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Georgia Power

2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

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

January 2021

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

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SUMMARY

This summary of the 2020 Annual Monitoring and Corrective Action Report provides the status of groundwater monitoring and corrective action program through December 2020 at Georgia Power Company's (Georgia Power's) Plant Yates Ash Ponds (AP) AP-3, A, B, B' and 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 U.S. Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D).

Plant Yates is located at 708 Dyer Road, approximately 8 miles northwest of Newnan and 13 miles southeast of Carrollton in Coweta County, Georgia. Plant Yates originally operated seven coal-fired steam generating units. Five of the units were retired in 2015 and two units were converted from coal to natural gas. CCR material resulting from power generation have historically been transferred and stored at the Site. The Site is located on the southwestern portion of the Plant Yates property shown on Figure 1.

Figure 1. Plant Yates and the Site

Groundwater at the Site is monitored using a monitoring system comprised of 19 upgradient and 18 downgradient wells installed at the Site. 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 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 into the ACM on June 12, 2019, and the R6 CCR Landfill was incorporated on January 31, 2020. During the 2020 annual reporting period, the Site remained in assessment monitoring.

During the 2020 reporting period, Arcadis conducted three groundwater sampling events in February, March, and September. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Per the CCR rule, groundwater results for March and September 2020 data were evaluated in accordance with the certified statistical methods. That evaluation showed statistically significant values of Appendix III[2] and Appendix IV[3] parameters in wells provided in the table below.

[1] 80 FR 21468, Apr. 17, 2015, as amended at 81 FR 51807, Aug. 5, 2016; 83 FR 36452, July 30, 2018; 85 FR 53561, Aug. 28, 2020
[2] Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)
[3] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228

Appendix III Parameter	March 2020	October 2020
Boron	YGWC-23S, YGWC-33S, YGWC-38, YGWC-41, YGWC-42, YGWC-43	YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43
Calcium	YGWC-33S, YGWC-38, YGWC-42	YGWC-38, YGWC-42
Chloride		YGWC-24SA, YGWC-36A
pH	YGWC-33S	
Sulfate	YGWC-33S, YGWC-38, YGWC-41, YGWC-42, YGWC-43, YGWC-49	YGWC-38, YGWC-41, YGWC-42, YGWC-43
Total Dissolved Solids	YGWC-33S, YGWC-38, YGWC-41, YGWC-42, YGWC-43	YGWC-38, YGWC-41, YGWC-42, YGWC-43
Appendix IV Parameter	**March 2020**	**October 2020**
Beryllium	YGWC-33S, YGWC-38	YGWC-38
Cobalt	YGWC-33S	
Selenium	YGWC-38, YGWC-41	YGWC-38, YGWC-41

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from January through December 2020, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to the website and provided to EPD semiannually.

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ACRONYMS AND ABBREVIATIONS

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

PROFESSIONAL CERTIFICATION

This *2020 Annual Groundwater Monitoring and Corrective Action Report* for the Georgia Power Company Plant Yates AP-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.

Arcadis U.S., Inc.

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01.29.2021
Date

1 INTRODUCTION

This *2020 Annual Groundwater Monitoring and Corrective Action Report* presents groundwater monitoring activities conducted at the Georgia Power Company (GPC) Plant Yates Ash Ponds (AP) AP-3, A, B, B' and R6 Landfill (the site) in February, March, and September 2020. This report was prepared in accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residuals (CCR) Rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division (GAEPD) Rules for Solid Waste Management 391-3-4-.10. Groundwater monitoring requirements for the site are specified by GAEPD Rule 391-3-4-.10(6)(a), which also incorporates the USEPA CCR Rule. For ease of reference, the USEPA CCR Rules are cited within this report.

This report presents the results of February 2020 annual monitoring for Appendix IV of 40 CFR 257, as well as a semiannual monitoring events conducted in March and September 2020, and activities completed through 2020 in accordance with Rule 391-3-4-.10(6)(c).

1.1 Background

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 proposed 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, GPC proactively began monitoring the R6 Landfill as part of a combined multi-unit monitoring program. Groundwater monitoring and reporting for the CCR Units is 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). Due to the configuration of the units and the overall groundwater flow direction, a combined multi-unit groundwater monitoring network for the CCR units has been proposed in the permit packages.

The groundwater monitoring unit at AP-3, A, B and B' began assessment monitoring according to 40 CFR § 257.95 in January 2018. An Assessment of Corrective Measures (ACM) Report for AP-3, A, B, 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 competed 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 R6 addressing beryllium and selenium SSLs is attached as **Appendix A**.

This report includes combined results for assessment monitoring of AP-3, A, B and B' and the R6 CCR Landfill.

1.2 Site Description, Regional Geology and Hydrogeologic Setting

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.

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

A thin layer of soil from one to two feet thick overlies a thick layer of saprolite. The saprolite, which extends to typical depths of 20 to 40 feet below ground surface, was formed in-place by the physical and chemical weathering of the underlying metamorphic rocks. The saprolite typically consists of clay and silt rich soils that grade to sandier soils with depth. A zone of variable thickness (approximately 5 to 20 feet) of transitionally weathered rock typically exists between the saprolite and competent bedrock. The lithology of the transition zone is highly variable and ranges from medium to coarse unconsolidated material to highly fractured and weathered rock fragments. Localized alluvial soils consisting of generally coarser material (silty-sand, clayey silt, and silty clay with well-rounded gravel and cobbles) that have been observed in saprolite may be related to historical river channel migration.

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

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

1.3 Groundwater Monitoring Well Network and CCR Unit Description

Pursuant to 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 are installed to supplement characterization and groundwater elevation measurements (**Table 1B**).

As typical of the Piedmont Physiographic Province, there is a degree of connectivity between the saprolite and partially weathered rock units. Fractured bedrock may or may not be connected to the overlying units

and flow may be controlled by geologic structures present. Based on the site hydrogeology, the monitoring system is designed to monitor groundwater flow in the saprolite, the transition-zone, and the upper bedrock. Wells suffixed with an “S” are installed in saprolite, an “I” indicates partially weathered rock (transition zone), and “D” indicates upper bedrock. The monitoring well network for the site is provided on **Figure 2**.

2 GROUNDWATER MONITORING ACTIVITIES

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

Table 2 summarizes groundwater sampling events conducted by ACC at AP-3, A, B, B’ and R6 CCR Landfill during February, March, and by Arcadis in September 2020. Field sampling logs are provided in **Appendix B**.

2.1 Monitoring Well Installation and Maintenance

Well YGWC-33S was abandoned in June 2020 because it was not suitably located to detect groundwater flow away from the combined AP-3, A, B, B’ and the R6 Landfill waste boundary and its location was interfering with ongoing construction. Network monitoring well YGWC-36A will be used for that purpose. Additionally, YGWC-24S and PZ-24I were abandoned in June 2020 and replacement wells YGWC-24SA and PZ-24IA were installed to the east to accommodate planned construction work along Dyer Road. A Well Installation Report was submitted under a separate cover on August 10, 2020. Closure by removal activities in the R6 ditch necessitated abandonment of YGWC-36 on July 20, 2020 and replacement well YGWC-36A was installed on September 22, 2020. A Well Installation Report for YGWA-36A was submitted under a separate cover on November 12, 2020. Other monitoring well-related activities were limited to visual inspection of well conditions prior to sampling, recording site conditions, and performing exterior maintenance to provide safe access for sampling. Copies of well installation and/or abandonment reports are included in **Appendix C**.

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 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 was placed in the operating record for the R6 CCR Landfill on November 13, 2019. AP-3, A, B, B’ and the R6 CCR Landfill currently remain in assessment monitoring.

Monitoring wells at AP-3, A, B, B’ and the R6 CCR Landfill were sampled for Appendix IV parameters in February 2020 pursuant to 40 CFR § 257.95(b). In accordance with 40 CFR § 257.95(d), semiannual assessment monitoring events occurred in March 2020 and September 2020 where samples were

collected and analyzed for Appendix III parameters and Appendix IV parameters detected above the laboratory method detection limit (MDL) from the February 2020 event. Additionally, newly installed replacement monitoring well YGWC-36A was sampled for assessment monitoring parameters on October 7, 2020 after well installation and development completion. A summary of groundwater sampling events completed during the semiannual assessment monitoring events in 2020 is provided in **Table 2**.

2.3 Other Groundwater Sampling

To further characterize groundwater quality at the site, additional samples were collected from wells YAMW-1 through YAMW-5, PZ-35, and PZ-37 at one or more events in January, February, March, and September 2020. Well locations are presented on **Figure 2**. Sampling and analysis were performed following the procedures described in Section 3. Analytical results from the additional sampling of these monitoring wells/piezometer are incorporated in the *Semiannual Remedy Selection and Design Progress Report* included as **Appendix A** to this report.

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. January 31, 2020 is also the date that the R6 CCR Landfill was incorporated into the ACM. **Appendix A** contains the third semiannual 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

Prior to the February, March, and September assessment 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 at 19 monitoring wells within the certified well network were collected at AP-3, A, B, B' and the R6 CCR Landfill (17 wells in September due to abandonment of YGWC-36 and YGWC-33S). Additionally, water levels were collected at 15 non-network monitoring wells and/or piezometers. Groundwater elevation data are summarized in **Tables 3A/B/C**.

Saprolite, transition zone, and shallow bedrock groundwater elevation data were used to prepare potentiometric surface elevation contour maps for February, March, and September 2020 (**Figures 3, 4 and 5,** respectively). Groundwater elevations ranged from 729.67 feet (YGWC-33S) to 796.55 feet (YGWA-39). The groundwater flow direction for the saprolite, transition zone, and shallow bedrock wells is generally towards the west, northeast, and east from the southern portion of the R6 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, Ash Pond 3, and Ash Pond B' areas to the central portion of the site. The groundwater flow direction is consistent with historical patterns. Deeper bedrock groundwater elevations vary across the site, ranging from 729.85 feet (YGWC-43) to 790.29 feet (YGWC-40). It is interpreted that these variations are attributed to bedrock geologic structural controls, and therefore may be hydraulically independent of each other. 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.

Specifically:

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

where:

v = groundwater seepage velocity

k = hydraulic conductivity

dh/dl = hydraulic gradient

n_e = effective porosity

Groundwater flow velocities were calculated for the site based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on a review of several sources, including Driscoll 1986, USEPA 1989, and Freeze and Cherry 1979). Calculated groundwater flow velocities for March and September 2020 and are presented in **Table 4A and 4B**, respectively. The calculated average linear flow velocity ranged from 25 feet per year to 33 feet per year.

3.2 Groundwater Sampling

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

A smarTroll™ or AquaTroll 600 (In-Situ field instruments) was used to monitor and record field water quality parameters during well purging. The stabilization criteria for pH and specific conductance 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 units for pH.
- ± 5% for specific conductance.
- Turbidity measurements less than 10 nephelometric turbidity units.

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

3.3 Laboratory Analyses

In February and March 2020, samples were submitted for laboratory analysis from 13 monitoring wells for the AP-3, A, B, and B' units, and six monitoring wells for the R6 CCR Landfill. During the February 2020 sampling event, the AP-3, A, B, B' and R6 CCR Landfill wells were sampled and analyzed for Appendix IV parameters according to 40 CFR § 257.95(b). In September 2020, samples were submitted for laboratory analysis from 11 monitoring wells for the AP-3, A, B, and B' units, and six monitoring wells for the R6 CCR Landfill. YGWC-36A was sampled on October 7, 2020 after well installation and development activities. Sample locations submitted for laboratory analysis per field event are summarized in **Table 2**. Groundwater samples collected during the semiannual event in March 2020 and September 2020 were analyzed for Appendix III parameters as well as those Appendix IV parameters detected above the laboratory MDL during the February 2020 event, in accordance with 40 CFR § 257.95(d). Mercury was not detected above the laboratory MDL during the February 2020 scan event. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in **Appendix D**.

Analytical data collected from the 2020 sampling events are summarized in **Table 5**. A summary of historical groundwater data is provided in **Appendix E**.

Laboratory analyses were performed by Pace Analytical Services, LLC, which is accredited by the National Environmental Laboratory Accreditation Program and maintains this certification for all parameters analyzed for this project. Laboratory reports and chain-of-custody records for the monitoring events are presented in **Appendix 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 is used), field blanks, and duplicate samples. Groundwater quality data in this report was validated in accordance with USEPA guidance (USEPA 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post-digestion spikes, laboratory and field duplicate relative percent differences, equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags have been applied to the data using USEPA procedures as guidance (USEPA 2017). The data validation report prepared by ACC included in **Appendix 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 activities, 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**.

Values followed by a "J" flag indicate that the value is an estimated analyte concentration detected between the MDL and the laboratory reporting limit. The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under

routine laboratory operating conditions. “J” flagged data are used to establish background statistical limits but are not used when performing statistical analyses.

4 STATISTICAL ANALYSIS

Statistical analysis of Appendix III and IV groundwater monitoring data was performed on samples from the R6 Landfill, AP-3, A, B, and B’ (March and September 2020) assessment monitoring events pursuant to 40 CFR §§ 257.93–95 following the established, certified statistical methods. The statistical method used at the site was developed in accordance with 40 CFR § 257.93(f) using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, USEPA 530/R-09-007 (USEPA 2009).

4.1 Statistical Methods

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

4.1.1 Appendix III 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 and September 2020 events were compared to the statistical limit to determine whether concentrations exceeded background levels. The statistical method incorporates an optional 1-of-2 verification resample plan. When an initial statically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine whether the result was an outlier. If resampling is performed and the initial finding is not verified, the resampled value replaces the initial finding. When the resample confirms the initial result, both values remain in the database and an SSI is declared. The following criteria were applied to the evaluation:

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

4.1.2 Assessment Monitoring Statistical Methods

Interwell parametric tolerance limits were used to calculate background limits from pooled upgradient well data for Appendix IV constituents with a target of 95 percent confidence and 95 percent coverage.

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

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

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

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

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

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

Following the above federal and state rules, GWPS have been established for statistical comparison of Appendix IV constituents at AP-3, A, B, B' and the R6 CCR Landfill. **Table 6** summarizes the background limits established at each monitoring well for the March and September 2020 sampling events along with the GWPS established under federal and state rules.

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

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

4.2 Statistical Analysis Results

Appendix III statistical analysis for wells associated with the site was performed to determine whether constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated for the AP-3, A, B, B' and R6 CCR Landfill to determine whether concentrations statistically exceed the established GWPS. Appendix IV analytical data from the first and second 2020 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 2019).

Based on review of the Appendix III statistical analysis from the March and September 2020 sampling events presented in **Appendix F**, Appendix III constituents have not returned to background levels for either unit and assessment monitoring should continue pursuant to 40 CFR § 257.95(f). A table is provided in **Appendix F** summarizing site monitoring wells where analytical sampling results have revealed constituents with SSIs.

4.2.1 First Semiannual 2020 Assessment Monitoring Event

Statistical analysis of the March 2020 Appendix IV data was completed using the GWPS established according to both 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a). The following SSLs were identified:

- Beryllium: YGWC-33S and YGWC-38
- Cobalt: YGWC-33S
- Selenium: YGWC-38 and YGWC-41.

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**.

4.2.2 Second Semiannual 2020 Assessment Monitoring Event

Statistical analysis of the September 2020 Appendix IV data was completed using the GWPS established according to both 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a). Delineation wells with an adequate dataset (i.e., minimum of four independent samples) were also statistically evaluated in addition to the compliance network monitoring wells. Analytical data for these wells are included with the historical groundwater data in **Appendix E**. The following SSLs were identified:

- Beryllium: YGWC-38
- Selenium: YGWC-38 and YGWC-41, 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 at 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 was initiated with the second 2019 semiannual monitoring event. Pursuant to 40 CFR § 257.96(b), GPC 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 and selenium.

The SSLs of beryllium and, formerly, cobalt at well YGWC-33S, which was abandoned in June 2020, are spatially and vertically delineated to below GWPS at wells PZ-35 and YAMW-1, respectively. The SSL of selenium in well YGWC-41 is spatially delineated to below GWPS at wells YAMW-2 and YAMW-3, and vertically at YAMW-4. The SSL of beryllium and selenium in well YGWC-38 is vertically delineated to below GWPS at YAMW-5, and spatially delineated by downgradient well YGWC-36/36A. Closure by removal activities in the R6 ditch necessitated abandonment of YGWC-36 on July 20, 2020. The replacement well, YGWC-36A, was installed on September 22, 2020 and sampled on October 7, 2020. One of the delineation wells, PZ-37, exhibited an SSL for selenium, but is in a groundwater flow path that leads into the waste boundary. Delineation of selenium is maintained by compliance wells YGWC-23S and YGWC-36A.

The ACM efforts completed during the reporting period are presented in the *Semiannual Remedy Selection and Design Progress Report* in **Appendix A**. GPC will include future semiannual progress reports with each groundwater monitoring and corrective action report.

6 CONCLUSIONS AND RECOMMENDATIONS

This 2020 *Annual Groundwater Monitoring & Corrective Action Report* was prepared to fulfill the requirements of US EPA's 40 CFR §257.95 and Georgia EPD's 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, show SSLs of beryllium in well YGWC-38 and selenium in wells YGWC-38, YGWC-41, and delineation well PZ-37. Delineation data from the site indicate that constituents showing SSLs are spatially and vertically delineated onsite to concentrations below the GWPS.

Assessment monitoring at AP-3, A, B, B', and the R6 CCR Landfill will continue pursuant to § 257.95, as well as the assessment of corrective measures as required by § 257.96 at the multi-unit site. The annual groundwater monitoring event for Appendix IV of 40 CFR 257, as well as the first semiannual monitoring event in accordance with Rule 391-3-4-.10(6)(c) are scheduled for the first quarter of 2021.

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TABLES

Table 1A - Monitoring Well Network Summary
2020 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

ARCADIS Design & Consultancy for natural and built assets

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
AP-3, A, B and B'							
YGWA-4I	5/21/2014	784.21	48.81	735.40	38.51	745.70	Upgradient
YGWA-5I	5/21/2014	784.54	58.94	725.60	48.64	735.90	Upgradient
YGWA-5D	5/21/2014	784.53	129.13	655.40	78.83	706.00	Upgradient
YGWA-17S	9/10/2015	783.05	39.85	743.20	29.55	753.20	Upgradient
YGWA-18S	9/8/2015	790.57	39.97	750.60	29.97	760.90	Upgradient
YGWA-18I	9/8/2015	790.57	79.97	710.60	69.67	720.90	Upgradient
YGWA-20S	9/29/2015	767.12	29.52	737.60	19.22	747.90	Upgradient
YGWA-21I	9/28/2015	783.70	79.90	703.80	69.60	714.10	Upgradient
YGWC-23S	9/21/2015	764.91	38.91	726.00	28.61	736.30	Downgradient
YGWC-24S [1]	9/16/2015	764.12	57.57	706.55	47.24	716.88	Downgradient
YGWC-24SA [1]	6/4/2020	765.00	57.00	708.00	47.00	718.00	Downgradient
YGWC-33S [2]	3/3/2016	764.91	38.53	706.01	28.33	716.21	Downgradient
YGWC-36 [3]	7/20/2016	739.61	55.86	683.67	45.53	694.00	Downgradient
YGWC-36A [3]	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							
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
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.

[1] YGWC-24S was abandoned in June 2020. YGWC-24SA was installed as a replacement well for YGWC-24S.

[2] YGWC-33S was abandoned in June 2020.

[3] YGWC-36 was abandoned in September 2020. YGWC-36A was installed as replacement well for YGWC-36.

Acronyms and Abbreviations:

bTOC = below top of casing

ft = feet

Table 1B - Non- Network Well Summary
2020 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-24I[1]	9/16/2015	764.33	89.79	674.54	79.46	684.80	Piezometer
PZ-24IA[1]	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-51	11/8/2019	744.30	36.32	707.98	26.32	717.98	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:

YAMW-1 and PZ-35 used for downgradient characterization of YGWC-33S (abandoned in June 2020).

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

[1] PZ-24I was abandoned in June 2020. PZ-24IA was installed as a replacement well for PZ-24I.

Acronyms and Abbreviations:

bTOC = below top of casing

ft = feet

Table 2 - Groundwater Sampling Plan
2020 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

ARCADIS Design & Consultancy for natural and built assets

Well ID	Hydraulic Location	Assessment Monitoring	2020 First Semiannual Sampling	2020 Second Semiannual Sampling
		February 11-17, 2020	March 24-26, 2020	September 22-25, 2020
AP-3, A, B and B'				
YGWA-4I	Upgradient	Scan	A-05	A-06
YGWA-5I	Upgradient	Scan	A-05	A-06
YGWA-5D	Upgradient	Scan	A-05	A-06
YGWA-17S	Upgradient	Scan	A-05	A-06
YGWA-18S	Upgradient	Scan	A-05	A-06
YGWA-18I	Upgradient	Scan	A-05	A-06
YGWA-20S	Upgradient	Scan	A-05	A-06
YGWA-21I	Upgradient	Scan	A-05	A-06
YGWC-23S	Downgradient	Scan	A-05	A-06
YGWC-24S	Downgradient	Scan	A-05	--
YGWC-24SA	Downgradient	--	--	A-06
YGWC-33S	Downgradient	Scan	A-05	--
YGWC-36	Downgradient	Scan	A-05	--
YGWC-36A[1]	Downgradient	--	--	A-06
YGWC-49	Downgradient	Scan	A-02	A-03
R6 CCR Landfill				
YGWA-39	Upgradient	Scan	A-02	A-03
YGWA-40	Upgradient	Scan	A-02	A-03
YGWC-38	Downgradient	Scan	A-02	A-03
YGWC-41	Downgradient	Scan	A-02	A-03
YGWC-42	Downgradient	Scan	A-02	A-03
YGWC-43	Downgradient	Scan	A-02	A-03

Notes:

1. Scan = All wells analyzed per Appendix IV.

2. A-XX indicates the Assessment Event Number (Appendix III and Detected Appendix IV).

[1] YGWC-36A was sampled on October 7, 2020 after well installation and development activities.

Table 3A - Summary of Groundwater Elevations - February 2020
2020 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	TOC Elevation (ft)	Depth to Water (ft bTOC)	Groundwater Elevation (ft)
YGWA-4I	2/10/2020	784.21	22.66	761.55
YGWA-5I	2/10/2020	784.54	18.33	766.21
YGWA-5D	2/10/2020	784.53	22.81	761.72
YGWA-6S	2/10/2020	782.47	17.40	765.07
YGWA-6I	2/10/2020	782.73	17.74	764.99
YGWA-17S	2/10/2020	783.05	10.49	772.56
YGWA-18S	2/10/2020	790.57	19.43	771.14
YGWA-18I	2/10/2020	790.57	22.57	768.00
YGWA-20S	2/10/2020	767.12	11.05	756.07
YGWA-21I	2/11/2020	783.70	27.52*	756.18
YGWC-23S	2/11/2020	764.91	17.18*	747.73
YGWC-24S	2/11/2020	764.12	27.53	736.59
YGWC-33S	2/11/2020	744.54	15.41*	729.13
YGWC-36	2/11/2020	739.61	9.28*	730.33
YGWC-38	2/11/2020	799.69	30.67*	769.02
YGWA-39	2/11/2020	818.19	23.45	794.74
YGWA-40	2/11/2020	815.73	24.90	790.83
YGWC-41	2/11/2020	803.92	27.90	776.02
YGWC-42	2/11/2020	797.86	27.65	770.21
YGWC-43	2/11/2020	744.96	14.48	730.48
YGWC-49	2/10/2020	782.73	31.70	751.03
PZ-35	2/11/2020	743.81	12.14	731.67
PZ-04S	2/10/2020	784.25	24.18	760.07
PZ-05S	2/10/2020	784.64	18.25	766.39
PZ-06D	2/10/2020	782.02	21.81	760.21
PZ-24I	2/11/2020	764.33	28.29	736.04
PZ-37	2/11/2020	760.78	14.13*	746.65
PZ-48	2/10/2020	779.83	19.43	760.40
PZ-51	2/11/2020	744.30	6.69	737.61
YAMW-1	2/11/2020	743.83	11.99	731.84
YAMW-2	2/11/2020	781.04	18.60	762.44
YAMW-3	2/10/2020	796.05	35.36	760.69
YAMW-4	2/11/2020	805.59	31.19	774.40
YAMW-5	2/11/2020	788.90	31.73	757.17

Notes:

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

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

TOC = top of casing

Table 3B - Summary of Groundwater Elevations - March 2020
2020 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	TOC Elevation (ft)	Depth to Water (ft bTOC)	Groundwater Elevation (ft)
YGWA-4I	3/16/2020	784.21	18.95	765.26
YGWA-5I	3/16/2020	784.54	14.53	770.01
YGWA-5D	3/16/2020	784.53	21.31	763.22
YGWA-6S	3/16/2020	782.47	15.15	767.32
YGWA-6I	3/16/2020	782.73	15.82	766.91
YGWA-17S	3/16/2020	783.05	9.39	773.66
YGWA-18S	3/16/2020	790.57	16.04	774.53
YGWA-18I	3/16/2020	790.57	19.87	770.70
YGWA-20S	3/16/2020	767.12	10.87	756.25
YGWA-21I	3/16/2020	783.70	25.77*	757.93
YGWC-23S	3/16/2020	764.91	15.93*	748.98
YGWC-24S	3/16/2020	764.12	25.96	738.16
YGWC-33S	3/16/2020	744.54	14.87*	729.67
YGWC-36	3/16/2020	739.61	9.46*	730.15
YGWC-38	3/16/2020	799.69	28.25*	771.44
YGWA-39	3/16/2020	818.19	21.64	796.55
YGWA-40	3/16/2020	815.73	21.45	794.28
YGWC-41	3/16/2020	803.92	24.24	779.68
YGWC-42	3/16/2020	797.86	24.44	773.42
YGWC-43	3/16/2020	744.96	13.95	731.01
YGWC-49	3/16/2020	782.73	29.34	753.39
PZ-35	3/16/2020	743.81	11.94	731.87
PZ-04S	3/16/2020	784.25	20.27	763.98
PZ-05S	3/16/2020	784.64	14.38	770.26
PZ-06D	3/16/2020	782.02	19.46	762.56
PZ-24I	3/16/2020	764.33	27.03	737.30
PZ-37	3/16/2020	760.78	12.68*	748.10
PZ-48	3/16/2020	779.83	17.38	762.45
PZ-51	3/16/2020	744.30	5.82	738.48
YAMW-1	3/16/2020	743.83	11.74	732.09
YAMW-2	3/16/2020	781.04	15.60	765.44
YAMW-3	3/16/2020	796.05	30.18	765.87
YAMW-4	3/16/2020	805.59	27.07	778.52
YAMW-5	3/16/2020	788.90	14.32	774.58

Notes:

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

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

TOC = top of casing

Table 3C - Summary of Groundwater Elevations - September 2020
2020 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	TOC Elevation (ft)	Depth to Water (ft bTOC)	Groundwater Elevation (ft)
YGWA-4I	9/21/2020	784.21	23.45	760.76
YGWA-5I	9/21/2020	784.54	19.82	764.72
YGWA-5D	9/21/2020	784.53	22.51	762.02
YGWA-6S	9/21/2020	782.47	18.22	764.25
YGWA-6I	9/21/2020	782.73	18.48	764.25
YGWA-17S	9/21/2020	783.05	12.62	770.43
YGWA-18S	9/21/2020	790.57	20.39	770.18
YGWA-18I	9/21/2020	790.57	23.59	766.98
YGWA-20S	9/21/2020	767.12	11.44	755.68
YGWA-21I	9/21/2020	783.70	31.29	756.10
YGWC-23S	9/21/2020	794.91	17.61	747.44
YGWC-24SA	9/21/2020	765.00	28.77	736.23
YGWC-38	9/21/2020	799.69	29.82	768.78
YGWA-39	9/21/2020	818.19	21.81	796.38
YGWA-40	9/21/2020	815.73	25.44	790.29
YGWC-41	9/21/2020	803.92	26.91	777.01
YGWC-42	9/21/2020	797.86	27.48	770.38
YGWC-43	9/21/2020	744.96	15.11	729.85
YGWC-49	9/21/2020	782.73	31.00	751.73
PZ-35	9/21/2020	743.81	15.44	728.37
PZ-04S	9/21/2020	784.25	24.95	759.30
PZ-05S	9/21/2020	784.64	19.81	764.83
PZ-06D	9/21/2020	782.02	21.43	760.59
PZ-24IA	9/21/2020	764.33	29.13	735.20
PZ-37	9/21/2020	760.78	13.79	746.40
PZ-48	9/21/2020	799.83	19.94	779.89
PZ-51	9/21/2020	744.30	6.94	737.36
YAMW-1	9/21/2020	743.83	15.14	728.69
YAMW-2	9/21/2020	781.04	22.18	758.86
YAMW-3	9/21/2020	796.05	35.28	760.77
YAMW-4	9/21/2020	805.59	30.61	774.98
YAMW-5	9/21/2020	788.90	12.84	776.06

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

TOC = top of casing

Equation

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

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

Values Used in Calculation

Value			Source
K_{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	
i_1 =	0.0190	unitless	Hydraulic gradient from: YGWA-40 to YGWC-42
i_2 =	0.0262	unitless	YGWC-49 to PZ-24I
i_{avg} =	0.0222	unitless	Average
n_e =	0.20	unitless	See note 2

Minimum Linear Flow Velocity

$$V_{min} = \frac{(0.28)\,(0.02)}{0.20}$$

V_{min} = 0.03 ft/day, or 10 ft/year

Maximum Linear Flow Velocity

$$V_{max} = \frac{(10)\,(0.02)}{0.20}$$

V_{max} = 1.0 ft/day, or 380 ft/year

Average Linear Flow Velocity

$$V_{avg} = \frac{(0.8)(0.022)}{0.2}$$

V_{avg} = 0.09 ft/day, or 33 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 K_{avg}

2. Default value recommended by USEPA for silty sand-type soil (USEPA 1996).

Equation

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

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

Values Used in Calculation

Value			Source
K_{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	
i_1 =	0.018	unitless	Hydraulic gradient from: YGWA-40 to YGWC-42
i_2 =	0.017	unitless	YGWC-49 to PZ-24I
i_{avg} =	0.017	unitless	Average
n_e =	0.20	unitless	See note 2

Minimum Linear Flow Velocity

$$V_{min} = \frac{(0.28)\,(0.017)}{0.20}$$

V_{min} = 0.023 ft/day, or 8.69 ft/year

Maximum Linear Flow Velocity

$$V_{max} = \frac{(10)\,(0.017)}{0.20}$$

V_{max} = 0.85 ft/day, or 310 ft/year

Average Linear Flow Velocity

$$V_{avg} = \frac{(0.8)(0.022)}{0.2}$$

V_{avg} = 0.068 ft/day, or 24.8 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 K_{avg}
2. Default value recommended by USEPA for silty sand-type soil (USEPA 1996).

Table 5 - Groundwater Analytical Data - 2020
2020 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	YGWA-17S	YGWA-17S
		2/12/2020	3/25/2020	9/22/2020	2/12/2020	3/24/2020	9/22/2020	2/12/2020	3/24/2020	9/22/2020	2/11/2020	3/24/2020
Appendix III	pH	6.15	6.26	5.80	7.52	7.34	7.19	5.83	5.81	5.99	5.58	5.57
	Boron	--	0.011 J	< 0.0052	--	0.011 J	0.0079 J	--	0.0068 J	0.0053 J	--	0.0092 J
	Calcium	--	10.5	9.6	--	26.1	27.2	--	2.5	2.6	--	2.7
	Chloride	--	3.9	4.5	--	3.5	3.6	--	4.3	4.2	--	5.0
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.056 J	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	--	8.8	8.2	--	5.9	5.5	--	2.2	2.1	--	5.4
	Total Dissolved Solids	--	146	83.0	--	139	104	--	113 D6	75.0	--	71.0
Appendix IV	Antimony	< 0.00027	< 0.00027	< 0.00028	< 0.00027	< 0.00027	< 0.00028	< 0.00027	< 0.00027	< 0.00028	< 0.00027	< 0.00027
	Arsenic	< 0.00035	< 0.00035	< 0.00078	0.0046 JB	0.00065 J	0.0010 J	0.0020 JB	< 0.00035	< 0.00078	0.0022 JB	< 0.00035
	Barium	0.012	0.016	0.013	0.0079 J	0.0076 J	0.0076 J	0.023	0.021	0.019	0.015	0.015
	Beryllium	< 0.000074	< 0.000074	< 0.000046	< 0.000074	< 0.000074	< 0.000046	< 0.000074	< 0.000074	< 0.000046	0.000078 J	0.000080 J
	Cadmium	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011
	Chromium	< 0.00039	0.00058 J	< 0.00055	< 0.00039	< 0.00039	0.0011 J	0.00075	0.0014 J	< 0.00055	0.00087 J	0.00087 J
	Cobalt	< 0.00030	0.00056 J	< 0.00038	0.00037 J	0.00035 J	< 0.00038	< 0.00030	< 0.00030	< 0.00038	< 0.00030	< 0.00030
	Lead	< 0.000046	< 0.000046	< 0.000036	< 0.000046	0.000054 J	0.000045 J	< 0.000046	0.000068 J	0.000042 J	< 0.000046	0.000064 J
	Lithium	0.011 J	0.014 J	0.013 J	0.0066 J	0.0064 J	0.0066 J	0.0033	0.0033	0.0034 J	< 0.00078	0.0034 J
	Mercury	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--
	Molybdenum	< 0.00095	< 0.00095	< 0.00069	0.0011 J	0.0011 J	0.00099 J	< 0.00095	< 0.00095	< 0.00069	< 0.00095	< 0.00095
	Combined Radium - 226/228	1.25	0.766 U	0.795 U	4.02	3.52	2.98	0.913 U	1.37	0.428 U	0.461 U	0.534 U
	Selenium	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.0013
	Thallium	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052

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Analyte		YGWA-17S	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-21I	YGWA-21I
		9/23/2020	2/11/2020	3/24/2020	9/23/2020	2/11/2020	3/24/2020	9/23/2020	2/12/2020	3/24/2020	9/24/2020	2/12/2020	3/24/2020
Appendix III	pH	5.58	6.07	5.98	6.01	5.30	5.33	5.29	6.00	5.86	5.8	7.13	6.35
	Boron	0.0066 J	--	0.0054 J	0.021 J	--	0.010 J	0.0060 J	--	< 0.0049	0.0094 J	--	0.016 J
	Calcium	2.6	--	5.3	5.2	--	1.0	0.91 J	--	2.6	2.6	--	6.0
	Chloride	6.6	--	7.0	7.2	--	6.8	7.2	--	2.7	2.7	--	2.8
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.10 J	0.081 J
	Sulfate	5.1	--	< 0.50	0.53 J	--	0.99 J	1.1	--	< 0.50	< 0.50	--	3.0
	Total Dissolved Solids	99.0	--	91.0	103	--	59.0	81.0 D6	--	76.0	69.0	--	117
Appendix IV	Antimony	< 0.00028	< 0.00027	< 0.00027	< 0.00028	< 0.00027	< 0.00027	< 0.00028	< 0.00027	< 0.00027	< 0.00028	0.0015 J	0.0017 J
	Arsenic	< 0.00078	0.0014 JB	< 0.00035	< 0.00078	0.0026 JB	< 0.00035	< 0.00078	< 0.00035	< 0.00035	< 0.00078	0.0025 J	0.0013 J
	Barium	0.015	0.022	0.021	0.021	0.019	0.017	0.016	0.014	0.015	0.015	0.011	0.011
	Beryllium	0.000081 J	< 0.000074	< 0.000074	< 0.000046	0.000076 J	0.000089 J	0.000088 J	0.000078 J	0.000076 J	0.000083 J	< 0.000074	< 0.000074
	Cadmium	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011
	Chromium	0.00098 J	0.0010 J	0.00095 J	0.00092 J	0.00088 J	0.0011 J	0.0012 J	0.00045 J	0.00077 J	0.00076 J	< 0.00039	< 0.00039
	Cobalt	< 0.00038	< 0.00030	< 0.00030	< 0.00038	< 0.00030	< 0.00030	< 0.00038	< 0.00030	< 0.00030	< 0.00038	0.0081	0.0061
	Lead	0.000041 J	< 0.000046	0.000071 J	0.000060 J	< 0.000046	0.000054 J	0.000097 J	< 0.000046	0.00011 J	0.000092 J	< 0.000046	< 0.000046
	Lithium	< 0.00081	0.0033 J	0.0033 J	0.0030 J	0.0050 J	0.0035 J	0.0022 J	< 0.00078	< 0.00078	< 0.00081	0.0065 J	0.0064 J
	Mercury	--	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--
	Molybdenum	< 0.00069	< 0.00095	< 0.00095	< 0.00069	< 0.00095	< 0.00095	< 0.00069	< 0.00095	< 0.00095	< 0.00069	< 0.00095	< 0.00095
	Combined Radium - 226/228	0.466 U	1.48	0.632 U	0.887 U	0.597 U	0.262 U	0.430 U	1.11 U	1.88	0.611 U	1.61	1.24 U
	Selenium	< 0.0016	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.0013
	Thallium	< 0.00014	< 0.000052	< 0.000052	< 0.000014	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052

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Analyte		YGWA-21I	YGWA-39	YGWA-39	YGWA-39	YGWA-40	YGWA-40	YGWA-40	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-24S
		9/24/2020	2/12/2020	3/25/2020	9/24/2020	2/12/2020	3/24/2020	9/24/2020	2/17/2020	3/26/2020	9/24/2020	2/13/2020
Appendix III	pH	6.70	5.97	5.78	5.70	5.30	5.29	5.43	5.84	5.69	5.51	5.69
	Boron	0.013 J	--	0.043 J	0.037 J	--	0.088 J	0.087 J	--	0.94	1.1	--
	Calcium	7.8	--	2.7	3.7	--	4.8	4.4	--	5.6	7.9	--
	Chloride	2.0	--	1.9	2.7	--	4.7	5.0	--	1.6	2.0	--
	Fluoride	0.079 J	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	3.6	--	14.3	11.7	--	25.2	22.9	--	36.5	52.5	--
	Total Dissolved Solids	113	--	158	170	--	84.0	77.0	--	110	129	--
Appendix IV	Antimony	0.0047	< 0.00027	0.0014 J	< 0.00028	< 0.00027	< 0.00027	< 0.00028	< 0.00027	< 0.00027	0.00085 J	< 0.00027
	Arsenic	0.0014 J	0.00058 J	0.0012 J	< 0.00078	0.0034 JB	< 0.00035	< 0.00078	0.0019 J	0.0012 J	< 0.00078	< 0.00035
	Barium	0.010	0.011	0.014	0.016	0.035	0.033	0.028	0.024	0.027	0.035	0.016
	Beryllium	< 0.000046	< 0.000074	< 0.000074	< 0.000046	0.00018 J	0.00022 J	0.00020 J	0.000081 J	0.000090 J	0.00015 J	0.00014 J
	Cadmium	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011	< 0.00012	< 0.00011
	Chromium	< 0.00055	< 0.00039	< 0.00039	< 0.00055	0.00065 J	0.00055 J	< 0.00055	0.00087 J	0.0019 J	0.0011 J	< 0.00039
	Cobalt	0.0079	0.00034 J	0.00034 J	0.00053 J	< 0.00030	< 0.00030	< 0.00038	< 0.00030	< 0.00030	< 0.00038	< 0.00030
	Lead	0.000046 J	< 0.000046	0.000051 J	< 0.000036	< 0.000046	< 0.000046	0.000038 J	< 0.000046	< 0.000046	0.000046 J	< 0.000046
	Lithium	0.0069 J	0.0041 J	0.0049 J	0.0054 J	< 0.00078	< 0.00078	< 0.00081	0.0021 J	0.0021 J	0.0035 J	< 0.00078
	Mercury	--	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--	< 0.00014
	Molybdenum	< 0.00069	0.0025 J	0.0020 J	0.0016 J	< 0.00095	< 0.00095	< 0.00069	< 0.00095	< 0.00095	< 0.00069	< 0.00095
	Combined Radium - 226/228	1.80	0.45 U	0.377 U	0.568 U	1.83	1.27 U	0.634 U	1.46	0.281 U	0.788 U	0.474 U
	Selenium	< 0.0016	< 0.0013	< 0.0013	< 0.0016	0.0020 J	0.0020 J	0.0016 J	0.020	0.024	0.031	< 0.0013
	Thallium	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052

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Analyte		YGWC-24S	YGWC-24SA	YGWC-33S	YGWC-33S	YGWC-36	YGWC-36	YGWC-36A	YGWC-38	YGWC-38	YGWC-38	YGWC-41
		3/26/2020	9/23/2020	2/14/2020	3/25/2020	2/14/2020	3/25/2020	10/7/2020	2/14/2020	3/25/2020	9/25/2020	2/14/2020
Appendix III	pH	5.51	5.64	3.76	3.86	5.71	5.49	5.86	4.84	4.89	4.90	4.84
	Boron	0.033 J	< 0.0052	--	5.3	--	0.11	0.018 J	--	9.3	8.0	--
	Calcium	1.7	2.4	--	97.8	--	10.6	9.9	--	124	93.7	--
	Chloride	5.4	9.3 M1	--	4.2	--	6.7	8.7	--	4.0	4.0	--
	Fluoride	< 0.050	< 0.050 M1	0.23 J	0.36	--	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	< 0.50	< 0.50 M1	--	475	--	61.2	18.2	--	483	414	--
	Total Dissolved Solids	67.0	87.0	--	839	--	184	137	--	883	664	--
Appendix IV	Antimony	< 0.00027	< 0.00028	0.0013 J	< 0.00027	0.0027 J	0.0011 J	< 0.00028	0.00031 J	0.00063 J	0.00061 J	< 0.00027
	Arsenic	0.0015 J	< 0.00078	0.0027 J	0.0030 J	0.0026 J	< 0.00035	< 0.00078	0.0021 J	0.00068 J	< 0.00078	0.0014 J
	Barium	0.019	0.026	0.013	0.012	0.092	0.026	0.040	0.019	0.018	0.015	0.024
	Beryllium	0.00016 J	0.000061 J	0.016	0.017	0.00019 J	0.00022 J	0.00014 J	0.0042	0.0038	0.0033	0.0026 J
	Cadmium	< 0.00011	< 0.00012	0.0021 J	0.0020 J	0.00017 J	0.00019 J	0.00012 J	0.0021 J	0.0018 J	0.0015 J	0.00020 J
	Chromium	0.00094 J	< 0.00055	0.00078 J	0.0012 J	< 0.00039	0.00074 J	0.0013 J	0.0023 J	0.00065 J	< 0.00055	< 0.00039
	Cobalt	< 0.00030	< 0.00038	0.023	0.020	0.0025 J	0.00038 J	0.00086 J	< 0.00030	< 0.00030	< 0.00038	< 0.00030
	Lead	0.000053 J	< 0.000036	0.0010 J	0.00083 J	0.00016 J	0.00010 J	0.00077 J	< 0.000046	< 0.000046	< 0.000036	< 0.000046
	Lithium	< 0.00078	< 0.00081	0.024 J	0.029 J	0.0024 J	0.0032 J	0.0014 J	0.0076 J	0.0081 J	0.0069 J	0.0029 J
	Mercury	--	--	< 0.00014	--	< 0.00014	--	--	< 0.00014	--	--	< 0.00014
	Molybdenum	< 0.00095	< 0.00069	< 0.00095	< 0.00095	< 0.00095	< 0.00095	0.0015 J	< 0.00095	< 0.00095	< 0.00069	< 0.00095
	Combined Radium - 226/228	0.511 U	0.786 U	1.01 U	1.44	1.06 U	1.22 U	1.58	1.12 U	0.321 U	0.246 U	1.16
	Selenium	< 0.0013	< 0.0016	0.015	0.022	0.0020 J	0.0024 J	< 0.0016	0.11	0.099	0.076	0.059
	Thallium	< 0.000052	< 0.00014	0.00019 J	0.00015 J	0.00010 J	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052

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Analyte		YGWC-41	YGWC-41	YGWC-42	YGWC-42	YGWC-42	YGWC-43	YGWC-43	YGWC-43	YGWC-49	YGWC-49	YGWC-49
		3/25/2020	9/25/2020	2/14/2020	3/25/2020	9/24/2020	2/17/2020	3/25/2020	9/25/2020	2/17/2020	3/25/2020	9/24/2020
Appendix III	pH	4.87	4.95	5.80	5.53	5.55	5.93	5.79	5.75	5.82	5.69	5.62
	Boron	7.9	6.0	--	15.5	15.2	--	2.4	3.9	--	0.012 J	0.062 J
	Calcium	29.6	20.5	--	107	84.3 M1	--	12.1	19.8	--	13.2	12.0
	Chloride	2.7	3.0	--	3.2	3.3	--	1.8	2.3	--	4.1	4.6
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.15 J	0.073 J	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	214	175	--	642	579	--	164	281	--	76.1	77.0
	Total Dissolved Solids	428	307	--	1200	1060	--	352	494	--	130	187
Appendix IV	Antimony	< 0.00027	< 0.00028	< 0.00027	< 0.00027	< 0.00028	< 0.00027	0.00031 J	< 0.00028	< 0.00027	0.00053 J	< 0.00028
	Arsenic	0.0010 J	< 0.00078	0.0033 J	0.0013 J	< 0.00078	< 0.00035	0.00070 J	< 0.00078	0.0028 J	0.00086 J	< 0.00078
	Barium	0.021	0.016	0.031	0.030	0.026	0.037	0.033	0.046	0.071	0.071	0.066
	Beryllium	0.0026 J	0.0020 J	< 0.000074	< 0.000074	0.000067 J	0.00034 J	0.00034 J	0.00054 J	0.00011 J	0.00013 J	0.00013 J
	Cadmium	0.00018 J	0.00014 J	0.00025 J	0.00021 J	0.00014 J	< 0.00011	< 0.00011	< 0.00012	< 0.00011	< 0.00011	< 0.00012
	Chromium	0.00039 J	< 0.00055	< 0.00039	0.0013 J	< 0.00055	< 0.00039	< 0.00039	0.00071 J	0.0020 J	0.0019 J	0.0019 J
	Cobalt	< 0.00030	< 0.00038	0.0019 J	0.0018 J	0.0017 J	0.00088 J	0.0016 J	0.0018 J	< 0.00030	< 0.00030	< 0.00038
	Lead	< 0.000046	< 0.000036	< 0.000046	0.000047 J	< 0.000036	< 0.000046	0.000075 J	< 0.000036	0.000071 J	0.000059 J	< 0.000036
	Lithium	0.0029 J	0.0025 J	0.038	0.045	0.050	0.015 J	0.016 J	0.018 J	0.0032 J	0.0037 J	0.0037 J
	Mercury	--	--	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--
	Molybdenum	< 0.00095	< 0.00069	< 0.00095	< 0.00095	0.00091 J	< 0.00095	0.0015 J	0.0011 J	< 0.00095	< 0.00095	< 0.00069
	Combined Radium - 226/228	0.568 U	< 0.769 U	1.56	1.17 U	< 0.751 U	4.19	3.04	4.75	1.52	1.2 U	1.57 U
	Selenium	0.057	0.046	0.040	0.046	0.046	< 0.0013	< 0.0013	< 0.0016	0.0068 J	0.0085 J	0.0091 J
	Thallium	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014	< 0.000052	< 0.000052	< 0.00014

Notes:

1. Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.
2. Appendix III = Indicator parameters evaluated during Detection Monitoring.
3. Appendix IV = Parameters evaluated during Assessment Monitoring.

-- Not analyzed for this constituent.

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

Laboratory Qualifiers:

B = Analyte was detected in associated method blank.

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

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

M1 = Matrix spike exceeding quality control limits, batch accepted based on laboratory control sample recovery.

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

Table 6 - Background Levels and Groundwater Protection Standards
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Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

Constituent	Units	Background	Federal GWPS	State GWPS
September 2020 (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	0.003	0.004	0.004
Cadmium	mg/L	0.0025	0.005	0.005
Chromium	mg/L	0.010	0.100	0.100
Cobalt	mg/L	0.035	0.035	0.035
Fluoride	mg/L	0.680	4	4
Lead	mg/L	0.005	0.015	0.005
Lithium	mg/L	0.030	0.040	0.030
Mercury	mg/L	0.0005	0.002	0.002
Molybdenum	mg/L	0.014	0.100	0.014
Selenium	mg/L	0.010	0.050	0.050
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	6.9	6.9	6.9
March 2020 (AP-3, A, B, B', R6 Landfill)				
Antimony	mg/L	0.0035	0.006	0.006
Arsenic	mg/L	0.005	0.010	0.010
Barium	mg/L	0.067	2	2
Beryllium	mg/L	0.003	0.004	0.004
Cadmium	mg/L	0.0025	0.005	0.005
Chromium	mg/L	0.010	0.100	0.100
Cobalt	mg/L	0.013	0.013	0.013
Fluoride	mg/L	0.320	4	4
Lead	mg/L	0.005	0.015	0.005
Lithium	mg/L	0.030	0.040	0.030
Mercury	mg/L	0.0005	0.002	0.002
Molybdenum	mg/L	0.010	0.100	0.010
Selenium	mg/L	0.010	0.050	0.050
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	6.92	6.92	6.92

Notes:

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

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

Acronyms and Abbreviations:

mg/L = millgrams per liter

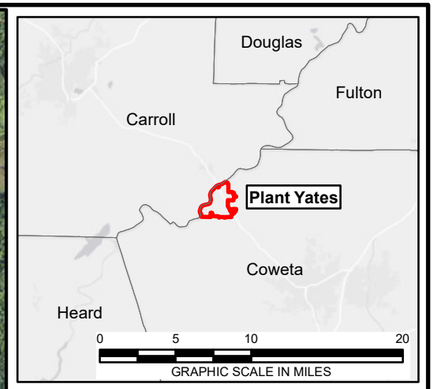
pCi/L = picocuries per liter

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

ASH POND A
ASH POND B
ASH POND B'
R6 ASH DISPOSAL AREA
ASH POND 3
ASH MANAGEMENT AREA



LEGEND

APPROXIMATE PROPERTY BOUNDARY
PERMITTED UNIT BOUNDARY

NOTE:
AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 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
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT – 2020

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

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

YGWA-6S
YGWA-6I
PZ-06D
PZ-48
YGWC-49
ASH POND A
ASH POND 2
PZ-24I
YGWC-24S
PZ-24IA
YGWC-24SA
PZ-35
YAMW-1
YGWC-36A
YGWC-36
YGWC-33S
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
YAMW-4
YGWC-41
PZ-37
YGWC-23S
ASH POND 3
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
- ABANDONED MONITORING WELL
- ABANDONED NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY

NOTE:
1. YGWC-33S WAS ABANDONED IN JUNE 2020.

2. YGWC-24SA WAS INSTALLED AS REPLACEMENT WELL FOR YGWC-24S IN JUNE 2020.

3. PZ-24IA WAS INSTALLED AS REPLACEMENT WELL FOR PZ-24I IN JUNE 2020.

4. YGWC-36A WAS INSTALLED AS A REPLACEMENT WELL FOR YGWC-36A IN SEPTEMBER 2020.

5. 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
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT – 2020

WELL LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

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

710 720 730 740 750 760 770 780 790

YGWA-6S 765.07
YGWA-6I 764.84
PZ-06D 760.21
PZ-48* 760.40
YGWC-49 751.03
PZ-24I 736.04
YGWC-24S 736.59
PZ-35 731.67
YAMW-1 731.84
YGWC-36* 730.33
YGWC-33S* 729.13
PZ-51 737.61
YGWC-43* 730.48
YAMW-2 762.44
YAMW-3* 760.69
YGWC-42 770.21
YAMW-4* 774.40
YGWC-41 776.02
PZ-37 746.65
YGWC-23S* 747.73
YAMW-5* 757.17
YGWC-38 769.02
YGWA-40 790.83
YGWA-39 794.74
YGWA-17S 772.56
YGWA-18S 771.14
YGWA-18I 768.00
YGWA-21I 756.18
YGWA-20S 756.07
YGWA-4I 761.55
PZ-04S 760.07
PZ-05S 766.39
YGWA-5I 766.21
YGWA-5D 761.72

ASH POND 2
ASH POND A
ASH POND B
ASH POND B'
R6 ASH DISPOSAL AREA
ASH POND 3
ASH MANAGEMENT AREA

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. * = DEPTH TO WATER RECORDED FROM TRANSDUCER READING ON MARCH 17 AT 12PM.

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

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

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

5. AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

6. 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
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT – 2020

GROUNDWATER ELEVATION MAP FEBRUARY 2020

ARCADIS Design & Consultancy for natural and built assets

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

710 720 730 740 750 760 770 780 790

PZ-06D 762.56
YGWA-6S 767.32
YGWA-6I 766.91
PZ-48* 782.45
YGWC-49 753.39
ASH POND A
ASH POND 2
PZ-24I 737.30
YGWC-24S 738.16
PZ-35 731.87
YAMW-1 732.09
YGWC-36* 730.07
YGWC-33S* 729.67
ASH POND B
ASH POND B'
PZ-51 738.48
YGWC-43* 731.01
R6 ASH DISPOSAL AREA
YGWA-17S 773.66
YGWA-18S 774.53
YGWA-18I 770.70
YAMW-3* 765.87
YGWC-42 773.42
YAMW-2 765.44
YAMW-4* 778.52
YGWC-41 779.68
PZ-37 747.85
YGWC-23S* 748.69
YGWC-38 771.20
YAMW-5* 774.58
ASH MANAGEMENT AREA
YGWA-40 794.28
YGWA-39 796.55
YGWA-21I 757.85
YGWA-20S 756.25
YGWA-4I 765.26
PZ-04S 763.98
PZ-05S 770.26
YGWA-5I 770.01
YGWA-5D 763.22

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. * = DEPTH TO WATER RECORDED FROM TRANSDUCER READING ON MARCH 16 AT 12PM.

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

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

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

5. AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

6. 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
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT – 2020

GROUNDWATER ELEVATION MAP MARCH 2020

ARCADIS Design & Consultancy for natural and built assets

FIGURE **4**

PATH: T:_ENVGA_Power\GPC_Plant_Yates\MXD\2020\Annual_GW_Corrective_Action\F4_GWE_March2020_AMA_SAP_TRANS.mxd DATE SAVED: 1/27/2021 3:40:54 PM LAST SAVED BY: tdrum

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

710 720 730 740 750 760 770 780 790

YGWA-6S 764.25
YGWA-6I 764.25
PZ-06D 760.59
PZ-48 779.89
YGWC-49 751.73
ASH POND A
ASH POND 2
PZ-24IA 735.20
YGWC-24SA 736.23
PZ-35 728.37
YAMW-1 728.69
YGWC-36A
ASH POND B
ASH POND B'
YGWA-17S 770.43
PZ-51 737.36
YGWC-43 729.85
R6 ASH DISPOSAL AREA
YGWA-18S 770.18
YGWA-18I 766.98
YAMW-3 760.77
YGWC-42 770.38
YAMW-2 758.86
ASH POND 3
YGWC-41 777.01
YAMW-4 774.98
PZ-37 746.40
YGWC-23S 747.44
YAMW-5 776.06
YGWC-38 768.78
ASH MANAGEMENT AREA
YGWA-40 790.29
YGWA-39 796.38
YGWA-21I 756.1
YGWA-20S 755.68
YGWA-4I 760.76
PZ-04S 759.30
PZ-05S 764.83
YGWA-5I 764.72
YGWA-5D 762.02

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)

NOTE:

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. SAPROLITE WELL YGWC-36A NOT USED FOR CONTOURING, WELL WAS INSTALLED DURING THE SEPTEMBER 2020 MONITORING EVENT.

5. AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

6. 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
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT – 2020

GROUNDWATER ELEVATION MAP SEPTEMBER 2020

ARCADIS Design & Consultancy for natural and built assets

FIGURE **5**

PATH: T:_ENVGA_Power\GPC_Plant_Yates\MXD\2020\Annual_GW_Corrective_Action\F5_GWE_Sep2020_AAA_SAP_TRANS.mxd DATE SAVED: 1/27/2021 3:43:12 PM LAST SAVED BY: idrum

APPENDIX A

Semi-Annual Remedy Selection and Design Progress Report

SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

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

January 2021

,

SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

Georgia Power Company

Newnan, Georgia

Coweta County

Prepared for:

Georgia Power Company

Jennifer Beck
Senior Scientist

Prepared by:

Arcadis, Inc.
2389 Paces ferry Road SE
Suite 900
Atlanta
Georgia 30339
Tel 770 431 8666

Margaret Gentile, Ph.D.
Technical Expert

Our Ref.:

30052922

Date:

January 29, 2021

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

CONTENTS

TABLES

FIGURES

ATTACHMENT

PROFESSIONAL CERTIFICATION

This *Semiannual Remedy Selection and Design Progress Report, Georgia Power Company - Plant Yates, Ash Pond 3,A,B,B' and 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 2020 in selecting and designing a remedy previously documented in the *Assessment of Corrective Measures Report – Plant Yates Ash Pond 3,A,B,B'* (ACC, 2019).

06.29.2021

J. Geoffrey Gay, P.E.
Principal Environmental Engineer
Georgia Registration No. PE 27801

Date

ACRONYMS AND ABBREVIATIONS

Arcadis	Arcadis, Inc.
ABA	acid base accounting
ACC	Atlantic Coast Consulting, Inc.
ACM	Assessment of Corrective Measures
AP-3	Ash Pond 3
AP-A	Ash Pond A
AP-B	Ash Pond B
AP-B’	Ash Pond B’
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
CSM	conceptual site model
GAEPD	Georgia Environmental Protection Division
GARD	Global Acid Rock Drainage
GWPS	Groundwater Protection Standard
ICP-MS	inductively coupled plasma-mass spectrometry
INAP	International Network for Acid Prevention
ISS	In Situ Stabilization/Solidification
mg/L	milligram per liter
MNA	monitored natural attenuation
NAG	net acid generation
SSL	statistically significant level
TDS	total dissolved solids
USEPA	United States Environmental Protection Agency
XRD	x-ray diffraction

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 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 2020 submittal of the Semiannual Remedy Selection and Design Progress Report (Arcadis 2020).

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 briefly summarizes the nature and extent of constituents determined to be present at statistically significant levels (SSLs) exceeding applicable reference groundwater protection standards (GWPS) for Appendix IV CCR constituents. SSLs have been determined for the following locations and constituents (**Figure 1)**:

- YGWC-38 (beryllium and selenium) at the R6 CCR Landfill.
- YGWC-41 (selenium) at the R6 CCR Landfill.
- PZ-37 (selenium) at the R6 CCR Landfill.

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 YWGC-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.

In addition to the assessment monitoring program at the Site, Georgia Power conducted a human health and ecological risk evaluation to evaluate constituents that exhibit SSLs in groundwater (i.e., beryllium and selenium) at the ash ponds and R6 CCR Landfill. The risk evaluation used a conservative, health-protective approach that is consistent with USEPA risk assessment guidance, GAEPD regulations and guidance, and standard practice for risk assessment in the State of Georgia. As part of the risk evaluation, a well survey of potential groundwater wells within a three-mile radius of the ash ponds and R6 CCR Landfill was conducted and consisted of reviewing federal, state, and county records and online sources in addition to conducting a windshield survey of the area. The risk evaluation relied on groundwater data collected by Georgia Power between 2017 and March 2020 in compliance with the federal and state CCR rules. Based upon this risk evaluation, which included multiple conservative assumptions, beryllium and selenium are not expected to pose a risk to human health or the environment. The *Risk Evaluation Report – Plant Yates R6 CCR Landfill and Ash Management Area, Coweta County, Georgia (Wood 2020)* and associated well survey are provided as **Attachment 1**.

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 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.

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 measure were screened to further refine the list of potential corrective measures to be retained for additional evaluation. This evaluation was first completed and reported in the August Semiannual Progress Report (Arcadis 2020) and presented in this Semiannual Progress Report as **Table 1**. The list of retained potential corrective measures includes:

1. MNA
2. Geochemical Manipulation (In-Situ Injection)
3. Hydraulic Containment (Pump and Treat)
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 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) and summarized below.

- Tier I : Constituent concentrations & plume stability
- Tier II: Constituent attenuation mechanisms
- Tier III: Aquifer capacity and stability
- Tier IV: Performance monitoring

3 SUMMARY OF WORK COMPLETED

3.1 Closure Activities

Source control is being implemented as part of the closure process and 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 R6 CCR Landfill:

- Ash Pond A excavation began in October 2014 and was completed in July 2015. Excavated materials were consolidated in the R6 CCR landfill.
- Water management for excavation of Ash Pond B began in January 2018. Excavation of Ash Pond B also began in January 2018 and is ongoing. Most of the ash excavation was completed in September 2019, however, final certification of removal has not been completed for the permitted area.
- R6 CCR landfill capping began in October 2015 and was completed during the 4th 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.

Appendix D of the 2020 Annual Groundwater Monitoring and Corrective Action Report contains historical groundwater analytical data, which is summarized here to understand how groundwater conditions are changing in conjunction with closure activities as part of the groundwater remedy.

Appendix III and IV parameters have been monitored in the R6 CCR Landfill monitoring network since 2017. In the R6 CCR Landfill area, decreasing concentration trends are observed on the east side of the unit at YGWC-38 **(Figure 2**). 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 a maximum of 22.7 milligrams per liter (mg/L) in June of 2018 to 8.0 mg/L in September 2020. Similarly, selenium concentrations in YGWC-38 decreased from 0.265 mg/L in September 2017 to 0.076 mg/L in September 2020. Beryllium has also decreased from a maximum of 0.0059 mg/L in June 2018 to 0.0033 mg/L in September 2020, less than the GWPS of 0.004 mg/L. However, selenium concentrations in the delineation well PZ-37 downgradient of YGWC-38 has varied between 0.168 mg/L and 0.33 mg/L during the same monitoring period. Additional description is included in Section 3.2 on the nature and extent of target constituents at the Site.

On the west side of the R6 CCR Landfill, boron, sulfate, and TDS concentrations have declined at YGWC-41 (**Figure 3**). For example, boron decreased from a maximum of 15.2 mg/L in February 2018 to 6.0 mg/L in September 2020. Selenium concentrations are lower at YWGC-41 on the west side of the unit than at YWGC-38 and PZ-37 on the east side of the unit and continue to decrease. Concentrations of selenium in well YGWC-41 have decreased from a maximum of 0.071 mg/L in February 2018 to 0.046 mg/L in September 2020, less than the GWPS of 0.05 mg/L.

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 of the material at AP-A and AP-B removes the source of CCR constituents,

which will likely enhance the groundwater quality in the area. Capping of the R6 CCR Landfill and future completion of capping of the consolidated ash pond materials in the AMA also eliminates the infiltration of water through CCR materials. Groundwater monitoring data to date indicate a significant reduction in the concentrations of target constituents such as boron, sulfate, beryllium, and selenium due to pond closure activities progressing at Plant Yates since 2014.

3.2 Nature and Extent Delineation

Groundwater monitoring has been performed for AP-A/B/B'/3 since June 2016 and August 2016 at the R6 CCR Landfill pursuant to detection and assessment monitoring programs required by 40 CFR § 257.94 and 40 CFR § 257.95, respectively. Additional monitoring wells have been installed and sampled to characterize the nature and extent of Appendix IV constituents exceeding GWPS.

Statistical analysis reports of data collected in September 2020 continued to identify SSLs for beryllium in YGWC-38, as well as selenium in wells YGWC-38 and YGWC-41 at the R6 CCR Landfill. Results from recent sampling and analysis has shown that beryllium no longer exceeds the GWPS at YGWC-38 and selenium no longer exceeds the GWPS at YGWC-41. Currently, selenium concentrations at YGWC-38 are the only Appendix IV constituent exceedances observed in the R6-CCR Landfill. An iso-concentration map for selenium is provided in **Figure 4.** Concentrations of beryllium from the September 2020 sampling event are below the GWPS in all wells at the site; consequently, no iso-concentration map was prepared for beryllium. **Figures 5 - 7** provide cross-sections. Water levels on the cross section are for March 2020 and did not change significantly in September 2020. In November 2019, assessment groundwater monitoring well YAMW-4 was constructed to vertically assess YGWC-41. YAMW-2 was constructed to horizontally assess YGWC-41, and YAMW-5 was constructed to vertically assess YGWC-38, while downgradient well YGWC-36A provides horizontal delineation. Results of all monitoring network wells are presented in Table 5 of the 2020 Annual Groundwater Monitoring and Corrective Action Report. The selenium SSL at YGWC-41 is horizontally delineated by YAMW-2 and YGWC-42. Selenium is vertically delineated by YAMW-4. Selenium and beryllium SSLs at YGWC-38 were vertically delineated by YAMW-5. Downgradient of YGWC-38, selenium is not vertically delineated at PZ-37 and a new well is planned to characterize the groundwater below the screen interval of PZ-37. Selenium and beryllium are horizontally delineated by YGWC-23S and downgradient monitoring well YGWC-36A. In response to comments on the 2019 Assessment of Corrective Measures, geologic cross-sections and a beryllium iso-concentration map for AP-3, A, B, and B' were submitted to the Georgia Environmental Protection Division (EPD) on January 15, 2020.

Historical beryllium and cobalt SSLs at YGWC-33S were delineated horizontally at PZ-35 and vertically at YAMW-1. However, YGWC-33S was abandoned in June 2020 because it was installed within the permitted boundary and not suitably located to detect groundwater flow away from the AP-A/B/B'/3 boundary. Closure by removal activities in the R6 ditch necessitated the abandonment of YGWC-36 in July 2020. A replacement well, YGWC-36A was installed in September 2020 and sampled in October. With the removal of YGWC-33S from the network, the compliance well YGWC-36A fulfills the purpose of a downgradient compliance well along this flowpath. Groundwater quality data for these locations is provided in Table 5 of the 2020 Annual Groundwater Monitoring and Corrective Action Report. No current exceedances of Appendix IV constituents are present in the downgradient compliance location.

Lab reports for data collected from delineation wells are provided in Appendix C of the 2020 Annual Groundwater Monitoring and Corrective Action Report.

4 ADDITIONAL DATA COLLECTION

This section summarizes the work completed during the reporting period (July through December 2020) to support ongoing remedy selection and design. Field and laboratory investigations were carried out to support a demonstration of MNA and evaluation of geochemical in-situ manipulation as a potential remedy of the R6 CCR Landfill. Investigation activities completed since the submission of the August 2020 Semiannual Remedy Selection Progress Update report include, as summarized in Table 2:

- Selenium speciation in groundwater collected from YGWC-38 and YGWC-41 to evaluate mechanisms of natural attenuation;
- Sampling and analysis of aquifer solids (saprolite, partially weathered bedrock, bedrock):
    - Mineralogic assemblages and constituent balances to identify potential reactive minerals for the evaluation of an MNA mechanism
    - Acid-base accounting (ABA) properties to support the evaluation of attenuation mechanism and stability and buffering capacity for in-situ approaches;
- Bench-scale sorption testing to evaluate mechanism, capacity, and stability of the sorption attenuation mechanism for selenium and beryllium; and
- Acidity measurements to assess aquifer buffering capacity or reagent demand for in-situ approaches.

Table 2 provides a summary of the sampling and analysis completed since July of 2020 to advance the evaluation of MNA as a potential viable remedy at the R6 CCR Landfill. The analysis of groundwater and aquifer solids was designed to support a tiered evaluation of MNA and potential supporting remedies including the following key components, in accordance with USEPA guidelines (USEPA 2007):

- Groundwater plume stability (Tier I)
- Mechanism of attenuation (Tier II)
- Capacity and stability (Tier III)
- Performance monitoring (Tier IV).

4.1 Selenium Speciation in Groundwater

The fate and transport of selenium in groundwater is greatly dependent on the species of selenium present. Therefore, groundwater collected from YGWC-38 and YGWC-41 was submitted for selenium speciation analysis to support the evaluation of an MNA mechanism in the ash ponds and R6 CCR Landfill. Selenium speciation was analyzed using inductively coupled plasma-mass spectrometry (ICP-MS) and included total dissolved selenium, selenite, selenate, and other commonly observed forms of selenium. Results from the speciation of selenium in groundwater analysis are summarized in **Table 3** and the supporting laboratory report is provided in **Attachment 2**.

4.2 Sampling and Analysis of Aquifer Solids

Aquifer solids were collected from discrete intervals from boreholes of existing (YGWC-38, YGWC-41) and newly installed (YGWC-24SA, YAMW-3, YAMW-4) monitoring locations to evaluate the geochemical characteristics of the aquifer matrix and support the evaluation of an MNA mechanism at the ash ponds and R6 CCR Landfill. A total of 11 aquifer solids samples from six locations were collected from core material (archived and newly generated) from borehole drilling programs and represent site aquifer materials. Samples underwent testing and analysis for mineralogy and ABA. Results from these analyses are summarized in **Tables 4 through 6** and the supporting laboratory reports are provided in **Attachment 2**.

X-ray diffraction (XRD) analysis was used to determine mineral assemblages and chemical balance of individual constituents in saprolite, partially weathered rock, and bedrock. This analysis was performed to identify and evaluate mineral phases that support an MNA mechanism to stabilize and decrease concentrations of beryllium and selenium in groundwater.

ABA analyses were completed on upgradient and downgradient aquifer solid materials (saprolite, partially weathered rock, and bedrock) to assess the buffering capacity of aquifer materials in areas representing saprolite (YGWC-24SA), partially weathered rock (YGWC-41), gneiss (YAMW-3 and YAMW-4), and biotite gneiss (YGWC-38 and YGWC-41). ABA testing was carried out according to USEPA Method 600/2-78-054, following guidelines established by the Global Acid Rock Drainage (GARD) Guide (International Network for Acid Prevention [INAP] 2018). The data generated from the ABA analysis will be used to support a demonstration of MNA capacity and stability.

4.3 Soil and Bedrock Sorption Study

A soil and bedrock sorption study was completed to simulate the interaction between groundwater and the aquifer solids. Results of the simulation are presented in **Table 7** and will be used to demonstrate the mechanism of attenuation and quantify the capacity for aquifer solids to adsorb dissolved selenium. These tests were carried out using the groundwater composition at YGWC-38 with a selenium concentration of approximately 0.075 mg/L and total acidity of 22.2 mg/L, and three distinct aquifer solid compositions: saprolite, biotite gneiss (fine grained), and biotite gneiss (coarse grained). Saprolite material from above the saturated zone in YGWC-24SA was used to support the assessment of MNA capacity in unimpacted sediments. The biotite gneiss bedrock material, both fine and coarse grained, was generated from core collected from YAMW-4 to represent unimpacted bedrock aquifer material. The bedrock cores were crushed into two particle size ranges using a proctor hammer and 3/8-inch and 3/16-inch sieves. The coarse bedrock used in the reactors incorporated particle size ranges between 3/16 and 3/8 inches. The fine bedrock material used were the particles passing through the 3/16-inch sieve.

For each of the three main lithologies evaluated (saprolite, biotite gneiss fine, and biotite gneiss coarse), several trials were run with variations in the solid to liquid ratio to generate estimates of the sorption coefficient (Kd). Each reactor was run for a 72-hour period, after which a filtered sample was extracted and submitted for dissolved beryllium and selenium analysis. In addition, a control reactor containing only YGWC-38 groundwater was run to verify that sorption to the reaction vessel did not occur. Over 72 hours, pH in the reactor cells varied depending on the solid-to-liquid ratio and material type.

5 PLANNED ACTIVITIES AND SCHEDULE

As part of the ongoing closure of ash ponds, water management has been initiated. During pond closure, temporary and permanent changes (e.g., dewatering and relocation of material) may occur that will be considered as part of remedy selection. These and other additional improvements are anticipated as the closure activities are completed and conditions with the closed impoundments are established, although there could be fluctuations in concentrations of CCR constituents over time as the new conditions reach long term equilibrium. To address the potential fluctuations in concentrations of CCR constituents over time, Georgia Power proactively initiated adaptive site management, as outlined in the ACM Report (ACC 2019), to support the remedial strategy and address potential changes in site conditions as appropriate. The adaptive site management approach may be adjusted over the site's life cycle as new site information and technologies become available. To this end, Georgia Power will continue its data collection efforts as necessary to support refinement of the conceptual site model (CSM) and to further evaluate the feasibility of the retained list of potential corrective measures. Work completed since July 2020 will support remedy selection. Additional evaluation in 2021 will support the development and submittal of a remedy selection report in accordance with 40 CFR § 257.98.

To achieve this goal and further the understanding of site conditions in support of remedy selection from among the retained corrective measures, the following activities (organized by general site area) are recommended for 2021:

- Continue routine groundwater sampling at Appendix III and Appendix IV constituent 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.
- Evaluation of recently collected (since July 2020) groundwater and aquifer solids data and groundwater modeling for the tiered framework for the evaluation of MNA as a viable remedy.

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 in 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.

6 REFERENCES

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TABLES

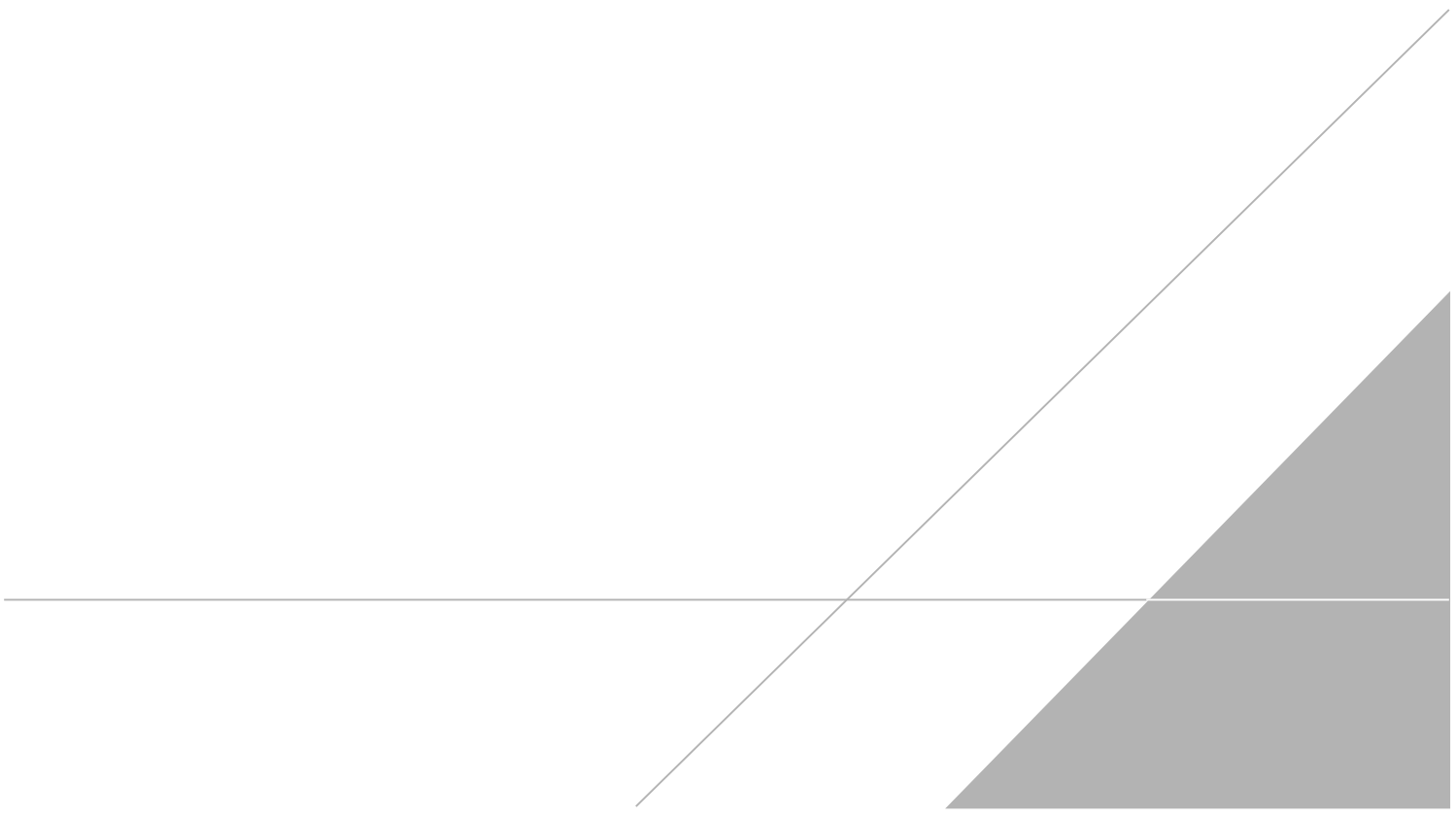

Table 1.
Remedy Evaluation Summary
Plant Yates AP-3, A, B, B' and R6 CCR Landfill
Georgia Power Company

Corrective Measure	Geochemical Manipulation (In Situ Injection)	Hydraulic Containment	In-Situ Stabilization/Solidification (ISS)	Monitored Natural Attenuation	Subsurface Vertical Barrier Walls	Permeable Reactive Barrier	Phytoremediation
Description	Injection of a chemical or organic substrate to alter geochemical conditions to those more favorable for stabilization of beryllium, cobalt, and/or selenium.	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 R6 landfill where the cap is in place.	This process is not limited by implementation.	-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 the 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 Be, Co and Se rapidly, but require ongoing monitoring to ensure conditions remain favorable.	Hydraulic containment is an effective corrective measure for 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 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	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

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Remedy Evaluation Summary
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Georgia Power Company

Corrective Measure	Geochemical Manipulation (In Situ Injection)	Hydraulic Containment	In-Situ Stabilization/Solidification (ISS)	Monitored Natural Attenuation	Subsurface Vertical Barrier Walls	Permeable Reactive Barrier	Phytoremediation
Reliability	This process will likely have overall reliability in achieving GWPS goals when adequate volume and subsurface distribution are achieved. Ongoing monitoring is necessary to ensure 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 and cobalt.
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 three years. Depending on the number of required units, the installation effort is expected to last several weeks. Full hydraulic capture/control is expected approximately three 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.
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. Above-ground treatment components may need to be present for an extended period, and 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 appears to be no potential receptors downgradient of the unit. Due to the potential need for groundwater extraction associated with barrier walls, above-ground 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.

Table 1.
Remedy Evaluation Summary
Plant Yates AP-3, A, B, B' and R6 CCR Landfill
Georgia Power Company

Corrective Measure	Geochemical Manipulation (In Situ Injection)	Hydraulic Containment	In-Situ Stabilization/Solidification (ISS)	Monitored Natural Attenuation	Subsurface Vertical Barrier Walls	Permeable Reactive Barrier	Phytoremediation
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. Not feasible or advantageous compared to other options for groundwater.	Yes	No. Site specific hydrogeology limits implementability, performance and effectiveness.	No. Site specific hydrogeology limits implementability, performance and effectiveness.	Yes

Table 2.
Summary of Sample Collection and Analysis for Remedy Selection Evaluation
Plant Yates; Ash Ponds 3, A, B, and B'; and R6 CRR Landfill
Georgia Power Company

ARCADIS Design & Consultancy for natural and built assets

Location ID	Sample Type	Sample Interval (ft bgs)	ABA	XRD	Selenium Speciation	Kd Study	Acidity	Purpose	Remedy Selection
YGWC-24SA	Saprolite	40.0 - 44.0	X	X	-	X	-	Characterization of subsurface materials in and above the water bearing zone: buffering and sorption capacity for R6 CCR Landfill and AMA	MNA, In-Situ Geochemical Manipulation
	Saprolite	47.0 - 49.0	X	X	-	-	-		
	Saprolite	52.0 - 54.0	X	X	-	-	-		
YAMW-3	Gneiss	83.0 - 84.0	X	X	-	-	-	Characterization of unimpacted bedrock material in water bearing zone. Buffering capacity for R6 CCR Landfill.	MNA, In-Situ Geochemical Manipulation
YAMW-4	Gneiss	88.0 - 89.0	X	X	-	X	-		
YGWC-38	Groundwater	37.0-47.0	-	-	X	-	X	Evaluate MNA attenuation mechanisms and capacity on east side of R6 CCR Landfill	MNA, In-Situ Geochemical Manipulation
	Saprolite	26.0-27.0	X	X	-	-	-	Characterization of sorption mechanism and capacity on east side of R6 CCR Landfill	
	Biotite Gneiss	39.0-40.0	X	X	-	-	-		
	Biotite Gneiss	59.5-60.5	X	X	-	-	-		
YGWC-41	Groundwater	54.0-64.0	-	-	X	-	-	Evaluate MNA attenuation mechanisms and capacity on west side of R6 CCR Landfill	MNA, In-Situ Geochemical Manipulation
	Partially Weathered Rock	32.0-33.0	X	X	-	-	-	Characterization of sorption mechanism and capacity on west side of R6 CCR Landfill	
	Partially Weathered Rock	48.0-49.0	X	X	-	-	-		
	Biotite Gneiss	59.0-60.0	X	X	-	-	-		

Notes:
ft bgs = feet below ground surface
ABA = acid-base accounting
AMA = ash management area
CCR = coal combustion residuals
Kd = sorption coefficient
MNA = monitored natural attenuation
XRD = x-ray diffraction

Table 3.
Selenium Speciation Results
Plant Yates; Ash Ponds 3, A, B, and B'; and R6 CRR Landfill
Georgia Power Company

Sample ID	Sample Date	MeSe(IV)	Se	Se(IV)	Se(VI)	SeCN	SeMet	$SeSO_3$
YGWC-38	9/25/2020	<0.350 U	85.9	<0.350 U	82.10	<0.250 U	<0.350 U	<0.300 U
YGWC-41	9/25/2020	<0.350 U	50.7	<0.350 U	49.3	<0.250 U	<0.350 U	<0.300 U

Notes:
All results are dissolved fraction
Me Se (IV) = methylseleninic acid
Se = selenium
Se(IV) = selenite
Se(VI) = selenate
SeCN = selenocyanate
SeMet = selenomethionine
$SeSO_3$ = selenium sulfite
U = Result is less than or equal to the method detection limit (MDL)

Table 4.
Mineralogy Results
Plant Yates; Ash Ponds 3, A, B, and B'; and R6 CRR Landfill
Georgia Power Company

Lithology	Chemical Composition	Saprolite				Partially Weathered Rock		Gneiss		Biotite Gneiss		
Sample ID		YGWC-24SA	YGWC-24SA	YGWC-24SA	YGWC-38	YGWC-41	YGWC-41	YAMW-3	YAMW-4	YGWC-38	YGWC-38	YGWC-41
Interval (feet below ground surface)		40-44	47-49	52-54	26-27	32-33	48-49	83-84	88-89	39-40	59.5-60.5	59-60
Quartz	SiO2	46.7	41.7	49.2	51.6	49.5	46.1	53.0	36.9	43.6	49.9	51.7
Albite	NaAlSi3O8	26.8	29.5	34.8	30.3	31.5	39.6	29.6	49.1	39.4	31.7	29.9
Albite, calcian	(Na,Ca)Al(Si,Al)3O8	6.40	7.00	2.40	6.30	6.90	2.50	4.90	7.10	5.30	6.30	8.70
Muscovite	KAl2(AlSi3O10)(OH)2	11.9	11.9	7.20	5.40	6.70	4.70	7.50	1.80	6.40	6.80	5.50
Biotite	K(Mg,Fe)3(AlSi3O10)(OH)2	2.20	0.80	1.00	1.20	-	5.60	5.00	2.80	4.40	5.00	4.30
Hydrobiotite	K(Mg,Fe)6(Si,Al,Fe)8O20(OH)4·4H2O	1.10	4.70	1.70	0.90	4.00	-	-	-	-	-	-
Clinochlore	(Fe,Mg)5Al(Si3Al)O10(OH)8	1.00	1.30	1.50	1.10	1.40	1.40	-	2.40	0.90	0.30	-
Kaolinite	Al2Si2O5(OH)4	2.30	1.40	1.60	2.20	-	-	-	-	-	-	-
Antigorite	Mg3Si2O5(OH)4	1.50	1.70	0.60	1.00	-	-	-	-	-	-	-
TOTAL	----	99.9	100	100	100	100	99.9	100	100	100	100	100

Notes:
All values are reported as weight percent.

Table 5.
Constituent Composition - Assay Results
Plant Yates; Ash Ponds 3, A, B, and B'; and R6 CRR Landfill
Georgia Power Company

Sample ID	Test/Parameter	Silicon	Aluminum	Iron	Potassium	Magnesium	Calcium	Titanium	Manganese	Barium	Chromium	Hydrogen	Oxygen	Sodium
YGWC-24SA (40-44)	Assay[1]	36.6	7.41	1.50	1.22	0.62	0.45	0.08	0.05	0.04	-	-	-	-
	SQD[2]	35.4	7.63	1.09	1.18	0.67	0.48	-	-	-	-	0.16	50.7	2.75
	Delta	1.25	-0.22	0.41	0.04	-0.05	-0.03	0.08	0.05	0.04	-	-0.16	-50.7	-2.75
YGWC-24SA (47-49)	Assay[1]	34.5	7.82	1.98	1.54	1.06	0.45	0.10	0.09	0.04	-	-	-	-
	SQD[2]	33.9	8.09	1.90	1.21	0.91	0.52	-	-	-	-	0.18	50.3	3.01
	Delta	0.65	-0.27	0.08	0.33	0.15	-0.07	0.10	0.09	0.04	-	-0.18	50.3	3.01
YGWC-24SA (52-54)	Assay[1]	36.6	6.57	1.12	0.77	0.51	0.33	0.05	0.04	0.02	-	-	-	-
	SQD[2]	37.0	6.41	1.03	0.73	0.44	0.18	-	-	-	-	0.11	50.9	3.23
	Delta	-0.41	0.16	0.09	0.04	0.07	0.15	0.05	0.04	0.02	-	-0.11	50.9	3.23
YAMW-3 (83-84)	Assay[1]	36.7	5.98	0.90	0.87	0.53	0.36	0.05	0.02	-	0.02	-	-	-
	SQD[2]	37.6	6.08	0.93	1.03	0.39	0.37	-	-	-	-	0.06	50.7	2.88
	Delta	-0.85	-0.10	-0.03	-0.16	0.14	-0.01	0.05	0.02	-	0.02	-0.06	50.7	2.88
YAMW-4 (88-89)	Assay[1]	36.6	7.01	0.66	0.37	0.49	0.47	0.05	0.05	-	-	-	-	-
	SQD[2]	35.2	7.76	1.09	0.37	0.33	0.53	-	-	-	-	0.05	50.1	4.62
	Delta	1.40	-0.75	-0.43	-0.003	0.16	-0.06	0.05	0.05	-	-	-0.05	-50.1	-4.62
YGWC-38 (26-27)	Assay[1]	37.8	6.33	1.06	0.64	0.43	0.34	0.05	0.02	0.02	-	-	-	-
	SQD[2]	37.1	6.47	0.62	0.57	0.61	0.47	-	-	-	-	0.11	51.1	2.98
	Delta	0.69	-0.14	0.44	0.07	-0.18	-0.13	0.05	0.02	0.02	-	-0.11	51.1	2.98
YGWC-38 (39-40)	Assay[1]	37.0	6.66	0.93	0.98	0.43	0.4	0.04	0.02	0.02	-	-	-	-
	SQD[2]	36.1	7.00	1.08	0.88	0.41	0.4	-	-	-	-	0.06	50.3	3.75
	Delta	0.86	-0.34	-0.15	0.11	0.02	0.01	0.04	0.02	0.02	-	-0.06	50.3	3.75
YGWC-38 (59.5-60.5)	Assay[1]	37.2	6.67	1.01	0.75	0.27	0.63	0.06	0.03	0.03	-	-	-	-
	SQD[2]	36.9	6.53	1.24	0.96	0.287	0.47	-	-	-	-	0.06	50.5	3.12
	Delta	0.34	0.14	-0.23	-0.21	-0.02	0.16	0.06	0.03	0.03	-	-0.06	50.5	3.12
YGWC-41 (32-33)	Assay[1]	36.3	6.18	1.52	0.82	0.58	0.67	0.08	0.05	0.02	-	-	-	-
	SQD[2]	36.6	6.37	1.30	0.70	0.58	0.51	-	-	-	-	0.10	50.7	3.13
	Delta	-0.32	-0.19	0.22	0.13	0.0001	0.16	0.08	0.05	0.02	-	-0.10	50.7	3.13
YGWC-41 (48-49)	Assay[1]	35.2	6.01	0.93	0.79	0.66	0.11	0.05	0.02	0.02	-	-	-	-
	SQD[2]	36.8	6.23	1.29	0.86	0.552	0.19	-	-	-	-	0.07	50.4	3.63
	Delta	-1.63	-0.22	-0.36	-0.07	0.11	-0.08	0.05	0.02	0.02	-	-0.07	50.4	3.63
YGWC-41 (59-60)	Assay[1]	37.1	6.55	0.93	0.65	0.63	0.34	0.06	0.02	0.02	-	-	-	-
	SQD[2]	37	6.6	1.01	0.79	0.648	0.22	-	-	-	-	0.05	50.6	3.05
	Delta	0.0665	-0.0535	-0.08	-0.14	-0.0182	0.13	0.06	0.02	0.02	-	-0.05	50.6	3.05

Notes:
All values are as weight percent.
1. Values measured by chemical assay. Reported in weight percent.
2. Values calculated based on mineral/compound formulas and quantites identified by semi-quantitative XRD.
- not detected
SQD = semi-quantitative XRD
XRD = x-ray diffraction

Table 6.
Acid-Base Accounting Results
Plant Yates; Ash Ponds 3, A, B, and B'; and R6 CRR Landfill
Georgia Power Company

Sample Location	Depth Interval	Lithology	Sulfur Forms							Neutralization Potential as $CaCO_3$
			Sulfur Total	Sulfur Sulfate	Total Sulfur minus Sulfate	Sulfur Pyritic Sulfide	Sulfur Organic Residual	Sulfur HCl Residue	Sulfur HNO_3 Residue	
	ft bgs		%	%	%	%	%	%	%	%
YAMW-3 (83-84)	83 - 84	gneiss	0.03 J	0.01 J	0.02 J	0.02 J	U	0.02 J	U	0.7
YAMW-4 (88-89)	88 - 89	gneiss	U	U	U	U	U	U	U	0.6
YGWC-24SA (40-44)	40 - 44	saprolite	U	U	U	U	U	U	U	0.3 J
YGWC-24SA (47-49)	47 - 49	saprolite	U	U	U	U	U	U	U	0.5
YGWC-24SA (52-54)	52 - 54	saprolite	U	U	U	U	U	U	U	0.4 J
YGWC-38 (26-27)	26 - 27	saprolite	U	U	U	U	U	U	U	0.3 J
YGWC-38 (39-40)	39 - 40	biotite gneiss	U	U	U	U	U	U	U	0.5 J
YGWC-38 (59.5-60.5)	59.5 - 60.5	biotite gneiss	0.03 J	0.01 J	0.02 J	0.02 J	U	0.02 J	U	0.6
YGWC-41 (32-33)	32 - 33	partially weathered rock	U	U	U	U	U	U	U	0.4 J
YGWC-41 (48-49)	48 - 49	partially weathered rock	U	U	U	U	U	U	U	0.2 J
YGWC-41 (59-60)	59 - 60	biotite gneiss	U	U	U	U	U	U	U	0.5 J

Notes:
MDL of 0.01 used in calculations
AP = Acid Generation Potential
NP = Neutralization Potential
Net Neutralizing Potential (NNP) calculated by NP-AP
NPR calculated as NP:AP
MDL = Method Detection Limit
U = the analyte was not detected in the sample above the MDL
J = the reported value is above the MDL but below the reporting limit; estimated
$CaCO_3$ = calcium carbonate
t $CaCO_3$/Kt = tons calcium carbonate per 1000 tons
Kg H_2SO_4/t = kilograms of sulfuric acid per ton

Table 6.
Acid-Base Accounting Results
Plant Yates; Ash Ponds 3, A, B, and B'; and R6 CRR Landfill
Georgia Power Company

Sample Location	Depth Interval	Lithology	Calculated Values						Net Acid Generation (NAG) Test	
			Acid Generation Potential (Total Sulfur)	Acid Generation Potential (Sulfide Sulfur)	Acid Neutralization Potential (calc)	Net Neutralization Potential (Total Sulfur)	Acid-Base Potential (Sulfide Sulfur)	Neutralization Potential Ratio (NPR)	NAG	pH After Oxidation
	ft bgs		t $CaCO_3$/Kt	t $CaCO_3$/Kt	t $CaCO_3$/Kt	t $CaCO_3$/Kt	t $CaCO_3$/Kt	calc	Kg H_2SO_4/t	s.u.
YAMW-3 (83-84)	83 - 84	gneiss	0.94	0.63	7.0	6.1	6.4	11.2	4.0	5.8
YAMW-4 (88-89)	88 - 89	gneiss	U	U	6.0	5.7	5.7	19.4	6.0	6.2
YGWC-24SA (40-44)	40 - 44	saprolite	U	U	3.0	2.7	2.7	9.7	3.0	6.2
YGWC-24SA (47-49)	47 - 49	saprolite	U	U	5.0	4.7	4.7	16.1	U	7.1
YGWC-24SA (52-54)	52 - 54	saprolite	U	U	4.0	3.7	3.7	12.9	3.0	6.4
YGWC-38 (26-27)	26 - 27	saprolite	U	U	3.0	2.7	2.7	9.7	7.0	6.0
YGWC-38 (39-40)	39 - 40	biotite gneiss	U	U	5.0	4.7	4.7	16.1	8.0	6.0
YGWC-38 (59.5-60.5)	59.5 - 60.5	biotite gneiss	0.94	0.63	6.0	5.1	5.4	9.6	4.0	5.5
YGWC-41 (32-33)	32 - 33	partially weathered rock	U	U	4.0	3.7	3.7	12.9	4.0	6.2
YGWC-41 (48-49)	48 - 49	partially weathered rock	U	U	2.0	1.7	1.7	6.5	8.0	5.9
YGWC-41 (59-60)	59 - 60	biotite gneiss	U	U	5.0	4.7	4.7	16.1	7.0	6.0

Notes:
MDL of 0.01 used in calculations
AP = Acid Generation Potential
NP = Neutralization Potential
Net Neutralizing Potential (NNP) calculated by NP-AP
NPR calculated as NP:AP
MDL = Method Detection Limit
U = the analyte was not detected in the sample above the MDL
J = the reported value is above the MDL but below the reporting limit; estimated
$CaCO_3$ = calcium carbonate
t $CaCO_3$/Kt = tons calcium carbonate per 1000 tons
Kg H_2SO_4/t = kilograms of sulfuric acid per ton

Table 7.
Kd Testing Details and Results
Plant Yates; Ash Ponds 3, A, B, and B'; and R6 CRR Landfill
Georgia Power Company

Lithology	Mass Solids (g)	Volume Groundwater (mL)	pH	Selenium Concentration Control (ppb)	Selenium Concentration Aqueous (ppb)	Percent Removed	Sorption Coefficient, Kd (L/kg)
Saprolite	0.24	259	5.9	0.075	0.075	0	N/A
	5.0	395	4.5	0.075	0.082	0	N/A
	50	370	6.3	0.075	0.082	0	N/A
	250	260	6.4	0.075	0.067	11	0.12
	350	175	NM	0.075	0.050	33	0.22
	300	100	NM	0.075	0.043	43	0.25
Biotite-Gneiss (Fine -Grained)	2.4	250	6.0	0.075	0.071	Nominal	N/A
	50	370	6.3	0.075	0.078	0	N/A
	200	290	7.6	0.075	0.070	7	0.1
	500	120	8.2	0.075	0.052	31	0.11
	800	350	NM	0.075	0.055	27	0.16
Biotite-Gneiss (Coarse -Grained)	2.4	250	5.9	0.075	0.076	0	N/A
	50	370	5.4	0.075	0.081	0	N/A
	200	290	7.1	0.075	0.079	0	N/A
	500	120	8.4	0.075	0.076	0	N/A
	800	350	7.5	0.075	0.073	0	N/A

Notes:
g = gram
mL = milliliter
ppb = part per billion
Kd = sorption coefficient
L/kg = liter per kilogram
N/A = Not Applicable
NM = Not measured

FIGURES

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-24I
YGWC-24S
PZ-24IA
YGWC-24SA
PZ-35
YAMW-1
YGWC-36A
YGWC-36
YGWC-33S
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
YAMW-4
YGWC-41
PZ-37
YGWC-23S
ASH POND 3
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
- ABANDONED MONITORING WELL
- ABANDONED NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY

NOTE:
1. YGWC-33S WAS ABANDONED IN JUNE 2020.

2. YGWC-24SA WAS INSTALLED AS REPLACEMENT WELL FOR YGWC-24S IN JUNE 2020.

3. PZ-24IA WAS INSTALLED AS REPLACEMENT WELL FOR PZ-24I IN JUNE 2020.

4. YGWC-36A WAS INSTALLED AS A REPLACEMENT WELL FOR YGWC-36A IN SEPTEMBER 2020.

5. 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
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

WELL LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

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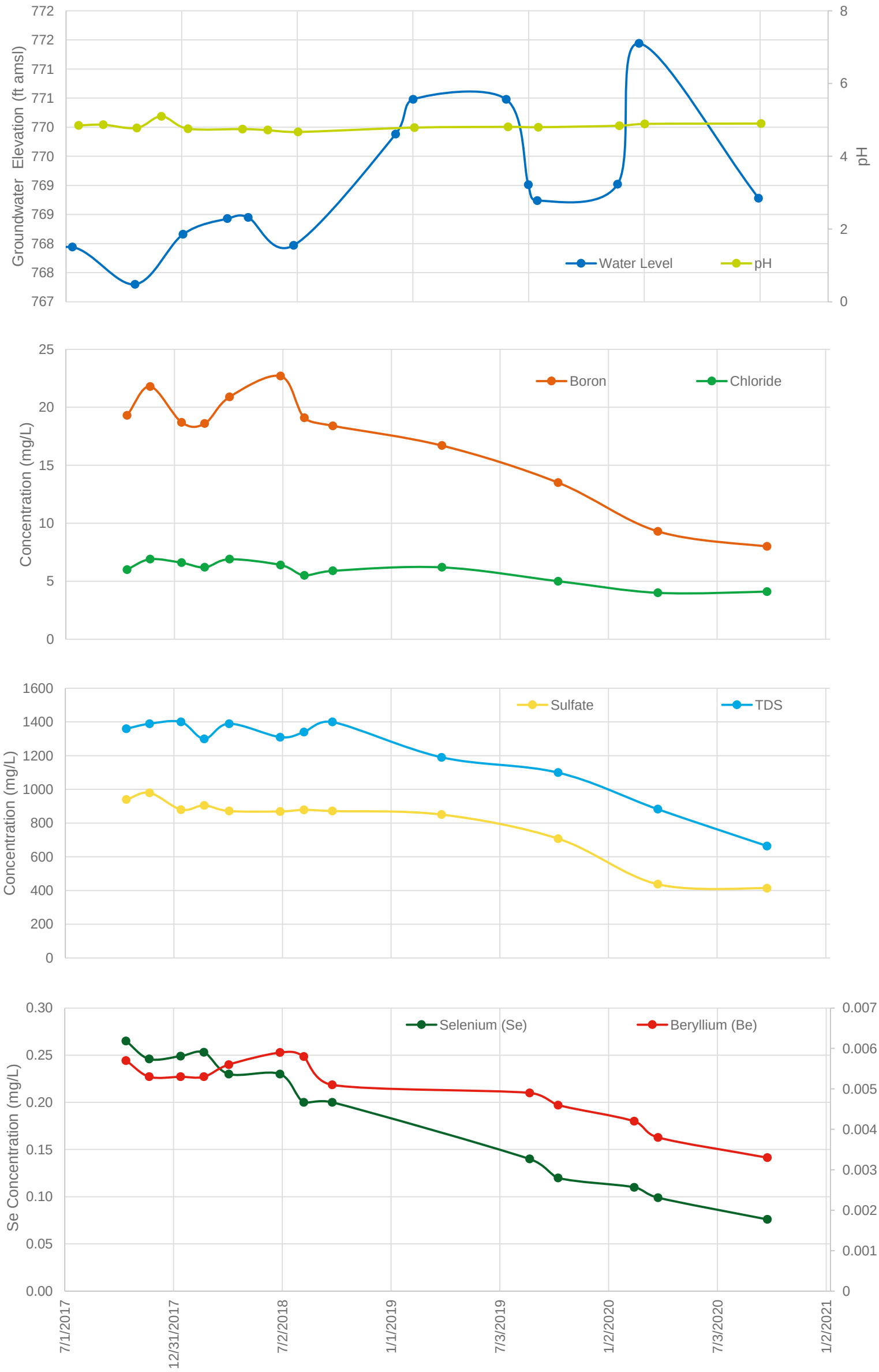

ft amsl = feet above mean sea level
mg/L = milligrams per liter

SEMI-ANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

YGWC-38 CONCENTRATION TRENDS

ARCADIS

FIGURE 2

Figure_2_17DEC2020
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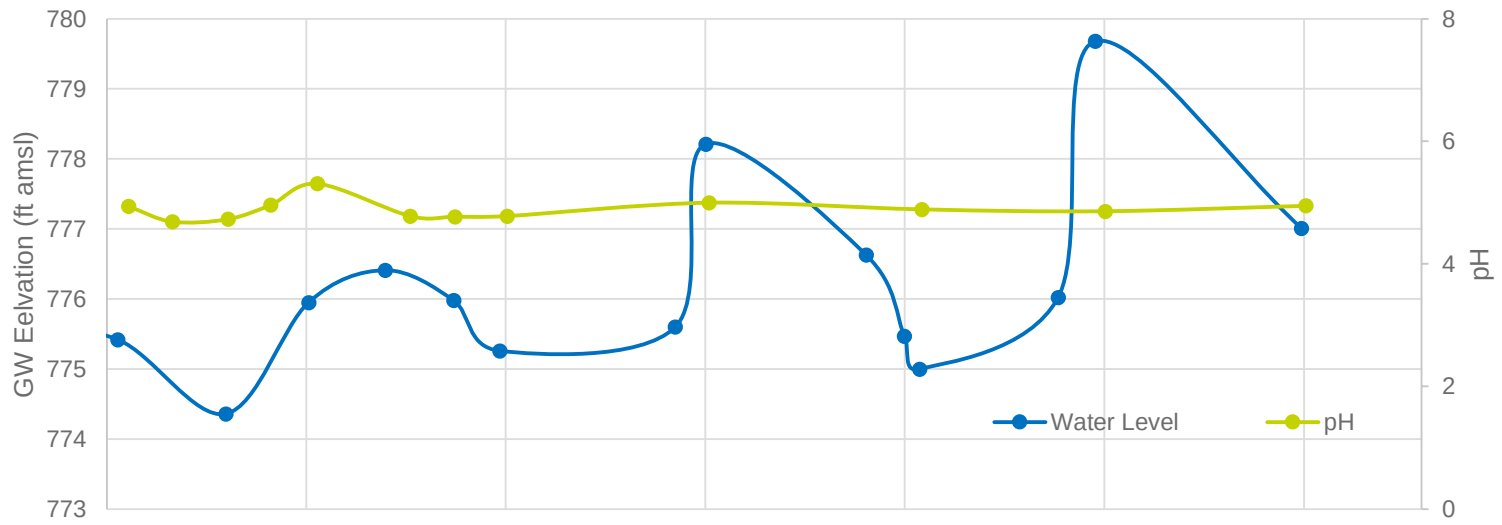

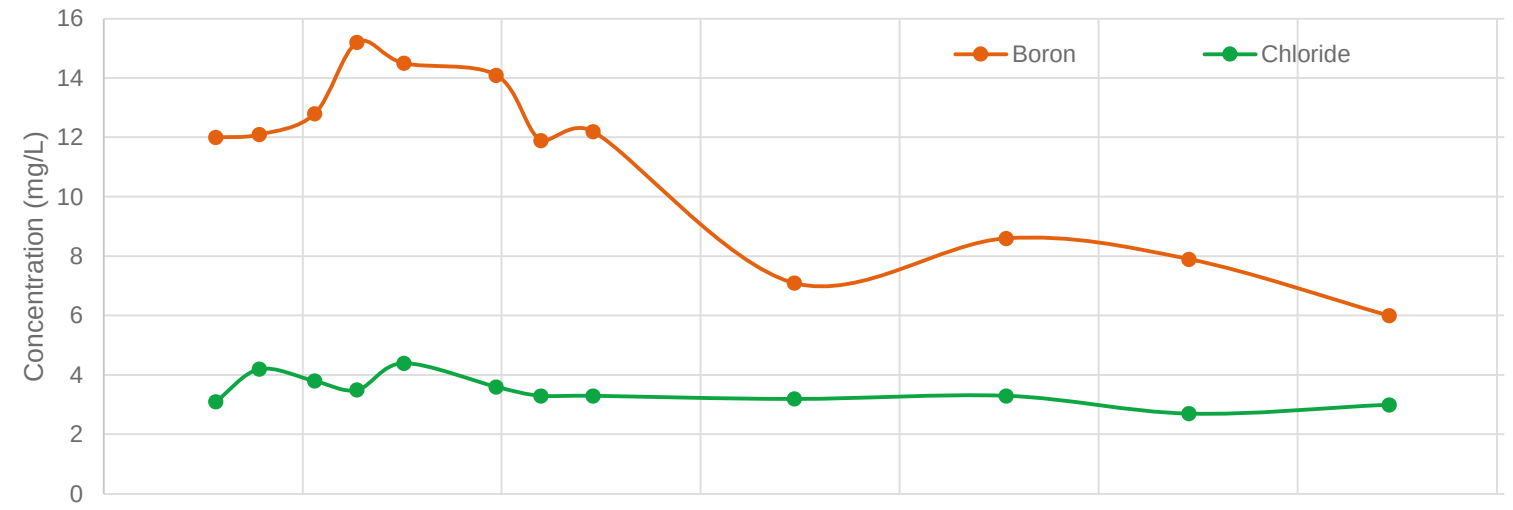

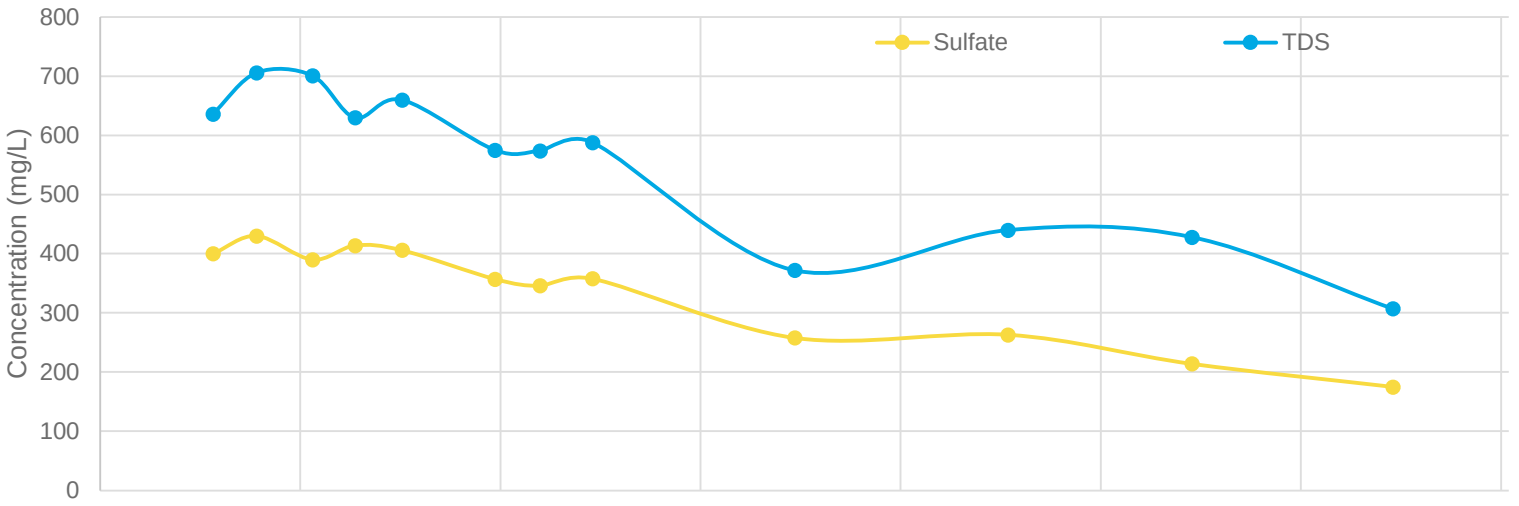

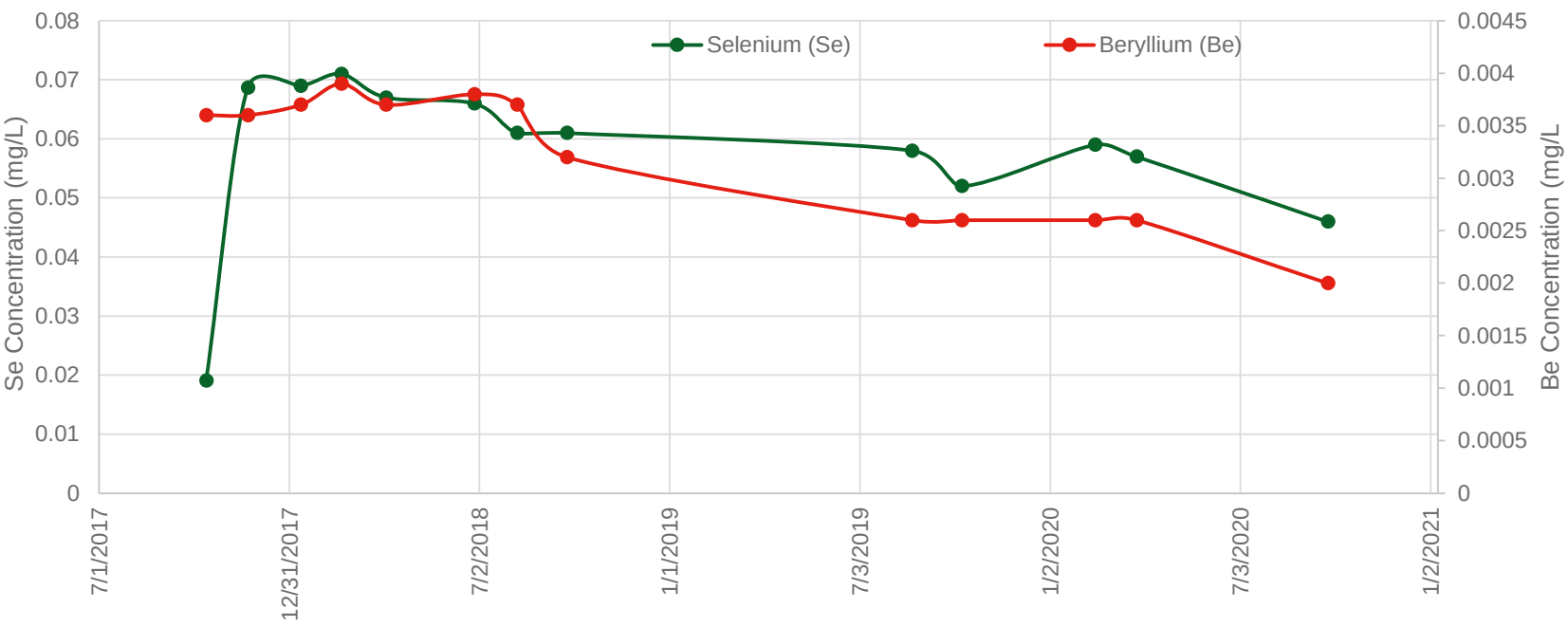

ft amsl = feet above mean sea level
mg/L = milligrams per liter

SEMI-ANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

YGWC-41 CONCENTRATION TRENDS

ARCADIS

FIGURE 3

Figure_3_17DEC2020
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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

710 720 730 740 750 760 770 780 790

YGWA-6I YGWA-6S
PZ-06D
PZ-48
YGWC-49 0.0091 J
ASH POND A
YGWC-24SA < 0.0016
YGWC-24S < 0.0016
YAMW-1 < 0.0016
PZ-35 < 0.0013
YGWC-36A < 0.0016
YGWC-36
YGWC-33S
ASH POND B
ASH POND B'
YGWA-17S < 0.0016
YGWA-18S < 0.0016
YGWA-18I
PZ-51
YGWC-43 < 0.0016
R6 ASH DISPOSAL AREA
YAMW-3
YGWC-42 0.046
YAMW-2 < 0.0016
YAMW-4 0.016
YGWC-41 0.046
ASH POND 3
PZ-37 0.32
YGWC-23S 0.031
YAMW-5 0.026
YGWC-38 0.076
0.05
ASH MANAGEMENT AREA
YGWA-40 0.0016 J
YGWA-39 < 0.0016
YGWA-21I < 0.0016
YGWA-20S < 0.0016
PZ-04S
YGWA-4I < 0.0016
PZ-05S
YGWA-5I < 0.0016
YGWA-5D < 0.0016

LEGEND

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

SELENIUM GWPS 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 SEPTEMBER 22-25 AND OCTOBER 7, 2020.
4. YGWC-33S WAS ABANDONED IN JUNE 2020; YGWC-36A WAS INSTALLED IN SEPTEMBER 2020 AS A REPLACEMENT WELL FOR YGWC-36.
5. APPROXIMATE POTENTIOMETRIC CONTOURS DATED SEPTEMBER 21, 2020.
6. A SURVEY OF POTENTIAL DRINKING WATER SUPPLY WELLS WAS PERFORMED WITHIN A 0.5 MILE RADIUS OF THE PLANT. ALL OF THE WELLS WERE LOCATED HYDRAULICALLY UPGRADIENT OF THE PLANT. SELENIUM IS DELINEATED TO BELOW THE GWPS ON THE PLANT PROPERTY.
7. 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
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

SELENIUM ISOCONCENTRATION MAP, SEPTEMBER 2020

ARCADIS Design & Consultancy for natural and built assets

FIGURE
4

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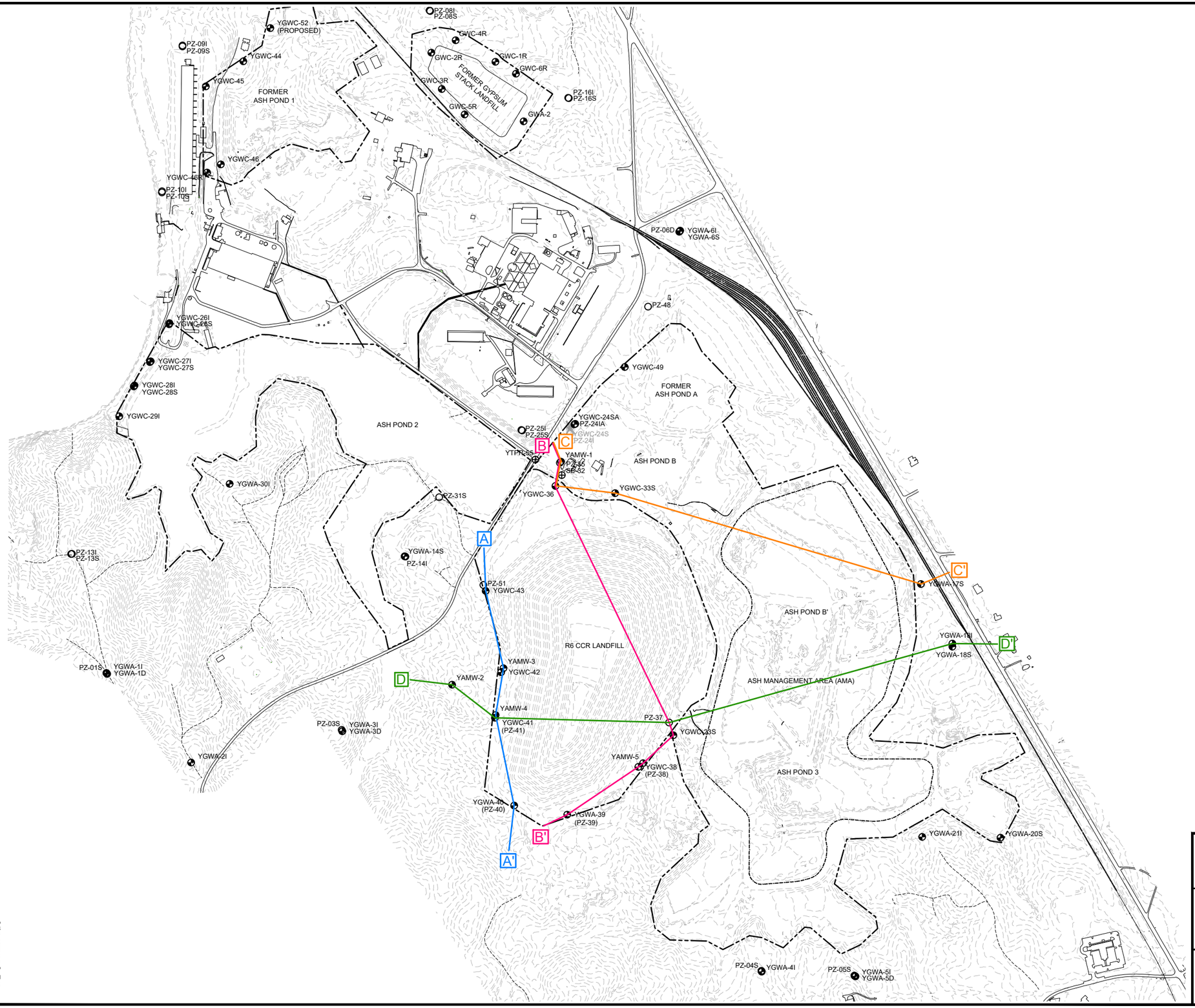

CROSS-SECTION LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5

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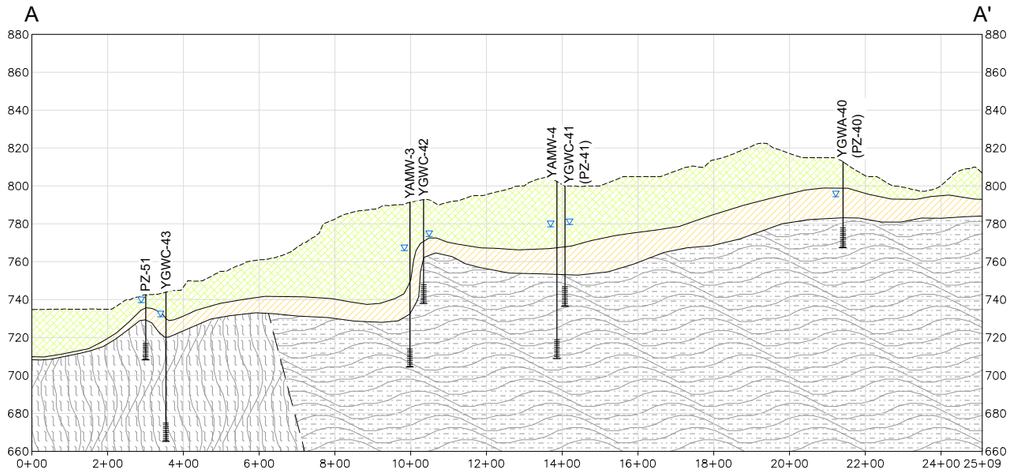
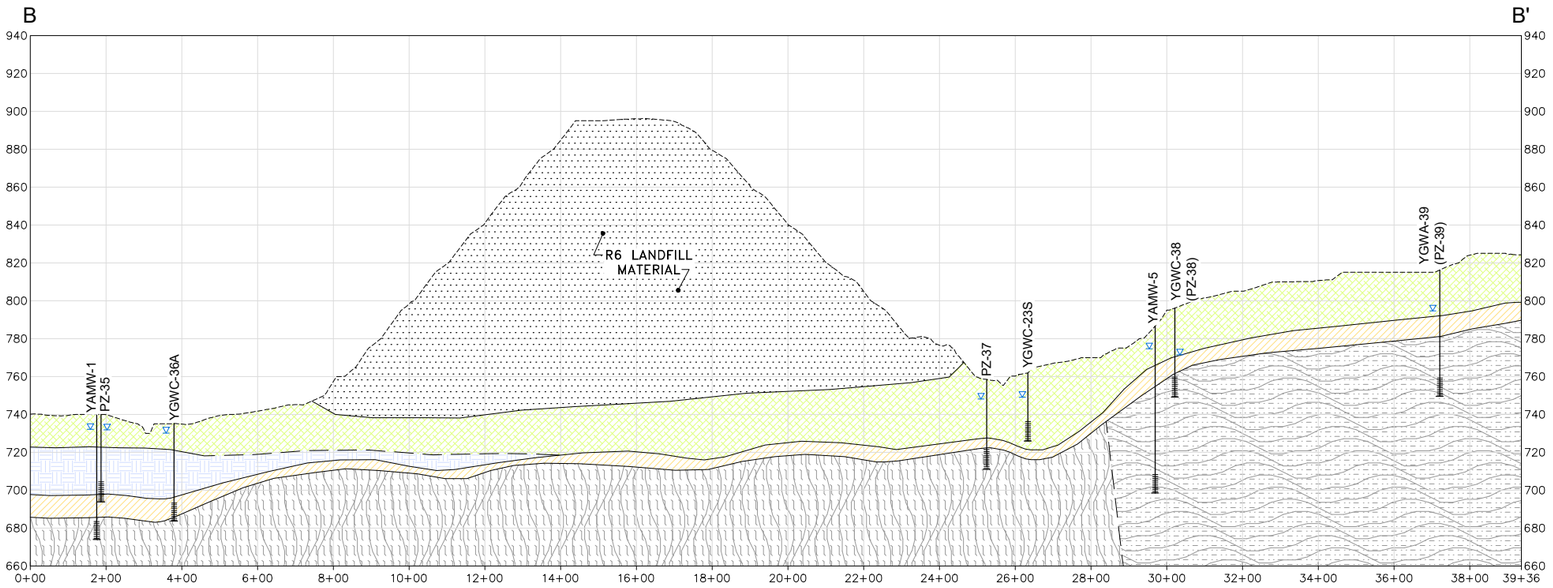




LEGEND:

WATER ELEVATION (MARCH 2020)

WELL SCREEN

SAPROLITE:

SILTY SAND – LIGHT BROWN TO TAN FIRE–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) – UNDIFFERIATED BIOTITE GNEISS, GRANITIC GNEISS, AND MICA SCHIST. MODERATELY TO INTENSELY FOLIATED

BIOTITE GNEISS – BIOTITE AND MUSCOVITE GNEISS. MODERATELY TO INTENSELY FOLIATED

0 400' 800'

HORIZONTAL GRAPHIC SCALE

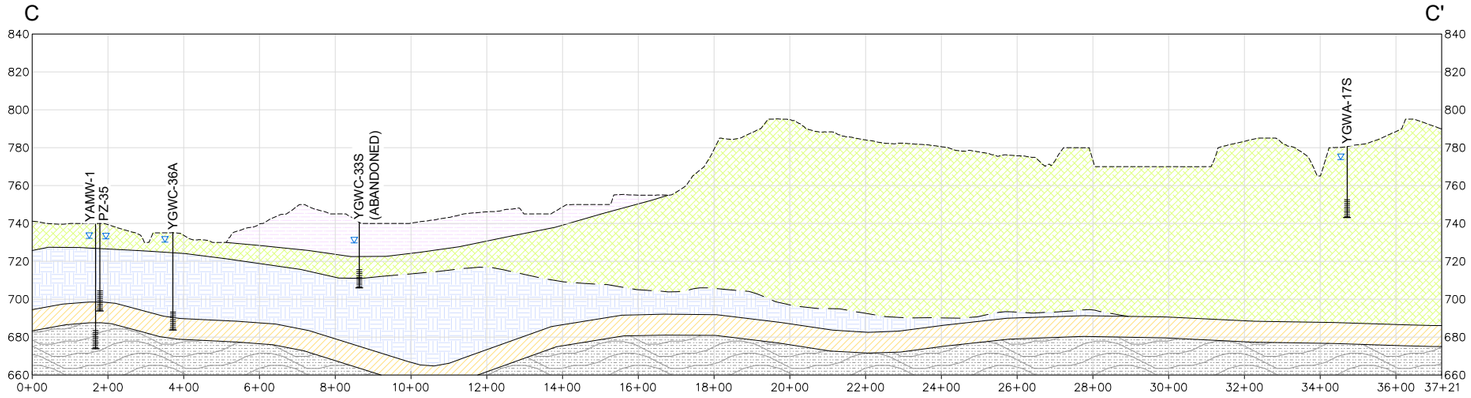
0 80' 160'

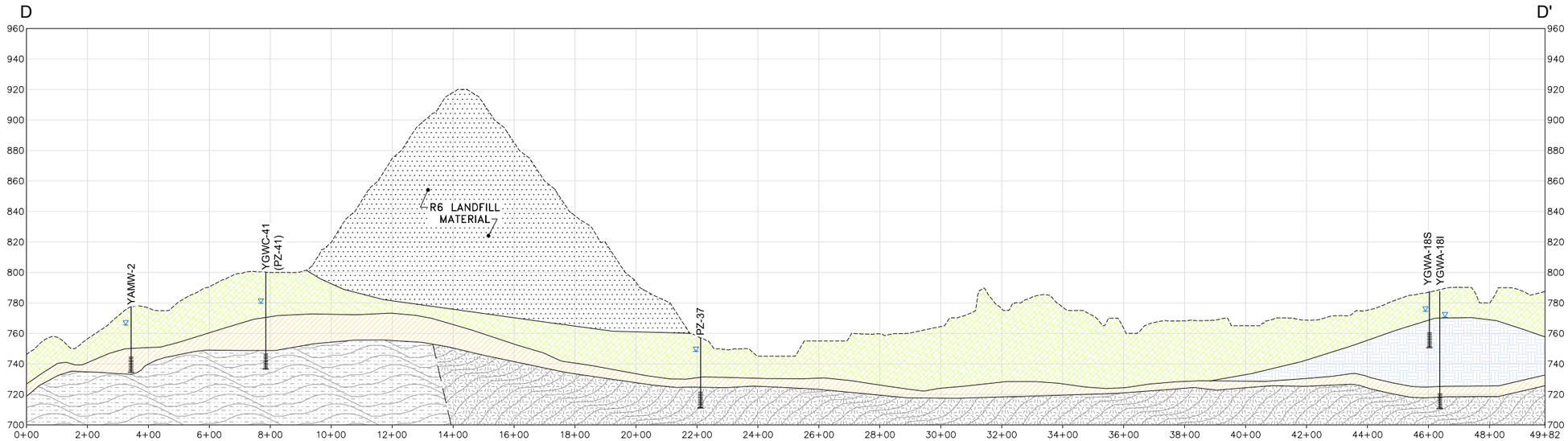
VERTICAL GRAPHIC SCALE

CROSS-SECTIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6





LEGEND:

- WATER ELEVATION (MARCH 2020)
- WELL SCREEN

SAPROLITE:

- SANDY SILT– LIGHT BROWN TO BROWN SANDY SILT. LOW PLASTICITY
- SILTY SAND – LIGHT BROWN TO TAN FIRE–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

0 400' 800'

HORIZONTAL GRAPHIC SCALE

0 80' 160'

VERTICAL GRAPHIC SCALE

CROSS-SECTIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7

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ATTACHMENT 1

Risk Evaluation Report

RISK EVALUATION REPORT
PLANT YATES
R6 CCR LANDFILL AND ASH MANAGEMENT AREA
COWETA COUNTY, GEORGIA

Prepared for

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Project Number 6123-20-1471

January 2021

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LIST OF ACRONYMS AND ABBREVIATIONS

ACC	Atlantic Coast Consulting
AMA	Ash Management Area
AP	Ash Pond
CCR	Coal Combustion Residual
CEM	Conceptual Exposure Model
CFR	Code of Federal Regulations
COI	Constituent of Interest
COPI	Constituent of Potential Interest
EPC	Exposure Point Concentration
EPD	[Georgia] Environmental Protection Division
ft	feet
ft/day	feet per day
GWPS	Groundwater Protection Standard
HSRA	Hazardous Site Response Act
IRIS	Integrated Risk Information System
K	Hydraulic Conductivity
mg/L	Milligrams per liter
amsl	above mean sea level
ProUCL	ProUCL software version 5.1
PZ	Piezometer
RME	Reasonable Maximum Exposure
RRS	Risk Reduction Standards
RSL	Regional Screening Level
SSL	Statistically Significant Level
UCL	95 Percent Upper Confidence Limit of the Arithmetic Mean
USEPA	United States Environmental Protection Agency
VRP	Voluntary Remediation Program

EXECUTIVE SUMMARY

Georgia Power's Plant Yates (site) is a former seven-unit coal-fired, electric-generating facility approximately 8 miles northwest of Newnan and 13 miles southeast of the city of Carrollton, Georgia in Coweta County, Georgia. Plant Yates began operations in 1982. In compliance with applicable regulations, coal combustion residual (CCR) material resulting from power generation has historically been transferred and stored at the site's CCR units which include the Gypsum Stack Landfill, R6 CCR Landfill (R6), AP-1, AP-2, AP-3, AP-A, AP-B, and AP-B'. The Ash Management Area (AMA) includes the former footprints of ash ponds AP-3, AP-A, AP-B, and AP-B'.

Georgia Power is currently in the permitting process for the closures of R6 and the AMA in place by consolidating the excavated CCR material to a smaller footprint and grading to promote drainage with placement of a final impermeable cover system in accordance with the Federal CCR Rule, 40 Code of Federal Regulations (C.F.R.). § 257[1], and the State CCR Rule, Georgia Environmental Protection Division (EPD) Coal Combustion Residuals Rule 391-3-4-.10. Two permit applications were submitted to Georgia EPD in November 2018: one for the AMA and another for the R6. Due to the configuration of the units and overall groundwater flow direction, both permit applications propose combining the monitoring systems of R6 and AMA into a single multi-unit monitoring system that meets federal and state monitoring requirements. The combined monitoring system is hereafter referred to in this report as R6-AMA. Post closure care including semiannual groundwater monitoring and reporting for R6-AMA is required for at least 30 years following closure in place of these units.

This report focuses on R6-AMA and presents the results of a human health risk and ecological evaluation for CCR constituents that exhibit statistically significant levels (SSLs) in groundwater at the site. A conservative, health-protective approach was used that is consistent with United States Environmental Protection Agency (USEPA) risk assessment guidance, Georgia EPD regulations and guidance, and standard practice for risk assessment in the State of Georgia. Using the groundwater protection standards (GWPS) established for R6-AMA according to Federal and State CCR Rules, beryllium and selenium were previously identified as SSL-related constituents (Arcadis, 2020). The risk evaluation relies on recent groundwater data collected by Georgia Power in compliance with the Federal and State CCR Rules.

[1] The full citation for the Federal CCR Rule is: *Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments,* 40 C.F.R. § 257. The rule was finalized with an effective date of October 14, 2015 and last amended August 28, 2020 with an effective date of September 28, 2020 (USEPA, 2020a).

Consistent with USEPA guidance, this risk evaluation used a tiered approach to evaluate potential risks, which included the following steps:

1. Development of a conceptual exposure model (CEM) for R6-AMA.
2. Initial groundwater risk screening: Comparison of groundwater concentrations for SSL-related constituents (beryllium and selenium) to conservative, health-protective criteria and/or background concentrations to assess whether constituents pose a risk to human health.
3. Refined groundwater risk evaluation: Performance of a more refined analysis for Constituents of Potential Interest (COPIs) that were retained in the initial risk screening in order to evaluate the potential risks for hypothetical off-site residential receptors exposed to groundwater.
4. Development of risk conclusions and identification of associated uncertainties.

Using this approach that includes multiple conservative assumptions, SSL-related constituents in on-site groundwater monitoring wells were either below the health-protective screening criteria (beryllium) or delineated to concentrations not exceeding health-protective screening criteria on-site (selenium) (i.e., either within R6-AMA or the downgradient AP-2 groundwater monitoring networks). Therefore, no further risk evaluation of groundwater is warranted. Compliance groundwater monitoring for R6-AMA under the Federal and State CCR Rules will continue. Georgia Power will proactively evaluate the data and update this evaluation, if necessary.

1 INTRODUCTION

This report summarizes a risk evaluation of R6-AMA located at Georgia Power's Plant Yates in Coweta County, Georgia (**Figure 1**). R6-AMA is to the east of AP-2 and to the southeast of AP-1. Georgia Power is currently in the permitting process to close R6-AMA in accordance with the Federal CCR Rule (USEPA, 2020a) and the State CCR Rule (EPD, 2018a). Two permit applications were submitted to Georgia EPD in November 2018: one for AMA and another for R6. Due to the configuration of the units and overall groundwater flow direction, both permits proposed combining the monitoring systems of AMA and R6 into a single multi-unit monitoring system that meets federal and state monitoring requirements.

This risk evaluation provides additional technical review of the human health and environmental protectiveness associated with R6-AMA with respect to constituent concentrations in groundwater identified at SSLs above the GWPS. The evaluation relies on a conservative, health-protective approach that is consistent with the risk approaches outlined in the Voluntary Remediation Program (VRP) (Georgia Voluntary Remediation Act, O.C.G.A. § 12-8-100) (EPD, 2009) and USEPA Regional Screening Levels (RSLs) User's Guide (USEPA, 2020b). This evaluation also incorporated principles and assumptions consistent with Federal and State CCR Rules.

The risk evaluation includes the development of a site-specific CEM and a stepwise risk screening process for identified SSL-related constituents for R6-AMA. Beryllium and selenium were previously identified as state and federal SSL-related constituents using the GWPS established for R6-AMA according to Federal and State CCR Rules (Arcadis, 2020). Beryllium was identified as an SSL-related constituent in YGWC-38 and selenium in YGWC-38 and YGWC-41 for R6 (**Figure 2**). Beryllium and cobalt were also previously identified as SSL-related constituents in YGWC-33S for AMA (**Figure 2**). Beryllium and cobalt present at YGWC-33S have been delineated by downgradient wells within the permitted unit boundary for AMA (Arcadis, 2020). YGWC-33S was subsequently abandoned in June 2020 because it was installed within the permitted boundary and not suitably located to detect groundwater flow at the waste boundary of the AMA. There are no SSLs for cobalt in the remaining monitoring well network for AMA requiring corrective action (Arcadis, 2020). Accordingly, consideration of cobalt in this risk evaluation is not warranted. Based on the results of the risk evaluation for beryllium and selenium, a site-specific recommended path forward is provided.

The remainder of the report is organized as follows:

- ***Section 2, Basis and Background for the Development of the Conceptual Exposure Model*** – Presents site-specific information related to the site history, monitoring network, topography and surface hydrology, geology and hydrogeology, potential transport pathways, and receptors that could potentially be exposed to SSL-related constituents.
- ***Section 3, Risk Evaluation Screening*** – Describes the process for the initial risk-based screening of SSL-related constituents to identify COPIs in groundwater.

- ***Section 4, Refined Risk Evaluation*** – Describes the risk screening process for the groundwater COPIs, including calculation of exposure point concentrations (EPCs) and analysis of concentration trends over time.

- ***Section 5, Uncertainty Assessment*** – Describes the uncertainties associated with the risk screening process.

- ***Section 6, Conclusions*** – Presents the conclusions of the risk evaluation.
- ***Section 7, References*** – Provides reference information for the sources cited in this document.

2 BASIS AND BACKGROUND FOR THE DEVELOPMENT OF THE CONCEPTUAL EXPOSURE MODEL

This section provides a brief overview of the site location and operational history, site regulatory status, and geology/hydrogeology.

A CEM representing the site-specific processes and conditions that are relevant to the potential migration of groundwater and potential exposure to SSL-related constituents has been developed based on a review and compilation of information previously presented for R6-AMA, including the *Hydrogeologic Assessment Report* (ACC, 2020a) and *2020 Semiannual Groundwater Monitoring and Corrective Action Report* (Arcadis, 2020). The CEM includes a conservative evaluation of potential exposure pathways, and potential human and ecological receptors.

2.1 Site Description

Plant Yates is located on the east bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line, approximately 8 miles northwest of the city of Newnan and 13 miles southeast of the city of Carrollton. Plant Yates occupies approximately 2,400 acres and is bordered by the Chattahoochee River on the west (**Figure 1**). Plant Yates was once a coal-fired power generating facility, but was converted to natural gas combustion turbines in 2014. Of the original seven coal-fired steam generating units (Units 1 – 7), Units 1 through 5 were retired in 2015 and Units 6 and 7 were converted from coal to natural gas and remain in service. CCR units at Plant Yates include the Gypsum Stack Landfill, AP-1, AP-2, and R6-AMA. The units included in R6-AMA for this report are described below (ACC, 2020a):

- R6 is an inactive CCR landfill as defined in the Georgia Rules for Solid Waste Management, Rule 391-3-4-.10(2)(a)3, because it no longer received CCR on or after October 19, 2015. R6 will be closed in place in accordance with the solid waste permit and the CCR Rules.
- Once consolidated and closed in place, the AMA will consist of CCR from AP-1, AP-2, AP-3, AP-A, AP-B, and AP-B'. AP-1 was a 23.4-acre CCR surface impoundment that completed closure by removal in July 2017. AP-2 is an inactive 60-acre CCR surface impoundment currently undergoing closure by removal. AP-3 is an inactive 55-acre surface impoundment currently undergoing closure in place including consolidation to reduce the footprint. AP-A is a 8.9-acre CCR surface impoundment that completed closure by removal in June 2017. AP-B is an inactive 6.3-acre CCR surface impoundment currently undergoing closure by removal. AP-B' is an inactive 29.8-acre surface impoundment currently undergoing closure in place including consolidation to reduce the footprint.

Semiannual groundwater monitoring and reporting for Plant Yates R6-AMA is performed in accordance with the monitoring program requirements of the Federal CCR Rule and Georgia EPD Solid Waste Management Program. In accordance with 40 CFR § 257.91, a certified compliance groundwater monitoring network was installed to monitor groundwater quality both upgradient and downgradient of R6-AMA. The R6-AMA certified monitoring well network consists of 10 upgradient monitoring wells and 8 downgradient monitoring wells. There are 15 non-network wells/piezometers that may be utilized for water level measurements or non-routine sample collection. The two AP-2 wells farthest downgradient of R6-AMA (YGWC-26S and YGWC-26I) were included in the risk evaluation because groundwater flows from R6-AMA into AP-2 and through the area near YGWC-26S and YGWC-26I, as discussed in Section 2.1.2. The locations of the certified compliance well network, non-network wells/piezometers, and the additional wells included in the risk evaluation are provided on **Figure 2**.

2.1.1 Topography and Surface Hydrology

The site is located within the Piedmont Physiographic Province of central Georgia, which is characterized by gently rolling hills and narrow valleys, with locally pronounced linear ridges. R6-AMA is located within the Middle Chattahoochee River Basin, where annual average rainfall ranges from 50 to 54 inches per year. Topography drops from an elevation of approximately 830 feet (ft) above mean sea level (amsl) along the southeastern border of the site to 700 ft amsl adjacent to the river immediately west of R6-AMA. This drop occurs over a distance of approximately 8,300 ft and does not take into account the elevation variations across the site due to manmade features (i.e., CCR units). The Chattahoochee River abuts the site to the west. The southward flowing river originates in the Valley and Ridge Physiographic Province near Helen, Georgia.

2.1.2 Geology and Hydrogeology

The geologic and hydrogeologic characteristics of the site have been extensively evaluated and compiled in previous reports. The following presents a brief summary of this information from the *2020 Semiannual Groundwater Monitoring and Corrective Action Report* (Arcadis, 2020) for R6-AMA:

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

A thin layer of soil from one to two feet thick overlies a thick layer of saprolite. The saprolite, which extends to typical depths of 20 to 40 feet below ground surface, was formed in-place by the physical and chemical weathering of the underlying metamorphic rocks. The saprolite typically consists of clay and silt rich soils that grade to sandier soils with depth. A zone of variable thickness (approximately 5 to 20 feet) of transitionally weathered rock typically exists between the saprolite and competent bedrock. The lithology of the transition zone is highly variable and ranges from medium to coarse unconsolidated material to highly fractured and weathered rock fragments. Localized alluvial soils consisting of generally coarser material (silty-sand, clayey silt, and silty clay with well-rounded gravel and cobbles) that have been observed in saprolite may be related to historical river channel migration.

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

The potentiometric surface elevation contours for March 2020 are presented in **Figure 3**. Pertinent hydrogeologic information from the *Hydrogeologic Assessment Report* (ACC, 2020a) is presented below:

Groundwater flow in the upper aquifer is under unconfined conditions and the water table is typically noted in the saprolite near the bedrock interface. Deeper groundwater flow is within the fractured bedrock and along discontinuities.

Groundwater flow direction in the upper aquifer is controlled by topography and by drainage features and man-made surface impoundments. The general site-wide groundwater flow direction is from the east-to west with localized flow direction controlled by surface water bodies. Groundwater flow within the multi-unit R6-AMA in the uppermost aquifer is from three directions; south to north, southeast to northwest and east to west. These three flow directions are controlled somewhat by the former surface water drainage swale that meandered from the southeast corner of the site, around the southeast and south corners of the AMA and between the AMA and R6.

Groundwater flow across the R6-AMA area ultimately flows west-northwest as it leaves the R6-AMA area and flows into the area surrounding AP-2. Based on the depression formed by the interpreted 710-foot contour line shown on **Figure 3**, groundwater from R6-AMA is anticipated to flow west-northwest towards the river and funnel through the area near YGWC-26S and YGWC-26I.

2.2 Potential Transport Pathways

A variety of geologic, hydrogeologic, and geochemical mechanisms can occur in the subsurface and serve to attenuate constituent concentrations in groundwater such as soil or rock characteristics, the local geology and hydrogeology, and the distance the groundwater must travel before reaching a potential receptor. A summary of potential transport pathways is shown on the CEM in **Figure 4**.

The Chattahoochee River abuts the site to the west and flows in a southward direction (**Figure 2**). SSL-constituent concentrations in groundwater were either below the health-protective screening criteria (beryllium) or were delineated below health-protective screening criteria in on-site groundwater (selenium); therefore, evaluation of the surface water pathway was not necessary.

2.3 Potential Exposure Pathways and Receptors

The exposure pathways for groundwater assumed to be complete based on site-specific information were used to identify potential receptors and estimate potential risk. The CEM (**Figure 4)** depicts the conservative potential exposure pathways and receptors included in the risk evaluation.

The following potential exposure pathways and receptors were considered:

- On-site industrial worker: The groundwater exposure pathway for the on-site industrial worker was considered incomplete because there are no wells on-site that are classified for use as potable wells.

- On-site construction worker: While there is a potential for limited exposure to groundwater by a construction worker through dermal contact with on-site shallow groundwater during subsurface activities, construction workers would be expected to have little to no direct contact with on-site groundwater due to safety procedures outlined in their site-specific health and safety plans.

- On-site resident: The groundwater exposure pathway for on-site residents was considered incomplete because there is no residential use on-site under current site conditions and future residential use of the site is considered unlikely. Land use surrounding the site is zoned Rural Conservation District (Coweta County, 2020). Beyond the Chattahoochee River to the west, land use is predominantly

zoned Industrial and Agricultural with some scattered Residential land use also present (Carroll County, 2018).

- Off-site industrial/construction worker: The potential for off-site worker exposure through direct contact with groundwater was addressed through the evaluation of hypothetical off-site residential receptors. Health-protective screening levels for residential receptors would be more conservative than industrial and construction worker screening levels.

- Off-site resident: The groundwater exposure pathway for hypothetical off-site residential receptors was assumed potentially complete. A well survey of potential groundwater wells within a three-mile radius of R6-AMA was conducted and consisted of reviewing federal, state, and county records and online sources, in addition to conducting a windshield survey of the area (Newfields, 2020). Results of the survey are presented on **Figure 5**. The well survey is included as **Appendix A**. Combining well information from all sources with parcel data, 728 total parcels likely to be associated with an active or inactive private well within the three-mile radius were identified. Although water lines near the site were constructed in the mid-1990s, there are likely homes near water lines that may still be on wells. The survey identified several private wells in the vicinity of the site with the closest being:

    - South of the site and near the southeast corner of AP-3 near Wagers Mill Road, up to Sol Bridges Rodd (upgradient of the site);
    - East of AP-B' near Stapler Road (upgradient of the site);
    - Southeast and northeast (upgradient of the site) along Old Carrollton Road, Sewell Mill Road and Daniel Road; and
    - West of the Chattahoochee River along Route 5 (upgradient of the site and up to 2 miles away).

  No private wells are located downgradient of R6-AMA prior to reaching the Chattahoochee River which is considered a hydraulic discharge boundary. In addition, SSL-constituent concentrations were either below the health-protective screening criteria (beryllium) or were delineated below health-protective screening criteria in on-site groundwater (selenium) prior to reaching the Chattahoochee River.

  Two public wells are also located within the three-mile radius. These wells, operated by the City of Whitesburg, are located approximately three miles northwest of the site across the Chattahoochee River. Because the Chattahoochee River serves as the site and regional hydraulic discharge boundary for groundwater flow in the upper aquifer, groundwater flow on the west side of the river flows from the north and west to the Chattahoochee River, and is therefore, upgradient of the site.

No surface water intakes have been identified for public water supplies within a three-mile radius of the site. Use of surface water as a drinking water source within three miles of the site is an incomplete exposure pathway; therefore, drinking water exposure assumptions for surface water do not apply.

SSL-related constituent concentrations in on-site groundwater monitoring wells were either below the health-protective screening criteria or delineated to concentrations not exceeding health-protective screening criteria on-site (i.e., either within R6-AMA or the downgradient AP-2 groundwater monitoring networks). As a conservative measure, potential off-site residential exposure to SSL-related constituents was evaluated using on-site groundwater wells/piezometers downgradient of R6-AMA and the farthest downgradient wells in AP-2. This comparison makes the conservative assumption that on-site groundwater may potentially migrate to off-site drinking water wells, through advective transport in groundwater without any attenuation within the aquifer media through factors such as dilution, dispersion, or adsorption. The risk evaluation screening conservatively assumed that hypothetical off-site residential receptors could be exposed to the concentrations of SSL-related constituents in groundwater through its use as a potable water supply by ingestion and dermal contact with groundwater.

- Off-site recreational surface water receptors: The surface water exposure pathway for recreational receptors was addressed qualitatively through the evaluation of on-site groundwater data. SSL-constituent concentrations were either below the health-protective screening criteria (beryllium) or were delineated below health-protective screening criteria in on-site groundwater (selenium); therefore, evaluation of the surface water pathway was not necessary.

- Off-site ecological surface water receptors: The surface water exposure pathway for off-site ecological receptors was addressed qualitatively through the evaluation of on-site groundwater data. SSL-constituent concentrations were either below the health-protective screening criteria (beryllium) or were delineated below health-protective screening criteria in on-site groundwater (selenium); therefore, evaluation of the surface water pathway was not necessary.

3 RISK EVALUATION SCREENING

The CEM developed in Section 2 was used to identify the potentially complete exposure pathways to human receptors that are considered in the risk evaluation. The initial step in the risk evaluation is the comparison of SSL-related constituents in groundwater to health-protective levels for potentially complete exposure pathways. The approach used is consistent with the Georgia EPD regulations and guidance, USEPA guidance, and standard practice for risk assessment in the State of Georgia. The Georgia EPD allows for the site-specific evaluation of risk in programs such as the Voluntary Remediation Program (EPD, 2009).

The initial risk evaluation screening was performed for the potential groundwater exposure pathway by comparing the concentrations of on-site groundwater wells determined to have SSL-related constituents to appropriate health-protective screening criteria. These criteria included the risk reduction standards (RRS) established in accordance with the Hazardous Site Response Act (HSRA) for drinking water and site-specific background for the protection of human health. If the maximum concentration of an SSL-related constituent exceeded the screening criterion, the constituent was identified as a COPI for further evaluation in the refined risk evaluation. The methodology and screening criteria used were identified in accordance with regulatory guidance and standard risk assessment practices using an approach designed to conservatively overestimate possible exposures and risks, providing an additional level of confidence in the conclusions. The methodology is summarized on **Figure 6** and discussed in more detail below.

3.1 Data Used in Risk Evaluation Screening

This section provides information on the groundwater dataset used in the risk evaluation screening.

3.1.1 Groundwater Data

For the initial risk screening evaluation, groundwater data from samples collected between 2017 and March 2020 from the on-site wells that were identified to have SSL-related constituents were used in the risk screening evaluation for hypothetical off-site residential exposure. The wells that were previously identifed to have SSL-related constituents under the Federal and State CCR Rules include YGWC-38 for beryllium and YGWC-38 and YGWC-41 for selenium. Data from these wells for the SSL-related constituents were screened against relevant health-protective screening criteria. The wells with SSL-related constituents are depicted on **Figure 2** and the groundwater dataset used for wells exhibiting SSLs in the risk evaluation is presented in **Appendix B.** Method detection limits for the groundwater dataset used in the risk evaluation were reviewed and confirmed to be less than the screening levels.

3.1.2 Background Groundwater Quality

Statistical analysis of groundwater monitoring data is performed at Plant Yates pursuant to §257.93-95 following the professional engineer (PE)-certified Statistical Analysis Method Certification (Rev 01, amended January 2020) (Georgia Power, 2020) for R6-AMA and the the Unified Guidance (USEPA, 2009); background values are routinely updated under the program. Ten monitoring wells in the certified monitoring well network are designated as upgradient or background locations, including YGWA-4I, YGWA-5D, YGWC-5I, YGWA-17S, YGWA-18S, YGWA-18I, YGWA-20S, YGWA-21I, YGWA-39, and YGWA-40. The statistical analyses performed on the groundwater data using Sanitas groundwater statistical software, as described in the *2020 Semiannual Groundwater Monitoring and Corrective Action Report* (Arcadis, 2020), as presented below:

> *Parametric tolerance limits were used to calculate background limits from pooled upgradient well data 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 limits were then used when determining the groundwater protection standards(GWPS) established under 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a).*

Naturally occurring or site-specific background concentrations can exceed health-protective screening criteria. Therefore, site-specific background values may be used as the groundwater screening values if background concentrations were identified as greater than the groundwater screening values.

3.2 Groundwater Screening Evaluation

The process of screening SSL-related constituents in groundwater against human health screening levels for groundwater is discussed below and presented in **Figure 6**. The HSRA RRS evaluated under the VRP approach presented herein included Type 1 and Type 2 standards for off-site residential receptors. The Hazardous Site Response Act, Rule 391-3-19.07(1) notes that "*[a]ll risk reduction standards will, when implemented, provide adequate protection of human health and the environment.*" In addition, Rule 391-3-19.07(3) notes a corrective action, if needed, may be considered complete when "*a site meets any or a combination of the applicable risk reduction standards described in Rule 391-3-19-.07."*

In accordance with standard practice and methodologies approved by the Georgia EPD, the screening level hierarchy for the SSL-related constituents is as follows:

- The higher of the Type 1 or Type 2 RRS for potential future off-site residential exposures, which are considered protective of human health for those constituents regulated under HSRA (i.e., beryllium and selenium).

  Type 2 RRSs were used for beryllium and selenium, which are the lower of the calculated carcinogenic and non-carcinogenic values derived using the default exposure factors for residential receptors and the methodology found in Appendix III of the HSRA rule (EPD, 2018b). Toxicity values for beryllium and selenium used for the Type 2 RRS calculations were identified in the Integrated Risk Information System (IRIS) (USEPA, 2020c). The risk-based Type 2 RRS were calculated using USEPA's RSL calculator (USEPA, 2020b) assuming a target cancer risk of 1×10^{-5} and a target hazard quotient of 1, consistent with Georgia EPD guidance (EPD, 2018b). The calculations of the Type 2 RRS values for the SSL-related constituents are presented in **Appendix C**.

- If site-specific background concentrations are greater than the criteria described above, then the site-specific background concentration is used as the screening level in accordance with the CCR methodology for development of groundwater protection standards (USEPA, 2020a). Background was not used as a screening level in the evaluation.

Table 1 presents the maximum detected concentration of each SSL-related constituent, which was used to represent potential off-site groundwater quality for comparison to the selected screening levels for hypothetical off-site residential receptors. The maximum detected concentration of selenium of 0.27 mg/L exceeded the screening level of 0.10 mg/L. Selenium was thereby identified as a COPI and retained for further evaluation in the refined risk evaluation. Concentrations of beryllium were below the health-protective screening level of 0.025 mg/L, and therefore, no further evaluation of beryllium was necessary.

4 REFINED RISK EVALUATION

A refined risk evaluation was conducted for the groundwater COPI, selenium, that was detected at concentrations that exceeded the health-protective screening criterion. The refined risk evaluation identified EPCs for selenium in groundwater for the purposes of characterizing potential risk to human receptors.

4.1 Refined Groundwater Risk Evaluation

Potential risk associated with exposure to selenium by hypothetical off-site residential receptors was refined using the methodology described in the HSRA and VRP guidance (EPD, 2018b; EPD, 2009) and is presented in the following section and on **Figure 7**.

For the refined risk evaluation, groundwater data from samples collected between 2016 and March 2020 from the on-site wells that were identified to have SSL-related constituents and downgradient monitoring wells/piezometers that represent groundwater flow in the same hydrologically downgradient direction were used to evaluate hypothetical off-site residential exposure.

The downgradient groundwater monitoring wells and piezometers included in the refined risk evaluation are depicted with yellow well labels on **Figure 2**. The following list of wells used to assess hypothetical off-site residential exposure includes those wells with SSL-related constituents along with the wells and piezometers downgradient of the wells exhibiting SSLs:

YGWC-22S	YGWC-38 (SSL)	YAMW-4
YGWC-23S	YGWC-41 (SSL)	YAMW-5
YGWC-32I	YGWC-42	PZ-37
YGWC-32S	YGWC-43	YGWC-26I (AP-2)
YGWC-34I	YAMW-3	YGWC-26S (AP-2)

Groundwater data used in the risk screening level evaluation were collected from the uppermost aquifer and are considered to be representative of groundwater conditions at the site. The groundwater dataset used in the refined risk evaluation is presented in **Appendix B.**

4.1.1 Groundwater Exposure Point Calculation

The refined risk evaluation for selenium includes the development of EPCs. The EPC is a conservative estimate of potential exposure to a receptor. The EPC is based on the 95 percent upper confidence limit of the arithmetic mean (UCL) and accounts for uncertainty and variability in the dataset (USEPA, 2002). Consistent with USEPA guidance for developing groundwater EPCs (USEPA, 2014), UCLs were calculated using USEPA ProUCL 5.1 software (ProUCL) (USEPA, 2016) and user's guide (USEPA, 2015a). For

the refined risk evaluation, the UCLs for the COPI in groundwater were calculated for the following specific datasets:

- UCLs for the individual well(s) with SSL-related constituents;
- UCLs based on combined data from the well(s) with SSL-related consistuents and other well(s)/piezometer(s) in the general vicinity to include additional downgradient monitoring well(s)/piezometer(s) that represent groundwater flow in the same hydrologically downgradient direction; and
- UCLs based on the combined data from the farthest downgradient well(s)/piezometer(s) that are hydrologically downgradient of the well(s) with an SSL-related constituent.

Other assumptions made in the calculations of the UCLs include:

- Primary samples (no duplicates) were used to calculate EPCs as duplicate samples were analyzed for quality assurance purposes.
- If the calculated UCL exceeded the maximum detected concentration, then the maximum detected concentration was used as the EPC.

ProUCL software calculates multiple UCLs and provides a recommended UCL that was selected as the EPC. If there were multiple UCLs recommended by ProUCL, the maximum UCL value was selected as a conservative measure. **Appendix D-1** provides a detailed summary of the UCLs calculated using the methods described above, and **Appendix D-2** presents figures showing the wells used in the calculation of the EPCs for selenium. **Appendix D-3** provides the input and output files associated with the ProUCL software.

Table 2 summarizes the groundwater EPC selected for selenium. This table shows the number of samples, the maximum detected concentration, the UCL recommended by ProUCL software, and the selected EPC.

4.1.2 COPI Concentration Trend Analysis

Concentration trends over time were evaluated as one line of evidence in the refined risk evaluation for selenium. The Mann-Kendall trend test with an alpha value equal to 0.05 and the Theil-Sen line test were conducted on the data from YGWC-38 and YGWC-41 for selenium to evaluate the trends in concentrations over time. The tests were conducted using the USEPA ProUCL 5.1 software (USEPA, 2016).

The Mann-Kendall and Theil-Sen test results are presented on time series graphs in **Appendix D-4** and indicated statistically significant decreasing trends in selenium concentrations over time at YGWC-38 and YGWC-41.

4.1.3 Refined Groundwater Risk Evaluation Results

In the refined risk evaluation, comparison of the calculated EPC to the screening level was used to identify constituents of interest (COIs) that may pose a potential risk to hypothetical off-site residential receptors exposed through the use of groundwater as potable water. If the EPC from the farthest downgradient well(s) is greater than the respective screening level, then the constituent is identified as having the potential for risk that warrants additional evaluation (e.g., performing a surface water evaluation).

Selenium was detected in 10 out of 22 groundwater samples in wells YGWC-38 and YGWC-41 at concentrations that exceeded the groundwater screening level for residential receptors. For the refined risk evaluation, the following EPCs were calculated for selenium using the monitoring wells/piezometers shown in **Appendices D-1** and **D-2**:

- Data from YGWC-38 and YGWC-41 were combined to determine if the UCL was less than the screening level (EPC Step 1 in **Appendix D-1**).

- Data from YGWC-38 and YGWC-41 and the downgradient wells/piezometers YAMW-5, PZ-37, YGWC-23S, YGWC-22S, YGWC-34I, YGWC-32I, YGWC-32S, YGWC-42, YAMW-3, YAMW-4, YGWC-43, YGWC-26S (AP-2), and YGWC-26I (AP-2) were combined to represent groundwater exposure in the same hydraulically downgradient direction (EPC Step 2 in **Appendix D-1**).

- Data from YGWC-26S (AP-2) and YGWC-26I (AP-2) were combined to represent groundwater exposure using the wells that are the farthest hydraulically downgradient of R6-AMA wells YGWC-38 and YGWC-41 (EPC Step 3 in **Appendix D-1**).

Although EPC Step 1 exceeded the applicable screening level, both EPC Steps 2 and 3, which included the farthest downgradient wells, were below the applicable screening level for selenium. Selenium concentrations in on-site groundwater monitoring wells were delineated to concentrations not exceeding the health-protective screening level on-site.

Table 3 presents the results of the refined screening comparing the farthest hydrologically downgradient EPC (EPC Step 3) to the screening level. As EPC Steps 2 and 3 were below the applicable screening level, selenium was not identified as a groundwater COI for hypothetical off-site residential receptors and is not expected to pose a risk to human health through potable water use.

4.1.4 Refined Groundwater Risk Evaluation Summary and Conclusions

Detections of selenium were reported at concentrations above the groundwater screening level. However, the results of the refined risk evaluation for groundwater indicate the following:

- Selenium is not expected to pose a risk to hypothetical off-site residential receptors.
- All of the individual data points used to calculate the selenium EPC to represent potential groundwater exposure for hypothetical off-site residential receptors based on the farthest hydrologically downgradient monitoring wells were below the health-protective screening level.
- Statistically significant decreasing trends in selenium concentrations have been observed at the wells exhibiting SSLs over time.

Therefore, based on the multiple lines of evidence and various conservative assumptions, further risk evaluation for groundwater is not warranted. Compliance groundwater monitoring under the Federal and State CCR Rules will continue. Downgradient monitoring wells YGWC-26I and YGWC-26S will also continue to be monitored under the AP-2 compliance groundwater monitoring program.

5 UNCERTAINTY ASSESSMENT

USEPA guidance stresses the importance of providing an analysis of uncertainties so that risk managers are better informed when evaluating risk assessment conclusions (USEPA, 1989). The uncertainty assessment provides a better understanding of the key uncertainties that are most likely to affect the risk assessment results and conclusions.

The potential uncertainties associated with the risk evaluation are as follows:

Health-Protective Screening Criteria Uncertainties:

- In accordance with standard practice and methodologies approved by the Georgia EPD, the higher of the Type 1 or Type 2 standard was selected for screening criteria. Selection of the screening criteria per standard practice is considered appropriate for risk quantification for R6-AMA. The Hazardous Site Response Act, Rule 391-3-19.07(1) notes that "*[a]ll risk reduction standards will, when implemented, provide adequate protection of human health and the environment*". Thus, this approach is likely to overestimate risks for hypothetical off-site receptors.

- Screening criteria based on RRSs, including beryllium and selenium, represent the reasonable maximum exposure (RME). The RME is defined as "the highest exposure that is reasonably expected to occur at a site but that is still within the range of possible exposures" (USEPA, 1989). USEPA (1989) states that the "intent of the RME is to estimate a conservative exposure case (i.e., well above the average case) that is still within the range of possible exposures". Potential receptors will likely have lower exposures than those presented in this risk evaluation (i.e., a majority of the site concentrations will be less than the UCL), and therefore, potential exposures are likely overestimated.

Exposure Uncertainties:

- The maximum detected concentrations of SSL-related constituents were compared to conservative screening criteria to identify the COPIs. Use of the maximum detected concentration is consistent with standard risk assessment practice; however, use of the maximum detected concentration for exposure likely overestimates potential risk.

- The constituents included in the risk evaluation occur naturally in the site geologic setting. Although background concentrations were evaluated and used in the screening process, contributions to exposure and risk were assumed to be entirely CCR-related and natural background sources were not quantified. Thus, SSL-related exposures were likely overestimated.

- Hypothetical off-site residential exposure was evaluated using on-site groundwater data from wells downgradient of R6-AMA, including data from two AP-2 wells. This comparison makes the conservative assumption that on-site groundwater may potentially migrate to off-site drinking water wells through advective transport in groundwater, but without any attenuation within the aquifer media through factors such as dilution, dispersion, or adsorption. This assumption may overestimate exposure and risk hypothetical off-site receptors.

- EPCs for metals in groundwater were assumed to be 100 percent bioavailable by ingestion and dermal contact. This assumption may tend to overestimate risk.

- An off-site well survey of potential groundwater wells within a three-mile radius of Plant Yates was conducted by NewFields in 2020 and consisted of reviewing publicly available federal, state, and county records as well as a windshield survey of the area (**Appendix A**). Wood relied on the data collected by Newfields.

  Although off-site potable wells identified in the well survey were not included in the risk evaluation, the presence of these wells do not appear to change the conclusions of the risk evaluation because concentrations of selenium were either below the health-protective screening criteria or delineated to concentrations not exceeding health-protective screening criteria on-site (i.e., either within R6-AMA or the downgradient AP-2 groundwater monitoring networks).

Toxicity Uncertainties:

- Toxicity factors used to calculate health-protective criteria are established at conservative levels to account for uncertainties and often result in criteria that are many times lower than the levels observed to cause effects in human or animal studies. Therefore, a screening level exceedance does not necessarily equate to an adverse effect.

6 CONCLUSIONS

This human health risk and ecological evaluation for SSL-related constituents in groundwater at the site was conducted using methods consistent with Georgia EPD and USEPA guidance and included multiple conservative assumptions. Based on this evaluation, beryllium and selenium are not expected to pose a risk to human health or the environment.

Accordingly, no further risk evaluation of groundwater is recommended. Compliance groundwater monitoring for R6-AMA under the Federal and State CCR Rules will continue. Georgia Power will proactively evaluate the data and update this evaluation, if necessary.

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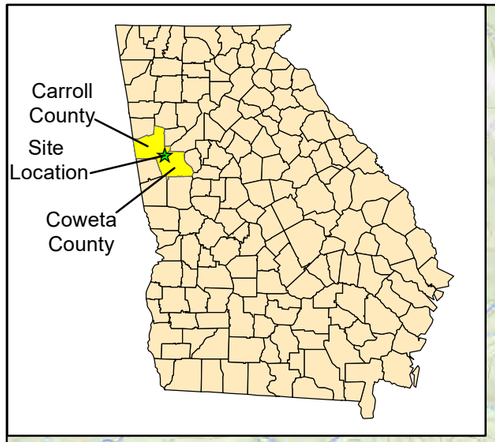
FIGURES



N

Ash Pond 1
Gypsum Stack Landfill
Ash Pond A
Ash Pond 2
Ash Pond B
Ash Pond B'
R6 Ash Disposal Area
Ash Pond 3
Ash Management Area

Chattahoochee River

CCR Permit Boundary
Property Boundary

0 0.25 0.5 1 Miles

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names

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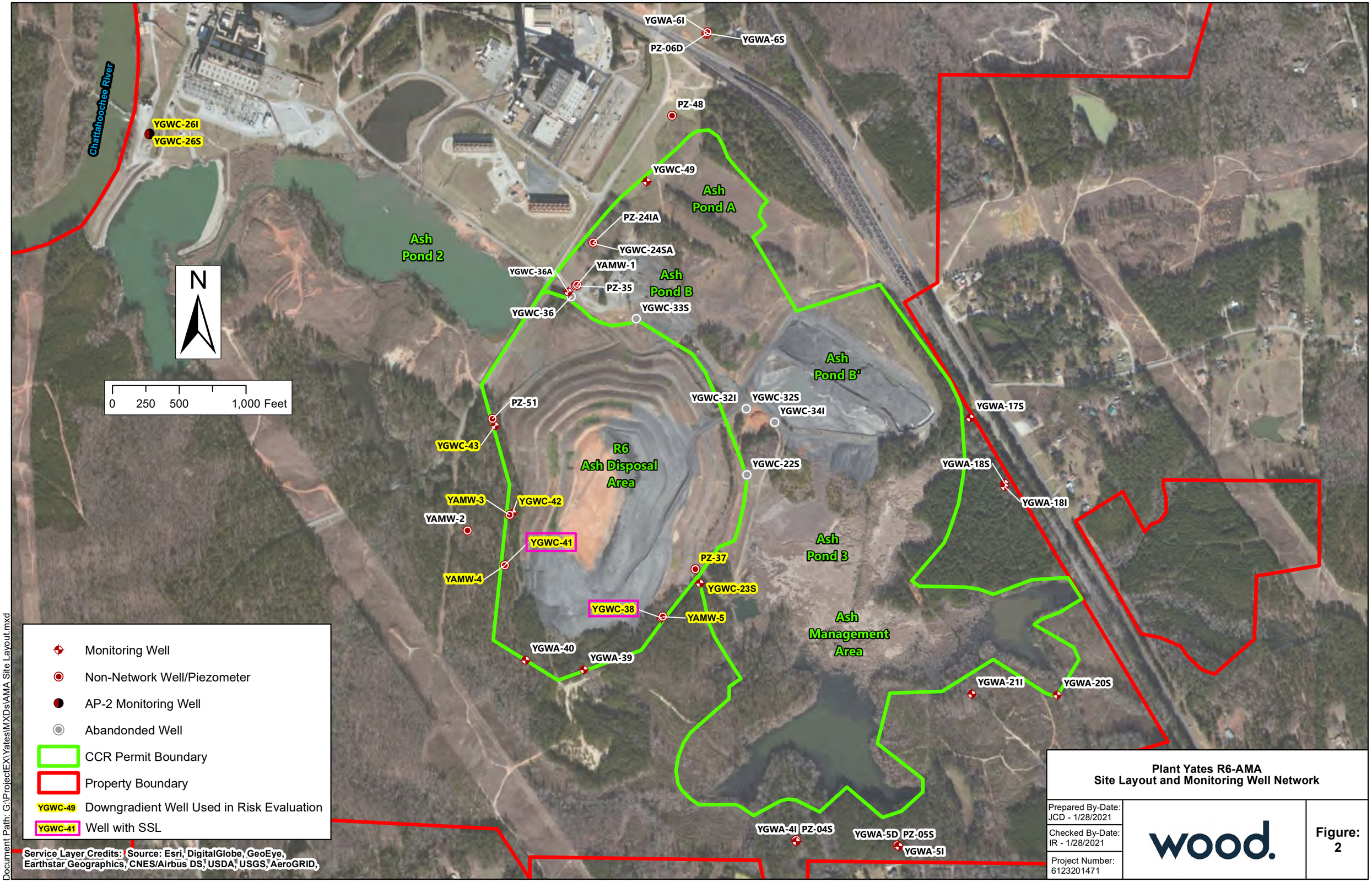
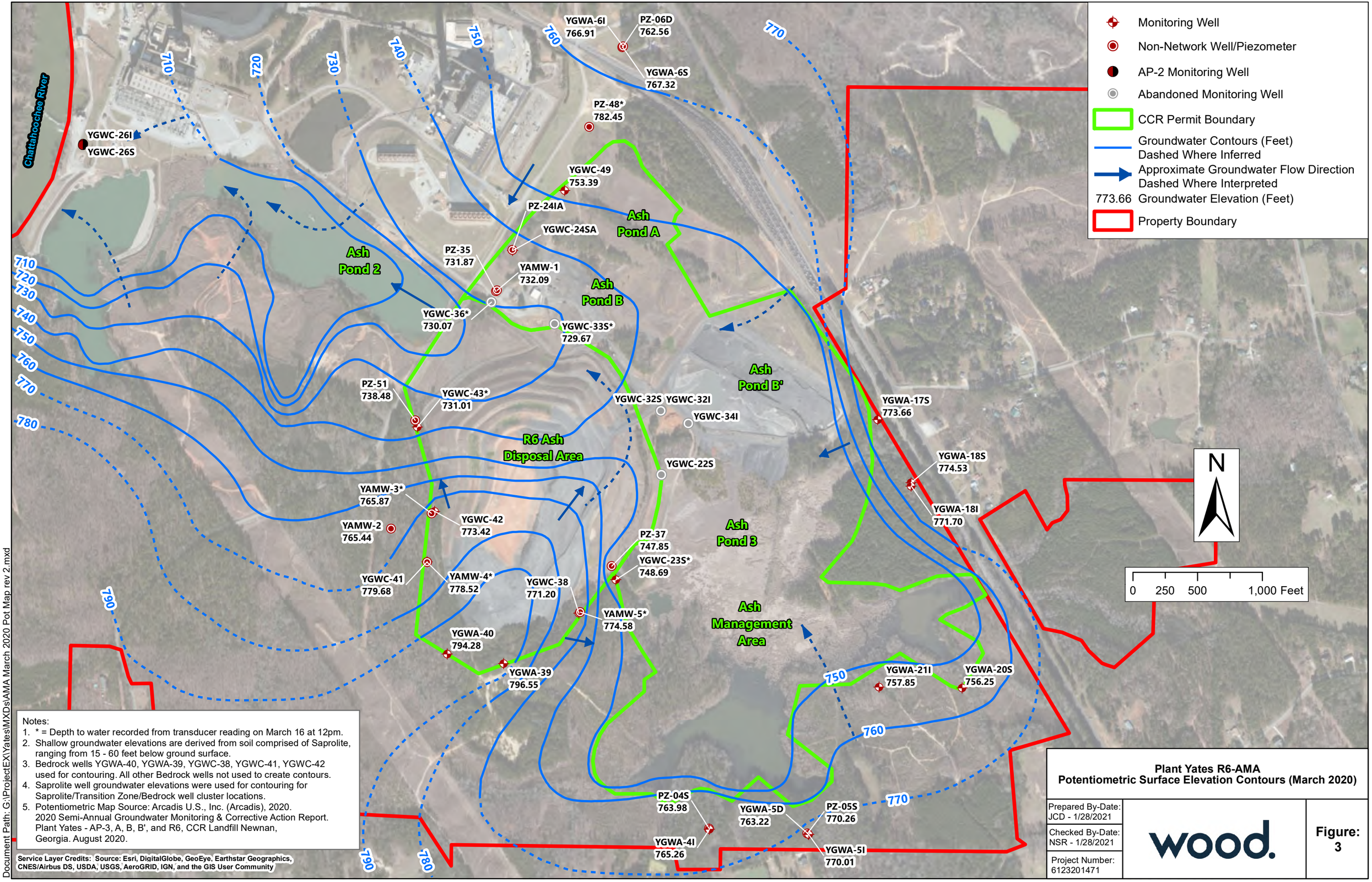
Plant Yates R6-AMA
Site Location

Prepared By-Date: JCD - 1/28/2021	wood.
Checked By-Date: IR - 1/28/2021	**Figure: 1**
Project Number: 6123201471	



Plant Yates R6-AMA
Site Layout and Monitoring Well Network

Prepared By-Date: JCD - 1/28/2021	wood.	Figure: 2
Checked By-Date: IR - 1/28/2021		
Project Number: 6123201471		

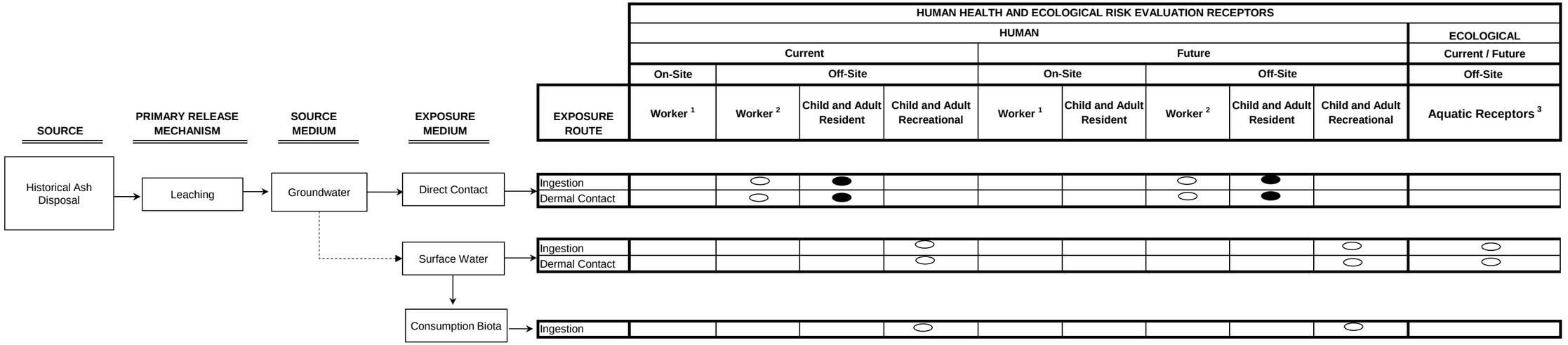


Notes:
1. * = Depth to water recorded from transducer reading on March 16 at 12pm.
2. Shallow groundwater elevations are derived from soil comprised of Saprolite, ranging from 15 - 60 feet below ground surface.
3. Bedrock wells YGWA-40, YGWA-39, YGWC-38, YGWC-41, YGWC-42 used for contouring. All other Bedrock wells not used to create contours.
4. Saprolite well groundwater elevations were used for contouring for Saprolite/Transition Zone/Bedrock well cluster locations.
5. Potentiometric Map Source: Arcadis U.S., Inc. (Arcadis), 2020. 2020 Semi-Annual Groundwater Monitoring & Corrective Action Report. Plant Yates - AP-3, A, B, B', and R6, CCR Landfill Newnan, Georgia. August 2020.

Plant Yates R6-AMA
Potentiometric Surface Elevation Contours (March 2020)

Prepared By-Date: JCD - 1/28/2021	wood.	Figure: 3
Checked By-Date: NSR - 1/28/2021		
Project Number: 6123201471		

Document Path: G:\Project\EX\Yates\MXDs\AMA March 2020 Pot Map rev 2.mxd



Legend

A conservative assumption for this assessment was made that groundwater from the site flows to the downgradient surface water.

Indicates potentially complete pathway, which is evaluated quantitatively.

Indicates potentially complete pathway, which is evaluated qualitatively.

Footnotes

1. The industrial worker was considered to have no complete pathways because there are no wells on-site that are classified for use as potable wells. On-site construction workers would be expected to have little to no direct contact with on-site groundwater due to safety procedures outlined in their site-specific health and safety plans.
2. Off-site industrial/construction worker addressed through the evaluation of hypothetical off-site residential receptors as health-protective screening levels for residential receptors would be more conservative than industrial and construction worker screening levels.
3. Generalized receptor for ecological health risk evaluation.

Plant Yates R6-AMA
Conceptual Exposure Model

Figure 4

Project Number
6123201471

Prepared by/Date: IMR 12/16/20
Checked by/Date: NSR 12/16/20

CCR Permit Boundary
Property Boundary
Private Drinking Well
Irrigation/Inactive Drinking Well
Public Drinking Well

N

0 0.5 1 Miles

Whitesburg
Carroll
Coweta
Acorn Creek
Cedar Creek
Gypsum Stack Landfill
Ash Pond 1
Ash Pond B
Ash Pond A
Ash Pond B'
Ash Pond 3
Ash Pond 2
R6 Ash Disposal Area
Ash Management Area
Panther Creek
Chattahoochee River
Carroll
Coweta
Wahoo Creek
Indian Creek
Turkey Creek
Moore Creek
Wahoo Creek
Bibb Lake
Wahoo Creek
Little
Moore Creek
Camden Creek

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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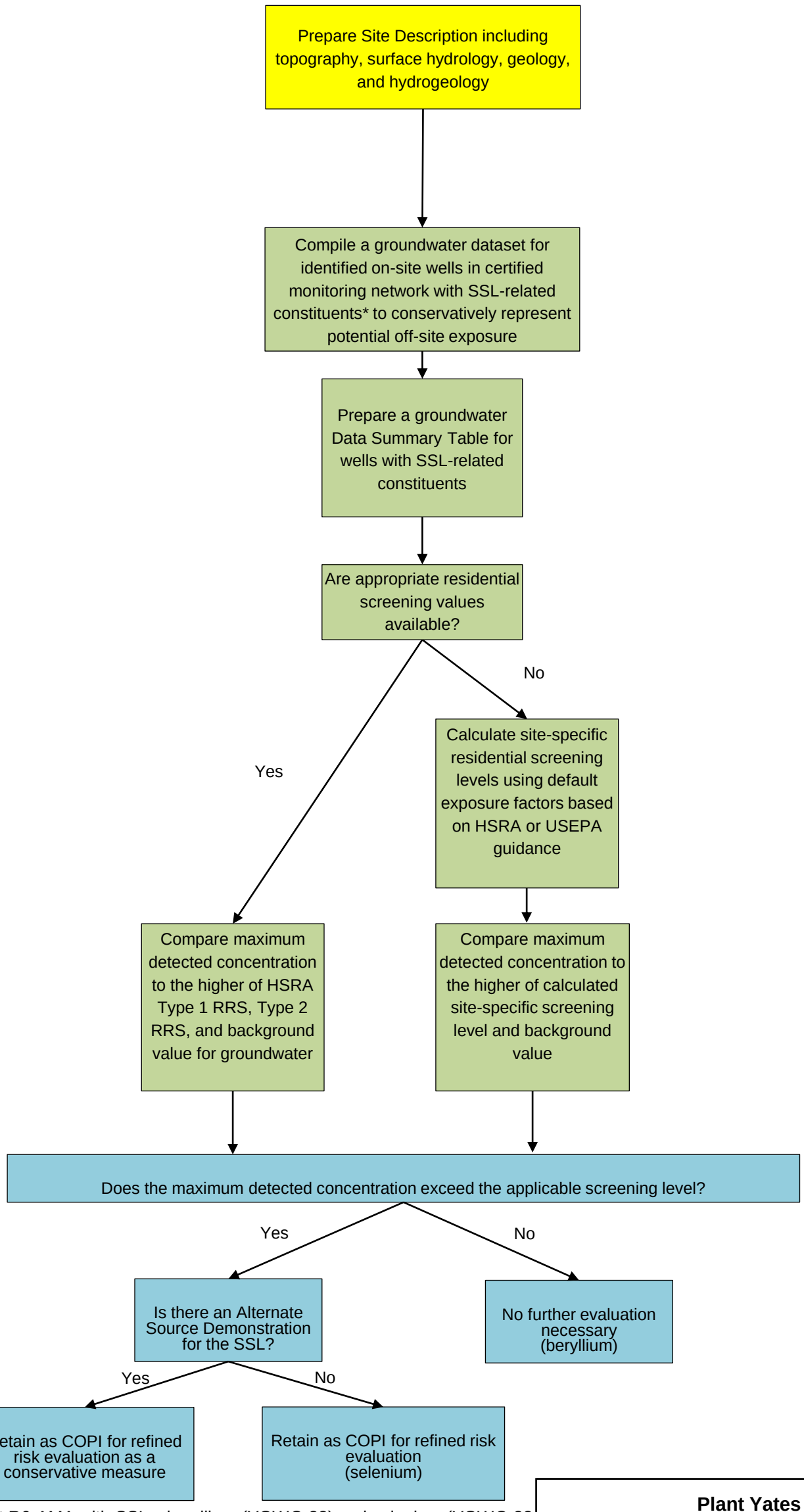
Plant Yates R6-AMA
Off-Site Well Survey Results

Prepared By-Date: NJM - 1/28/2021	wood.	Figure: 5
Checked By-Date: IR - 1/28/2021		
Project Number: 6123201471		

Groundwater Risk Screening Approach for R6-AMA



Notes:
Initial screen evaluates wells at R6-AMA with SSLs: beryllium (YGWC-38) and selenium (YGWC-38 and YGWC-41).
SSL = Statistically Significant Level
COPI = Constituent of Potential Interest
HSRA = Hazardous Site Response Act
RRS = Risk Reduction Standard
USEPA = United States Environmental Protection Agency

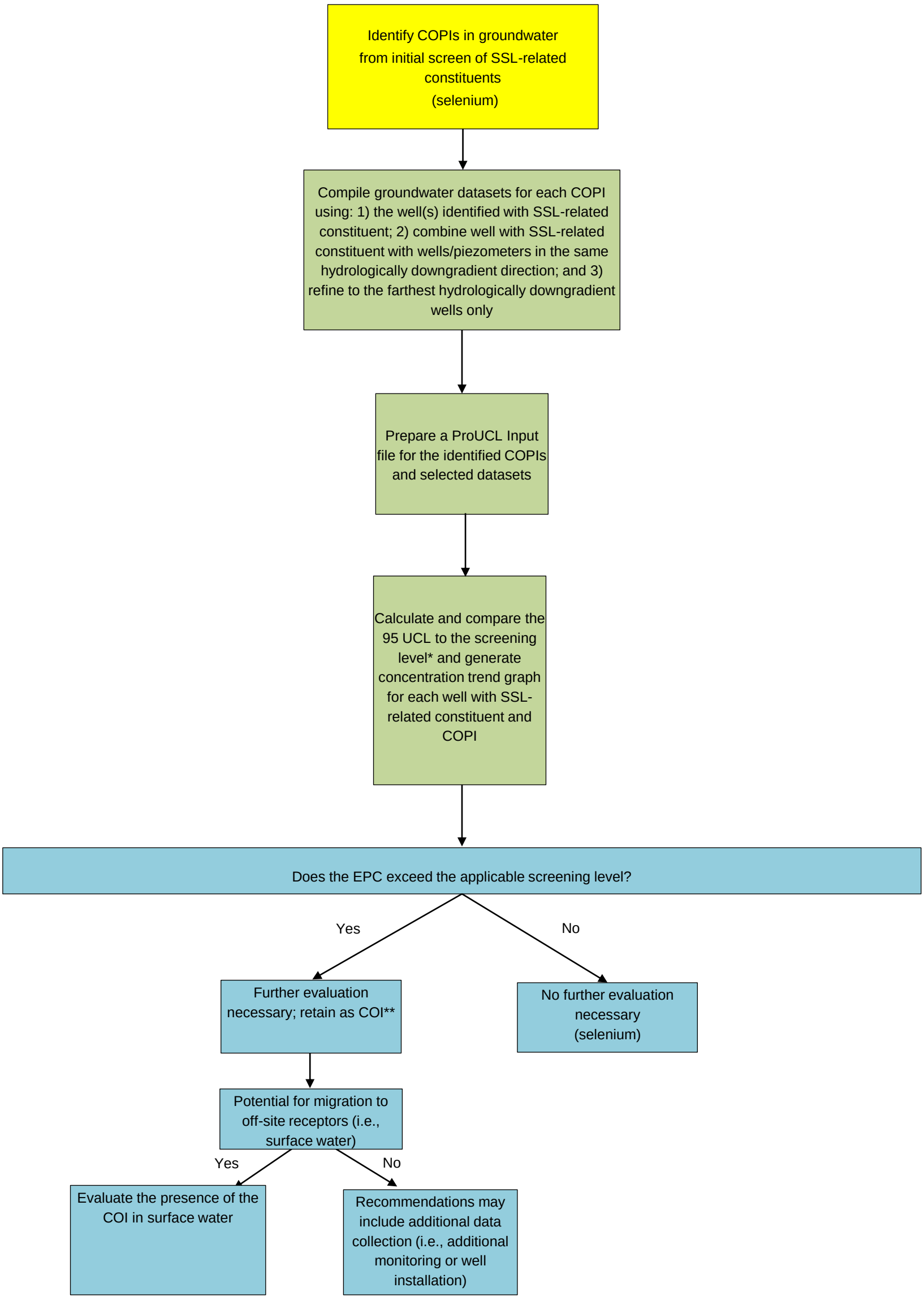
Plant Yates R6-AMA
Groundwater Risk Screening Approach

Figure 6

Project Number
6123201471

Prepared by/Date: IMR 12/16/20
Checked by/Date: NSR 12/17/20

Refined Groundwater Risk Screening Approach for R6-AMA



Notes:
*If the 95 UCL exceeds the maximum concentration, use the maximum as the EPC.
**This step is not necessary for Yates R6-AMA.
SSL = Statistically Significant Level
COPI = Constituent of Potential Interest
EPC = Exposure Point Concentration
UCL = Upper Confidence Limit
COI = Constituent of Interest

Plant Yates R6-AMA
Approach for Refined Groundwater Risk Evaluation

Figure 7

Project Number
6123201471

Prepared by/Date: IMR 12/16/20
Checked by/Date: NSR 12/16/20

TABLES

Table 1
SSL-Related Constituent Groundwater Screening
Yates R6-AMA Risk Evaluation Report
Plant Yates, Newnan, Coweta County, GA

CCR Rule Designation	Constituent	CAS No.	Detection Frequency[1]	Exceedance Frequency[2]	Maximum Concentration (mg/L)	Screening Level (mg/L)	Source	Site-Specific Background (mg/L)	COPI? (Y/N)	Rationale[3]
Appendix IV	Beryllium	7440-41-7	11 / 11	0 / 11	0.0059	0.025	Type 2 RRS[4]	0.003	N	BSL
	Selenium	7782-49-2	22 / 22	10 / 22	0.265	0.10	Type 2 RRS[4]	0.010	Y	ASL

Notes:
[1] Evaluation includes 2017 through March 2020 groundwater analytical data from wells YGWC-38 for beryllium and YGWC-38 and YGWC-41 for selenium.
[2] Exceedance frequency is for the specific constituent that exceeds the first screening value in the hierarchy of screening values.
[3] Rationale for classification of constituent as a COPI or exclusion as a COPI:
ASL = Above respective screening level
BSL = Equal to or below respective screening level

[4] The Type 2 RRSs are calculated by the EPA RSL calculator using residential exposure factor inputs from HSRA Appendix III, Table 3.

Definitions:
CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
COPI = Constituent of Potential Interest
RRS = Risk Reduction Standard
mg/L = milligrams per Liter

Prepared by/Date: NSR 09/10/20
Checked by/Date: SBM 09/13/20

Table 2
Groundwater Exposure Point Concentration Summary
Yates R6-AMA Risk Evaluation Report
Plant Yates, Newnan, Coweta County, GA

Exposure Unit	CCR Rule Designation	Constituent	CAS No.	Detection Frequency	Maximum Concentration (mg/L)	95% UCL (mg/L)	Recommended UCL Method	Selected EPC[1] (mg/L)
R6-AMA	Appendix IV	Selenium[2]	7782-49-2	16 / 28	0.0023	0.0019	95% KM (t) UCL	0.0019

Notes:
[1] EPCs calculated in accordance with USEPA, 2014. Memorandum for Determining Groundwater Exposure Point Concentrations, Supplemental Guidance. OSWER Directive 9283.1-42, February 2014. Located at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236917.

EPC used in refined screening presented in Table 3.
[2] Selenium EPC based on EPC Step 3 data from AP-2 wells YGWC-26S and YGWC-26I. For further detail on the selected EPC, refer to Appendix D.

Definitions:
CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
mg/L = milligrams per liter
95% UCL = 95 percent upper confidence limit
EPC = Exposure Point Concentration

Prepared by/Date: NSR 09/11/20
Checked by/Date: SBM 09/14/20

Table 3
Downgradient Groundwater Refined Screening
Yates R6-AMA Risk Evaluation Report
Plant Yates, Newnan, Coweta County, GA

Exposure Unit	CCR Rule Designation	Constituent	CAS No.	Detection Frequency	Exceedance Frequency[1]	Selected EPC[2] (mg/L)	Screening Level (mg/L)	Source	Site-Specific Background (mg/L)	COI? (Y/N)	Rationale[3]
R6-AMA	Appendix IV	Selenium	7782-49-2	16 / 28	0 / 28	0.0019	0.10	Type 2 RRS[4]	0.010	N	BSL

Notes:

[1] The exceedance frequency is based on the number of samples with detected concentrations that exceed the identified screening level.

[2] EPCs calculated in accordance with USEPA, 2014. Memorandum for Determining Groundwater Exposure Point Concentrations, Supplemental Guidance. OSWER Directive 9283.1-42, February 2014. Located at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236917. For further detail on the selected EPC, refer to Appendix D.

[3] Rationale for classification of constituent as a COI or exclusion as a COI:

ASL = Above respective screening level

BSL = Below respective screening level

[4] The Type 2 RRSs are calculated by the EPA RSL calculator using residential exposure factor inputs from HSRA Appendix III, Table 3.

Definitions:

CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
COI = Constituent of Interest
mg/L = milligrams per liter
EPC = Exposure Point Concentration

Prepared by/Date: NSR 09/11/20
Checked by/Date: SBM 09/14/20

APPENDIX A

Plant Yates Well Survey (Off-Site)

Well Survey

Plant Yates

Ash Pond 3, Ash Pond A, Ash Pond B, Ash Pond B'

Coweta County, GA

Prepared for

Georgia Power Company

241 Ralph McGill Blvd., Atlanta, GA 30308

Prepared by

NewFields

1349 W. Peachtree Street, Suite 2000

Atlanta, GA 30309

March 5, 2020

Introduction

Plant Yates is located at 708 Dyer Road in Coweta County.

Newfields conducted a well survey within a three-mile radius of the Coal Combustion Residual (CCR) facilities at Yates: Ash Pond 3 (AP-3), Ash Pond A (AP-A), Ash Pond B (AP-B), and Ash Pond B' (AP-B'). This area is referred to in this report as the Investigated Area, and is shown on Figure 1.

As part of this survey, NewFields accessed and reviewed information from a number of Federal, State, and County records and online sources, as well as a windshield surveys of the Investigated Area. Information from each identified well was then compiled into a geographic information system (GIS) database.

Information Collection

This section summarizes the sources utilized for identifying potential drinking water wells within the Investigated Area.

1. Federal Sources
    a. **United States Geological Survey (USGS).** USGS maintains an inventory database of any well sampled by a USGS-affiliated program for ground-water levels or water quality parameters at any time in the past.[1] Well information and coordinates were downloaded for the state of Georgia and compiled into the GIS database. Wells in this database are labelled 'human drinking water wells' or 'monitoring wells'; however, many of these appear to be co-located with drinking water wells. Some of these USGS monitoring wells may in fact be private drinking water wells utilized for monitoring purposes by USGS. Some listings in this database are over 50 years old and may be inactive.

    b. **Safe Drinking Water Information System (SDWIS).** This EPA database has listings of public water systems but does not have well location information. SDWIS information was used to help identify the suppliers of public water in the vicinity of the facility. Public water is available throughout the entire Investigated Area, supplied by the Carroll County Water Authority, Coweta County Water Authority, and the City of Whitesburg.

2. State Sources
    a. **Georgia Environmental Protection Division**
        i. **Drinking Water Branch.** EPD maintains records about municipal and industrial wells, whose presence or absence within a radius of a site can be ascertained by contacting the agency. An email was sent to Michael Gillis of EPD on October 23rd, 2019 requesting information about wells in the investigated area. Mr. Gillis responded stating that two wells for the City of Whitesburg are located within the Investigated Area. The City of Whitesburg system serves 931 people. NewFields

[1] http://waterdata.usgs.gov/ga/nwis/inventory?introduction

identified the location of the wells using a combination of aerial photography, parcel data indicating which parcels are owned by the city, and well information from the EPD's Drinking Water Branch online database. These two drinking water wells are located approximately 2.7 and just under 3 miles to the northwest of the Plant Yates Ash Ponds.

ii. **EPD Pesticide Project.** From 2000 to 2004, EPD undertook a project to sample private drinking water wells for pesticides. EPD solicited volunteers state-wide to participate in the well sampling program. The final report includes the list of private water wells sampled, their coordinates, and depths when available.[2] Information about wells within the Investigated Area were compiled into the GIS database.

iii. **Hazardous Site Inventory (HSI) files.** EPD maintains files for HSI files for site which are undergoing state-led corrective action. These files usually contain groundwater data and well surveys. There are no HSI sites within the Investigated Area.

iv. **Hazardous Site Response Act (HSRA) notifications.** EPD maintains non-HSI HSRA notification reports (i.e., notifications submitted after releases of reportable substances). NewFields reviewed reports associated with sites in Carroll and Coweta County. No wells were identified within the Investigated Area.

b. **Agricultural and Environmental Services Laboratory (AESL) records.** The University of Georgia's AESL Laboratory tests drinking water samples submitted by private individuals to their local county extension service. Maps of these sampling results can viewed online.[3] Precise coordinates of sampling locations are not available, but NewFields was able to use online images to find approximate locations.

3. County Sources
   a. **County Health Departments.** County health departments (DOH) maintain records of the permits for "on-site sewage management systems" (septic tanks). These permits indicate whether the permittee has private or public water supply, and often identify the exact location of the well on a map. Coweta County does not maintain these records in a manner where they are easily searchable using geographic criteria. However, Carroll County Health Department conducted a search for permits along the major roads within Investigated Areas and provided copies of nearly three dozen permits from this area. These wells were geolocated based on address.
   b. **Coweta County Water and Sewerage Authority.** The Authority provided a shapefile showing the waterlines in Coweta County, including the dates of construction. Public water is

[2] https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/PR-55.pdf
[3] http://aesl.ces.uga.edu/water/map/

available throughout the area. Earliest lines in the area were built in the mid-1980s; water mains closest to the plant were not built until the mid-1990s.

c. **Tax Assessor Records.** Tax parcel shapefiles were acquired from the Coweta County GIS Department on October 2, 2019. Additional tax parcel data, including information about the age of structures on the property, was obtained on October 14, 2019 from the County Tax Assessor's Office. Carroll County Tax Assessor's office provided tax parcel shape and improvement data on October 23, 2019.

d. **Tax Assessor Web site.** The Carrol County Tax Assessor's Web site[4] lists information about the water source for each parcel. However, this data cannot be downloaded, but must be searched for parcels one at a time. NewFields used the Web site to check the water source for wells identified using all other sources. NewFields determined that public water use is widespread regardless of the age of homes.

4. Windshield Surveys
   a. A windshield survey of the Investigated Area was conducted on October 15th, 2019. During the survey a number of wells were visually identified, which were subsequently compiled into the GIS database. A windshield survey update was conducted on October 15th, 2019. The majority of wells identified during the survey were near residences.

Summary

In addition to identifying specific wells from the above listed sources, NewFields used a combination of parcel data and information about the presence and age of public water infrastructure in Coweta County to identify parcels that may be using well water as their drinking water source or had drinking water wells at some time. Many of these parcels may be (or have been) sharing wells, so a well might not exist for each identified parcel. A large number of structures in Coweta County significantly predate the nearest waterlines. While these wells are labelled 'drinking water wells', many of those may be inactive. Some parcels may not each have their own well, but may have shared wells.

In the Carroll County portion of the Investigated Area, NewFields did not use parcel data to identify potential wells. The search of the Tax Assessor's Web site showed that public water use is widespread in this area, even in older homes and homes with visible windshield survey wells. Most wells seen in Carroll County were therefore assumed to be irrigation wells or inactive drinking water wells, with exception of a small number of apparently active drinking water wells confirmed with Tax Assessor data.

Dense parcels in Arnco and Sargent, between 2 and 3 miles southeast of Plant Yates and within the Investigated Area, were assumed to be connected to public water. These small communities appear to have had their own water supply in the past and later switched to Coweta County.

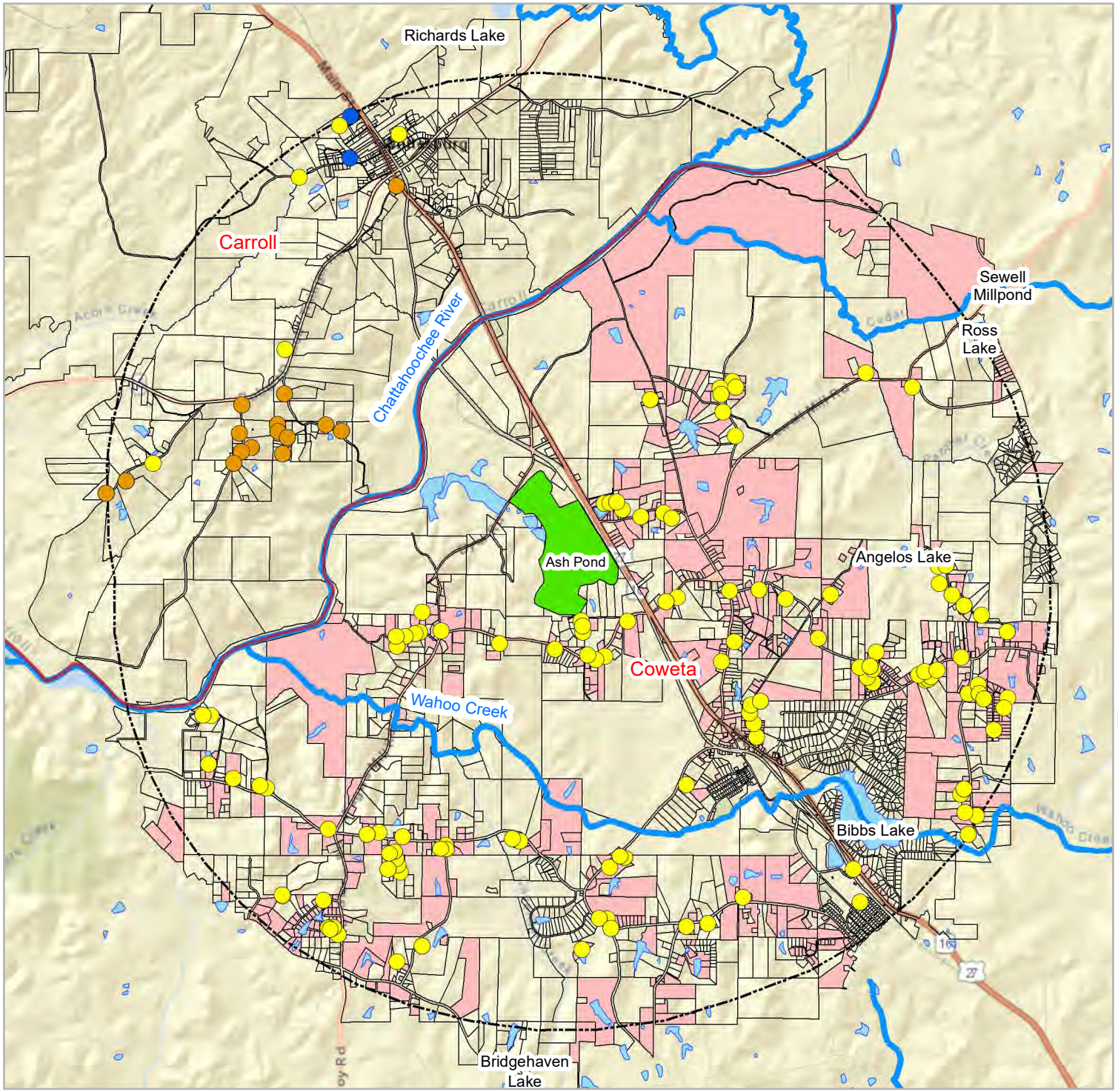
Public water is available throughout the entire surveyed area, supplied by the Carroll County Water Authority, Coweta County Water Authority, and the City of Whitesburg. Two public wells are located

[4] https://qpublic.schneidercorp.com/Application.aspx?App=CarrollCountyGA&Layer=Parcels&PageType=Search

within the Investigated Area, northeast of the Ash Ponds. These wells belong to the City of Whitesburg, a system that serves 931 people via 358 connections. The approximate locations of these wells are shown on Figure 1, which shows points for all identified wells, and shades parcels that were identified from parcel data as likely to are likely to contain wells. When viewed as a PDF file, the figure is interactive, and wells identified using different sources can be turned on and off.

Combining well data from all sources with parcel data, NewFields identified 728 total parcels likely to be associated with an active or inactive private well within the Investigated Area. Of these, 665 parcels were identified using parcel data. One hundred and twenty-five (125) wells were identified during the windshield survey. Twelve (12) of the wells seen during the windshield survey in Carroll County were assumed to be inactive or irrigation wells, since the tax assessor's Web site stated these properties were on public water. Eighteen (18) wells were identified using USGS sources, and one (1) from the EPD's Pesticide Sampling Project. Many wells were identified by multiple sources.[5]

[5] USGS monitoring wells located on Georgia Power property were also considered not to be drinking water wells and omitted.



Title	Plant Yates – AP-A, AP-3, AP-B, and AP-B'
Project	GPC Plants Georgia
NewFields	Two Midtown Plaza 1349 W. Peachtree St, #2000 Atlanta, Georgia 30309 Tel: 404-347-9050
Date	10/28/2019
Rev. No.	0
MXD	gpc_ccr_2019/agis
Figure No.	1

APPENDIX B
Data Used in Risk Evaluation

Appendix B
Site Groundwater Data (2016-2020) for Evaluation of SSLs[1]
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Well	Date	CAS	Constituent	Units	Obs	Flags	MDL	PQL
YGWC-38	03/25/20	7440-41-7	Beryllium	mg/L	0.0038		0.000074	0.003
YGWC-38	10/09/19	7440-41-7	Beryllium	mg/L	0.0046		0.000074	0.003
YGWC-38	08/22/19	7440-41-7	Beryllium	mg/L	0.0049		0.000074	0.003
YGWC-38	09/24/18	7440-41-7	Beryllium	mg/L	0.0051		0.00005	0.003
YGWC-38	08/07/18	7440-41-7	Beryllium	mg/L	0.0058		0.00005	0.003
YGWC-38	06/28/18	7440-41-7	Beryllium	mg/L	0.0059		0.00005	0.003
YGWC-38	04/03/18	7440-41-7	Beryllium	mg/L	0.0056		0.00005	0.003
YGWC-38	02/20/18	7440-41-7	Beryllium	mg/L	0.0053		0.00005	0.003
YGWC-38	01/12/18	7440-41-7	Beryllium	mg/L	0.0053		0.00009	0.003
YGWC-38	11/20/17	7440-41-7	Beryllium	mg/L	0.0053		0.00009	0.003
YGWC-38	10/12/17	7440-41-7	Beryllium	mg/L	0.0057		0.00009	0.003
YGWC-38	03/25/20	7782-49-2	Selenium	mg/L	0.099		0.0013	0.01
YGWC-38	10/09/19	7782-49-2	Selenium	mg/L	0.12		0.0013	0.01
YGWC-38	08/22/19	7782-49-2	Selenium	mg/L	0.14		0.0013	0.01
YGWC-38	09/24/18	7782-49-2	Selenium	mg/L	0.2		0.0014	0.01
YGWC-38	08/07/18	7782-49-2	Selenium	mg/L	0.2		0.0014	0.01
YGWC-38	06/28/18	7782-49-2	Selenium	mg/L	0.23		0.0014	0.01
YGWC-38	04/03/18	7782-49-2	Selenium	mg/L	0.23		0.0014	0.01
YGWC-38	02/20/18	7782-49-2	Selenium	mg/L	0.253		0.0014	0.01
YGWC-38	01/12/18	7782-49-2	Selenium	mg/L	0.249		0.0018	0.01
YGWC-38	11/20/17	7782-49-2	Selenium	mg/L	0.246		0.0018	0.01
YGWC-38	10/12/17	7782-49-2	Selenium	mg/L	0.265		0.0018	0.01
YGWC-41	03/25/20	7782-49-2	Selenium	mg/L	0.057		0.0013	0.01
YGWC-41	10/09/19	7782-49-2	Selenium	mg/L	0.052		0.0013	0.01
YGWC-41	08/22/19	7782-49-2	Selenium	mg/L	0.058		0.0013	0.01
YGWC-41	09/24/18	7782-49-2	Selenium	mg/L	0.061		0.0014	0.01
YGWC-41	08/07/18	7782-49-2	Selenium	mg/L	0.061		0.0014	0.01
YGWC-41	06/27/18	7782-49-2	Selenium	mg/L	0.066		0.0014	0.01
YGWC-41	04/03/18	7782-49-2	Selenium	mg/L	0.067		0.0014	0.01
YGWC-41	02/19/18	7782-49-2	Selenium	mg/L	0.071		0.0014	0.01
YGWC-41	01/11/18	7782-49-2	Selenium	mg/L	0.069		0.0018	0.01
YGWC-41	11/21/17	7782-49-2	Selenium	mg/L	0.0687		0.0018	0.01
YGWC-41	10/12/17	7782-49-2	Selenium	mg/L	0.0191		0.0018	0.01
PZ-37	09/24/18	7782-49-2	Selenium	mg/L	0.33		0.0014	0.01
PZ-37	08/06/18	7782-49-2	Selenium	mg/L	0.21		0.0014	0.01
PZ-37	06/29/18	7782-49-2	Selenium	mg/L	0.26		0.0014	0.01
PZ-37	04/03/18	7782-49-2	Selenium	mg/L	0.28		0.0014	0.01
PZ-37	02/20/18	7782-49-2	Selenium	mg/L	0.315		0.0014	0.01
PZ-37	01/11/18	7782-49-2	Selenium	mg/L	0.168		0.0018	0.01
PZ-37	11/21/17	7782-49-2	Selenium	mg/L	0.225		0.0018	0.01
PZ-37	10/12/17	7782-49-2	Selenium	mg/L	0.234		0.0018	0.01

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Plant Yates, Coweta County, GA

Well	Date	CAS	Constituent	Units	Obs	Flags	MDL	PQL
YAMW-3	01/16/20	7782-49-2	Selenium	mg/L		ND	0.0013	0.01
YAMW-4	01/16/20	7782-49-2	Selenium	mg/L	0.0018	J	0.0013	0.01
YAMW-5	01/15/20	7782-49-2	Selenium	mg/L	0.045		0.0013	0.01
YGWC-22S	07/05/17	7782-49-2	Selenium	mg/L	0.0147		0.0018	0.01
YGWC-22S	05/02/17	7782-49-2	Selenium	mg/L	0.0149		0.0014	0.01
YGWC-22S	03/08/17	7782-49-2	Selenium	mg/L	0.0171		0.0014	0.01
YGWC-22S	01/16/17	7782-49-2	Selenium	mg/L	0.0172		0.001	0.01
YGWC-22S	11/09/16	7782-49-2	Selenium	mg/L	0.0209		0.001	0.01
YGWC-22S	09/19/16	7782-49-2	Selenium	mg/L	0.0237		0.001	0.01
YGWC-22S	07/28/16	7782-49-2	Selenium	mg/L	0.0224		0.0009	0.01
YGWC-22S	06/07/16	7782-49-2	Selenium	mg/L	0.025		0.00024	0.0013
YGWC-23S	03/26/20	7782-49-2	Selenium	mg/L	0.024		0.0013	0.01
YGWC-23S	09/27/19	7782-49-2	Selenium	mg/L	0.018		0.0013	0.01
YGWC-23S	04/04/19	7782-49-2	Selenium	mg/L	0.017		0.0014	0.01
YGWC-23S	03/06/19	7782-49-2	Selenium	mg/L	0.019		0.0014	0.01
YGWC-23S	09/27/18	7782-49-2	Selenium	mg/L	0.023		0.0014	0.01
YGWC-23S	06/12/18	7782-49-2	Selenium	mg/L	0.026		0.0014	0.01
YGWC-23S	03/30/18	7782-49-2	Selenium	mg/L	0.028		0.0014	0.01
YGWC-23S	07/10/17	7782-49-2	Selenium	mg/L	0.0386		0.0018	0.01
YGWC-23S	05/02/17	7782-49-2	Selenium	mg/L	0.0395		0.0014	0.01
YGWC-23S	03/09/17	7782-49-2	Selenium	mg/L	0.0437		0.0014	0.01
YGWC-23S	01/16/17	7782-49-2	Selenium	mg/L	0.0469		0.001	0.01
YGWC-23S	11/08/16	7782-49-2	Selenium	mg/L	0.0521		0.001	0.01
YGWC-23S	09/20/16	7782-49-2	Selenium	mg/L	0.0464		0.001	0.01
YGWC-23S	07/28/16	7782-49-2	Selenium	mg/L	0.0385		0.0009	0.01
YGWC-23S	06/07/16	7782-49-2	Selenium	mg/L	0.037		0.00024	0.0013
YGWC-26I	03/20/20	7782-49-2	Selenium	mg/L	0.0019	J	n/a	n/a
YGWC-26I	02/13/20	7782-49-2	Selenium	mg/L	0.0019	J	n/a	n/a
YGWC-26I	09/25/19	7782-49-2	Selenium	mg/L	0.0019	J	0.0013	0.01
YGWC-26I	04/02/19	7782-49-2	Selenium	mg/L	0.0017	J	0.0014	0.01
YGWC-26I	02/27/19	7782-49-2	Selenium	mg/L	0.002	J	0.0014	0.01
YGWC-26I	03/30/18	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26I	07/10/17	7782-49-2	Selenium	mg/L	0.002	J	0.0018	0.01
YGWC-26I	05/08/17	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26I	02/21/17	7782-49-2	Selenium	mg/L	0.0018	J	0.001	0.01
YGWC-26I	01/18/17	7782-49-2	Selenium	mg/L	0.002	J	0.001	0.01
YGWC-26I	11/07/16	7782-49-2	Selenium	mg/L	0.0017	J	0.001	0.01
YGWC-26I	09/20/16	7782-49-2	Selenium	mg/L	0.0022	J	0.001	0.01
YGWC-26I	08/01/16	7782-49-2	Selenium	mg/L	0.0023	J	0.0009	0.01
YGWC-26I	06/08/16	7782-49-2	Selenium	mg/L	0.0016		0.00024	0.0013

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Well	Date	CAS	Constituent	Units	Obs	Flags	MDL	PQL
YGWC-26S	03/19/20	7782-49-2	Selenium	mg/L		ND	n/a	0.01
YGWC-26S	02/13/20	7782-49-2	Selenium	mg/L		ND	n/a	0.01
YGWC-26S	09/25/19	7782-49-2	Selenium	mg/L		ND	n/a	0.01
YGWC-26S	04/02/19	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26S	02/27/19	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26S	03/30/18	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26S	07/10/17	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26S	05/03/17	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26S	02/21/17	7782-49-2	Selenium	mg/L	0.0014	J	0.001	0.01
YGWC-26S	01/18/17	7782-49-2	Selenium	mg/L	0.0012	J	0.001	0.01
YGWC-26S	11/07/16	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26S	09/20/16	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-26S	08/01/16	7782-49-2	Selenium	mg/L	0.0014	J	0.0009	0.01
YGWC-26S	06/08/16	7782-49-2	Selenium	mg/L	0.0003	J	0.00024	0.0013
YGWC-32I	07/11/17	7782-49-2	Selenium	mg/L	0.0046	J	0.0018	0.01
YGWC-32I	05/03/17	7782-49-2	Selenium	mg/L	0.0022	J	0.0014	0.01
YGWC-32I	03/01/17	7782-49-2	Selenium	mg/L	0.0042	J	0.0014	0.01
YGWC-32I	01/17/17	7782-49-2	Selenium	mg/L	0.0027	J	0.001	0.01
YGWC-32I	11/10/16	7782-49-2	Selenium	mg/L	0.0016	J	0.001	0.01
YGWC-32I	09/21/16	7782-49-2	Selenium	mg/L	0.0026	J	0.001	0.01
YGWC-32I	07/29/16	7782-49-2	Selenium	mg/L	0.002	J	0.0009	0.01
YGWC-32I	06/08/16	7782-49-2	Selenium	mg/L	0.00094	J	0.00024	0.0013
YGWC-32S	07/11/17	7782-49-2	Selenium	mg/L	0.0696		0.0018	0.01
YGWC-32S	05/03/17	7782-49-2	Selenium	mg/L	0.0716		0.0014	0.01
YGWC-32S	03/01/17	7782-49-2	Selenium	mg/L	0.0704		0.0014	0.01
YGWC-32S	01/17/17	7782-49-2	Selenium	mg/L	0.0635		0.001	0.01
YGWC-32S	11/09/16	7782-49-2	Selenium	mg/L	0.0531		0.001	0.01
YGWC-32S	09/21/16	7782-49-2	Selenium	mg/L	0.0458		0.001	0.01
YGWC-32S	07/29/16	7782-49-2	Selenium	mg/L	0.0403		0.0009	0.01
YGWC-32S	06/08/16	7782-49-2	Selenium	mg/L	0.032		0.00024	0.0013
YGWC-34I	07/10/17	7782-49-2	Selenium	mg/L	0.0773		0.0018	0.01
YGWC-34I	05/02/17	7782-49-2	Selenium	mg/L	0.0734		0.0014	0.01
YGWC-34I	02/28/17	7782-49-2	Selenium	mg/L	0.0827		0.0014	0.01
YGWC-34I	01/17/17	7782-49-2	Selenium	mg/L	0.0758		0.001	0.01
YGWC-34I	11/09/16	7782-49-2	Selenium	mg/L	0.0814		0.001	0.01
YGWC-34I	09/21/16	7782-49-2	Selenium	mg/L	0.0746		0.001	0.01
YGWC-34I	07/28/16	7782-49-2	Selenium	mg/L	0.0748		0.0009	0.01
YGWC-34I	06/08/16	7782-49-2	Selenium	mg/L	0.06		0.00024	0.0013

Appendix B
Site Groundwater Data (2016-2020) for Evaluation of SSLs[1]
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Yates R6-AMA
Plant Yates, Coweta County, GA

Well	Date	CAS	Constituent	Units	Obs	Flags	MDL	PQL
YGWC-42	03/25/20	7782-49-2	Selenium	mg/L	0.046		0.0013	0.01
YGWC-42	10/09/19	7782-49-2	Selenium	mg/L	0.042		0.0013	0.01
YGWC-42	08/22/19	7782-49-2	Selenium	mg/L	0.047		0.0013	0.01
YGWC-42	09/20/18	7782-49-2	Selenium	mg/L	0.041		0.0014	0.01
YGWC-42	04/04/18	7782-49-2	Selenium	mg/L	0.055		0.0014	0.01
YGWC-42	10/12/17	7782-49-2	Selenium	mg/L	0.0594		0.0018	0.01
YGWC-42	07/11/17	7782-49-2	Selenium	mg/L	0.0697		0.0018	0.01
YGWC-42	05/10/17	7782-49-2	Selenium	mg/L	0.053		0.0014	0.01
YGWC-42	02/27/17	7782-49-2	Selenium	mg/L	0.0316		0.001	0.01
YGWC-42	11/16/16	7782-49-2	Selenium	mg/L	0.0313		0.001	0.01
YGWC-42	08/30/16	7782-49-2	Selenium	mg/L	0.0711		0.001	0.01
YGWC-43	03/25/20	7782-49-2	Selenium	mg/L		ND	n/a	0.01
YGWC-43	10/09/19	7782-49-2	Selenium	mg/L		ND	n/a	0.01
YGWC-43	08/21/19	7782-49-2	Selenium	mg/L		ND	n/a	0.01
YGWC-43	09/20/18	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-43	04/04/18	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-43	10/12/17	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-43	07/11/17	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-43	05/10/17	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-43	02/24/17	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-43	11/16/16	7782-49-2	Selenium	mg/L		ND	0.01	0.01
YGWC-43	08/31/16	7782-49-2	Selenium	mg/L		ND	0.01	0.01

Notes:

1) Highlighted rows indicate constituent identified in the well at a statistically significant level (SSL).

J - indicates an estimated value; the substance was detected between the laboratory MDL and PQL.
MDL - method detection limit
mg/L - milligrams per liter
n/a - not available
ND - not detected above the laboratory MDL
PQL - practical quantitation limit

Prepared by/Date: LO 09/15/20
Checked by/Date: IMR 12/04/20

APPENDIX C

USEPA RSL Calculator Generated Residential Screening Levels

Appendix C-1
Yates R6-AMA
Plant Yates, Coweta County, GA

Variable	Value
THQ (target hazard quotient) unitless	1
TR (target risk) unitless	0.00001
LT (lifetime) years	70
K (volatilization factor of Andelman) L/m^3	0.5
l_{sc} (apparent thickness of stratum corneum) cm	0.001
ED_{res} (exposure duration - resident) years	26
ED_{res-c} (exposure duration - child) years	6
ED_{res-a} (exposure duration - adult) years	20
ED_{0-2} (mutagenic exposure duration first phase) years	2
ED_{2-6} (mutagenic exposure duration second phase) years	4
ED_{6-16} (mutagenic exposure duration third phase) years	10
ED_{16-26} (mutagenic exposure duration fourth phase) years	10
EF_{res} (exposure frequency) days/year	350
EF_{res-c} (exposure frequency - child) days/year	350
EF_{res-a} (exposure frequency - adult) days/year	350
EF_{0-2} (mutagenic exposure frequency first phase) days/year	350
EF_{2-6} (mutagenic exposure frequency second phase) days/year	350
EF_{6-16} (mutagenic exposure frequency third phase) days/year	350
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	350
$ET_{event-res-adj}$ (age-adjusted exposure time) hours/event	0.67077
$ET_{event-res-madj}$ (mutagenic age-adjusted exposure time) hours/event	0.67077
ET_{res} (exposure time) hours/day	24
ET_{res-c} (dermal exposure time - child) hours/event	0.54
ET_{res-a} (dermal exposure time - adult) hours/event	0.71
ET_{res-c} (inhalation exposure time - child) hours/day	24
ET_{res-a} (inhalation exposure time - adult) hours/day	24
Appendix D-3	24
Scherer AP-1	24
Plant Scherer, Juliette, GA	24
ET_{16-26} (mutagenic inhalation exposure time fourth phase) hours/day	24
ET_{0-2} (mutagenic dermal exposure time first phase) hours/event	0.54
ET_{2-6} (mutagenic dermal exposure time second phase) hours/event	0.54
ET_{6-16} (mutagenic dermal exposure time third phase) hours/event	0.71
ET_{16-26} (mutagenic dermal exposure time fourth phase) hours/event	0.71
BW_{res-a} (body weight - adult) kg	80

Appendix C-1
Yates Risk Evaluation Report
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Appendix C-1
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Plant Yates, Coweta County, GA

Variable	Value
BW_{res-c} (body weight - child) kg	15
BW_{0-2} (mutagenic body weight) kg	15
BW_{2-6} (mutagenic body weight) kg	15
BW_{6-16} (mutagenic body weight) kg	80
BW_{16-26} (mutagenic body weight) kg	80
$IFW_{res-adj}$ (adjusted intake factor) L/kg	327.95
$IFW_{res-adj}$ (adjusted intake factor) L/kg	327.95
$IFWM_{res-adj}$ (mutagenic adjusted intake factor) L/kg	1019.9
$IFWM_{res-adj}$ (mutagenic adjusted intake factor) L/kg	1019.9
IRW_{res-c} (water intake rate - child) L/day	0.78
IRW_{res-a} (water intake rate - adult) L/day	2.5
IRW_{0-2} (mutagenic water intake rate) L/day	0.78
IRW_{2-6} (mutagenic water intake rate) L/day	0.78
IRW_{6-16} (mutagenic water intake rate) L/day	2.5
IRW_{16-26} (mutagenic water intake rate) L/day	2.5
EV_{res-a} (events - adult) per day	1
EV_{res-c} (events - child) per day	1
EV_{0-2} (mutagenic events) per day	1
EV_{2-6} (mutagenic events) per day	1
EV_{6-16} (mutagenic events) per day	1
EV_{16-26} (mutagenic events) per day	1
$DFW_{res-adj}$ (age-adjusted dermal factor) cm^2-event/kg	2610650
$DFWM_{res-adj}$ (mutagenic age-adjusted dermal factor) cm^2-event/kg	8191633
SA_{res-c} (skin surface area - child) cm^2	6365
SA_{res-a} (skin surface area - adult) cm^2	19652
SA_{0-2} (mutagenic skin surface area) cm^2	6365
SA_{2-6} (mutagenic skin surface area) cm^2	6365
SA_{6-16} (mutagenic skin surface area) cm^2	19652
SA_{16-26} (mutagenic skin surface area) cm^2	19652

Output generated 06AUG2020:16:09:05

Appendix C-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF_o $(mg/kg\text{-}day)^{-1}$	SF_o Ref	IUR $(ug/m^3)^{-1}$	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m^3)	RfC Ref	GIABS	K_p (cm/hr)	MW
Beryllium and compounds	7440-41-7	No	No	Inorganics	-		2.40E-03	I	2.00E-03	I	2.00E-05	I	7.00E-03	1.00E-03	9.01E+00
Selenium	7782-49-2	No	No	Inorganics	-		-		5.00E-03	I	2.00E-02	C	1.00E+00	1.00E-03	7.90E+01

Output generated 06AUG2020:16:09:05

Appendix C-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	B (unitless)	t^* (hr)	T_{event} (hr/event)	FA (unitless)	In EPD?	$DA_{event\ (ca)}$	$DA_{event\ (nc\ child)}$	$DA_{event\ (nc\ adult)}$	MCL (ug/L)
Beryllium and compounds	7440-41-7	No	No	Inorganics	1.15E-03	2.83E-01	1.18E-01	1.00E+00	Yes	-	3.44E-05	5.94E-05	4.00E+00
Selenium	7782-49-2	No	No	Inorganics	3.42E-03	6.99E-01	2.91E-01	1.00E+00	Yes	-	1.23E-02	2.12E-02	5.00E+01

Output generated 06AUG2020:16:09:05

Appendix C-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	Ingestion SL TR=1E-05 (ug/L)	Dermal SL TR=1E-05 (ug/L)	Inhalation SL TR=1E-05 (ug/L)	Carcinogenic SL TR=1E-05 (ug/L)	Ingestion SL Child THQ=1 (ug/L)	Dermal SL Child THQ=1 (ug/L)
Beryllium and compounds	7440-41-7	No	No	Inorganics	-	-	-	-	4.01E+01	6.37E+01
Selenium	7782-49-2	No	No	Inorganics	-	-	-	-	1.00E+02	2.28E+04

Output generated 06AUG2020:16:09:05

Appendix C-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	Inhalation SL Child THQ=1 (ug/L)	Noncarcinogenic SL Child THI=1 (ug/L)	Ingestion SL Adult THQ=1 (ug/L)	Dermal SL Adult THQ=1 (ug/L)	Inhalation SL Adult THQ=1 (ug/L)
Beryllium and compounds	7440-41-7	No	No	Inorganics	-	2.46E+01	6.67E+01	8.37E+01	-
Selenium	7782-49-2	No	No	Inorganics	-	9.98E+01	1.67E+02	2.99E+04	-

Output generated 06AUG2020:16:09:05

Appendix C-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	Noncarcinogenic SL Adult THI=1 (ug/L)	Screening Level (ug/L)
Beryllium and compounds	7440-41-7	No	No	Inorganics	3.71E+01	2.46E+01 nc
Selenium	7782-49-2	No	No	Inorganics	1.66E+02	9.98E+01 nc

Output generated 06AUG2020:16:09:05

APPENDIX D

Support for Refined Risk Evaluation

Appendix D-1

Exposure Point Concentration Calculation Results

Appendix D-1
Exposure Point Concentration Calculation Results[1]
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

CCR Rule Designation	Constituent	Well IDs Included	Maximum Concentration (mg/L)	Detection Frequency	Exceedance Frequency	EPC Step 1: Individual Target Well(s) 2016-2020 (mg/L)	EPC Step 2: Target Well(s) & Downgradient Well(s) 2016-2020 (mg/L)	EPC Step 3: Farthest Downgradient Well(s) 2016-2020 (mg/L)
Appendix IV	Selenium	YGWC-38 YGWC-41	0.265	22 / 22	10 / 22	0.21		
		YGWC-38 YAMW-5 YGWC-23S PZ-37 YGWC-22S YGWC-34I YGWC-32I YGWC-32S YGWC-41 YAMW-4 YGWC-42 YAMW-3 YGWC-43 YGWC-26S (AP-2) YGWC-26I (AP-2)	0.33	106 / 130	18 / 130		0.086	
		YGWC-26S (AP-2) YGWC-26I (AP-2)	0.0023	16 / 28	0 / 28			0.0019

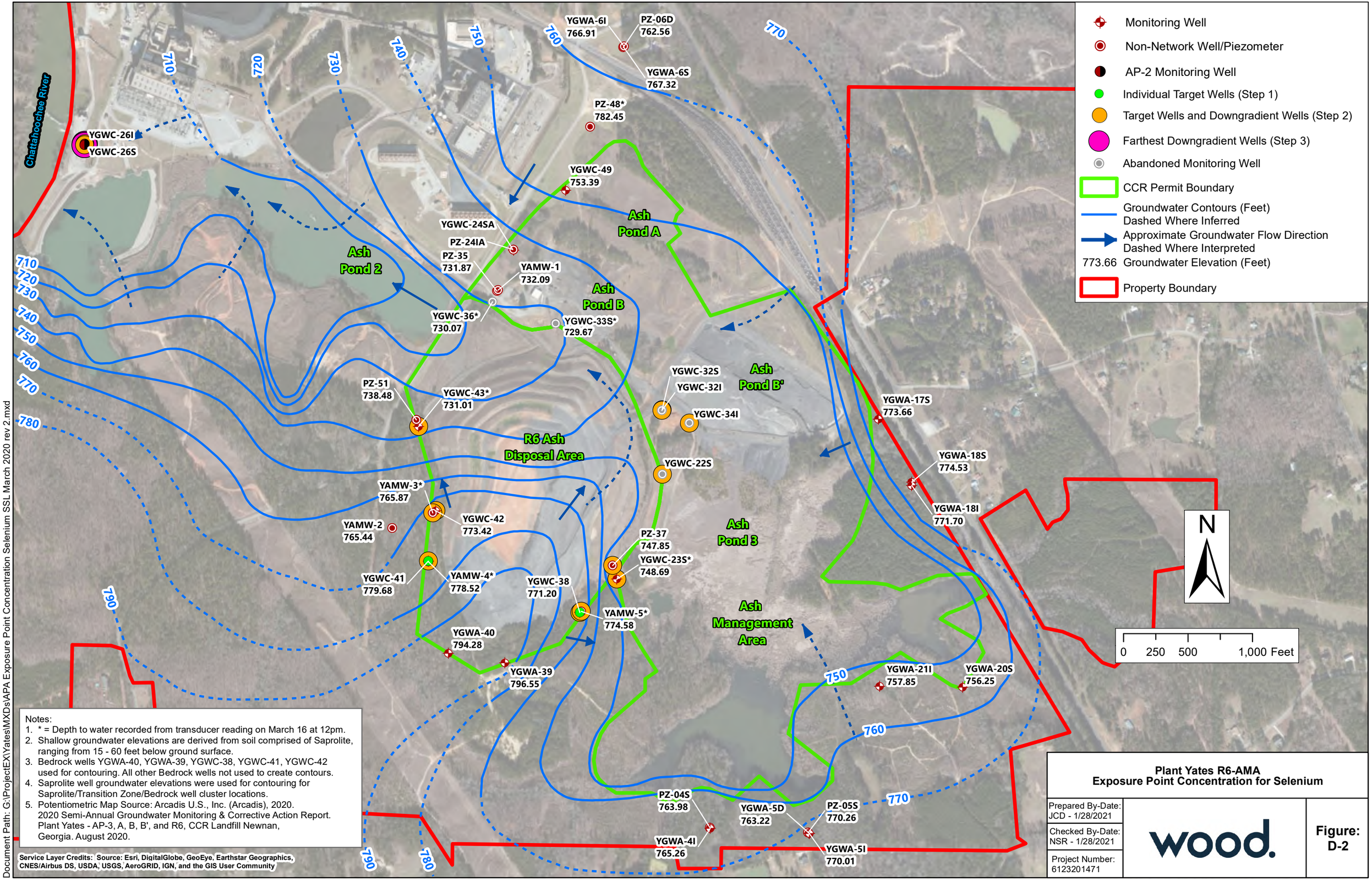
Notes:
Highlighted value is the EPC selected for the refined screening.
1 - EPCs calculated in accordance with USEPA, 2014. Memorandum for Determining Groundwater Exposure Point Concentrations, Supplemental Guidance. OSWER Directive 9283.1-42, February 2014. Located at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236917

Definitions:
EPC = Exposure Point Concentration
mg/L = milligrams per liter

Prepared by/Date: NSR 09/10/20
Checked by/Date: SBM 09/13/20

Appendix D-2

Exposure Point Concentration Figures



Notes:
1. * = Depth to water recorded from transducer reading on March 16 at 12pm.
2. Shallow groundwater elevations are derived from soil comprised of Saprolite, ranging from 15 - 60 feet below ground surface.
3. Bedrock wells YGWA-40, YGWA-39, YGWC-38, YGWC-41, YGWC-42 used for contouring. All other Bedrock wells not used to create contours.
4. Saprolite well groundwater elevations were used for contouring for Saprolite/Transition Zone/Bedrock well cluster locations.
5. Potentiometric Map Source: Arcadis U.S., Inc. (Arcadis), 2020. 2020 Semi-Annual Groundwater Monitoring & Corrective Action Report. Plant Yates - AP-3, A, B, B', and R6, CCR Landfill Newnan, Georgia. August 2020.

Plant Yates R6-AMA
Exposure Point Concentration for Selenium

Prepared By-Date: JCD - 1/28/2021	wood.
Checked By-Date: NSR - 1/28/2021	Figure: D-2
Project Number: 6123201471	

Document Path: G:\Project\EX\Yates\MXDs\APA Exposure Point Concentration Selenium SSL March 2020 rev 2.mxd

Appendix D-3

ProUCL Input/Output Files

Appendix D-3a
Groundwater ProUCL Input - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Step 1

Well(1)	Date(1)	Selenium(1)	D_Selenium(1)
YGWC-38	10/12/17	0.265	1
YGWC-38	11/20/17	0.246	1
YGWC-38	01/12/18	0.249	1
YGWC-38	02/20/18	0.253	1
YGWC-38	04/03/18	0.23	1
YGWC-38	06/28/18	0.23	1
YGWC-38	08/07/18	0.2	1
YGWC-38	09/24/18	0.2	1
YGWC-38	08/22/19	0.14	1
YGWC-38	10/09/19	0.12	1
YGWC-38	03/25/20	0.099	1
YGWC-41	10/12/17	0.0191	1
YGWC-41	11/21/17	0.0687	1
YGWC-41	01/11/18	0.069	1
YGWC-41	02/19/18	0.071	1
YGWC-41	04/03/18	0.067	1
YGWC-41	06/27/18	0.066	1
YGWC-41	08/07/18	0.061	1
YGWC-41	09/24/18	0.061	1
YGWC-41	08/22/19	0.058	1
YGWC-41	10/09/19	0.052	1
YGWC-41	3/25/2020	0.057	1

Step 2

Well(2)	Date(2)	Selenium(2)	D_Selenium(2)
YGWC-38	10/12/17	0.265	1
YGWC-38	11/20/17	0.246	1
YGWC-38	01/12/18	0.249	1
YGWC-38	02/20/18	0.253	1
YGWC-38	04/03/18	0.23	1
YGWC-38	06/28/18	0.23	1
YGWC-38	08/07/18	0.2	1
YGWC-38	09/24/18	0.2	1
YGWC-38	08/22/19	0.14	1
YGWC-38	10/09/19	0.12	1
YGWC-38	03/25/20	0.099	1
YAMW-5	01/15/20	0.045	1
PZ-37	10/12/17	0.234	1
PZ-37	11/21/17	0.225	1
PZ-37	01/11/18	0.168	1
PZ-37	02/20/18	0.315	1
PZ-37	04/03/18	0.28	1
PZ-37	06/29/18	0.26	1
PZ-37	08/06/18	0.21	1
PZ-37	09/24/18	0.33	1
YGWC-23S	06/07/16	0.037	1
YGWC-23S	07/28/16	0.0385	1
YGWC-23S	09/20/16	0.0464	1
YGWC-23S	11/08/16	0.0521	1
YGWC-23S	01/16/17	0.0469	1
YGWC-23S	03/09/17	0.0437	1
YGWC-23S	05/02/17	0.0395	1
YGWC-23S	07/10/17	0.0386	1
YGWC-23S	03/30/18	0.028	1
YGWC-23S	06/12/18	0.026	1
YGWC-23S	09/27/18	0.023	1
YGWC-23S	03/06/19	0.019	1
YGWC-23S	04/04/19	0.017	1
YGWC-23S	09/27/19	0.018	1
YGWC-23S	03/26/20	0.024	1
YGWC-22S	06/07/16	0.025	1
YGWC-22S	07/28/16	0.0224	1
YGWC-22S	09/19/16	0.0237	1
YGWC-22S	11/09/16	0.0209	1
YGWC-22S	01/16/17	0.0172	1
YGWC-22S	03/08/17	0.0171	1
YGWC-22S	05/02/17	0.0149	1
YGWC-22S	07/05/17	0.0147	1
YGWC-34I	06/08/16	0.06	1
YGWC-34I	07/28/16	0.0748	1
YGWC-34I	09/21/16	0.0746	1
YGWC-34I	11/09/16	0.0814	1
YGWC-34I	01/17/17	0.0758	1
YGWC-34I	02/28/17	0.0827	1
YGWC-34I	05/02/17	0.0734	1
YGWC-34I	07/10/17	0.0773	1
YGWC-32S	06/08/16	0.032	1
YGWC-32S	07/29/16	0.0403	1
YGWC-32S	09/21/16	0.0458	1
YGWC-32S	11/09/16	0.0531	1
YGWC-32S	01/17/17	0.0635	1
YGWC-32S	03/01/17	0.0704	1
YGWC-32S	05/03/17	0.0716	1
YGWC-32S	07/11/17	0.0696	1
YGWC-32I	06/08/16	0.00094	1
YGWC-32I	07/29/16	0.002	1
YGWC-32I	09/21/16	0.0026	1
YGWC-32I	11/10/16	0.0016	1
YGWC-32I	01/17/17	0.0027	1
YGWC-32I	03/01/17	0.0042	1
YGWC-32I	05/03/17	0.0022	1
YGWC-32I	07/11/17	0.0046	1
YGWC-41	10/12/17	0.0191	1

Step 3

Well(3)	Date(3)	Selenium(3)	D_Selenium(3)
YGWC-26S	06/08/16	0.0003	1
YGWC-26S	08/01/16	0.0014	1
YGWC-26S	09/20/16	0.01	0
YGWC-26S	11/07/16	0.01	0
YGWC-26S	01/18/17	0.0012	1
YGWC-26S	02/21/17	0.0014	1
YGWC-26S	05/03/17	0.01	0
YGWC-26S	07/10/17	0.01	0
YGWC-26S	03/30/18	0.01	0
YGWC-26S	02/27/19	0.01	0
YGWC-26S	04/02/19	0.01	0
YGWC-26S	09/25/19	0.01	0
YGWC-26S	02/13/20	0.01	0
YGWC-26S	03/19/20	0.01	0
YGWC-26I	06/08/16	0.0016	1
YGWC-26I	08/01/16	0.0023	1
YGWC-26I	09/20/16	0.0022	1
YGWC-26I	11/07/16	0.0017	1
YGWC-26I	01/18/17	0.002	1
YGWC-26I	02/21/17	0.0018	1
YGWC-26I	05/08/17	0.01	0
YGWC-26I	07/10/17	0.002	1
YGWC-26I	03/30/18	0.01	0
YGWC-26I	02/27/19	0.002	1
YGWC-26I	04/02/19	0.0017	1
YGWC-26I	09/25/19	0.0019	1
YGWC-26I	02/13/20	0.0019	1
YGWC-26I	03/20/20	0.0019	1

Appendix D-3a
Groundwater ProUCL Input - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Step 1			
Well(1)	Date(1)	Selenium(1)	D_Selenium(1)

Step 2			
Well(2)	Date(2)	Selenium(2)	D_Selenium(2)
YGWC-41	11/21/17	0.0687	1
YGWC-41	01/11/18	0.069	1
YGWC-41	02/19/18	0.071	1
YGWC-41	04/03/18	0.067	1
YGWC-41	06/27/18	0.066	1
YGWC-41	08/07/18	0.061	1
YGWC-41	09/24/18	0.061	1
YGWC-41	08/22/19	0.058	1
YGWC-41	10/09/19	0.052	1
YGWC-41	3/25/2020	0.057	1
YAMW-4	01/16/20	0.0018	1
YGWC-42	08/30/16	0.0711	1
YGWC-42	11/16/16	0.0313	1
YGWC-42	02/27/17	0.0316	1
YGWC-42	05/10/17	0.053	1
YGWC-42	07/11/17	0.0697	1
YGWC-42	10/12/17	0.0594	1
YGWC-42	04/04/18	0.055	1
YGWC-42	09/20/18	0.041	1
YGWC-42	08/22/19	0.047	1
YGWC-42	10/09/19	0.042	1
YGWC-42	03/25/20	0.046	1
YAMW-3	01/16/20	0.01	0
YGWC-43	08/31/16	0.01	0
YGWC-43	11/16/16	0.01	0
YGWC-43	02/24/17	0.01	0
YGWC-43	05/10/17	0.01	0
YGWC-43	07/11/17	0.01	0
YGWC-43	10/12/17	0.01	0
YGWC-43	04/04/18	0.01	0
YGWC-43	09/20/18	0.01	0
YGWC-43	08/21/19	0.01	0
YGWC-43	10/09/19	0.01	0
YGWC-43	03/25/20	0.01	0
YGWC-26S	06/08/16	0.0003	1
YGWC-26S	08/01/16	0.0014	1
YGWC-26S	09/20/16	0.01	0
YGWC-26S	11/07/16	0.01	0
YGWC-26S	01/18/17	0.0012	1
YGWC-26S	02/21/17	0.0014	1
YGWC-26S	05/03/17	0.01	0
YGWC-26S	07/10/17	0.01	0
YGWC-26S	03/30/18	0.01	0
YGWC-26S	02/27/19	0.01	0
YGWC-26S	04/02/19	0.01	0
YGWC-26S	09/25/19	0.01	0
YGWC-26S	02/13/20	0.01	0
YGWC-26S	03/19/20	0.01	0
YGWC-26I	06/08/16	0.0016	1
YGWC-26I	08/01/16	0.0023	1
YGWC-26I	09/20/16	0.0022	1
YGWC-26I	11/07/16	0.0017	1
YGWC-26I	01/18/17	0.002	1
YGWC-26I	02/21/17	0.0018	1
YGWC-26I	05/08/17	0.01	0
YGWC-26I	07/10/17	0.002	1
YGWC-26I	03/30/18	0.01	0
YGWC-26I	02/27/19	0.002	1
YGWC-26I	04/02/19	0.0017	1
YGWC-26I	09/25/19	0.0019	1
YGWC-26I	02/13/20	0.0019	1
YGWC-26I	03/20/20	0.0019	1

Step 3			
Well(3)	Date(3)	Selenium(3)	D_Selenium(3)

Notes:
1) Concentrations in units of mg/L.

Prepared by/Date: NSR 09/10/20
Checked by/Date: SBM 09/14/2020

Appendix D-3b
Groundwater ProUCL Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.19/10/2020 4:27:25 PM
From File	AppD-3_YATES SSL ProUCL 200820_b.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Selenium(1)

General Statistics

Total Number of Observations	22	Number of Distinct Observations	19
		Number of Missing Observations	0
Minimum	0.0191	Mean	0.131
Maximum	0.265	Median	0.085
SD	0.0843	Std. Error of Mean	0.018
Coefficient of Variation	0.644	Skewness	0.467

Normal GOF Test

Shapiro Wilk Test Statistic	0.837	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.911	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.262	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.184	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	0.162	95% Adjusted-CLT UCL (Chen-1995)	0.162
		95% Modified-t UCL (Johnson-1978)	0.162

Gamma GOF Test

A-D Test Statistic	1.221	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.754	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.235	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.187	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Appendix D-3b
Groundwater ProUCL Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Gamma Statistics

k hat (MLE)	2.365	k star (bias corrected MLE)	2.073
Theta hat (MLE)	0.0554	Theta star (bias corrected MLE)	0.0632
nu hat (MLE)	104.1	nu star (bias corrected)	91.22
MLE Mean (bias corrected)	0.131	MLE Sd (bias corrected)	0.091
		Approximate Chi Square Value (0.05)	70.19
Adjusted Level of Significance	0.0386	Adjusted Chi Square Value	68.82

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.17	95% Adjusted Gamma UCL (use when n<50)	0.174

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.888	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.911	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.204	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.184	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-3.958	Mean of logged Data	-2.259
Maximum of Logged Data	-1.328	SD of logged Data	0.721

Assuming Lognormal Distribution

95% H-UCL	0.192	90% Chebyshev (MVUE) UCL	0.2
95% Chebyshev (MVUE) UCL	0.23	97.5% Chebyshev (MVUE) UCL	0.271
99% Chebyshev (MVUE) UCL	0.353		

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	0.161	95% Jackknife UCL	0.162
95% Standard Bootstrap UCL	0.159	95% Bootstrap-t UCL	0.164
95% Hall's Bootstrap UCL	0.16	95% Percentile Bootstrap UCL	0.16
95% BCA Bootstrap UCL	0.161		
90% Chebyshev(Mean, Sd) UCL	0.185	95% Chebyshev(Mean, Sd) UCL	0.209
97.5% Chebyshev(Mean, Sd) UCL	0.243	99% Chebyshev(Mean, Sd) UCL	0.31

Appendix D-3b
Groundwater ProUCL Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	0.209

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Selenium(2)

General Statistics

Total Number of Observations	130	Number of Distinct Observations	95
Number of Detects	106	Number of Non-Detects	24
Number of Distinct Detects	93	Number of Distinct Non-Detects	2
Minimum Detect	3.0000E-4	Minimum Non-Detect	0.0013
Maximum Detect	0.33	Maximum Non-Detect	0.01
Variance Detects	0.00655	Percent Non-Detects	18.46%
Mean Detects	0.0684	SD Detects	0.0809
Median Detects	0.0454	CV Detects	1.184
Skewness Detects	1.667	Kurtosis Detects	1.822
Mean of Logged Detects	-3.614	SD of Logged Detects	1.692

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.743	**Normal GOF Test on Detected Observations Only**
5% Shapiro Wilk P Value	0	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.258	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.0863	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.0561	KM Standard Error of Mean	0.0068
KM SD	0.0772	95% KM (BCA) UCL	0.0679
95% KM (t) UCL	0.0674	95% KM (Percentile Bootstrap) UCL	0.0672
95% KM (z) UCL	0.0673	95% KM Bootstrap t UCL	0.0692
90% KM Chebyshev UCL	0.0765	95% KM Chebyshev UCL	0.0857
97.5% KM Chebyshev UCL	0.0986	99% KM Chebyshev UCL	0.124

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.019	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.804	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.117	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.092	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Appendix D-3b
Groundwater ProUCL Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Gamma Statistics on Detected Data Only

k hat (MLE)	0.655	k star (bias corrected MLE)	0.643
Theta hat (MLE)	0.104	Theta star (bias corrected MLE)	0.106
nu hat (MLE)	138.9	nu star (bias corrected)	136.3
Mean (detects)	0.0684		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	3.0000E-4	Mean	0.0576
Maximum	0.33	Median	0.0297
SD	0.0765	CV	1.328
k hat (MLE)	0.649	k star (bias corrected MLE)	0.639
Theta hat (MLE)	0.0888	Theta star (bias corrected MLE)	0.0902
nu hat (MLE)	168.7	nu star (bias corrected)	166.1
Adjusted Level of Significance (β)	0.0482		
Approximate Chi Square Value (166.10, α)	137.3	Adjusted Chi Square Value (166.10, β)	137
95% Gamma Approximate UCL (use when n>=50)	0.0697	95% Gamma Adjusted UCL (use when n<50)	0.0698

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0561	SD (KM)	0.0772
Variance (KM)	0.00596	SE of Mean (KM)	0.0068
k hat (KM)	0.528	k star (KM)	0.521
nu hat (KM)	137.3	nu star (KM)	135.5
theta hat (KM)	0.106	theta star (KM)	0.108
80% gamma percentile (KM)	0.0923	90% gamma percentile (KM)	0.15
95% gamma percentile (KM)	0.212	99% gamma percentile (KM)	0.364

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (135.47, α)	109.6	Adjusted Chi Square Value (135.47, β)	109.3
95% Gamma Approximate KM-UCL (use when n>=50)	0.0693	95% Gamma Adjusted KM-UCL (use when n<50)	0.0695

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic	0.885	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk P Value	1.727E-11	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.159	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.0863	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Appendix D-3b
Groundwater ProUCL Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.0565	Mean in Log Scale	-4.031
SD in Original Scale	0.0772	SD in Log Scale	1.805
95% t UCL (assumes normality of ROS data)	0.0677	95% Percentile Bootstrap UCL	0.0679
95% BCA Bootstrap UCL	0.0687	95% Bootstrap t UCL	0.0694
95% H-UCL (Log ROS)	0.147		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-4.127	KM Geo Mean	0.0161
KM SD (logged)	1.88	95% Critical H Value (KM-Log)	3.12
KM Standard Error of Mean (logged)	0.168	95% H-UCL (KM -Log)	0.158
KM SD (logged)	1.88	95% Critical H Value (KM-Log)	3.12
KM Standard Error of Mean (logged)	0.168		

DL/2 Statistics

DL/2 Normal		DL/2 Log-Transformed	
Mean in Original Scale	0.0566	Mean in Log Scale	-3.941
SD in Original Scale	0.0771	SD in Log Scale	1.684
95% t UCL (Assumes normality)	0.0678	95% H-Stat UCL	0.123

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	0.0857

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Selenium(3)

General Statistics

Total Number of Observations	28	Number of Distinct Observations	11
Number of Detects	16	Number of Non-Detects	12
Number of Distinct Detects	10	Number of Distinct Non-Detects	1
Minimum Detect	3.0000E-4	Minimum Non-Detect	0.01
Maximum Detect	0.0023	Maximum Non-Detect	0.01
Variance Detects	2.2729E-7	Percent Non-Detects	42.86%
Mean Detects	0.00171	SD Detects	4.7675E-4
Median Detects	0.00185	CV Detects	0.279
Skewness Detects	-1.787	Kurtosis Detects	4.4
Mean of Logged Detects	-6.445	SD of Logged Detects	0.477

Appendix D-3b
Groundwater ProUCL Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.847	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.887	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.182	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.213	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00171	KM Standard Error of Mean	1.1919E-4
KM SD	4.6161E-4	95% KM (BCA) UCL	0.00188
95% KM (t) UCL	0.00191	95% KM (Percentile Bootstrap) UCL	0.00188
95% KM (z) UCL	0.0019	95% KM Bootstrap t UCL	0.00187
90% KM Chebyshev UCL	0.00206	95% KM Chebyshev UCL	0.00223
97.5% KM Chebyshev UCL	0.00245	99% KM Chebyshev UCL	0.00289

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.663	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.74	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.234	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.216	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	7.107	k star (bias corrected MLE)	5.816
Theta hat (MLE)	2.4009E-4	Theta star (bias corrected MLE)	2.9338E-4
nu hat (MLE)	227.4	nu star (bias corrected)	186.1
Mean (detects)	0.00171		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	3.0000E-4	Mean	0.00526
Maximum	0.01	Median	0.0021
SD	0.00419	CV	0.797
k hat (MLE)	1.364	k star (bias corrected MLE)	1.242
Theta hat (MLE)	0.00386	Theta star (bias corrected MLE)	0.00424
nu hat (MLE)	76.4	nu star (bias corrected)	69.55
Adjusted Level of Significance (β)	0.0404		
Approximate Chi Square Value (69.55, α)	51.35	Adjusted Chi Square Value (69.55, β)	50.38
95% Gamma Approximate UCL (use when n>=50)	0.00713	95% Gamma Adjusted UCL (use when n<50)	0.00726

Appendix D-3b
Groundwater ProUCL Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00171	SD (KM)	4.6161E-4
Variance (KM)	2.1309E-7	SE of Mean (KM)	1.1919E-4
k hat (KM)	13.66	k star (KM)	12.22
nu hat (KM)	765.1	nu star (KM)	684.5
theta hat (KM)	1.2489E-4	theta star (KM)	1.3960E-4
80% gamma percentile (KM)	0.0021	90% gamma percentile (KM)	0.00235
95% gamma percentile (KM)	0.00258	99% gamma percentile (KM)	0.00304

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (684.46, α)	624.8	Adjusted Chi Square Value (684.46, β)	621.2
95% Gamma Approximate KM-UCL (use when n>=50)	0.00187	95% Gamma Adjusted KM-UCL (use when n<50)	0.00188

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.607	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.271	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.213	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00169	Mean in Log Scale	-6.445
SD in Original Scale	5.1424E-4	SD in Log Scale	0.419
95% t UCL (assumes normality of ROS data)	0.00186	95% Percentile Bootstrap UCL	0.00185
95% BCA Bootstrap UCL	0.00184	95% Bootstrap t UCL	0.00185
95% H-UCL (Log ROS)	0.00202		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-6.445	KM Geo Mean	0.00159
KM SD (logged)	0.462	95% Critical H Value (KM-Log)	1.912
KM Standard Error of Mean (logged)	0.119	95% H-UCL (KM -Log)	0.00209
KM SD (logged)	0.462	95% Critical H Value (KM-Log)	1.912
KM Standard Error of Mean (logged)	0.119		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00312	Mean in Log Scale	-5.954
SD in Original Scale	0.0017	SD in Log Scale	0.679
95% t UCL (Assumes normality)	0.00366	95% H-Stat UCL	0.0043

DL/2 is not a recommended method, provided for comparisons and historical reasons

Appendix D-3b
Groundwater ProUCL Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.00191

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix D-3c
Groundwater ProUCL Mann-Kendall Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Mann-Kendall Trend Test Analysis

User Selected Options	
Date/Time of Computation	ProUCL 5.19/15/2020 10:04:59 AM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Selenium-ygwc-38

General Statistics

Number of Events Reported (m)	11
Number of Missing Events	0
Number or Reported Events Used	11
Number Values Reported (n)	11
Minimum	0.099
Maximum	0.265
Mean	0.203
Geometric Mean	0.194
Median	0.23
Standard Deviation	0.0578
Coefficient of Variation	0.285

Mann-Kendall Test

M-K Test Value (S)	-47
Tabulated p-value	0
Standard Deviation of S	12.77
Standardized Value of S	-3.603
Approximate p-value	1.5728E-4

Statistically significant evidence of a decreasing trend at the specified level of significance.

Appendix D-3c
Groundwater ProUCL Mann-Kendall Output - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Selenium-ygwc-41

General Statistics

Number of Events Reported (m)	11
Number of Missing Events	0
Number or Reported Events Used	11
Number Values Reported (n)	11
Minimum	0.0191
Maximum	0.071
Mean	0.0591
Geometric Mean	0.0563
Median	0.061
Standard Deviation	0.0145
Coefficient of Variation	0.246

Mann-Kendall Test

M-K Test Value (S)	-26
Tabulated p-value	0.02
Standard Deviation of S	12.81
Standardized Value of S	-1.952
Approximate p-value	0.0255

Statistically significant evidence of a decreasing trend at the specified level of significance.

Appendix D-4

Groundwater Trend Graphs

Appendix D-4
Groundwater Mann-Kendall Trend Graphs - Selenium
Yates Risk Evaluation Report
Yates R6-AMA
Plant Yates, Coweta County, GA

Prepared by/Date: LO 09/11/20
Checked by/Date: NSR 09/15/20

ATTACHMENT 2

Analytical Reports

BROOKS APPLIED LABS
18804 North Creek Parkway, Ste 100, Bothell, WA 98011 • USA • T: 206 632 6206 F: 206 632 6017 • info@brooksapplied.com

October 20, 2020

Arcadis – Raleigh
ATTN: Jennifer Beck
5420 Wade Park Blvd #350
Raleigh, NC 27607
jennifer.beck@arcadis.com

RE: Project ARC-RA2001 Client Project: #3006037.00001

Dear Jennifer Beck,

On September 26, 2020, Brooks Applied Labs (BAL) received two (2) water samples at a temperature of 1.5°C. The samples were logged-in for the analyses of Selenium Speciation analyses, including selenite [*Se(IV)*], selenate [*Se(VI)*], selenocyanate [*SeCN*], selenomethionine [*SeMet*], methylseleninic acid [*MeSe(IV)*], selenosulfate [*SeSO3*]. Both samples were analyzed for dissolved Selenium (Se) per our phone conversation on September 29, 20020. All samples were received and stored according to BAL SOPs and EPA methodology.

Samples were field filtered.

Se Speciation Analysis by IC-ICP-CRC-MS

Each aqueous fraction submitted for Se speciation analysis was analyzed using ion chromatography inductively coupled plasma collision reaction cell mass spectrometry (IC-ICP-CRC-MS). Selenium species were chromatographically separated on an ion exchange column and then quantified using inductively coupled plasma collision reaction cell mass spectrometry (ICP-CRC-MS); for more information on this determinative technique, please visit the *Interference Reduction Technology* section on our website, brooksapplied.com.

The Se speciation results were *not* method blank corrected as described in the calculations section of the relevant BAL SOP and were evaluated using reporting limits adjusted to account for sample aliquot size. The method detection limits (MDLs) for Se(IV), Se(VI), and SeCN were generated via MDL studies. The calibration does not contain MeSe(IV), SeMet, or SeSO3 due to impurities in these standards which would bias the results for other Se species. The MDL value for Se(IV) was used as the MDL for MeSe(IV) and SeMet since Se(IV) is the nearest eluting Se species included in the calibration. The MDL value for Se(VI) was used as the MDL for SeSO3 since Se(VI) is the nearest eluting Se species included in the calibration. Please refer to the *Sample Results* page for sample-specific MDLs, method reporting limits (MRLs), and other details.

In instances where either the native sample concentration and/or the corresponding matrix duplicate (DUP) were reported as less than or equal to the MDL, and were reported as non-detectable (**ND**), the relative percent difference (RPD) between the two values was not calculated (**N/C**).

Trace Metals Quantitation by ICP-QQQ-MS

Prior to analysis all sample fractions were preserved to 1% HNO3 (v/v) and digested in a closed vessel via modified EPA Method 1638 with nitric and hydrochloric acids. Trace metals quantitation was performed using inductively coupled plasma triple quadrupole mass spectrometry (ICP-QQQ-MS). The ICP-QQQ-MS determinative method uses advanced interference removal techniques to ensure accuracy of the sample results. For more information, please visit the Interference Reduction Technology section on our website, brooksapplied.com.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (**N/C**).

In instances where a matrix spike/matrix spike duplicate (MS/MSD) set was spiked at a level less than the native sample, the recoveries are not considered valid indicators of data quality. However, these results are reported as a demonstration of precision. When the spiking levels were ≤ 25% of the native sample concentrations, the recoveries were not reported **(NR)**. No sample results were qualified on the basis of the MS or MSD recoveries

All results were *not* method blank corrected, as described in the calculations section of the relevant BAL SOPs and were evaluated using reporting limits adjusted to account for sample aliquot size.

All data was reported without further qualification, and all other associated quality control sample results met acceptance criteria.

BAL, an accredited laboratory, certifies that the reported results of all analyses for which BAL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page.

Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Amy Goodall
Project Manager
Brooks Applied Labs
amy@brooksapplied.com

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Report Information

Laboratory Accreditation

BAL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BAL is also certified by many other states to perform environmental analyses. For a current list of our accreditations /certifications, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/> or review Tables 1 and 2 in our Accreditation Information. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received
BAL	Brooks Applied Labs
BLK	method blank
BS	blank spike
CAL	calibration standard
CCB	continuing calibration blank
CCV	continuing calibration verification
COC	chain of custody record
D	dissolved fraction
DUP	duplicate
IBL	instrument blank
ICV	initial calibration verification
MDL	method detection limit
MRL	method reporting limit
MS	matrix spike
MSD	matrix spike duplicate
ND	non-detect
NR	non-reportable
N/C	not calculated
PS	post preparation spike
REC	percent recovery
RPD	relative percent difference
SCV	secondary calibration verification
SOP	standard operating procedure
SRM	reference material
T	total fraction
TR	total recoverable fraction

Definition of Data Qualifiers

(Effective 3/23/2020)

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.
Z	Holding time and/or preservation requirements not established for this method; however, BAL recommendations for holding time were not followed. Please see narrative for explanation.

These qualifiers are based on those previously utilized by Brooks Applied Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BAL.

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Accreditation Information

Table 1. Accredited method/matrix/analytes for TNI

Issued by: State of Florida Dept. of Health (The NELAC Institute 2016 Standard)
Issued on: July 27, 2020; Valid to: June 30, 2021
Certificate Number: E87982-35

Method	Matrix	TNI Accredited Analyte(s)
EPA 1638	Non-Potable Waters	Ag, Cd, Cu, Ni, Pb, Sb, Se, Tl, Zn
EPA 200.8	Non-Potable Waters	Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, U, V, Zn
EPA 6020	Non-Potable Waters	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Tl, U, V, Zn
	Solids/Chemicals & Biological	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn
BAL-5000	Non-Potable Waters	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Sn, Sr, Tl, U, V, Zn, Hardness
	Solids/Chemicals	Ag, As, B, Be, Cd, Co, Cr, Cu, Pb, Mo, Ni, Sb, Se, Sn, Sr, Tl, V, Zn
	Biological	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Sn, Tl, V, Zn
EPA 1640	Non-Potable Waters	Ag, As, Cd, Cu, Pb, Ni, Zn
EPA 1631E	Non-Potable Waters, Solids/Chemicals & Biological	Total Mercury
EPA 1630	Non-Potable Waters	Methyl Mercury
BAL-3200	Solids/Chemicals & Biological	Methyl Mercury
BAL-4100	Non-Potable Waters	As(III), As(V), DMAs, MMAs
BAL-4200	Non-Potable Waters	Se(IV), Se(VI)
BAL-4201	Non-Potable Waters	Se(IV), Se(VI)
BAL-4300	Non-Potable Waters Solid/Chemicals	Cr(VI)
SM2340B	Non-Potable Waters	Hardness

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Accreditation Information

Table 2. Accredited method/matrix/analytes for ISO (1), Non-Governmental TNI (2), and DoD/DOE (3)

Issued by: ANAB

Issued on: January 10, 2020; Valid to: March 30, 2022

Method	Matrix	ISO and Non-Gov. TNI Accredited Analyte(s)	DoD/DOE Accredited Analytes
EPA 1638 Mod EPA 200.8 Mod EPA 6020 Mod BAL-5000	Non-Potable Waters	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Sn, Sr, Tl, U, V, Zn	Ag, Al, As, Ba, Ca, Cd, Cr, Cu, Fe, Pb, Mg, Mn, Ni, Sb, Se, V, Zn
	Solids/Chemicals & Biological	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Sn, Sr, Tl, V, Zn	Ag, As, Cd, Cr, Cu, Pb, Ni, Se, Zn
EPA 1640 Mod	Non-Potable Waters	Ag, As, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Tl, V, Zn	Not Accredited
EPA 1631E Mod BAL-3100 (waters) BAL-3101 (solids)	Non-Potable Waters, Solids/Chemicals & Biological/Food	Total Mercury	Total Mercury
EPA 1630 Mod BAL-3200	Non-Potable Waters, Solids/Chemicals Biological	Methyl Mercury	Methyl Mercury (excluding Solids/Chemicals)
EPA 1632A Mod BAL-3300	Non-Potable Waters Solids/Chemicals	Inorganic Arsenic, As(III)	Inorganic Arsenic. As(III) for waters only.
	Biological/Food	Inorganic Arsenic	Inorganic Arsenic (excluding Food)
AOAC 2015.01 Mod BAL-5000 by BAL-5040	Food	As, Cd, Hg, Pb	Not Accredited
BAL-4100	Non-Potable Waters	As(III), As(V), DMAs, MMAs	Not Accredited
	Biological by BAL-4115	Inorganic Arsenic, DMAs, MMAs	Not Accredited
BAL-4101	Food by BAL-4116	Inorganic Arsenic, DMAs, MMAs	Not Accredited
BAL-4200	Non-Potable Waters	Se(IV), Se(VI), SeCN	Not Accredited
BAL-4201	Non-Potable Waters	Se(IV), Se(VI), SeCN, SeMet	Not Accredited
BAL-4300	Non-Potable Waters, Solid/Chemicals	Cr(VI)	Cr(VI)
SM 3500-Fe BAL-4500	Non-Potable Waters	Fe, Fe(II)	Not Accredited
SM2340B	Non-Potable Waters	Hardness	Hardness
SM 2540G EPA 160.3 BAL-0501	Solids/Chemicals & Biological	% Dry Weight	% Dry Weight

(1) ISO/IEC 17025:2017 – Certificate Number ADE-1447.2
(2) Non-Governmental NELAC Institute 2016 Standard – Certificate Number ADE-1447.1
(3) Department of Defense/Energy Consolidated Quality Systems Manual v. 5.3 – Certificate Numbers ADE-1447 for DoD, ADE-1447.3 for DOE.

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
YGWC-38	2039070-01	Water	QC Sample	09/25/2020	09/26/2020
YGWC-41	2039070-02	Water	Sample	09/25/2020	09/26/2020

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
MeSe(IV)	Water	SOP BAL-4200	09/29/2020	09/30/2020	B202612	2001183
Se	Water	EPA 1638 Mod	10/12/2020	10/14/2020	B202717	2001231
Se(IV)	Water	SOP BAL-4200	09/29/2020	09/30/2020	B202612	2001183
Se(VI)	Water	SOP BAL-4200	09/29/2020	09/30/2020	B202612	2001183
SeCN	Water	SOP BAL-4200	09/29/2020	09/30/2020	B202612	2001183
SeMet	Water	SOP BAL-4200	09/29/2020	09/30/2020	B202612	2001183
SeSO3	Water	SOP BAL-4200	09/29/2020	09/30/2020	B202612	2001183

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
YGWC-38										
2039070-01	MeSe(IV)	Water	D	≤ 0.350	U	0.350	1.25	µg/L	B202612	2001183
2039070-01	Se	Water	D	85.9		0.018	0.057	µg/L	B202717	2001231
2039070-01	Se(IV)	Water	D	≤ 0.350	U	0.350	1.25	µg/L	B202612	2001183
2039070-01	Se(VI)	Water	D	82.1		0.300	1.25	µg/L	B202612	2001183
2039070-01	SeCN	Water	D	≤ 0.250	U	0.250	1.25	µg/L	B202612	2001183
2039070-01	SeMet	Water	D	≤ 0.350	U	0.350	1.25	µg/L	B202612	2001183
2039070-01	SeSO3	Water	D	≤ 0.300	U	0.300	1.25	µg/L	B202612	2001183
YGWC-41										
2039070-02	MeSe(IV)	Water	D	≤ 0.350	U	0.350	1.25	µg/L	B202612	2001183
2039070-02	Se	Water	D	50.7		0.018	0.057	µg/L	B202717	2001231
2039070-02	Se(IV)	Water	D	≤ 0.350	U	0.350	1.25	µg/L	B202612	2001183
2039070-02	Se(VI)	Water	D	49.3		0.300	1.25	µg/L	B202612	2001183
2039070-02	SeCN	Water	D	≤ 0.250	U	0.250	1.25	µg/L	B202612	2001183
2039070-02	SeMet	Water	D	≤ 0.350	U	0.350	1.25	µg/L	B202612	2001183
2039070-02	SeSO3	Water	D	≤ 0.300	U	0.300	1.25	µg/L	B202612	2001183

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Accuracy & Precision Summary

Batch: B202612
Lab Matrix: Water
Method: SOP BAL-4200

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B202612-BS1	**Blank Spike, (1923027)**						
	MeSe(IV)		5.095	4.780	µg/L	94% 75-125	
	Se(IV)		5.000	5.097	µg/L	102% 75-125	
	Se(VI)		5.000	5.024	µg/L	100% 75-125	
	SeCN		5.015	4.984	µg/L	99% 75-125	
	SeMet		4.932	4.863	µg/L	99% 75-125	
B202612-DUP2	**Duplicate, (2039070-01)**						
	MeSe(IV)	ND		ND	µg/L		N/C 25
	Se(IV)	ND		ND	µg/L		N/C 25
	Se(VI)	82.12		81.15	µg/L		1% 25
	SeCN	ND		ND	µg/L		N/C 25
	SeMet	ND		ND	µg/L		N/C 25
	SeSO3	ND		ND	µg/L		N/C 25
B202612-MS2	**Matrix Spike, (2039070-01)**						
	Se(IV)	ND	245.0	256.0	µg/L	104% 75-125	
	Se(VI)	82.12	255.0	344.8	µg/L	103% 75-125	
	SeCN	ND	245.2	250.1	µg/L	102% 75-125	
	SeMet	ND	49.42	43.25	µg/L	88% 75-125	
B202612-MSD2	**Matrix Spike Duplicate, (2039070-01)**						
	Se(IV)	ND	245.0	257.3	µg/L	105% 75-125	0.5% 25
	Se(VI)	82.12	255.0	344.4	µg/L	103% 75-125	0.1% 25
	SeCN	ND	245.2	248.1	µg/L	101% 75-125	0.8% 25
	SeMet	ND	49.42	42.64	µg/L	86% 75-125	1% 25

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Accuracy & Precision Summary

Batch: B202717
Lab Matrix: Water
Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B202717-BS1	**Blank Spike, (2042013)**						
	Se		20.00	20.66	µg/L	103% 75-125	
B202717-BS2	**Blank Spike, (2042013)**						
	Se		20.00	20.85	µg/L	104% 75-125	
B202717-BS3	**Blank Spike, (2042013)**						
	Se		20.00	21.00	µg/L	105% 75-125	
B202717-DUP4	**Duplicate, (2039070-01)**						
	Se	85.87		86.49	µg/L		0.7% 20
B202717-MS4	**Matrix Spike, (2039070-01)**						
	Se	85.87	10.20	96.60	µg/L	NR 75-125	
B202717-MSD4	**Matrix Spike Duplicate, (2039070-01)**						
	Se	85.87	10.20	94.98	µg/L	NR 75-125	N/C 20

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Method Blanks & Reporting Limits

Batch: B202612
Matrix: Water
Method: SOP BAL-4200
Analyte: MeSe(IV)

Sample	Result	Units
B202612-BLK1	0.00	µg/L
B202612-BLK2	0.00	µg/L
B202612-BLK3	0.00	µg/L
B202612-BLK4	0.00	µg/L

Average: 0.000
Limit: 0.025

MDL: 0.007
MRL: 0.025

Analyte: Se(IV)

Sample	Result	Units
B202612-BLK1	0.00	µg/L
B202612-BLK2	0.00	µg/L
B202612-BLK3	0.00	µg/L
B202612-BLK4	0.00	µg/L

Average: 0.000
Limit: 0.025

MDL: 0.007
MRL: 0.025

Analyte: Se(VI)

Sample	Result	Units
B202612-BLK1	0.00	µg/L
B202612-BLK2	0.00	µg/L
B202612-BLK3	0.00	µg/L
B202612-BLK4	0.00	µg/L

Average: 0.000
Limit: 0.025

MDL: 0.006
MRL: 0.025

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Method Blanks & Reporting Limits

Analyte: SeCN

Sample	Result	Units
B202612-BLK1	0.00	µg/L
B202612-BLK2	0.00	µg/L
B202612-BLK3	0.00	µg/L
B202612-BLK4	0.00	µg/L

Average: 0.000
Limit: 0.025

MDL: 0.005
MRL: 0.025

Analyte: SeMet

Sample	Result	Units
B202612-BLK1	0.00	µg/L
B202612-BLK2	0.00	µg/L
B202612-BLK3	0.00	µg/L
B202612-BLK4	0.00	µg/L

Average: 0.000
Limit: 0.025

MDL: 0.007
MRL: 0.025

Analyte: SeSO3

Sample	Result	Units
B202612-BLK1	0.00	µg/L
B202612-BLK2	0.00	µg/L
B202612-BLK3	0.00	µg/L
B202612-BLK4	0.00	µg/L

Average: 0.000
Limit: 0.025

MDL: 0.006
MRL: 0.025

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Method Blanks & Reporting Limits

Batch: B202717
Matrix: Water
Method: EPA 1638 Mod
Analyte: Se

Sample	Result	Units
B202717-BLK1	0.009	µg/L
B202717-BLK2	0.006	µg/L
B202717-BLK3	0.005	µg/L
B202717-BLK4	0.005	µg/L

Average: 0.006
Limit: 0.056

MDL: 0.018
MRL: 0.056

Project ID: ARC-RA2001
PM: Amy Goodall

Client PM: Jennifer Beck
Client Project: #3006037.00001

Sample Containers

Lab ID: 2039070-01
Sample: YGWC-38
Report Matrix: Water
Sample Type: QC Sample
Collected: 09/25/2020
Received: 09/26/2020

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Cent Tube 15mL Se-Sp	10 mL	na	none	na	na	Cooler 1 - 2039070
B	XTRA_VOL	250 mL	na	none	na	na	Cooler 1 - 2039070
C	Cent Tube 50mL	50 mL	na	0.2% HNO3 (BAL)	202437	2	Cooler 1 - 2039070

Lab ID: 2039070-02
Sample: YGWC-41
Report Matrix: Water
Sample Type: Sample
Collected: 09/25/2020
Received: 09/26/2020

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Cent Tube 15mL Se-Sp	10 mL	na	none	na	na	Cooler 1 - 2039070
B	XTRA_VOL	250 mL	na	none	na	na	Cooler 1 - 2039070
C	Cent Tube 50mL	50 mL	na	0.2% HNO3 (BAL)	2024037	2	Cooler 1 - 2039070

Shipping Containers

Cooler 1 - 2039070

Received: September 26, 2020 9:15
Tracking No: 3972 1768 2270 via FedEx
Coolant Type: Ice
Temperature: 1.5 °C

Description: Cooler 1
Damaged in transit? No
Returned to client? No
Comments: IR 21

Custody seals present? Yes
Custody seals intact? Yes
COC present? Yes

CHAIN-OF-CUSTODY / Analytical Request Document

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

BROOKS LAB

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Clinton, GA 30114
Email:
Phone: 770 384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: ~~Yates R6~~ CCR MW
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: ~~10040~~

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N)	Analyses Test	Residual Chlorine (Y/N)
13	~~Blank~~																			
14	YGWC-38	WT		9/25	0940				1	X									Se Species	
15	YGWC-41			9/25	1355				1	X										
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Se(IV), Se(VI), SeCN unknown 250 mL plastic	Arcadis	9/25/20	1600		9/25/20	9:15	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Michael Gray
SIGNATURE of SAMPLER:
DATE Signed: 9/25/20

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

Semi-Quantitative X-Ray Diffraction

Report Prepared for:	*Arcadis US Inc*
Project Number/ LIMS No.	*18122-01/MI4505-OCT20*
Sample Receipt:	*October 14, 2020*
Sample Analysis:	*October 15, 2020*
Reporting Date:	*November 12, 2020*

Instrument:	BRUKER AXS D8 Advance Diffractometer
Test Conditions:	Co radiation, 35 kV, 40 mA Regular Scanning: Step: 0.02°, Step time:0.2s, 2θ range: 3-70°
Interpretations :	PDF2/PDF4 powder diffraction databases issued by the International Center for Diffraction Data (ICDD). DiffracPlus Eva software.
Detection Limit :	0.5-2%. Strongly dependent on crystallinity.

Contents:

Kim Gibbs, H.B.Sc., P.Geo.
Senior Mineralogist

Huyun Zhou, Ph.D., P.Geo.
Senior Mineralogist

Method Summary

The Semi-Quantitative Mineral Identification by XRD (ME-LR-MIN-MET-MN-D03) method used by SGS Minerals Services is accredited to the requirements of ISO/IEC 17025.

Mineral Identification and Interpretation:

Mineral identification and interpretation involve matching the diffraction pattern of a test sample material to patterns of single-phase reference materials. The reference patterns are compiled by the Joint Committee on Powder Diffraction Standards - International Center for Diffraction Data (JCPDS-ICDD) and released on software as a database of Powder Diffraction Files (PDF).

Interpretations do not reflect the presence of non-crystalline and/or amorphous compounds. Mineral proportions are based on relative peak heights and may be strongly influenced by crystallinity, structural group or preferred orientations. Interpretations and relative proportions should be accompanied by supporting petrographic and geochemical data (Whole Rock Analysis, Inductively Coupled Plasma - Optical Emission Spectroscopy, etc.).

Semi-Quantitative Analysis:

The Semi-Quantitative analysis (RIR method) is performed based on each mineral's relative peak heights and of their respective I/Icor values, which are available from the PDF database. Mineral abundances for the bulk sample (in weight %) are generated by Bruker-EVA Software. These data are reconciled with a bulk chemistry (e.g. whole rock analysis including SiO_2, Al_2O_3, Na_2O, K_2O, CaO, MgO, Fe_2O_3, Cr_2O_3, MnO, TiO_2, P_2O_5, V_2O_5 or other chemical data). A chemical balance table shows the difference between the assay results and elemental concentrations determined by XRD.

Semi-Quantitative X-ray Diffraction Results

Mineral	YGWC-24SA (10-44) (wt %)	YGWC-24SA (47-49) (wt %)	YGWC-24SA (52-54) (wt %)	YAMW-3 (83-84) (wt %)	YAMW-4 (88-89) (wt %)	YGWC-38 (26-27) (wt %)	YGWC-38 (39-40) (wt %)	YGWC-38 (59.5-60.5) (wt %)	YGWC-41 (32-33) (wt %)	YGWC-41 (48-49) (wt %)	YGWC-41 (59-60) (wt %)
Quartz	46.7	41.7	49.2	53.0	36.9	51.6	43.6	49.9	49.5	46.1	51.7
Albite	26.8	29.5	34.8	29.6	49.1	30.3	39.4	31.7	31.5	39.6	29.9
Albite, calcian	6.4	7.0	2.4	4.9	7.1	6.3	5.3	6.3	6.9	2.5	8.7
Muscovite	11.9	11.9	7.2	7.5	1.8	5.4	6.4	6.8	6.7	4.7	5.5
Biotite	2.2	0.8	1.0	5.0	2.8	1.2	4.4	5.0	-	5.6	4.3
Hydrobiotite	1.1	4.7	1.7	-	-	0.9	-	-	4.0	-	-
Clinochlore	1.0	1.3	1.5	-	2.4	1.1	0.9	0.3	1.4	1.4	-
Kaolinite	2.3	1.4	1.6	-	-	2.2	-	-	-	-	-
Antigorite	1.5	1.7	0.6	-	-	1.0	-	-	-	-	-
TOTAL	100	100	100	100	100	100	100	100	100	100	100

Mineral	Composition
Quartz	SiO_2
Albite	$NaAlSi_3O_8$
Albite, calcian	$(Na,Ca)Al(Si,Al)_3O_8$
Muscovite	$KAl_2(AlSi_3O_{10})(OH)_2$
Biotite	$K(Mg,Fe)_3(AlSi_3O_{10})(OH)_2$
Hydrobiotite	$K(Mg,Fe)_6(Si,Al,Fe)_8O_{20}(OH)_4 \cdot 4H_2O$
Clinochlore	$(Fe,Mg)_5Al(Si_3Al)O_{10}(OH)_8$
Kaolinite	$Al_2Si_2O_5(OH)_4$
Antigorite	$Mg_3Si_2O_5(OH)_4$

Chemical Balance

YGWC-24SA (10-44)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	36.6	35.4	1.25	Both
Aluminum	7.41	7.63	-0.22	Both
Iron	1.50	1.09	0.41	Both
Potassium	1.22	1.18	0.04	Both
Magnesium	0.62	0.67	-0.05	Both
Calcium	0.45	0.48	-0.03	Both
Titanium	0.08	-	0.08	XRF
Manganese	0.05	-	0.05	XRF
Barium	0.04	-	0.04	XRF
Hydrogen	-	0.16	-0.16	SQD
Oxygen	-	50.7	-50.7	SQD
Sodium	-	2.75	-2.75	SQD

YGWC-24SA (47-49)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	34.5	33.9	0.65	Both
Aluminum	7.82	8.09	-0.27	Both
Iron	1.98	1.90	0.08	Both
Potassium	1.54	1.21	0.33	Both
Magnesium	1.06	0.91	0.15	Both
Calcium	0.45	0.52	-0.07	Both
Titanium	0.10	-	0.10	XRF
Manganese	0.09	-	0.09	XRF
Barium	0.04	-	0.04	XRF
Hydrogen	-	0.18	-0.18	SQD
Oxygen	-	50.3	50.3	SQD
Sodium	-	3.01	3.01	SQD

1. Values measured by chemical assay. Reported in weight percent.

2. Values calculated based on mineral/compound formulas and quantites identified by semi-quantitative XRD.

Chemical Balance

YGWC-24SA (52-54)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	36.6	37.0	-0.41	Both
Aluminum	6.57	6.41	0.16	Both
Iron	1.12	1.03	0.09	Both
Potassium	0.77	0.73	0.04	Both
Magnesium	0.51	0.44	0.07	Both
Calcium	0.33	0.18	0.15	Both
Titanium	0.05	-	0.05	XRF
Manganese	0.04	-	0.04	XRF
Barium	0.02	-	0.02	XRF
Hydrogen	-	0.11	-0.11	SQD
Oxygen	-	50.9	50.9	SQD
Sodium	-	3.23	3.23	SQD

YAMW-3 (83-84)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	36.7	37.6	-0.85	Both
Aluminum	5.98	6.08	-0.10	Both
Iron	0.90	0.93	-0.03	Both
Potassium	0.87	1.03	-0.16	Both
Magnesium	0.53	0.39	0.14	Both
Calcium	0.36	0.37	-0.01	Both
Titanium	0.05	-	0.05	XRF
Manganese	0.02	-	0.02	XRF
Chromium	0.02	-	0.02	XRF
Hydrogen	-	0.06	-0.06	SQD
Oxygen	-	50.7	50.7	SQD
Sodium	-	2.88	2.88	SQD

1. Values measured by chemical assay. Reported in weight percent.

2. Values calculated based on mineral/compound formulas and quantites identified by semi-quantitative XRD.

Chemical Balance

YAMW-4 (88-89)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	36.6	35.2	1.40	Both
Aluminum	7.01	7.76	-0.75	Both
Iron	0.66	1.09	-0.43	Both
Magnesium	0.49	0.33	0.16	Both
Calcium	0.47	0.53	-0.06	Both
Potassium	0.37	0.37	0.00	Both
Titanium	0.05	-	0.05	XRF
Manganese	0.05	-	0.05	XRF
Hydrogen	-	0.05	-0.05	SQD
Oxygen	-	50.1	-50.1	SQD
Sodium	-	4.62	-4.62	SQD

YGWC-38 (26-27)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	37.8	37.1	0.69	Both
Aluminum	6.33	6.47	-0.14	Both
Iron	1.06	0.62	0.44	Both
Potassium	0.64	0.57	0.07	Both
Magnesium	0.43	0.61	-0.18	Both
Calcium	0.34	0.47	-0.13	Both
Titanium	0.05	-	0.05	XRF
Barium	0.02	-	0.02	XRF
Manganese	0.02	-	0.02	XRF
Hydrogen	-	0.11	-0.11	SQD
Oxygen	-	51.1	51.1	SQD
Sodium	-	2.98	2.98	SQD

1. Values measured by chemical assay. Reported in weight percent.

2. Values calculated based on mineral/compound formulas and quantites identified by semi-quantitative XRD.

Chemical Balance

YGWC-38 (39-40)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	37.0	36.1	0.86	Both
Aluminum	6.66	7.00	-0.34	Both
Potassium	0.98	0.88	0.11	Both
Iron	0.93	1.08	-0.15	Both
Magnesium	0.43	0.41	0.02	Both
Calcium	0.41	0.40	0.01	Both
Titanium	0.04	-	0.04	XRF
Barium	0.02	-	0.02	XRF
Manganese	0.02	-	0.02	XRF
Hydrogen	-	0.06	-0.06	SQD
Oxygen	-	50.3	50.3	SQD
Sodium	-	3.75	3.75	SQD

YGWC-38 (59.5-60.5)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	37.2	36.9	0.34	Both
Aluminum	6.67	6.53	0.14	Both
Iron	1.01	1.24	-0.23	Both
Potassium	0.75	0.96	-0.21	Both
Calcium	0.63	0.47	0.16	Both
Magnesium	0.27	0.29	-0.02	Both
Titanium	0.06	-	0.06	XRF
Manganese	0.03	-	0.03	XRF
Barium	0.03	-	0.03	XRF
Hydrogen	-	0.06	-0.06	SQD
Oxygen	-	50.5	50.5	SQD
Sodium	-	3.12	3.12	SQD

1. Values measured by chemical assay. Reported in weight percent.

2. Values calculated based on mineral/compound formulas and quantites identified by semi-quantitative XRD.

Chemical Balance

YGWC-41 (32-33)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	36.3	36.6	-0.32	Both
Aluminum	6.18	6.37	-0.19	Both
Iron	1.52	1.30	0.22	Both
Potassium	0.82	0.70	0.13	Both
Calcium	0.67	0.51	0.16	Both
Magnesium	0.58	0.58	0.00	Both
Titanium	0.08	-	0.08	XRF
Manganese	0.05	-	0.05	XRF
Barium	0.02	-	0.02	XRF
Hydrogen	-	0.10	-0.10	SQD
Oxygen	-	50.7	50.7	SQD
Sodium	-	3.13	3.13	SQD

YGWC-41 (48-49)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	35.2	36.8	-1.63	Both
Aluminum	6.01	6.23	-0.22	Both
Iron	0.93	1.29	-0.36	Both
Potassium	0.79	0.86	-0.07	Both
Magnesium	0.66	0.55	0.11	Both
Calcium	0.11	0.19	-0.08	Both
Titanium	0.05	-	0.05	XRF
Barium	0.02	-	0.02	XRF
Manganese	0.02	-	0.02	XRF
Hydrogen	-	0.07	-0.07	SQD
Oxygen	-	50.4	50.4	SQD
Sodium	-	3.63	3.63	SQD

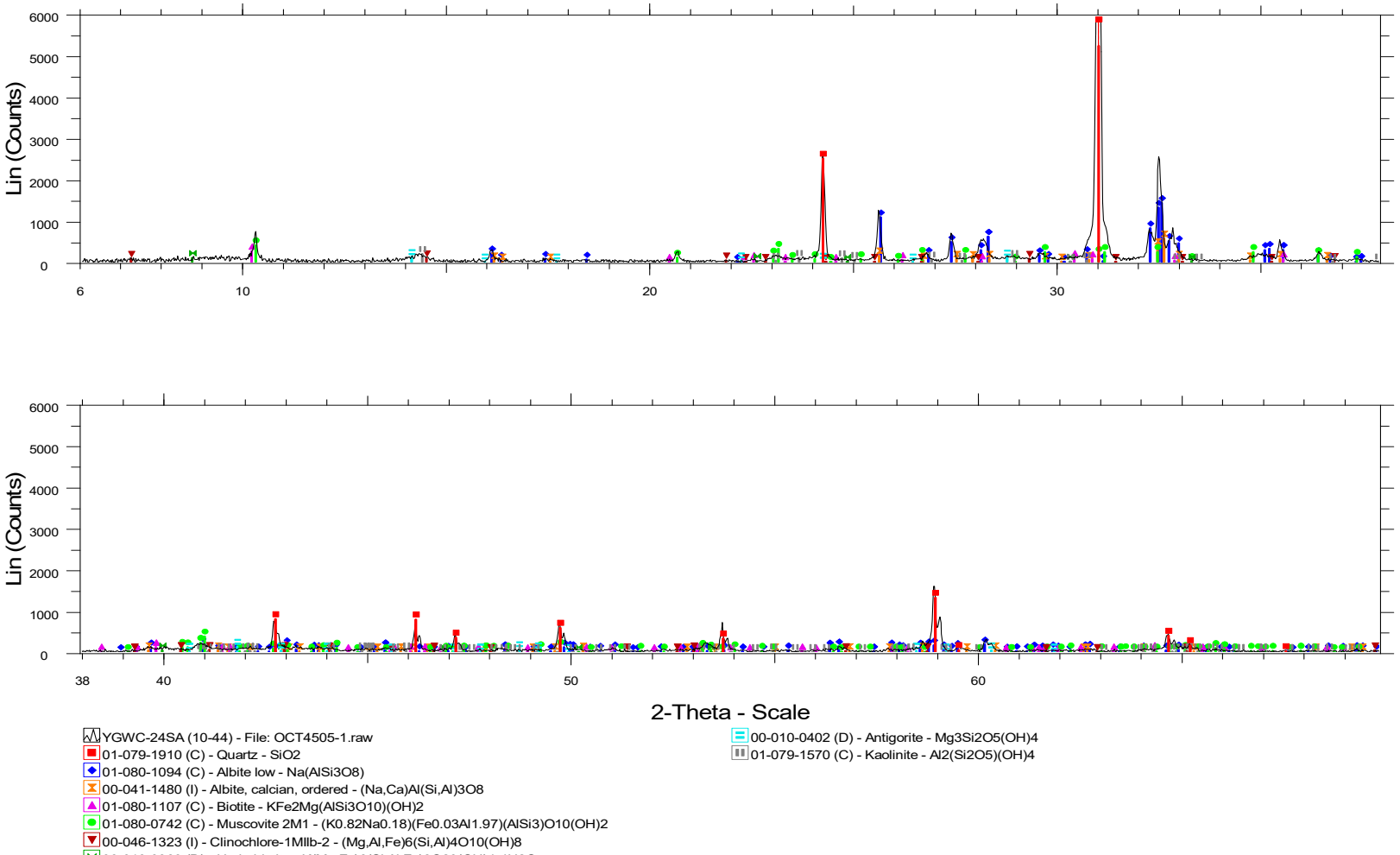
YGWC-41 (59-60)

Name	Assay[1]	SQD[2]	Delta	Status
Silicon	37.1	37.0	0.07	Both
Aluminum	6.55	6.60	-0.05	Both
Iron	0.93	1.01	-0.08	Both
Potassium	0.65	0.79	-0.14	Both
Calcium	0.63	0.65	-0.02	Both
Magnesium	0.34	0.22	0.13	Both
Titanium	0.06	-	0.06	XRF
Barium	0.02	-	0.02	XRF
Manganese	0.02	-	0.02	XRF
Hydrogen	-	0.05	-0.05	SQD
Oxygen	-	50.6	50.6	SQD
Sodium	-	3.05	3.05	SQD

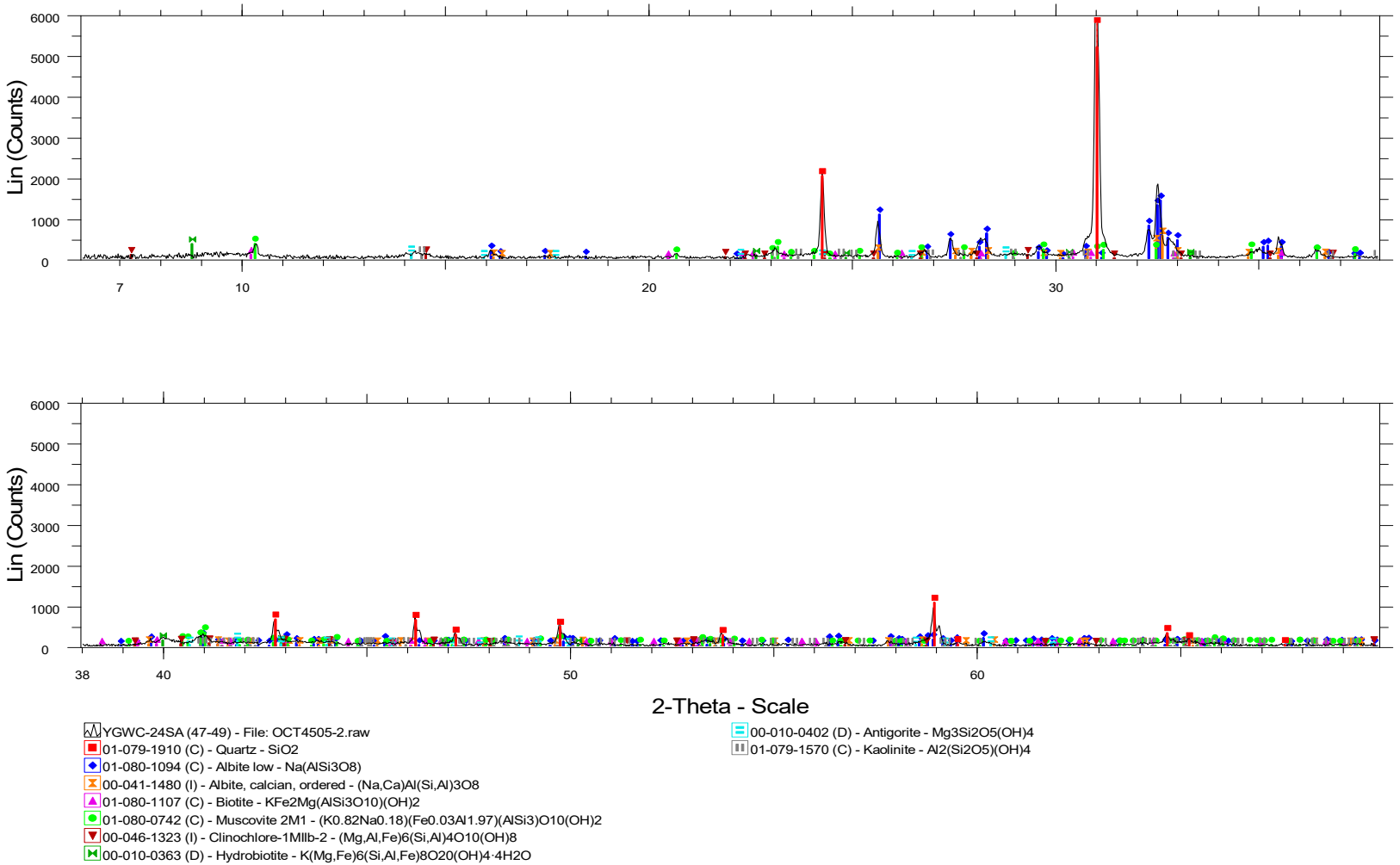
1. Values measured by chemical assay. Reported in weight percent.

2. Values calculated based on mineral/compound formulas and quantites identified by semi-quantitative XRD.

YGWC-24SA (10-44)



YGWC-24SA (47-49)



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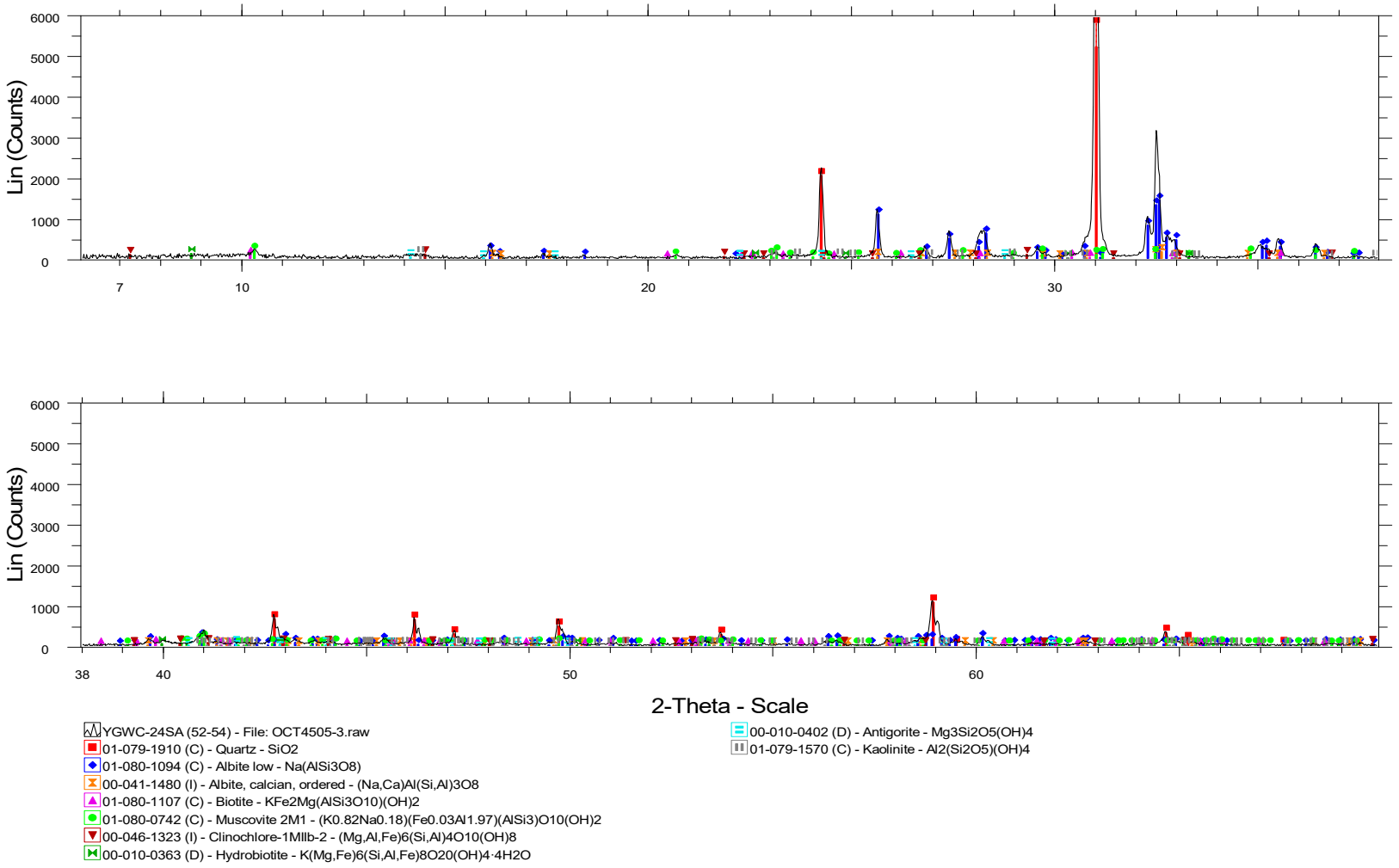
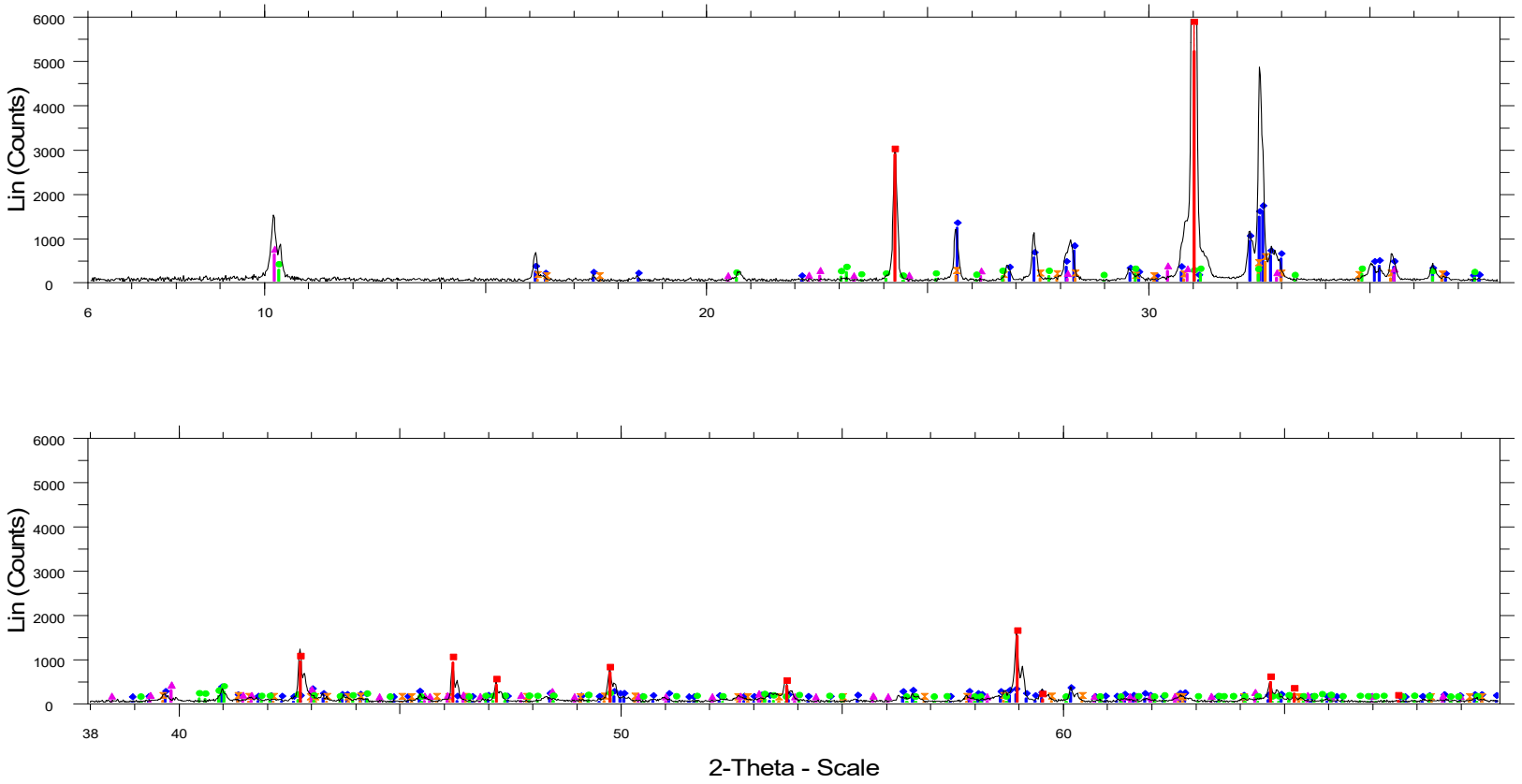
12-Nov-20

YGWC-24SA (52-54)



YAMW-3 (83-84)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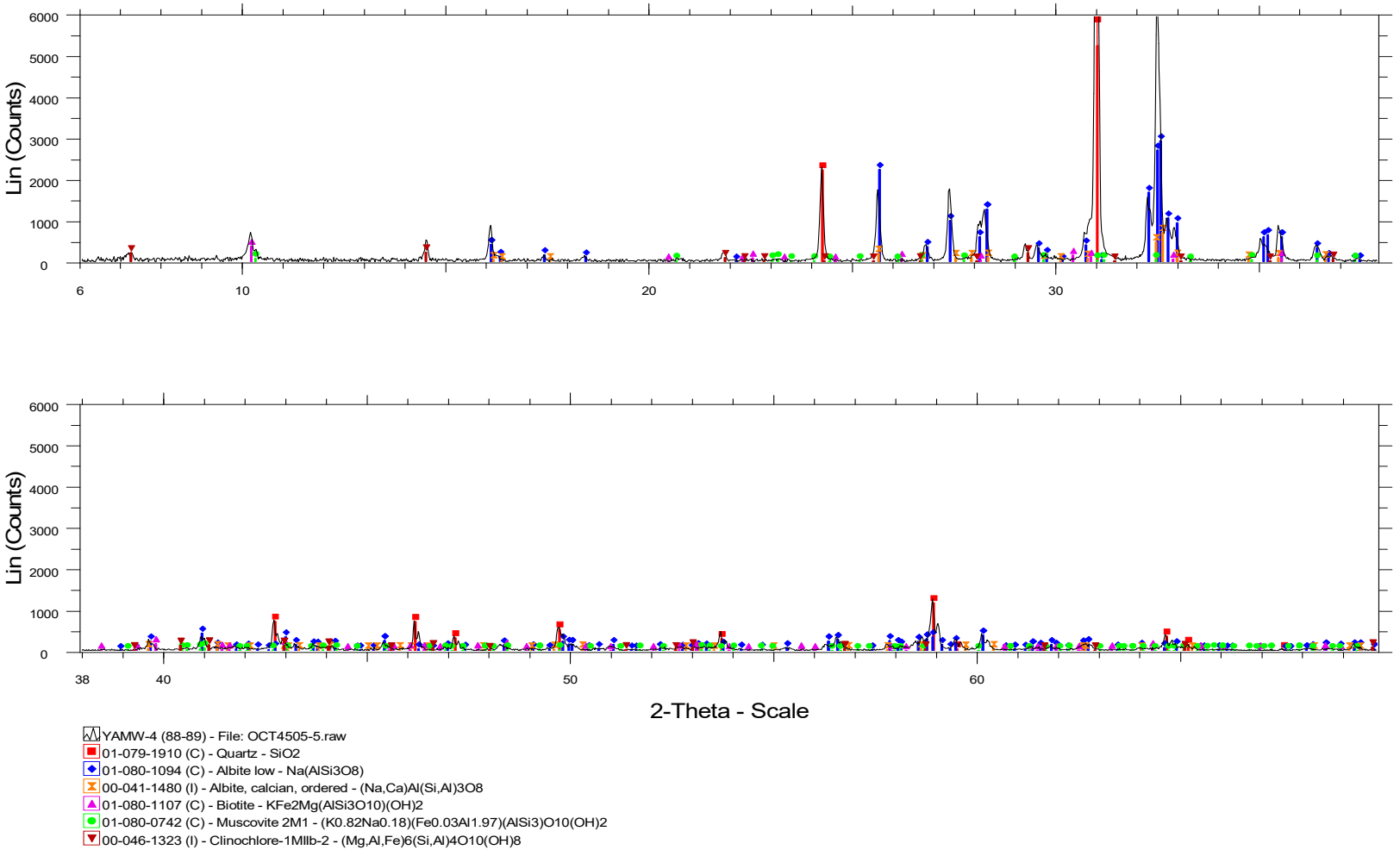
01-080-1094 (C) - Albite low - Na(AlSi3O8)
00-041-1480 (I) - Albite, calcian, ordered - (Na,Ca)Al(Si,Al)3O8
01-080-1107 (C) - Biotite - K(Fe,Mg)3(AlSi3O10)(OH)2
01-080-0742 (C) - Muscovite 2M1 - (K0.82Na0.18)(Fe0.03Al1.97)(AlSi3)O10(OH)2

YAMW-4 (88-89)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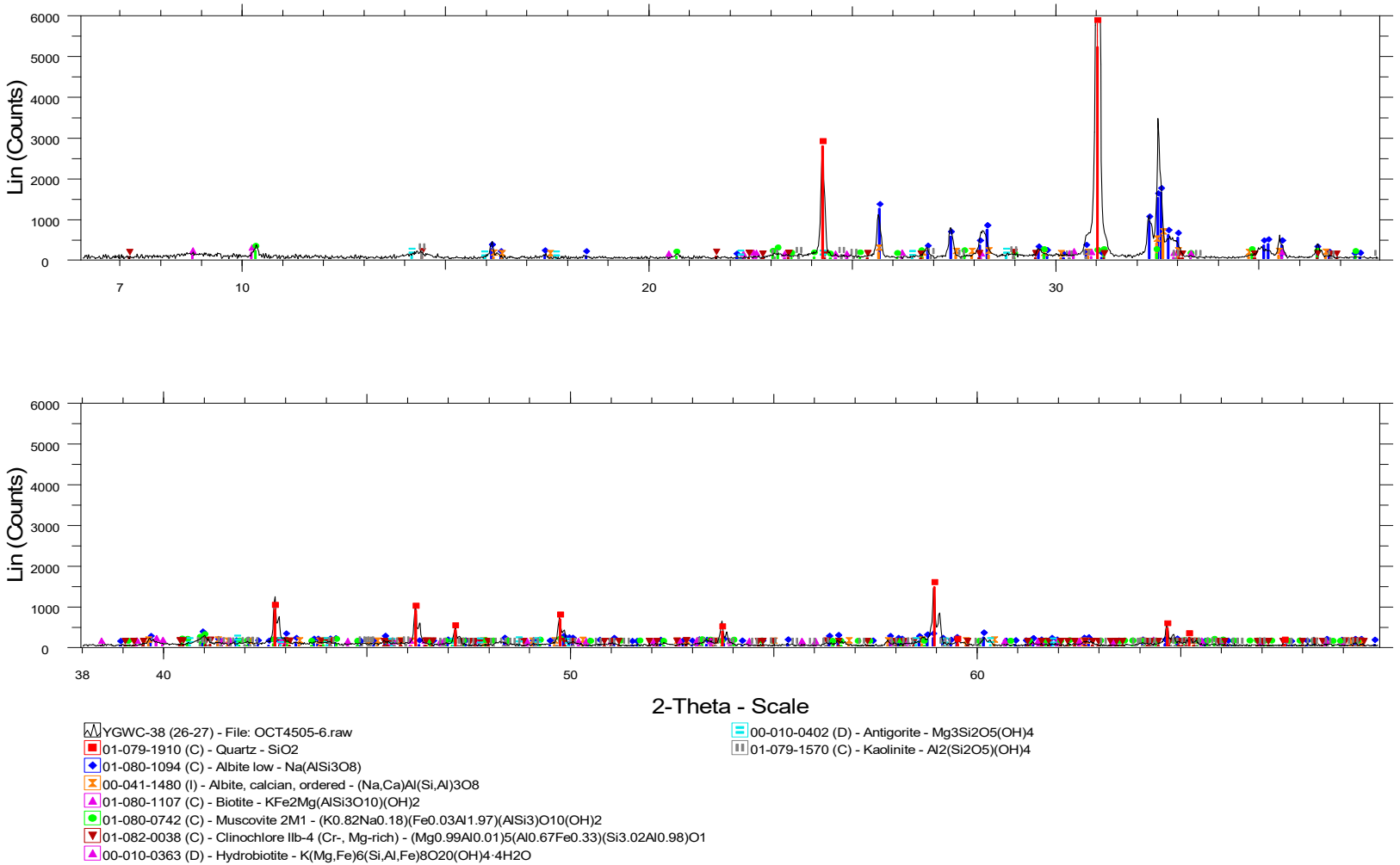
2-Theta - Scale
YAMW-4 (88-89) - File: OCT4505-5.raw
01-079-1910 (C) - Quartz - SiO2
01-080-1094 (C) - Albite low - Na(AlSi3O8)
00-041-1480 (I) - Albite, calcian, ordered - (Na,Ca)Al(Si,Al)3O8
01-080-1107 (C) - Biotite - KFe2Mg(AlSi3O10)(OH)2
01-080-0742 (C) - Muscovite 2M1 - (K0.82Na0.18)(Fe0.03Al1.97)(AlSi3)O10(OH)2
00-046-1323 (I) - Clinochlore-1MIIb-2 - (Mg,Al,Fe)6(Si,Al)4O10(OH)8

YGWC-38 (26-27)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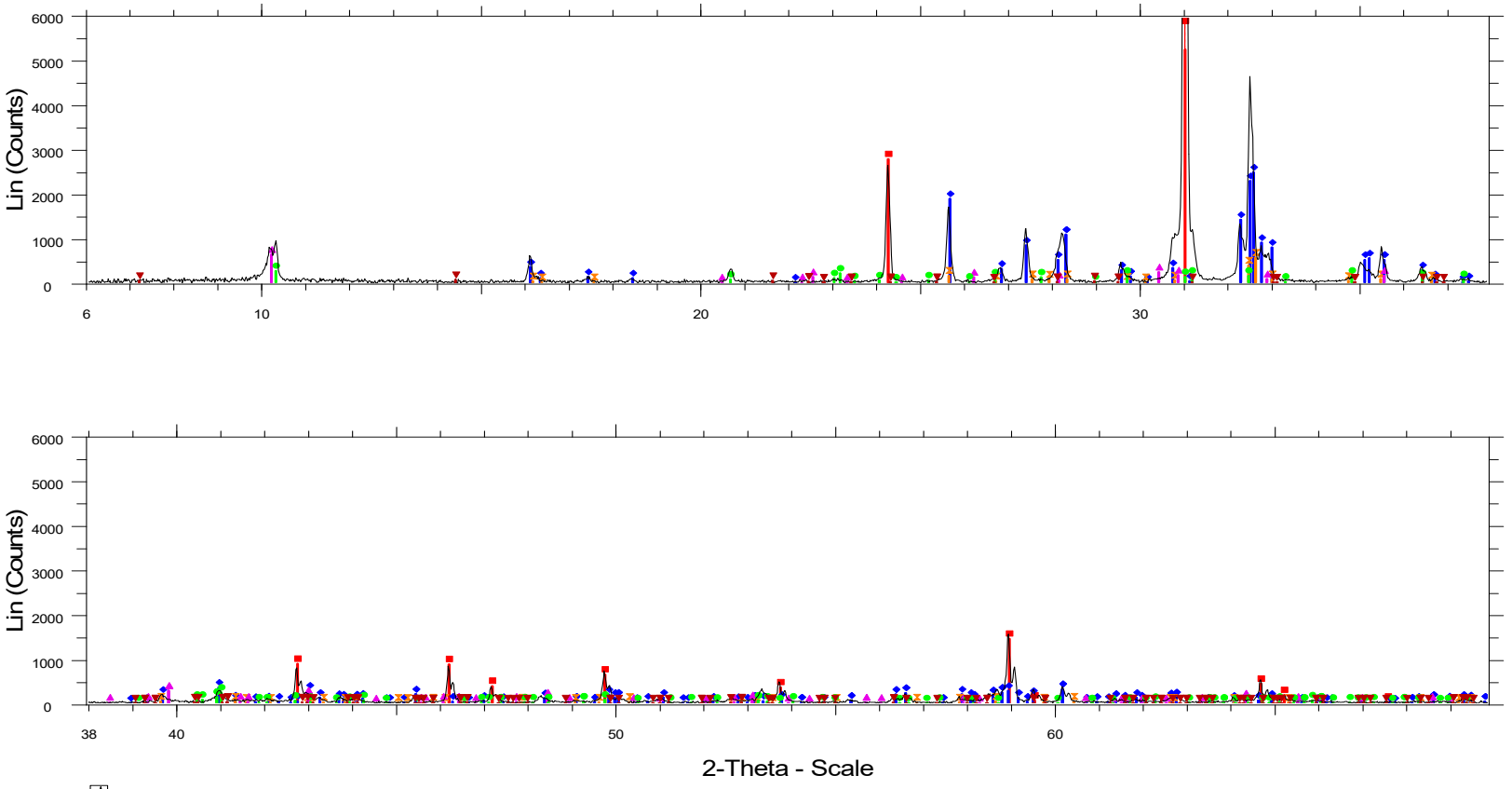
2-Theta - Scale
YGWC-38 (26-27) - File: OCT4505-6.raw
01-079-1910 (C) - Quartz - SiO2
01-080-1094 (C) - Albite low - Na(AlSi3O8)
00-041-1480 (I) - Albite, calcian, ordered - (Na,Ca)Al(Si,Al)3O8
01-080-1107 (C) - Biotite - KFe2Mg(AlSi3O10)(OH)2
01-080-0742 (C) - Muscovite 2M1 - (K0.82Na0.18)(Fe0.03Al1.97)(AlSi3)O10(OH)2
01-082-0038 (C) - Clinochlore IIb-4 (Cr-, Mg-rich) - (Mg0.99Al0.01)5(Al0.67Fe0.33)(Si3.02Al0.98)O1
00-010-0363 (D) - Hydrobiotite - K(Mg,Fe)6(Si,Al,Fe)8O20(OH)4·4H2O
00-010-0402 (D) - Antigorite - Mg3Si2O5(OH)4
01-079-1570 (C) - Kaolinite - Al2(Si2O5)(OH)4

YGWC-38 (39-40)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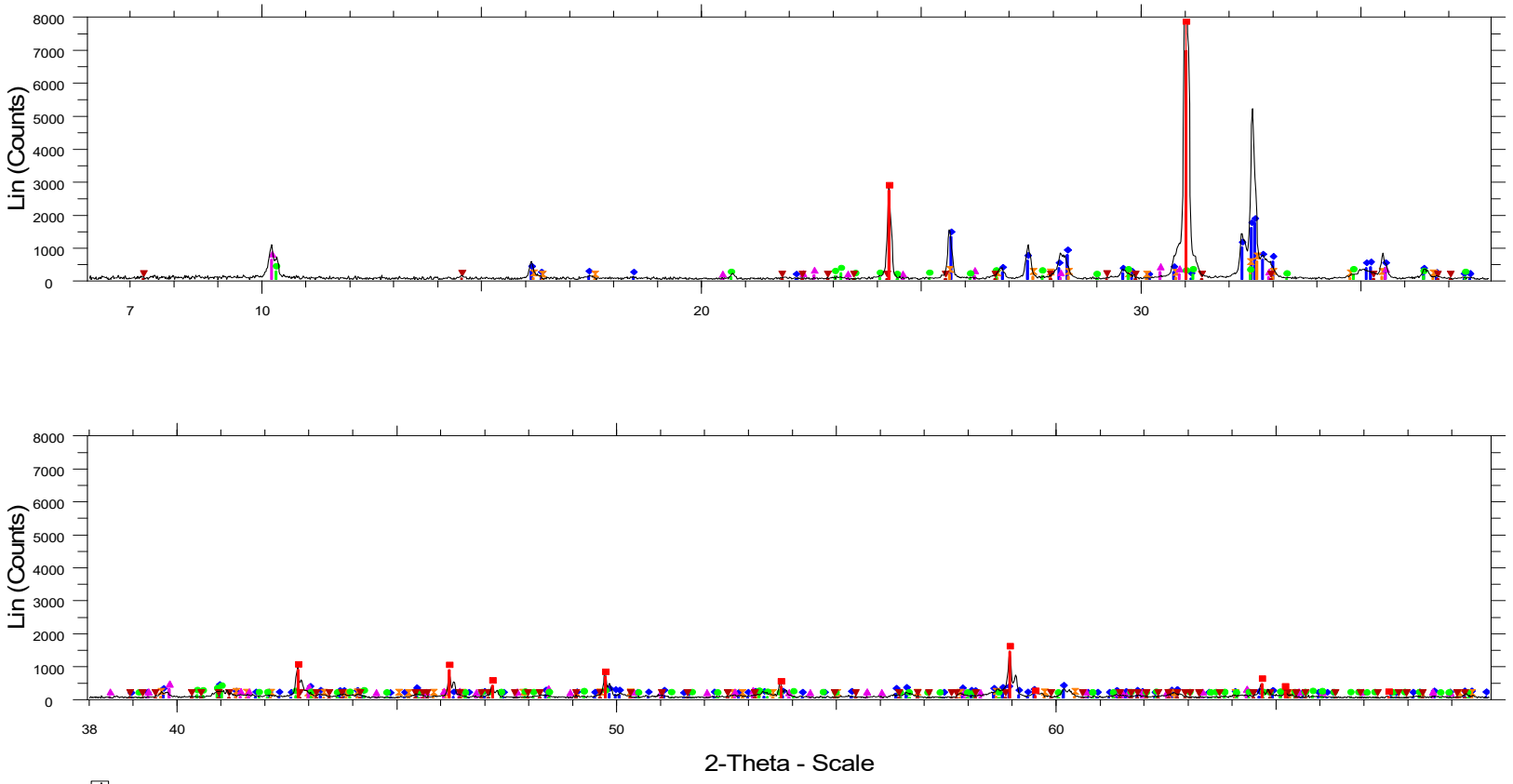
2-Theta - Scale
YGWC-38 (39-40) - File: OCT4505-7.raw
01-079-1910 (C) - Quartz - SiO2
01-080-1094 (C) - Albite low - Na(AlSi3O8)
00-041-1480 (I) - Albite, calcian, ordered - (Na,Ca)Al(Si,Al)3O8
01-080-1107 (C) - Biotite - KFe2Mg(AlSi3O10)(OH)2
01-080-0742 (C) - Muscovite 2M1 - (K0.82Na0.18)(Fe0.03Al1.97)(AlSi3)O10(OH)2
01-082-0038 (C) - Clinochlore IIb-4 (Cr-, Mg-rich) - (Mg0.99Al0.01)5(Al0.67Fe0.33)(Si3.02Al0.98)O10(OH)8

YGWC-38 (59.5-60.5)



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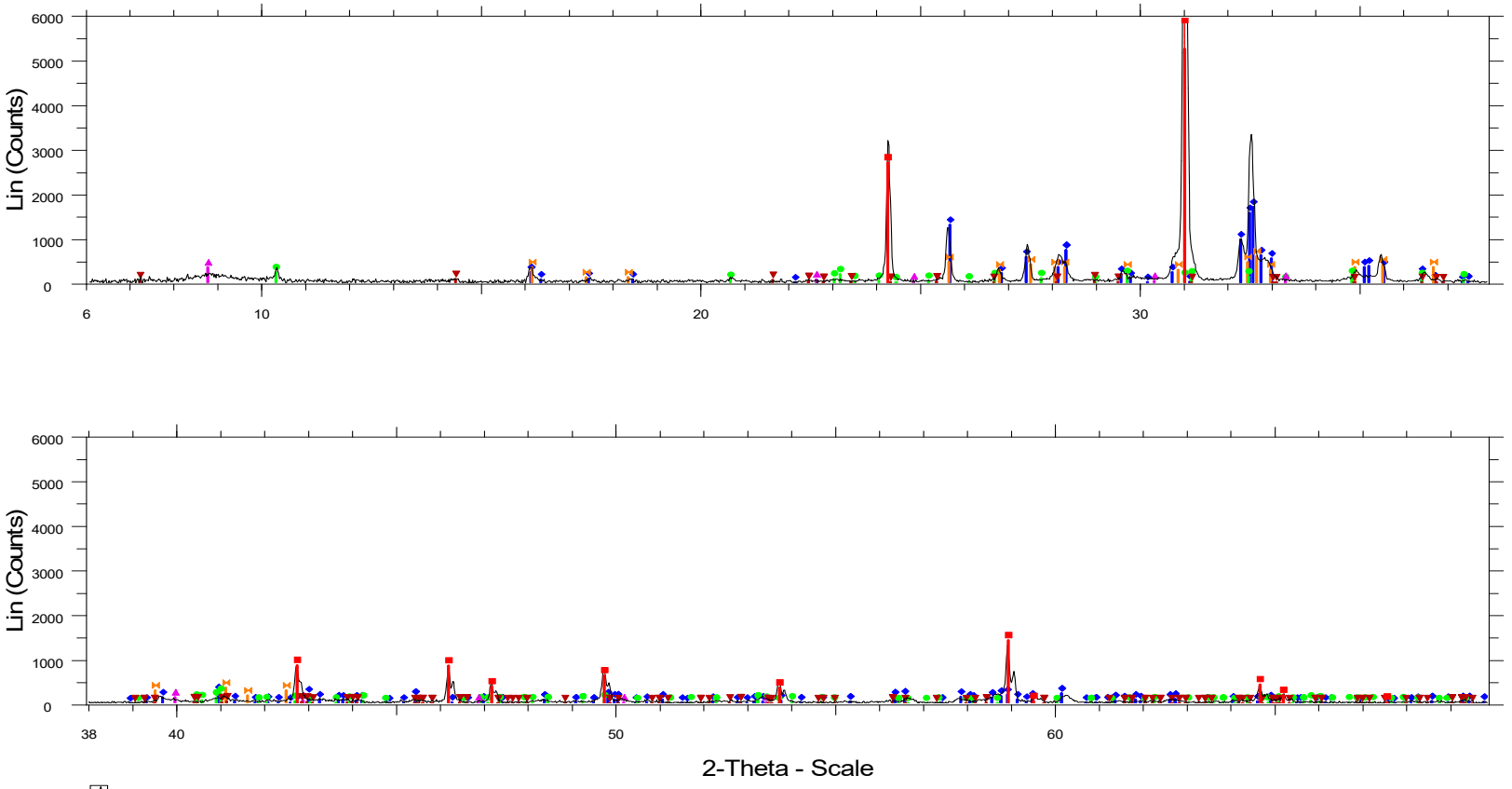
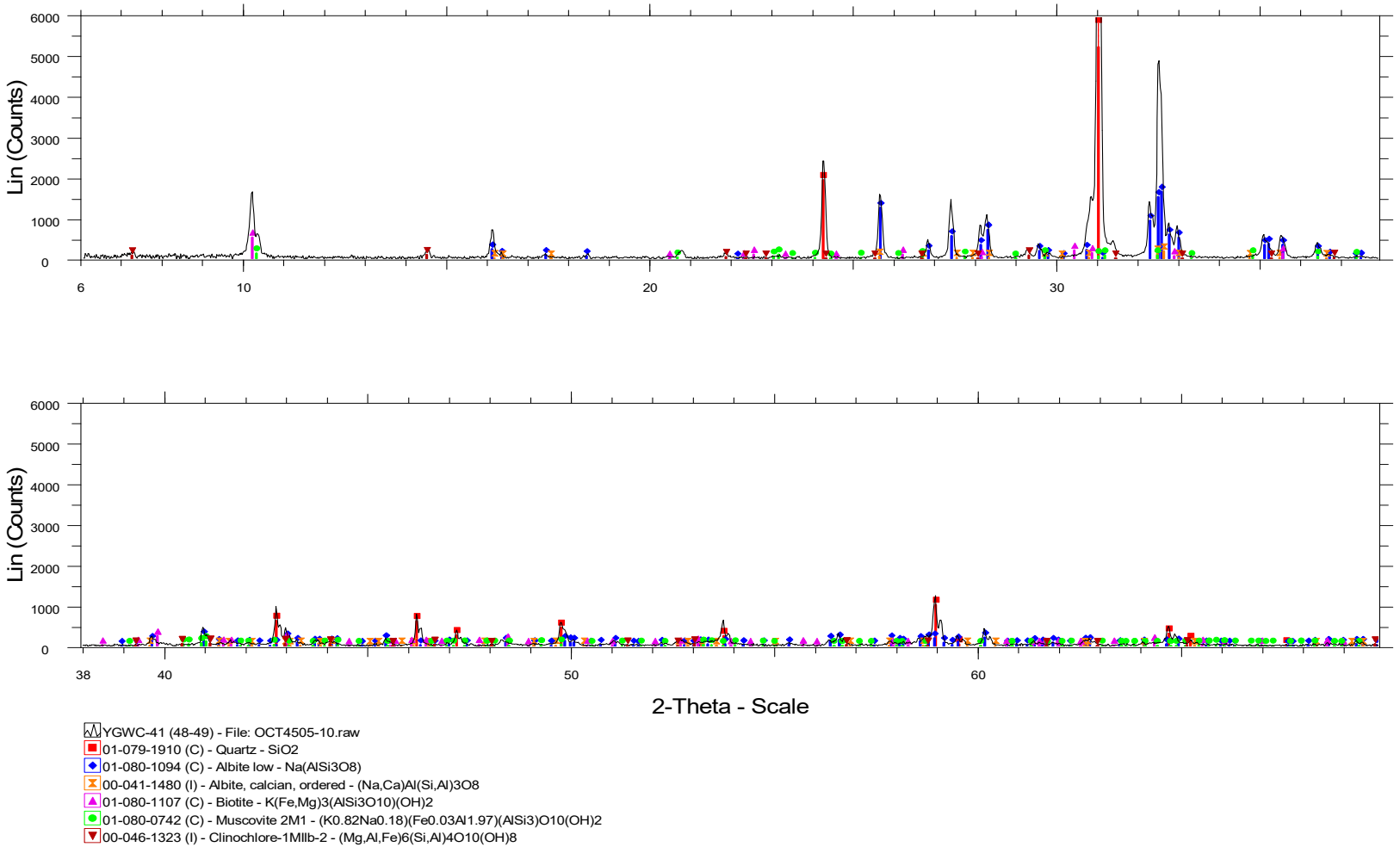
12-Nov-20

YGWC-41 (32-33)



YGWC-41 (48-49)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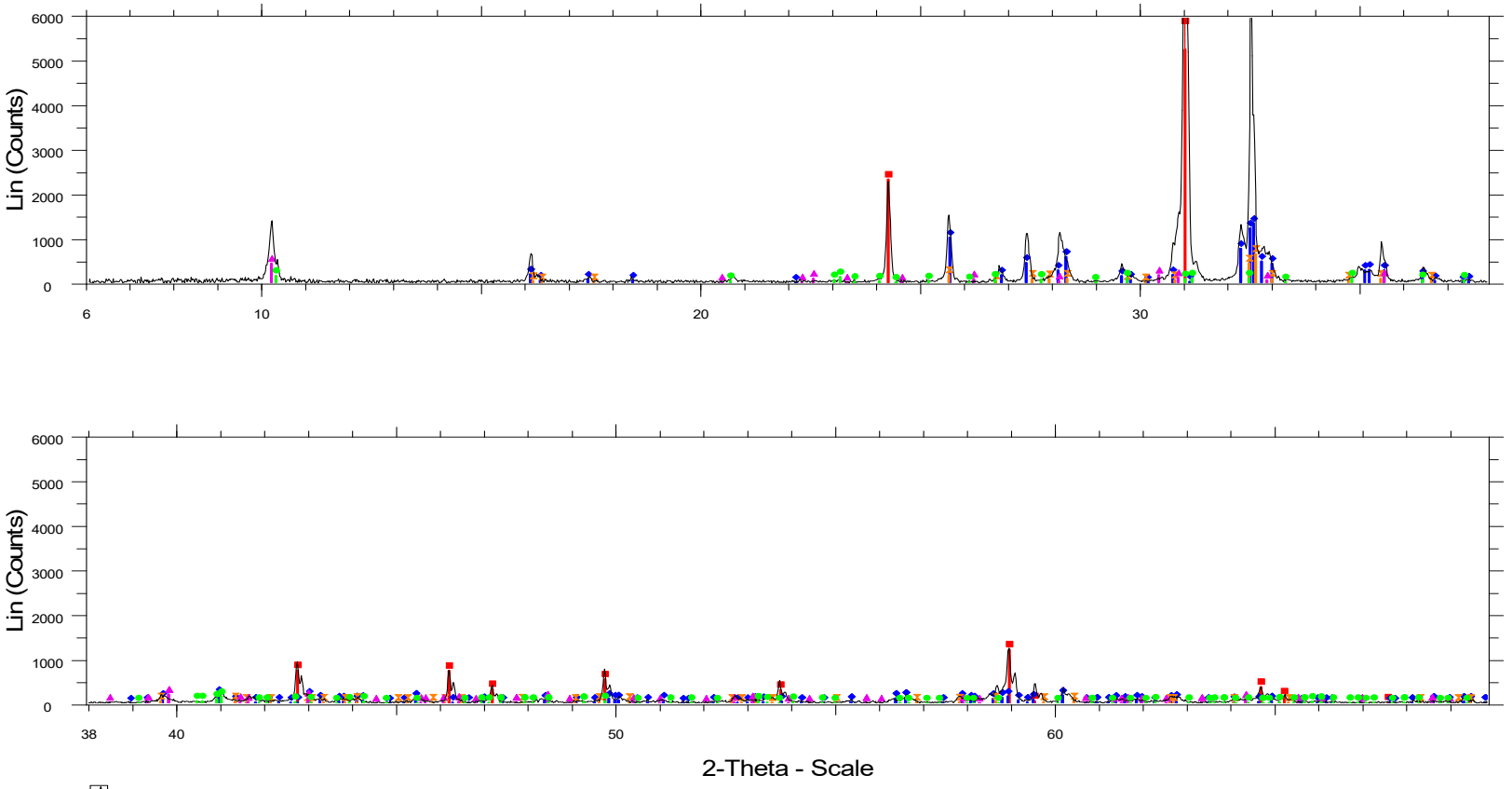
01-079-1910 (C) - Quartz - SiO2
01-080-1094 (C) - Albite low - Na(AlSi3O8)
00-041-1480 (I) - Albite, calcian, ordered - (Na,Ca)Al(Si,Al)3O8
01-080-1107 (C) - Biotite - K(Fe,Mg)3(AlSi3O10)(OH)2
01-080-0742 (C) - Muscovite 2M1 - (K0.82Na0.18)(Fe0.03Al1.97)(AlSi3)O10(OH)2
00-046-1323 (I) - Clinochlore-1MIIb-2 - (Mg,Al,Fe)6(Si,Al)4O10(OH)8

YGWC-41 (59-60)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01-079-1910 (C) - Quartz - SiO2
01-080-1094 (C) - Albite low - Na(AlSi3O8)
00-041-1480 (I) - Albite, calcian, ordered - (Na,Ca)Al(Si,Al)3O8
01-080-1107 (C) - Biotite - KFe2Mg(AlSi3O10)(OH)2
01-080-0742 (C) - Muscovite 2M1 - (K0.82Na0.18)(Fe0.03Al1.97)(AlSi3)O10(OH)2

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 09, 2020

Report to:
Jennifer Beck
ARCADIS
630 Plaza Drive
Suite 100
Highlands Ranch, CO 80129

Bill to:
Accounts Payable
ARCADIS
630 Plaza Drive, Suite 100

Highlands Ranch, CO 80129

Project ID:
ACZ Project ID: L62108

Jennifer Beck:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 09, 2020. This project has been assigned to ACZ's project number, L62108. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L62108. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after May 08, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

ARCADIS
Project ID:
Sample ID: YGWC-24SA (40-44)

ACZ Sample ID: ***L62108-01***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		3.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		3.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	3		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	6.2		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.3	J	*	%	0.1	0.5	11/06/20 8:00	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:30	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 12:39	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YGWC-24SA (47-49)

ACZ Sample ID: ***L62108-02***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		5.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		5.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	<1	U	*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	7.1		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.5		*	%	0.1	0.5	11/06/20 8:29	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:31	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 12:52	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YGWC-24SA (52-54)

ACZ Sample ID: ***L62108-03***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		4.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		4.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	3		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	6.4		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.4	J	*	%	0.1	0.5	11/06/20 8:39	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:33	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 13:05	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YAMW-3 (83-84)

ACZ Sample ID: ***L62108-04***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4		0.94	J		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		7.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		6.1			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	4		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	5.8		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.7		*	%	0.1	0.5	11/06/20 8:48	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	0.02	J	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	0.02	J	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	0.01	J	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	0.03	J	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	0.02	J	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:35	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 13:18	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YAMW-4 (88-89)

ACZ Sample ID: ***L62108-05***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		6.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		6.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	6		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	6.2		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.6		*	%	0.1	0.5	11/06/20 8:58	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:37	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 13:31	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YGWC-38 (26-27)

ACZ Sample ID: ***L62108-06***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		3.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		3.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	7		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	6.0		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.3	J	*	%	0.1	0.5	11/06/20 9:08	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:38	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 13:44	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YGWC-38 (39-40)

ACZ Sample ID: ***L62108-07***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		5.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		5.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	8		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	6.0		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.5	J	*	%	0.1	0.5	11/06/20 9:18	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:40	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 13:57	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YGWC-38 (59.5-60.5)

ACZ Sample ID: ***L62108-08***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4		0.94	J		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		6.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		5.1			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	4		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	5.5		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.6		*	%	0.1	0.5	11/06/20 9:27	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	0.02	J	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	0.02	J	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	0.01	J	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	0.03	J	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	0.02	J	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:42	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 14:10	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YGWC-41 (32-33)

ACZ Sample ID: ***L62108-09***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		4.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		4.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	4		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	6.2		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.4	J	*	%	0.1	0.5	11/06/20 9:37	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:44	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 14:23	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YGWC-41 (48-49)

ACZ Sample ID: ***L62108-10***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		2.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		2.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	8		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	5.9		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.2	J	*	%	0.1	0.5	11/06/20 9:47	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:45	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 14:36	sjm

Arizona license number: AZ0102

ARCADIS
Project ID:
Sample ID: YGWC-41 (59-60)

ACZ Sample ID: ***L62108-11***
Date Sampled: *10/08/20 12:00*
Date Received: *10/09/20*
Sample Matrix: *Soil*

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4			U		t CaCO3/Kt	0.31	3.1	11/09/20 0:00	calc
Acid Neutralization Potential (calc)	M600/2-78-054 1.3		5.0			t CaCO3/Kt	1	5	11/09/20 0:00	calc
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3		5.0			t CaCO3/Kt			11/09/20 0:00	calc
Net Acid Generation Procedure	Single NAG - EGI 2002									
NAG		1	7		*	Kg H2SO4/t	1	1	11/06/20 0:00	jms
pH After Oxidation		1	6.0		*	units	0.1	0.1	11/06/20 0:00	jms
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	1	0.5	J	*	%	0.1	0.5	11/06/20 9:57	gkh
Sulfur Forms	M600/2-78-054 3.2.4-MOD									
Sulfur HCl Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur HNO3 Residue		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Organic Residual		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Pyritic Sulfide		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Sulfur Total		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra
Total Sulfur minus Sulfate		1	<0.01	U	*	%	0.01	0.1	11/02/20 0:00	cra

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				10/29/20 13:47	krs
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3				*				10/30/20 14:50	sjm

Arizona license number: AZ0102

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Reference

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Net Acid Generation Single NAG - EGI 2002

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG508974													
L62108-01DUP	DUP	11/06/20 15:05			3	3	‹g H2SO4/				0	20	

Neutralization Potential as CaCO3 M600/2-78-054 3.2.3

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG509086													
L62108-01DUP	DUP	11/06/20 8:09			.3	.3	%				0	20	RA
L62108-01MS	MS	11/06/20 8:19	SI190303-1	1	.3	1.3	%	100	70	130			
WG509086LCSS	LCSS	11/06/20 11:05	PCN59475	99.9		93	%	93	80	120			
WG509086PBS	PBS	11/06/20 11:15				U	%		-0.2	0.2			

Sulfur Organic Residual M600/2-78-054 3.2.4-MOD

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG508739													
L62108-01DUP	DUP	11/02/20 17:50			U	U	%				0	20	RA
WG508739PBS	PBS	11/02/20 17:50				U	%		-0.03	0.03			

Sulfur Pyritic Sulfide M600/2-78-054 3.2.4-MOD

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG508739													
WG508739PBS	PBS	11/02/20 17:50				U	%		-0.03	0.03			
L62108-01DUP	DUP	11/02/20 17:50			U	U	%				0	20	RA

Sulfur Sulfate M600/2-78-054 3.2.4-MOD

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG508739													
WG508739PBS	PBS	11/02/20 17:50				U	%		-0.03	0.03			
L62108-01DUP	DUP	11/02/20 17:50			U	U	%				0	20	RA

Sulfur Total M600/2-78-054 3.2.4-MOD

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG508739													
L62108-01DUP	DUP	11/02/20 17:50			U	U	%				0	20	RA
L62108-01MS	MS	11/02/20 17:50	PCN62541	1.3	U	1.25	%	96	80	120			
WG508739LCSS	LCSS	11/02/20 17:50	PCN61784	4.01		4.25	%	106	80	120			
WG508739PBS	PBS	11/02/20 17:50				U	%		-0.03	0.03			

Total Sulfur Minus Sulfate M600/2-78-054 3.2.4-MOD

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG508739													
WG508739PBS	PBS	11/02/20 17:50				U	%		-0.03	0.03			
L62108-01DUP	DUP	11/02/20 17:50			U	U	%				0	20	RA

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62108-01	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L62108-02	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L62108-03	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62108-04	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L62108-05	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L62108-06	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62108-07	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L62108-08	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L62108-09	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62108-10	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L62108-11	WG509086	Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG508739	Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Sulfur Total	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Soil Analysis

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
NAG	Single NAG - EGI 2002
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3
pH After Oxidation	Single NAG - EGI 2002
Sulfur HCl Residue	M600/2-78-054 3.2.4-MOD
Sulfur HNO3 Residue	M600/2-78-054 3.2.4-MOD
Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD
Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD
Sulfur Sulfate	M600/2-78-054 3.2.4-MOD
Sulfur Total	M600/2-78-054 3.2.4-MOD
Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.	
NAG	Single NAG - EGI 2002
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3
pH After Oxidation	Single NAG - EGI 2002
Sulfur HCl Residue	M600/2-78-054 3.2.4-MOD
Sulfur HNO3 Residue	M600/2-78-054 3.2.4-MOD
Sulfur Organic Residual	M600/2-78-054 3.2.4-MOD
Sulfur Pyritic Sulfide	M600/2-78-054 3.2.4-MOD
Sulfur Sulfate	M600/2-78-054 3.2.4-MOD
Sulfur Total	M600/2-78-054 3.2.4-MOD
Total Sulfur minus Sulfate	M600/2-78-054 3.2.4-MOD

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

ARCADIS

ACZ Project ID: L62108
Date Received: 10/09/2020 11:02
Received By:
Date Printed: 10/13/2020

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]			X
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA33832	17.6	NA	15	N/A

Was ice present in the shipment container(s)?

No - Wet or gel ice was not present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

ARCADIS

ACZ Project ID:	L62108
Date Received:	10/09/2020 11:02
Received By:	
Date Printed:	10/13/2020

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ARCADIS Design & Consultancy for natural and built assets

L62108

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Georgia Power Yates

PROJECT NAME: Georgia Power Yates	**Company**	**Contact**	**4915 Prospectus Drive, Suite G Durham, NC 27713**
Lab name: ACZ Laboratories, Inc.	**Arcadis**	**Ricky Sams**	**919-328-5602**
SAMPLERS: Ricky Sams			

SAMPLE ID	DATE	TIME	MATRIX	COMP/GRAB	CONTAINERS	Requested Analyses																				
YGWC - 24SA (40-44)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YGWC - 24SA (47-49)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YGWC - 24SA (52-54)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YAMW - 3 (83-84)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YAMW - 4 (88-89)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YGWC - 38 (26-27)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YGWC - 38 (39-40)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YGWC - 38 (59.5-60.5)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YGWC - 41 (32-33)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YGWC - 41 (48-49)	10/8/2020	12:00	Geo. Material	Grab	1	X																				
YGWC - 41 (59-60)	10/8/2020	12:00	Geo. Material	Grab	1	X																				

	Requested Analyses
1	ABA analysis (See attached quote)
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Special Instructions/Comments:

FEDEX OVERNIGHT

Notes

Standard TAT please.

Laboratory Information and Receipt

Lab Name:

Shipping Tracking #:

Specify Turnaround Requirements:

Cooler Present (Y/N):

Cooler Temperature(s) °C:

Custody Seals:

Condition/Cooler Temp:

Relinquished by:	DATE	TIME	Received by:	Relinquished by:	DATE	TIME	Received by:
Ricky Sams	10/8/2020	17:00			10/9/20	11:00	

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Accounts Payable
ARCADIS
630 Plaza Drive, Suite 600 Task 0001/Project# 30043054.0001
Highlands Ranch, CO 80129

7/6/2020

Quote Number: ABA-FLY-ASH

Matrix: Soil Georgia fly air: ABA and NAG, 3 Samples, standard TAT 3 WEEKS

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Misc.			
Electronic Data Deliverable			$0.00
Sample Preparation			
Air Dry at 34 Degrees C	USDA No. 1, 1972		$10.00
Crush and Pulverize (Ring & Puck)	EPA-600/2-78-054 3.1.3		$16.00
Soil Analysis			
Acid Generation Potential (calc on Sulfur total)	M600/2-78-054 3.2.4	Calculation	$0.00
Acid Neutralization Potential (calc)	M600/2-78-054 1.3	Calculation	$0.00
Acid-Base Potential (calc on Sulfur total)	M600/2-78-054 1.3	Calculation	$0.00
Net Acid Generation Procedure	Single NAG - EGI 2002	0.1 to 1 Kg H2SO4/t	$95.00
Neutralization Potential as CaCO3	M600/2-78-054 3.2.3	0.1 %	$18.00
Sulfur Forms	M600/2-78-054 3.2.4-MOD	0.01 %	$85.00
		Cost/Sample:	**$224.00**

This quote is based on a Standard Turn Around Time of approximately 21 days for soil and solid matrices (15 business days). TAT may vary with seasonal heavy workload. Please contact your PM if rush TAT is required. Rush TAT needs to be pre-approved prior to sample shipment to assure that due dates can be met. Pricing includes standard reporting formats and standard ACZ EDDs. All projects received are subject to a $125.00 Minimum Charge. Please note that method detection limits are estimates and may be elevated depending on sample matrix that require dilution. Pricing includes coolers, soil jars or bags, labels, COCs and ice-packs (if needed for your analysis), shipped to your site or office via UPS ground. Return shipping is the responsibility of the client. Please allow ample time for your bottles to arrive. Please note that soil preparation charges may change based on the condition and volume of sample(s) upon receipt. Wet samples may increase the TAT if air-drying is needed required.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Accounts Payable
ARCADIS
630 Plaza Drive, Suite 600 Task 0001/Project# 30043054.0001
Highlands Ranch, CO 80129

7/6/2020

Quote Number: ABA-FLY-ASH

CONTRACT DETAILS
Pricing includes coolers, bottles pre-preserved as needed, labels, COCs and ice-packs shipped to your site or office via UPS ground. Return shipping is the responsibility of the client. Please allow three to five days for delivery when ordering containers. ACZ must be notified prior to receiving samples of all special requests such as electronic data deliverables or special reporting requirements. The client will be charged for special sample containers or express shipping and additional charges may apply for non-standard requests.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project(s) is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at http://www.acz.com/wp-content/uploads/2015/10/ACZ_Terms_Conditions.pdf. Please note that MDL's in this quote may possibly increase due to sample matrix or samples with high TDS.

All orders that require shipping of coolers are subject to a minimum charge of $200.00. Local orders without shipping are subject to a minimum charge of $125.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

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

October 27, 2020

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

RE: Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Peachtree Corners, GA
- Pace Analytical Services - Ormond Beach

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: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Pace Analytical Services Ormond Beach
8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Arizona Certification# AZ0819
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

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

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

SAMPLE SUMMARY

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92500960001	**KD-1**	Water	10/16/20 14:00	10/17/20 09:30
92500960007	**KD-1-DISSOLVED**	Water	10/16/20 14:00	10/17/20 09:30
92500960008	**KD-2-DISSOLVED**	Water	10/16/20 14:15	10/17/20 09:30
92500960009	**KD-3-DISSOLVED**	Water	10/16/20 14:30	10/17/20 09:30
92500960010	**KD-4-DISSOLVED**	Water	10/16/20 15:00	10/17/20 09:30
92500960011	**245A-6.0-DISSOLVED**	Water	10/16/20 15:05	10/17/20 09:30
92500960012	**245A-3.8-DISSOLVED**	Water	10/16/20 15:10	10/17/20 09:30
92500960013	**YGWC-33S**	Water	10/16/20 15:15	10/17/20 09:30
92500960014	**YGWC-38**	Water	10/16/20 15:20	10/17/20 09:30

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

SAMPLE ANALYTE COUNT

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92500960007	**KD-1-DISSOLVED**	EPA 6020B	CW1	2	PASI-GA
92500960008	**KD-2-DISSOLVED**	EPA 6020B	CW1	2	PASI-GA
92500960009	**KD-3-DISSOLVED**	EPA 6020B	CW1	2	PASI-GA
92500960010	**KD-4-DISSOLVED**	EPA 6020B	CW1	2	PASI-GA
92500960011	**245A-6.0-DISSOLVED**	EPA 6020B	CW1	2	PASI-GA
92500960012	**245A-3.8-DISSOLVED**	EPA 6020B	CW1	2	PASI-GA
92500960013	**YGWC-33S**	SM 2310B	AGS	1	PASI-O
92500960014	**YGWC-38**	SM 2310B	AGS	1	PASI-O

PASI-GA = Pace Analytical Services - Peachtree Corners, GA
PASI-O = Pace Analytical Services - Ormond Beach

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

SUMMARY OF DETECTION

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92500960007	**KD-1-DISSOLVED**					
EPA 6020B	Beryllium, Dissolved	0.0032	mg/L	0.0030	10/22/20 18:15	
92500960008	**KD-2-DISSOLVED**					
EPA 6020B	Beryllium, Dissolved	0.0020J	mg/L	0.0030	10/22/20 18:38	
92500960009	**KD-3-DISSOLVED**					
EPA 6020B	Beryllium, Dissolved	0.0031	mg/L	0.0030	10/22/20 18:43	
92500960010	**KD-4-DISSOLVED**					
EPA 6020B	Beryllium, Dissolved	0.0026J	mg/L	0.0030	10/22/20 18:49	
92500960011	**245A-6.0-DISSOLVED**					
EPA 6020B	Beryllium, Dissolved	0.00034J	mg/L	0.0030	10/22/20 18:55	
EPA 6020B	Cobalt, Dissolved	0.0028J	mg/L	0.0050	10/22/20 18:55	
92500960012	**245A-3.8-DISSOLVED**					
EPA 6020B	Beryllium, Dissolved	0.0042	mg/L	0.0030	10/22/20 19:12	
EPA 6020B	Cobalt, Dissolved	0.0026J	mg/L	0.0050	10/22/20 19:12	
92500960013	**YGWC-33S**					
SM 2310B	Acidity, Total	38.4	mg/L	1.0	10/23/20 11:57	N2
92500960014	**YGWC-38**					
SM 2310B	Acidity, Total	22.2	mg/L	1.0	10/23/20 11:57	N2

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Sample: KD-1-DISSOLVED **Lab ID: 92500960007** Collected: 10/16/20 14:00 Received: 10/17/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Beryllium, Dissolved	**0.0032**	mg/L	0.0030	0.000046	1	10/21/20 14:56	10/22/20 18:15	7440-41-7	
Cobalt, Dissolved	ND	mg/L	0.0050	0.00038	1	10/21/20 14:56	10/22/20 18:15	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Sample: KD-2-DISSOLVED **Lab ID: 92500960008** Collected: 10/16/20 14:15 Received: 10/17/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Beryllium, Dissolved	**0.0020J**	mg/L	0.0030	0.000046	1	10/21/20 14:56	10/22/20 18:38	7440-41-7	
Cobalt, Dissolved	ND	mg/L	0.0050	0.00038	1	10/21/20 14:56	10/22/20 18:38	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Sample: KD-3-DISSOLVED **Lab ID: 92500960009** Collected: 10/16/20 14:30 Received: 10/17/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Beryllium, Dissolved	**0.0031**	mg/L	0.0030	0.000046	1	10/21/20 14:56	10/22/20 18:43	7440-41-7	
Cobalt, Dissolved	ND	mg/L	0.0050	0.00038	1	10/21/20 14:56	10/22/20 18:43	7440-48-4	

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

ANALYTICAL RESULTS

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Sample: KD-4-DISSOLVED **Lab ID: 92500960010** Collected: 10/16/20 15:00 Received: 10/17/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Beryllium, Dissolved	**0.0026J**	mg/L	0.0030	0.000046	1	10/21/20 14:56	10/22/20 18:49	7440-41-7	
Cobalt, Dissolved	ND	mg/L	0.0050	0.00038	1	10/21/20 14:56	10/22/20 18:49	7440-48-4	

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

ANALYTICAL RESULTS

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Sample: 245A-6.0-DISSOLVED **Lab ID: 92500960011** Collected: 10/16/20 15:05 Received: 10/17/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Beryllium, Dissolved	**0.00034J**	mg/L	0.0030	0.000046	1	10/21/20 14:56	10/22/20 18:55	7440-41-7	
Cobalt, Dissolved	**0.0028J**	mg/L	0.0050	0.00038	1	10/21/20 14:56	10/22/20 18:55	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Sample: 245A-3.8-DISSOLVED **Lab ID: 92500960012** Collected: 10/16/20 15:10 Received: 10/17/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Beryllium, Dissolved	**0.0042**	mg/L	0.0030	0.000046	1	10/21/20 14:56	10/22/20 19:12	7440-41-7	
Cobalt, Dissolved	**0.0026J**	mg/L	0.0050	0.00038	1	10/21/20 14:56	10/22/20 19:12	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Sample: YGWC-33S **Lab ID: 92500960013** Collected: 10/16/20 15:15 Received: 10/17/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2310B Acidity, Total	Analytical Method: SM 2310B Pace Analytical Services - Ormond Beach								
Acidity, Total	**38.4**	mg/L	1.0	1.0	1		10/23/20 11:57		N2

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Sample: YGWC-38 **Lab ID: 92500960014** Collected: 10/16/20 15:20 Received: 10/17/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2310B Acidity, Total	Analytical Method: SM 2310B Pace Analytical Services - Ormond Beach								
Acidity, Total	**22.2**	mg/L	1.0	1.0	1		10/23/20 11:57		N2

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

QC Batch: 574733
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92500960007, 92500960008, 92500960009, 92500960010, 92500960011, 92500960012

METHOD BLANK: 3042471 Matrix: Water
Associated Lab Samples: 92500960007, 92500960008, 92500960009, 92500960010, 92500960011, 92500960012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Beryllium, Dissolved	mg/L	ND	0.0030	0.000046	10/22/20 18:02	
Cobalt, Dissolved	mg/L	ND	0.0050	0.00038	10/22/20 18:02	

LABORATORY CONTROL SAMPLE: 3042472

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Beryllium, Dissolved	mg/L	0.1	0.098	98	80-120	
Cobalt, Dissolved	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3042473 3042474

Parameter	Units	92500960007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium, Dissolved	mg/L	0.0032	0.1	0.1	0.096	0.10	93	98	75-125	5	20	
Cobalt, Dissolved	mg/L	ND	0.1	0.1	0.099	0.098	99	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: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

QC Batch: 676127
QC Batch Method: SM 2310B
Analysis Method: SM 2310B
Analysis Description: 2310B Acidity, Total
Laboratory: Pace Analytical Services - Ormond Beach
Associated Lab Samples: 92500960013, 92500960014

METHOD BLANK: 3677980 Matrix: Water
Associated Lab Samples: 92500960013, 92500960014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acidity, Total	mg/L	ND	1.0	1.0	10/23/20 11:57	N2

SAMPLE DUPLICATE: 3677981

Parameter	Units	92500201001 Result	Dup Result	RPD	Max RPD	Qualifiers
Acidity, Total	mg/L	18.2	18.2	0	10	N2

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: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

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

N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GA POWER YATES 30052922.00009
Pace Project No.: 92500960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92500960007	**KD-1-DISSOLVED**	EPA 3005A	574733	EPA 6020B	574788
92500960008	**KD-2-DISSOLVED**	EPA 3005A	574733	EPA 6020B	574788
92500960009	**KD-3-DISSOLVED**	EPA 3005A	574733	EPA 6020B	574788
92500960010	**KD-4-DISSOLVED**	EPA 3005A	574733	EPA 6020B	574788
92500960011	**245A-6.0-DISSOLVED**	EPA 3005A	574733	EPA 6020B	574788
92500960012	**245A-3.8-DISSOLVED**	EPA 3005A	574733	EPA 6020B	574788
92500960013	**YGWC-33S**	SM 2310B	676127		
92500960014	**YGWC-38**	SM 2310B	676127		

Pace Analytical

Sample Condition Upon Rece **WO# : 92500960**

Client Name: GA Power

92500960

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

Tracking #: 7718 2409 9882

Optional
Proj. Due Date:
Proj. Name:

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

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

Thermometer Used THR214 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 2.7 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: KRW 10/17/20

Temp should be above freezing to 6°C

Comments:

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	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 bottle

Project # **WO# : 92500960**

PM: KLH1 Due Date: 11/02/20

CLIENT: GA-GA Power

Matrix	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)	BP1S-1 liter Plastic H2SO4 (pH < 2) (Cl-)	BP4S-125 mL Plastic H2SO4 (pH < 2)	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-1 liter Amber Unpreserved (N/A) (Cl-)	AG3U-250 mL Amber Unpreserved (pH < 2)	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 (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation 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							1																						
	13																													
	14																													

pH Adjustment Log for Preserved Samples

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

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

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

PACE Kevin Herring

Lab Work Order #: 10840

Send Results to:

Contact & Company Name: Dave Liles ARCADIS	Telephone: 919-328-5574
Address: 4915 Prospectus Drive	Fax: STE 6
City: Durham State: NC Zip: 27713	E-mail Address: david.liles@arcadis.com
Project Name/Location (City, State): EA Power Yates	Project #: 30057922.00009
Sampler's Printed Name: Robert Prisse	Sampler's Signature:

Preservative	HNO_3	HNO_3	None					
Filtered (✓)		X						
# of Containers	1	1	1					
Container Information	250 P	250 P	250P					

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: _____ 10. Other: _____

Matrix Key: SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: _____

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Metals Total 6020 BE CO	Metals dissolved 6020 BE CO	Acidity	REMARKS	
									ARS00460	
Kd-1	10/16/20	1400		X	W	1			HOLD	001
Kd-1-dissolved		1400		X	W		1			007
Kd-2		1415		X	W	1			HOLD	002
Kd-2-dissolved		1415		X	W		1			008
Kd-3		1430		X	W	1			HOLD	003
Kd-3_dissolved		1430		X	W		1			009
Kd-4		1500		X	W	1			HOLD	004
Kd-4-dissolved		1500		X	W		1			010
24SA-6.0		1505		X	W	1			HOLD	005
24SA-6.0_dissolved		1505		X	W		1			011
24SA-3.8		1510		X	W	1			HOLD	006
24SA-3.8_dissolved		1510		X	W		1			012
YGWC-33S		1515		X	W			1		013
YGWC-38	↓	1520		X	W			1		014

Special Instructions/Comments:

* Metals 6020: BE & CO

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: PACE Atlanta	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Robert Prisse	Printed Name: Fed Ex	Printed Name:	Printed Name: Krisann Wellington
☒ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature: K. Wellington
Specify Turnaround Requirements: Standard	Sample Receipt:	Firm: ARCADIS	Firm/Courier: Fed Ex	Firm/Courier:	Firm: Pace
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 10/16/20 1700	Date/Time: 10/16/20 1700	Date/Time:	Date/Time: 10/17/20 0930

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

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

December 03, 2020

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

RE: Project: Plant Yates
Pace Project No.: 92508174

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on November 24, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville

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: Geoffrey Gay, ARCADIS - Atlanta
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
Pace Project No.: 92508174

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

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 92508174

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92508174001	**Kd-4.6**	Water	11/23/20 15:30	11/24/20 09:32
92508174002	**Kd-4.7**	Water	11/23/20 15:35	11/24/20 09:32
92508174003	**Kd-2.6**	Water	11/23/20 15:40	11/24/20 09:32

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SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 92508174

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92508174001	**Kd-4.6**	EPA 6020B	JOR	2
92508174002	**Kd-4.7**	EPA 6020B	JOR	2
92508174003	**Kd-2.6**	EPA 6020B	JOR	2

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
Pace Project No.: 92508174

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92508174001	**Kd-4.6**					
EPA 6020B	Selenium, Dissolved	0.043	mg/L	0.00050	12/02/20 17:54	
92508174002	**Kd-4.7**					
EPA 6020B	Selenium, Dissolved	0.050	mg/L	0.00050	12/02/20 17:58	
92508174003	**Kd-2.6**					
EPA 6020B	Selenium, Dissolved	0.055	mg/L	0.00050	12/02/20 17:43	

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ANALYTICAL RESULTS

Project: Plant Yates
Pace Project No.: 92508174

Sample: Kd-4.6 **Lab ID: 92508174001** Collected: 11/23/20 15:30 Received: 11/24/20 09:32 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Beryllium, Dissolved	ND	mg/L	0.00010	0.000050	1	12/01/20 16:07	12/02/20 17:54	7440-41-7	
Selenium, Dissolved	**0.043**	mg/L	0.00050	0.000061	1	12/01/20 16:07	12/02/20 17:54	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
Pace Project No.: 92508174

Sample: Kd-4.7 **Lab ID: 92508174002** Collected: 11/23/20 15:35 Received: 11/24/20 09:32 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Beryllium, Dissolved	ND	mg/L	0.00010	0.000050	1	12/01/20 16:07	12/02/20 17:58	7440-41-7	
Selenium, Dissolved	**0.050**	mg/L	0.00050	0.000061	1	12/01/20 16:07	12/02/20 17:58	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
Pace Project No.: 92508174

Sample: Kd-2.6 **Lab ID: 92508174003** Collected: 11/23/20 15:40 Received: 11/24/20 09:32 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Beryllium, Dissolved	ND	mg/L	0.00010	0.000050	1	12/01/20 16:07	12/02/20 17:43	7440-41-7	
Selenium, Dissolved	**0.055**	mg/L	0.00050	0.000061	1	12/01/20 16:07	12/02/20 17:43	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
Pace Project No.: 92508174

QC Batch: 583663
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92508174001, 92508174002, 92508174003

METHOD BLANK: 3085975 Matrix: Water
Associated Lab Samples: 92508174001, 92508174002, 92508174003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Beryllium, Dissolved	mg/L	ND	0.00010	0.000050	12/02/20 17:35	
Selenium, Dissolved	mg/L	ND	0.00050	0.000061	12/02/20 17:35	

LABORATORY CONTROL SAMPLE: 3085976

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Beryllium, Dissolved	mg/L	0.01	0.0094	94	80-120	
Selenium, Dissolved	mg/L	0.05	0.047	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3085977 3085978

Parameter	Units	92508174003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium, Dissolved	mg/L	ND	0.01	0.01	0.0093	0.0097	93	97	75-125	3	20	
Selenium, Dissolved	mg/L	0.055	0.05	0.05	0.10	0.10	99	89	75-125	5	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 92508174

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates
Pace Project No.: 92508174

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92508174001	**Kd-4.6**	EPA 3010A	583663	EPA 6020B	583696
92508174002	**Kd-4.7**	EPA 3010A	583663	EPA 6020B	583696
92508174003	**Kd-2.6**	EPA 3010A	583663	EPA 6020B	583696

ARCADIS Design & Consultancy for natural and built assets

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Georgia Power Yates

PROJECT NAME: Georgia Power Yates						Company	Contact	4915 Prospectus Drive, Suite G Durham, NC 27713
Lab name: Pace Analytical						Arcadis	Robert Prigge	919-414-2388
SAMPLERS: Robert Prigge						Requested Analyses		
SAMPLE ID	DATE	TIME	MATRIX	Number of containers	Sample Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Remarks
Kd-4.6	11/23/2020	1530	Water	Grab	1	X																				1
Kd-4.7	11/23/2020	1535	Water	Grab	1	X																				1
Kd-2.6	11/23/2020	1540	Water	Grab	1	X																				1

	Requested Analyses
1	Dissloved Metals 6020- Selenium and Beryllium
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Special Instructions/Comments:

FEDEX OVERNIGHT

Notes

1. Metals samples were filtered with .45u filter

Laboratory Information and Receipt

Lab Name: Pace Analytical

Shipment Tracking #

Special Temperature Requirements: Standard

☐ Cooler present and intact

☐ Cooler custody seal(s) intact

Temperature Category:

Condition/Cooler Temp:

Relinquished by:	DATE	TIME	Received by:	Relinquished by:	DATE	TIME	Received by:
Robert Prigge	11/23/2020	17:00	Fed Ex		11/24/20	0932	MK Pace

WO# : 92508174

92508174

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#: 92508174

PM: KLH1 Due Date: 12/03/20
CLIENT: GA-ArcadAtl

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

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

Date/Initials Person Examining Contents: MT 11/24/20

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

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

Thermometer: ☐ IR Gun ID: 214 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.3 **Correction Factor:** Add/Subtract (°C) ± 0.1

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 (MT 11/24/20)	☐ N/A	7. Field filtered
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: WW				
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	

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY
FEDEX tracking # 7721 6422 3752

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# : 92508174**

PM: KLH1 **Due Date: 12/03/20**

CLIENT: GA-ArcadAtl

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

pH Adjustment Log for Preserved Samples

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

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

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

November 16, 2020

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

RE: Project: GA POWER YATES
Pace Project No.: 92505273

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on November 11, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - 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: GA POWER YATES
Pace Project No.: 92505273

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

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

SAMPLE SUMMARY

Project: GA POWER YATES
Pace Project No.: 92505273

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92505273001	**KD-1.2**	Water	11/09/20 13:00	11/11/20 09:47
92505273002	**KD-2.3**	Water	11/09/20 13:00	11/11/20 09:47
92505273003	**KD-3.3**	Water	11/09/20 13:00	11/11/20 09:47
92505273004	**KD-4.3**	Water	11/09/20 13:00	11/11/20 09:47
92505273005	**KD-2.4**	Water	11/09/20 13:00	11/11/20 09:47
92505273006	**KD-3.4**	Water	11/09/20 13:00	11/11/20 09:47
92505273007	**KD-4.4**	Water	11/09/20 13:00	11/11/20 09:47
92505273008	**KD-2.5**	Water	11/09/20 13:00	11/11/20 09:47
92505273009	**KD-3.5**	Water	11/09/20 13:00	11/11/20 09:47
92505273010	**KD-4.5**	Water	11/09/20 13:00	11/11/20 09:47
92505273011	**KD-3.2**	Water	11/09/20 13:00	11/11/20 09:47

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SAMPLE ANALYTE COUNT

Project: GA POWER YATES
Pace Project No.: 92505273

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92505273001	**KD-1.2**	EPA 6020B	KH	2
92505273002	**KD-2.3**	EPA 6020B	KH	2
92505273003	**KD-3.3**	EPA 6020B	KH	2
92505273004	**KD-4.3**	EPA 6020B	KH	2
92505273005	**KD-2.4**	EPA 6020B	KH	2
92505273006	**KD-3.4**	EPA 6020B	KH	2
92505273007	**KD-4.4**	EPA 6020B	KH	2
92505273008	**KD-2.5**	EPA 6020B	KH	2
92505273009	**KD-3.5**	EPA 6020B	KH	2
92505273010	**KD-4.5**	EPA 6020B	KH	2
92505273011	**KD-3.2**	EPA 6020B	KH	2

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

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

SUMMARY OF DETECTION

Project: GA POWER YATES
Pace Project No.: 92505273

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92505273001	**KD-1.2**					
EPA 6020B	Beryllium	0.0028J	mg/L	0.0030	11/13/20 19:49	
EPA 6020B	Selenium	0.075	mg/L	0.010	11/13/20 19:49	
92505273002	**KD-2.3**					
EPA 6020B	Selenium	0.052	mg/L	0.010	11/13/20 19:55	
92505273003	**KD-3.3**					
EPA 6020B	Selenium	0.076	mg/L	0.010	11/13/20 20:00	
92505273004	**KD-4.3**					
EPA 6020B	Beryllium	0.00014J	mg/L	0.0030	11/13/20 20:06	
EPA 6020B	Selenium	0.067	mg/L	0.010	11/13/20 20:06	
92505273005	**KD-2.4**					
EPA 6020B	Selenium	0.070	mg/L	0.010	11/13/20 20:12	
92505273006	**KD-3.4**					
EPA 6020B	Beryllium	0.000046J	mg/L	0.0030	11/13/20 20:17	
EPA 6020B	Selenium	0.079	mg/L	0.010	11/13/20 20:17	
92505273007	**KD-4.4**					
EPA 6020B	Beryllium	0.00041J	mg/L	0.0030	11/13/20 20:35	
EPA 6020B	Selenium	0.082	mg/L	0.010	11/13/20 20:35	
92505273008	**KD-2.5**					
EPA 6020B	Beryllium	0.00054J	mg/L	0.0030	11/13/20 20:40	
EPA 6020B	Selenium	0.078	mg/L	0.010	11/13/20 20:40	
92505273009	**KD-3.5**					
EPA 6020B	Beryllium	0.0025J	mg/L	0.0030	11/13/20 20:46	
EPA 6020B	Selenium	0.081	mg/L	0.010	11/13/20 20:46	
92505273010	**KD-4.5**					
EPA 6020B	Beryllium	0.0021J	mg/L	0.0030	11/13/20 20:52	
EPA 6020B	Selenium	0.082	mg/L	0.010	11/13/20 20:52	
92505273011	**KD-3.2**					
EPA 6020B	Selenium	0.073	mg/L	0.010	11/13/20 20:57	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-1.2 **Lab ID: 92505273001** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	**0.0028J**	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 19:49	7440-41-7	
Selenium	**0.075**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 19:49	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-2.3 **Lab ID: 92505273002** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	ND	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 19:55	7440-41-7	
Selenium	**0.052**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 19:55	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-3.3 **Lab ID: 92505273003** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	ND	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:00	7440-41-7	
Selenium	**0.076**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:00	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-4.3 **Lab ID: 92505273004** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	**0.00014J**	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:06	7440-41-7	
Selenium	**0.067**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:06	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-2.4 **Lab ID: 92505273005** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	ND	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:12	7440-41-7	
Selenium	**0.070**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:12	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-3.4 **Lab ID: 92505273006** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	**0.000046J**	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:17	7440-41-7	
Selenium	**0.079**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:17	7782-49-2	

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ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-4.4 **Lab ID: 92505273007** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	**0.00041J**	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:35	7440-41-7	
Selenium	**0.082**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:35	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-2.5 **Lab ID: 92505273008** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	**0.00054J**	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:40	7440-41-7	
Selenium	**0.078**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:40	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-3.5 **Lab ID: 92505273009** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	**0.0025J**	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:46	7440-41-7	
Selenium	**0.081**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:46	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-4.5 **Lab ID: 92505273010** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	**0.0021J**	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:52	7440-41-7	
Selenium	**0.082**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:52	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: GA POWER YATES
Pace Project No.: 92505273

Sample: KD-3.2 **Lab ID: 92505273011** Collected: 11/09/20 13:00 Received: 11/11/20 09:47 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								
Beryllium	ND	mg/L	0.0030	0.000046	1	11/13/20 09:15	11/13/20 20:57	7440-41-7	
Selenium	**0.073**	mg/L	0.010	0.0016	1	11/13/20 09:15	11/13/20 20:57	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: GA POWER YATES
Pace Project No.: 92505273

QC Batch: 580142
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92505273001, 92505273002, 92505273003, 92505273004, 92505273005, 92505273006, 92505273007, 92505273008, 92505273009, 92505273010, 92505273011

METHOD BLANK: 3068868 Matrix: Water
Associated Lab Samples: 92505273001, 92505273002, 92505273003, 92505273004, 92505273005, 92505273006, 92505273007, 92505273008, 92505273009, 92505273010, 92505273011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Beryllium	mg/L	ND	0.0030	0.000046	11/13/20 18:17	
Selenium	mg/L	ND	0.010	0.0016	11/13/20 18:17	

LABORATORY CONTROL SAMPLE: 3068869

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Beryllium	mg/L	0.1	0.095	95	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068870 3068871

Parameter	Units	92505178011 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	0.089	0.091	89	91	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.095	0.097	95	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
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(770)734-4200

QUALIFIERS

Project: GA POWER YATES
Pace Project No.: 92505273

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GA POWER YATES
Pace Project No.: 92505273

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92505273001	**KD-1.2**	EPA 3005A	580142	EPA 6020B	580243
92505273002	**KD-2.3**	EPA 3005A	580142	EPA 6020B	580243
92505273003	**KD-3.3**	EPA 3005A	580142	EPA 6020B	580243
92505273004	**KD-4.3**	EPA 3005A	580142	EPA 6020B	580243
92505273005	**KD-2.4**	EPA 3005A	580142	EPA 6020B	580243
92505273006	**KD-3.4**	EPA 3005A	580142	EPA 6020B	580243
92505273007	**KD-4.4**	EPA 3005A	580142	EPA 6020B	580243
92505273008	**KD-2.5**	EPA 3005A	580142	EPA 6020B	580243
92505273009	**KD-3.5**	EPA 3005A	580142	EPA 6020B	580243
92505273010	**KD-4.5**	EPA 3005A	580142	EPA 6020B	580243
92505273011	**KD-3.2**	EPA 3005A	580142	EPA 6020B	580243

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# : 92505273

92505273

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

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

Date/Initials Person Examining Contents: MT 1/11/20

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: 7.4 **Correction Factor: Add/Subtract (°C)** +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): 7.4

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

FEDEX Tracking # 7710 4485 1765

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: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.09	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 bottle

Project # WO#: 92505273

PM: KLH1 Due Date: 11/18/20

CLIENT GA-GA Power

Matrix	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)
	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 #
2.						

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 Offu
Out of hold, incorrect preservative, out of temp, incorrect containers.

ARCADIS
Infrastructure Water Environment Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #
92505273

Send Results to:

Contact & Company Name: Dave Liles/Arcadis
Telephone: 919-328-5574
Address:
Fax:
City: State: Zip:
E-mail Address:

Project Name/Location (City, State): GA Power Yates
Project #:
Sampler's Printed Name: Ricky Sams
Sampler's Signature:

Preservative	C							
Filtered (✓)	✓							
# of Containers	1							
Container Information	3							

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Total Metals 6020 (Se, Be)								
Kd - 1.2	11/9	13:00	X		W	X								
Kd - 2.3	↓	↓	↓		↓	X								
Kd - 3.3						X								
Kd - 4.3						X								
Kd - 2.4						X								
Kd - 3.4						X								
Kd - 4.4						X								
Kd - 2.5						X								
Kd - 3.5						X								
Kd - 4.5						X								
Kd - 3.2	↓	↓	↓		↓	X								

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

REMARKS

Metals List: Se, Be

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name:	Cooler Custody Seal (✓)	Printed Name: Ricky Sams	Printed Name:	Printed Name:	Printed Name: Michael Tran
☐ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: Pace
Shipping Tracking #	Condition/Cooler Temp: _____	Date/Time: 11/10/20 17:00	Date/Time:	Date/Time:	Date/Time: 11/11/20 9:47

20738826 CofC AR Form 01 12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Arcadis, Inc.

2389 Paces Ferry Road SE

Suite 900

Atlanta, Georgia 30339

Tel 770 431 8666

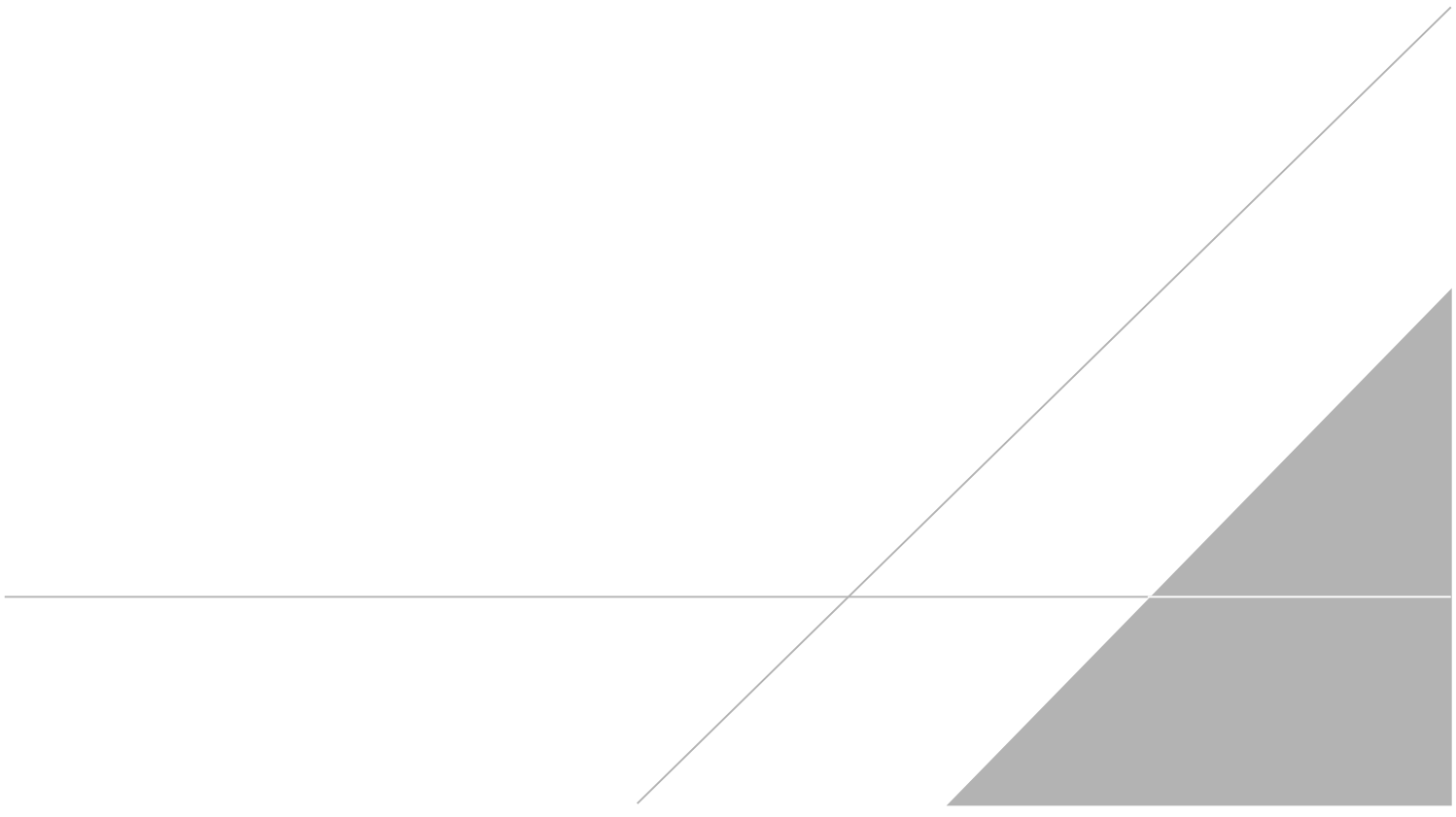
Fax 770 435 2666

APPENDIX B

Field Sampling Forms (February, March, September, and October 2020)

February 2020

Scan Event



Low-Flow Test Report:

Test Date / Time: 2/12/2020 1:02:54 PM
Project: Plant Yates - AP 3
Operator Name: O. Fuquea

Location Name: YGWA-4I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 39.7 ft** **Total Depth: 49.7 ft** **Initial Depth to Water: 22.56 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 45 ft** **Estimated Total Volume Pumped: 4.9 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 110 ml/min Final Draw Down: 41.3 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714344**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/12/2020 1:02 PM	00:00	6.33 pH	17.09 °C	134.46 µS/cm	4.18 mg/L		84.9 mV	22.56 ft	110.00 ml/min
2/12/2020 1:07 PM	05:00	6.30 pH	16.55 °C	139.74 µS/cm	1.76 mg/L	0.78 NTU	67.5 mV	23.60 ft	110.00 ml/min
2/12/2020 1:12 PM	10:00	6.28 pH	16.51 °C	138.19 µS/cm	1.22 mg/L	0.90 NTU	61.2 mV	24.60 ft	110.00 ml/min
2/12/2020 1:17 PM	15:00	6.28 pH	16.43 °C	137.60 µS/cm	1.13 mg/L	1.06 NTU	57.8 mV	25.20 ft	110.00 ml/min
2/12/2020 1:22 PM	20:00	6.28 pH	16.40 °C	137.71 µS/cm	1.15 mg/L	0.92 NTU	55.7 mV	25.40 ft	110.00 ml/min
2/12/2020 1:27 PM	25:00	6.25 pH	16.35 °C	134.30 µS/cm	1.33 mg/L	0.81 NTU	54.6 mV	25.70 ft	110.00 ml/min
2/12/2020 1:32 PM	30:00	6.21 pH	16.36 °C	129.99 µS/cm	1.59 mg/L	0.59 NTU	54.6 mV	25.80 ft	110.00 ml/min
2/12/2020 1:37 PM	35:00	6.17 pH	16.33 °C	126.51 µS/cm	1.84 mg/L	1.43 NTU	55.3 mV	25.90 ft	110.00 ml/min
2/12/2020 1:42 PM	40:00	6.16 pH	16.47 °C	124.91 µS/cm	1.96 mg/L	0.85 NTU	55.8 mV	26.00 ft	110.00 ml/min
2/12/2020 1:47 PM	45:00	6.15 pH	16.51 °C	124.23 µS/cm	2.01 mg/L	0.66 NTU	56.2 mV	26.00 ft	110.00 ml/min

Samples

Sample ID:	Description:
YGWA-4I	Collected at 1348. 67F overcast.

Low-Flow Test Report:

Test Date / Time: 2/12/2020 10:01:40 AM
Project: Plant Yates - AP 3
Operator Name: O. Fuquea

Location Name: YGWA-5D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 50 ft** **Top of Screen: 81 ft** **Total Depth: 131.6 ft** **Initial Depth to Water: 22.13 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 116 ft** **Estimated Total Volume Pumped: 5.2 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min Final Draw Down: 0.27 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714344**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/12/2020 10:01 AM	00:00	7.33 pH	13.86 °C	205.84 µS/cm	8.11 mg/L		92.0 mV	22.13 ft	150.00 ml/min
2/12/2020 10:06 AM	05:00	7.19 pH	15.22 °C	189.99 µS/cm	0.93 mg/L	1.16 NTU	-15.7 mV	22.20 ft	150.00 ml/min
2/12/2020 10:11 AM	10:00	7.42 pH	15.48 °C	189.90 µS/cm	0.29 mg/L	1.34 NTU	-72.0 mV	22.30 ft	150.00 ml/min
2/12/2020 10:16 AM	15:00	7.62 pH	15.66 °C	215.13 µS/cm	0.25 mg/L	1.40 NTU	-46.5 mV	22.40 ft	150.00 ml/min
2/12/2020 10:21 AM	20:00	7.63 pH	15.73 °C	211.53 µS/cm	0.21 mg/L	1.44 NTU	-48.1 mV	22.40 ft	150.00 ml/min
2/12/2020 10:26 AM	25:00	7.56 pH	15.79 °C	200.50 µS/cm	0.20 mg/L	0.99 NTU	-44.5 mV	22.40 ft	150.00 ml/min
2/12/2020 10:31 AM	30:00	7.53 pH	15.79 °C	195.78 µS/cm	0.20 mg/L	0.87 NTU	-42.0 mV	22.40 ft	150.00 ml/min
2/12/2020 10:36 AM	35:00	7.52 pH	15.78 °C	193.90 µS/cm	0.19 mg/L	0.69 NTU	-40.5 mV	22.40 ft	150.00 ml/min

Samples

Sample ID:	Description:
YGWA-5D	Collected at 1038. 55F overcast.

Low-Flow Test Report:

Test Date / Time: 2/12/2020 11:25:09 AM
Project: Plant Yates - AP 3
Operator Name: O. Fuquea

Location Name: YGWA-5I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 48.5 ft** **Total Depth: 58.5 ft** **Initial Depth to Water: 18.02 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 53.5 ft** **Estimated Total Volume Pumped: 6.0 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 4 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714344**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/12/2020 11:25 AM	00:00	5.90 pH	16.16 °C	79.27 µS/cm	4.98 mg/L		47.8 mV	18.02 ft	200.00 ml/min
2/12/2020 11:30 AM	05:00	5.87 pH	16.36 °C	78.18 µS/cm	5.14 mg/L	1.44 NTU	50.7 mV	18.30 ft	200.00 ml/min
2/12/2020 11:35 AM	10:00	5.85 pH	16.42 °C	78.47 µS/cm	5.24 mg/L	1.24 NTU	54.5 mV	18.40 ft	200.00 ml/min
2/12/2020 11:40 AM	15:00	5.84 pH	16.46 °C	79.59 µS/cm	5.45 mg/L	1.18 NTU	58.2 mV	18.40 ft	200.00 ml/min
2/12/2020 11:45 AM	20:00	5.84 pH	16.51 °C	80.61 µS/cm	5.66 mg/L	0.85 NTU	61.7 mV	18.40 ft	200.00 ml/min
2/12/2020 11:50 AM	25:00	5.83 pH	16.56 °C	81.01 µS/cm	5.77 mg/L	1.96 NTU	64.3 mV	18.40 ft	200.00 ml/min
2/12/2020 11:55 AM	30:00	5.83 pH	16.59 °C	81.04 µS/cm	5.83 mg/L	2.22 NTU	66.0 mV	18.40 ft	200.00 ml/min

Samples

Sample ID:	Description:
YGWA-5I	Collected at 1155. 62F overcast.

Low-Flow Test Report:

Test Date / Time: 2/11/2020 10:44:10 AM
Project: Plant Yates - AP 3
Operator Name: O. Fuquea

Location Name: YGWA-17S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 29.91 ft** **Total Depth: 39.91 ft** **Initial Depth to Water: 10.32 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 34.91 ft** **Estimated Total Volume Pumped: 7.1 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 2 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714344**

Test Notes:
Starting WL: 10.31

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/11/2020 10:44 AM	00:00	5.58 pH	17.94 °C	76.32 µS/cm	2.85 mg/L		133.1 mV	33.86 ft	200.00 ml/min
2/11/2020 10:49 AM	05:00	5.57 pH	17.89 °C	74.44 µS/cm	1.76 mg/L	4.74 NTU	111.1 mV	11.00 ft	200.00 ml/min
2/11/2020 10:54 AM	10:00	5.57 pH	18.16 °C	75.46 µS/cm	1.65 mg/L	6.56 NTU	103.4 mV	10.60 ft	200.00 ml/min
2/11/2020 10:54 AM	10:35	5.57 pH	18.16 °C	76.11 µS/cm	1.64 mg/L	8.06 NTU	132.7 mV	10.60 ft	200.00 ml/min
2/11/2020 10:59 AM	15:35	5.58 pH	18.08 °C	76.48 µS/cm	1.61 mg/L	6.51 NTU	98.0 mV	10.60 ft	200.00 ml/min
2/11/2020 11:04 AM	20:35	5.59 pH	18.09 °C	78.99 µS/cm	1.45 mg/L	7.94 NTU	94.6 mV	10.60 ft	200.00 ml/min
2/11/2020 11:09 AM	25:35	5.58 pH	18.16 °C	79.19 µS/cm	1.42 mg/L	8.12 NTU	93.1 mV	10.60 ft	200.00 ml/min
2/11/2020 11:14 AM	30:35	5.58 pH	18.19 °C	78.04 µS/cm	1.48 mg/L	5.25 NTU	92.0 mV	10.60 ft	200.00 ml/min
2/11/2020 11:19 AM	35:35	5.58 pH	18.21 °C	78.25 µS/cm	1.52 mg/L	4.76 NTU	133.5 mV	10.60 ft	200.00 ml/min

Samples

Sample ID:	Description:
YGWA-17S	Collected at 1121. 66F Rain.

Low-Flow Test Report:

Test Date / Time: 2/11/2020 1:21:12 PM
Project: Plant Yates - AP 3
Operator Name: O. Fuquea

Location Name: YGWA-18I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 69.76 ft** **Total Depth: 79.67 ft** **Initial Depth to Water: 22.41 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 74.67 ft** **Estimated Total Volume Pumped: 7.0** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 2 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714344**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/11/2020 1:21 PM	00:00	6.37 pH	17.62 °C	96.74 µS/cm	4.13 mg/L		90.3 mV	22.41 ft	200.00 ml/min
2/11/2020 1:26 PM	05:00	6.06 pH	17.22 °C	104.82 µS/cm	2.75 mg/L	2.82 NTU	72.6 mV	22.60 ft	200.00 ml/min
2/11/2020 1:31 PM	10:00	6.07 pH	17.20 °C	106.37 µS/cm	3.08 mg/L	2.21 NTU	72.7 mV	22.60 ft	200.00 ml/min
2/11/2020 1:36 PM	15:00	6.07 pH	17.19 °C	107.06 µS/cm	3.13 mg/L	1.64 NTU	72.5 mV	22.60 ft	200.00 ml/min
2/11/2020 1:41 PM	20:00	6.07 pH	17.14 °C	107.55 µS/cm	3.15 mg/L	1.49 NTU	72.1 mV	22.60 ft	200.00 ml/min
2/11/2020 1:46 PM	25:00	6.07 pH	17.12 °C	108.03 µS/cm	3.20 mg/L	1.76 NTU	72.1 mV	22.60 ft	200.00 ml/min
2/11/2020 1:51 PM	30:00	6.07 pH	17.13 °C	108.22 µS/cm	3.27 mg/L	1.61 NTU	72.2 mV	22.60 ft	200.00 ml/min
2/11/2020 1:56 PM	35:00	6.07 pH	17.13 °C	107.81 µS/cm	3.36 mg/L	1.29 NTU	72.2 mV	22.60 ft	200.00 ml/min

Samples

Sample ID:	Description:
YGWA-18I	Collected at 1356, 71F cloudy.

Low-Flow Test Report:

Test Date / Time: 2/11/2020 12:09:04 PM
Project: Plant Yates - AP 3
Operator Name: O. Fuquea

Location Name: YGWA-18S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 29.86 ft** **Total Depth: 39.86 ft** **Initial Depth to Water: 19.36 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 34.86 ft** **Estimated Total Volume Pumped: 4.5 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 12 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714344**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/11/2020 12:09 PM	00:00	5.51 pH	17.98 °C	56.25 µS/cm	6.09 mg/L		131.3 mV	19.36 ft	150.00 ml/min
2/11/2020 12:14 PM	05:00	5.32 pH	17.88 °C	57.23 µS/cm	2.86 mg/L	1.88 NTU	107.1 mV	20.20 ft	150.00 ml/min
2/11/2020 12:19 PM	10:00	5.31 pH	17.85 °C	57.13 µS/cm	2.35 mg/L	2.39 NTU	100.0 mV	20.30 ft	150.00 ml/min
2/11/2020 12:24 PM	15:00	5.30 pH	17.80 °C	57.27 µS/cm	2.00 mg/L	2.11 NTU	96.1 mV	20.30 ft	150.00 ml/min
2/11/2020 12:29 PM	20:00	5.30 pH	17.71 °C	57.30 µS/cm	1.89 mg/L	2.63 NTU	94.3 mV	20.40 ft	150.00 ml/min
2/11/2020 12:34 PM	25:00	5.30 pH	17.68 °C	57.33 µS/cm	1.85 mg/L	3.16 NTU	91.9 mV	20.40 ft	150.00 ml/min
2/11/2020 12:39 PM	30:00	5.30 pH	17.72 °C	57.38 µS/cm	1.84 mg/L	2.57 NTU	90.4 mV	20.40 ft	150.00 ml/min

Samples

Sample ID:	Description:
YGWA-18S	Collected at 1239. 71F light rain.

Low-Flow Test Report:

Test Date / Time: 2/12/2020 1:16:33 PM
Project: Plant Yates - AP3
Operator Name: Hunter Auld

Location Name: YGWA-20S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 19 ft** **Total Depth: 29.71 ft** **Initial Depth to Water: 10.75 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 24 ft** **Estimated Total Volume Pumped: 6.3 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 180 ml/min** **Final Draw Down: 11.4 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sampled at 1345 on 2-12-20.

Weather Conditions:
Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/12/2020 1:16 PM	00:00	6.03 pH	17.63 °C	45.88 µS/cm	7.00 mg/L		74.6 mV	10.75 ft	180.00 ml/min
2/12/2020 1:21 PM	05:00	6.02 pH	17.28 °C	46.14 µS/cm	7.00 mg/L	3.90 NTU	82.6 mV	11.60 ft	180.00 ml/min
2/12/2020 1:26 PM	10:00	6.01 pH	17.18 °C	46.06 µS/cm	6.99 mg/L	3.80 NTU	87.9 mV	11.60 ft	180.00 ml/min
2/12/2020 1:31 PM	15:00	6.01 pH	17.11 °C	46.01 µS/cm	6.99 mg/L	3.10 NTU	92.5 mV	11.60 ft	180.00 ml/min
2/12/2020 1:36 PM	20:00	6.00 pH	17.15 °C	46.26 µS/cm	6.92 mg/L	3.20 NTU	96.3 mV	11.70 ft	180.00 ml/min
2/12/2020 1:41 PM	25:00	6.00 pH	17.16 °C	45.84 µS/cm	6.88 mg/L	2.80 NTU	99.2 mV	11.70 ft	180.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/12/2020 2:16:48 PM
Project: Plant Yates - AP3
Operator Name: Hunter Auld

Location Name: YGWA-21I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 70 ft** **Total Depth: 80.07 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 75 ft** **Estimated Total Volume Pumped: 4.2 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 140 ml/min**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sampled at 1445 on 2-12-20. Extra rad here. Transducer in well.

Weather Conditions:
Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/12/2020 2:16 PM	00:00	7.06 pH	18.70 °C	114.37 µS/cm	6.52 mg/L		96.6 mV		140.00 ml/min
2/12/2020 2:21 PM	05:00	6.59 pH	18.23 °C	162.96 µS/cm	0.80 mg/L	1.20 NTU	36.4 mV		140.00 ml/min
2/12/2020 2:26 PM	10:00	6.90 pH	18.20 °C	180.84 µS/cm	0.37 mg/L	0.70 NTU	-33.4 mV		140.00 ml/min
2/12/2020 2:31 PM	15:00	7.04 pH	18.13 °C	184.48 µS/cm	0.28 mg/L	0.75 NTU	-71.2 mV		140.00 ml/min
2/12/2020 2:36 PM	20:00	7.11 pH	18.12 °C	186.93 µS/cm	0.21 mg/L	0.80 NTU	-96.5 mV		140.00 ml/min
2/12/2020 2:41 PM	25:00	7.13 pH	18.29 °C	181.90 µS/cm	0.18 mg/L	0.75 NTU	-109.0 mV		140.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/12/2020 11:44:45 AM
Project: Plant Yates - R6
Operator Name: Hunter Auld

Location Name: YGWA-39 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 58 ft** **Total Depth: 68.5 ft** **Initial Depth to Water: 23.45 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 10 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 4.2 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sampled at 1220 on 2-12-20.

Weather Conditions:
Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/12/2020 11:44 AM	00:00	6.34 pH	17.19 °C	83.38 µS/cm	3.55 mg/L		117.6 mV	23.45 ft	250.00 ml/min
2/12/2020 11:49 AM	05:00	5.98 pH	17.86 °C	108.50 µS/cm	0.78 mg/L	0.80 NTU	91.2 mV	23.70 ft	250.00 ml/min
2/12/2020 11:53 AM	08:52	5.99 pH	17.95 °C	109.63 µS/cm	0.42 mg/L	0.80 NTU	84.0 mV	23.70 ft	250.00 ml/min
2/12/2020 11:58 AM	13:52	5.99 pH	17.99 °C	106.41 µS/cm	0.32 mg/L	0.70 NTU	79.4 mV	23.70 ft	250.00 ml/min
2/12/2020 12:03 PM	18:52	5.99 pH	17.98 °C	101.61 µS/cm	0.19 mg/L	0.60 NTU	76.8 mV	23.80 ft	250.00 ml/min
2/12/2020 12:08 PM	23:52	5.98 pH	18.00 °C	98.86 µS/cm	0.15 mg/L	0.60 NTU	75.5 mV	23.80 ft	250.00 ml/min
2/12/2020 12:13 PM	28:52	5.97 pH	17.98 °C	96.22 µS/cm	0.14 mg/L	0.60 NTU	75.0 mV	23.80 ft	250.00 ml/min
2/12/2020 12:18 PM	33:52	5.97 pH	17.99 °C	94.54 µS/cm	0.14 mg/L	0.70 NTU	74.8 mV	23.80 ft	250.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/12/2020 10:14:58 AM
Project: Plant Yates - R6
Operator Name: Hunter Auld

Location Name: YGWA-40 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38 ft** **Total Depth: 48.35 ft** **Initial Depth to Water: 24.1 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 43 ft** **Estimated Total Volume Pumped: 4.2 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 4.8 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sampled at 1042 on 2-12-20.

Weather Conditions:
Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/12/2020 10:14 AM	00:00	5.31 pH	16.70 °C	89.99 µS/cm	5.99 mg/L		156.2 mV	24.10 ft	100.00 ml/min
2/12/2020 10:19 AM	05:00	5.30 pH	17.12 °C	82.47 µS/cm	5.56 mg/L	0.90 NTU	171.3 mV	24.40 ft	100.00 ml/min
2/12/2020 10:24 AM	10:00	5.30 pH	17.15 °C	82.36 µS/cm	5.54 mg/L	0.70 NTU	133.4 mV	24.40 ft	100.00 ml/min
2/12/2020 10:29 AM	15:00	5.30 pH	17.19 °C	82.92 µS/cm	5.52 mg/L	0.70 NTU	132.5 mV	24.40 ft	100.00 ml/min
2/12/2020 10:34 AM	20:00	5.30 pH	17.19 °C	83.42 µS/cm	5.53 mg/L	0.65 NTU	132.1 mV	24.50 ft	100.00 ml/min
2/12/2020 10:39 AM	25:00	5.30 pH	17.20 °C	83.28 µS/cm	5.53 mg/L	0.50 NTU	131.2 mV	24.50 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/17/2020 12:51:11 PM
Project: Plant Yates
Operator Name: C Parker

Location Name: YGWC-23S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 29.2 ft** **Total Depth: 39.18 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 34.2 ft** **Estimated Total Volume Pumped: 5.2 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714302**

Test Notes:
Sampled at 13:20. Cloudy 50s. Transducer in well - can not get DTW.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 0.5	+/- 100	
2/17/2020 12:51 PM	00:00	5.87 pH	16.97 °C	118.61 µS/cm	8.35 mg/L	3.60 NTU	100.6 mV	150.00 ml/min
2/17/2020 12:56 PM	05:00	5.85 pH	17.00 °C	120.55 µS/cm	8.24 mg/L	4.13 NTU	89.3 mV	200.00 ml/min
2/17/2020 1:01 PM	10:00	5.85 pH	17.04 °C	119.34 µS/cm	8.19 mg/L	3.98 NTU	84.8 mV	200.00 ml/min
2/17/2020 1:06 PM	15:00	5.84 pH	17.01 °C	119.14 µS/cm	8.25 mg/L	4.17 NTU	83.6 mV	200.00 ml/min
2/17/2020 1:11 PM	20:00	5.84 pH	17.09 °C	118.31 µS/cm	8.23 mg/L	2.97 NTU	82.3 mV	200.00 ml/min
2/17/2020 1:16 PM	25:00	5.84 pH	17.09 °C	117.78 µS/cm	8.23 mg/L	2.07 NTU	81.2 mV	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/13/2020 2:26:04 PM
Project: Plant Yates - AP 3
Operator Name: Hunter Auld

Location Name: YGWC-24S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 47 ft** **Total Depth: 57.01 ft** **Initial Depth to Water: 27.53 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 52 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 8.04 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sampled at 1453 on 2-13-20. Dup-2 here.

Weather Conditions:
Cloudy, 50s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/13/2020 2:26 PM	00:00	5.86 pH	17.46 °C	48.20 µS/cm	6.36 mg/L		87.3 mV	27.53 ft	200.00 ml/min
2/13/2020 2:31 PM	05:00	5.70 pH	17.50 °C	46.89 µS/cm	6.20 mg/L	0.60 NTU	90.4 mV	28.20 ft	200.00 ml/min
2/13/2020 2:36 PM	10:00	5.67 pH	17.37 °C	47.18 µS/cm	6.18 mg/L	0.50 NTU	136.4 mV	28.20 ft	200.00 ml/min
2/13/2020 2:41 PM	15:00	5.67 pH	17.28 °C	46.96 µS/cm	6.25 mg/L	0.50 NTU	95.0 mV	28.20 ft	200.00 ml/min
2/13/2020 2:46 PM	20:00	5.69 pH	17.21 °C	46.82 µS/cm	6.28 mg/L	0.50 NTU	96.0 mV	28.20 ft	200.00 ml/min
2/13/2020 2:51 PM	25:00	5.69 pH	17.15 °C	47.49 µS/cm	6.40 mg/L	0.50 NTU	96.8 mV	28.20 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/14/2020 11:12:56 AM
Project: Plant Yates - AP 3
Operator Name: Hunter Auld

Location Name: YGWC-33S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28.7 ft** **Total Depth: 38.73 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 33 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sampled at 1140 on 2-14-20. Transducer in well.

Weather Conditions:
Sunny, 40s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/14/2020 11:12 AM	00:00	3.82 pH	14.45 °C	964.03 µS/cm	7.20 mg/L		159.3 mV		200.00 ml/min
2/14/2020 11:17 AM	05:00	3.75 pH	17.28 °C	889.94 µS/cm	1.41 mg/L	1.80 NTU	169.4 mV		200.00 ml/min
2/14/2020 11:22 AM	10:00	3.76 pH	18.02 °C	879.22 µS/cm	0.89 mg/L	2.50 NTU	286.3 mV		200.00 ml/min
2/14/2020 11:27 AM	15:00	3.76 pH	17.99 °C	871.15 µS/cm	0.41 mg/L	2.70 NTU	295.0 mV		200.00 ml/min
2/14/2020 11:32 AM	20:00	3.76 pH	18.08 °C	867.23 µS/cm	0.25 mg/L	2.20 NTU	175.6 mV		200.00 ml/min
2/14/2020 11:37 AM	25:00	3.76 pH	18.19 °C	867.95 µS/cm	0.21 mg/L	1.80 NTU	174.5 mV		200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/14/2020 11:19:57 AM
Project: Plant Yates - AMA / R6
Operator Name: Anna Schnittker

Location Name: YGWC-36 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 50 ft** **Total Depth: 60 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 55 ft** **Estimated Total Volume Pumped: 5.4 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 180 ml/min**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714302**

Test Notes:
Sample time: 1155

Weather Conditions:
Sunny 40s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 100	+/- 100	+/- 0.3	
2/14/2020 11:19 AM	00:00	5.88 pH	17.76 °C	207.70 µS/cm	4.73 mg/L	2.10 NTU	53.4 mV		180.00 ml/min
2/14/2020 11:24 AM	05:00	5.79 pH	16.83 °C	192.30 µS/cm	4.30 mg/L	1.70 NTU	28.1 mV		180.00 ml/min
2/14/2020 11:29 AM	10:00	5.72 pH	16.65 °C	170.57 µS/cm	4.32 mg/L	1.40 NTU	27.0 mV		180.00 ml/min
2/14/2020 11:34 AM	15:00	5.71 pH	16.75 °C	167.92 µS/cm	4.18 mg/L	1.30 NTU	12.5 mV		180.00 ml/min
2/14/2020 11:39 AM	19:12	5.71 pH	16.76 °C	167.67 µS/cm	4.02 mg/L	1.30 NTU	49.0 mV		180.00 ml/min
2/14/2020 11:40 AM	20:03	5.71 pH	16.78 °C	167.65 µS/cm	4.00 mg/L	1.40 NTU	29.9 mV		180.00 ml/min
2/14/2020 11:45 AM	25:03	5.71 pH	16.83 °C	166.48 µS/cm	3.82 mg/L	1.50 NTU	79.7 mV		180.00 ml/min
2/14/2020 11:50 AM	30:03	5.71 pH	17.07 °C	166.66 µS/cm	3.71 mg/L	1.40 NTU	80.5 mV		180.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/14/2020 12:57:02 PM
Project: Plant Yates - AP 3
Operator Name: Hunter Auld

Location Name: YGWC-38 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 40 ft** **Total Depth: 50.12 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 45 ft** **Estimated Total Volume Pumped: 3.9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sampled at 1325 on 2-14-20. Transducer in well.

Weather Conditions:
Sunny, 40s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/14/2020 12:57 PM	00:00	5.10 pH	15.85 °C	1,000.6 µS/cm	5.21 mg/L		158.0 mV		130.00 ml/min
2/14/2020 1:02 PM	05:00	4.86 pH	16.02 °C	926.33 µS/cm	2.94 mg/L	1.20 NTU	136.1 mV		130.00 ml/min
2/14/2020 1:07 PM	10:00	4.84 pH	16.05 °C	919.72 µS/cm	2.74 mg/L	1.80 NTU	207.6 mV		130.00 ml/min
2/14/2020 1:12 PM	15:00	4.83 pH	15.98 °C	916.75 µS/cm	2.63 mg/L	1.00 NTU	123.8 mV		130.00 ml/min
2/14/2020 1:17 PM	20:00	4.84 pH	15.98 °C	921.39 µS/cm	2.66 mg/L	0.80 NTU	190.5 mV		130.00 ml/min
2/14/2020 1:22 PM	25:00	4.84 pH	16.35 °C	919.89 µS/cm	2.66 mg/L	0.90 NTU	186.6 mV		130.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/14/2020 9:33:36 AM
Project: Plant Yates - R6
Operator Name: Hunter Auld

Location Name: YGWC-41 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57 ft** **Total Depth: 67.7 ft** **Initial Depth to Water: 27.73 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 62 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 140 ml/min** **Final Draw Down: 9.2 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sampled at 1000 on 2-14-20.

Weather Conditions:
Sunny, 40s.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/14/2020 9:33 AM	00:00	4.87 pH	13.82 °C	490.48 µS/cm	3.64 mg/L		167.2 mV	27.73 ft	140.00 ml/min
2/14/2020 9:38 AM	05:00	4.84 pH	15.31 °C	467.10 µS/cm	2.99 mg/L	0.80 NTU	195.6 mV	28.50 ft	140.00 ml/min
2/14/2020 9:43 AM	10:00	4.83 pH	15.29 °C	476.67 µS/cm	2.70 mg/L	0.40 NTU	117.4 mV	28.50 ft	140.00 ml/min
2/14/2020 9:48 AM	15:00	4.83 pH	15.46 °C	476.58 µS/cm	2.75 mg/L	0.50 NTU	114.7 mV	28.50 ft	140.00 ml/min
2/14/2020 9:53 AM	20:00	4.83 pH	16.33 °C	475.00 µS/cm	2.67 mg/L	0.50 NTU	112.9 mV	28.50 ft	140.00 ml/min
2/14/2020 9:58 AM	25:00	4.84 pH	16.16 °C	474.79 µS/cm	2.67 mg/L	0.50 NTU	110.4 mV	28.50 ft	140.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/14/2020 9:49:40 AM
Project: Plant Yates - AMA / R6
Operator Name: Anna Schnittker

Location Name: YGWC-42 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 50 ft** **Total Depth: 60 ft** **Initial Depth to Water: 27.35 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 55 ft** **Estimated Total Volume Pumped: 5.3 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 35 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714302**

Test Notes:
Sample time: 1030

Weather Conditions:
Sunny 40s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 100	+/- 100	+/- 0.3	
2/14/2020 9:49 AM	00:00	5.85 pH	16.31 °C	1,182.3 µS/cm	0.83 mg/L	1.80 NTU	77.7 mV	28.0 ft	150.00 ml/min
2/14/2020 9:54 AM	05:00	5.85 pH	15.55 °C	1,190.2 µS/cm	0.75 mg/L	1.70 NTU	101.8 mV	29.0 ft	150.00 ml/min
2/14/2020 9:59 AM	10:00	5.83 pH	15.34 °C	1,218.6 µS/cm	0.80 mg/L	1.30 NTU	98.0 mV	30.30 ft	150.00 ml/min
2/14/2020 10:04 AM	15:00	5.84 pH	15.21 °C	1,215.4 µS/cm	0.76 mg/L	0.70 NTU	38.0 mV	30.30 ft	150.00 ml/min
2/14/2020 10:05 AM	15:24	5.84 pH	15.20 °C	1,213.9 µS/cm	0.75 mg/L	0.60 NTU	67.1 mV	30.30 ft	150.00 ml/min
2/14/2020 10:10 AM	20:24	5.83 pH	15.02 °C	1,229.8 µS/cm	0.77 mg/L	0.70 NTU	27.5 mV	30.30 ft	150.00 ml/min
2/14/2020 10:15 AM	25:24	5.82 pH	14.94 °C	1,239.1 µS/cm	0.82 mg/L	0.70 NTU	74.6 mV	30.30 ft	150.00 ml/min
2/14/2020 10:20 AM	30:24	5.80 pH	14.76 °C	1,253.9 µS/cm	0.88 mg/L	0.80 NTU	73.2 mV	30.30 ft	150.00 ml/min
2/14/2020 10:25 AM	35:24	5.80 pH	14.80 °C	1,261.2 µS/cm	0.90 mg/L	0.70 NTU	16.7 mV	30.30 ft	150.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/17/2020 11:30:52 AM
Project: Plant Yates
Operator Name: C Parker

Location Name: YGWC-43 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 70 ft** **Total Depth: 80 ft** **Initial Depth to Water: 14.45 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 75 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 220 ml/min Final Draw Down: 2 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714302**

Test Notes:
Sampled at 12:00. Cloudy 50s. EB-2 here at 11:50- tubing.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 0.5	+/- 100	+/- 10	
2/17/2020 11:30 AM	00:00	5.82 pH	16.26 °C	518.37 µS/cm	0.26 mg/L	3.49 NTU	-0.8 mV	14.45 ft	150.00 ml/min
2/17/2020 11:35 AM	05:00	5.87 pH	16.51 °C	505.49 µS/cm	0.19 mg/L	2.91 NTU	-4.0 mV	14.60 ft	220.00 ml/min
2/17/2020 11:40 AM	10:00	5.90 pH	16.58 °C	497.16 µS/cm	0.15 mg/L	3.06 NTU	-11.2 mV	14.60 ft	220.00 ml/min
2/17/2020 11:45 AM	15:00	5.92 pH	16.63 °C	495.52 µS/cm	0.14 mg/L	2.36 NTU	-13.8 mV	14.60 ft	220.00 ml/min
2/17/2020 11:50 AM	20:00	5.92 pH	16.64 °C	497.98 µS/cm	0.14 mg/L	2.11 NTU	-13.0 mV	14.70 ft	220.00 ml/min
2/17/2020 11:55 AM	25:00	5.93 pH	16.69 °C	497.98 µS/cm	0.15 mg/L	1.35 NTU	-11.3 mV	14.70 ft	220.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/17/2020 1:55:26 PM
Project: Plant Yates
Operator Name: C Parker

Location Name: YGWC-49 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 69 ft** **Total Depth: 79 ft** **Initial Depth to Water: 31.42 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 74 m** **Estimated Total Volume Pumped: 5.1 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 6 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714302**

Test Notes:
Sampled at 14:30. Cloudy 50s.

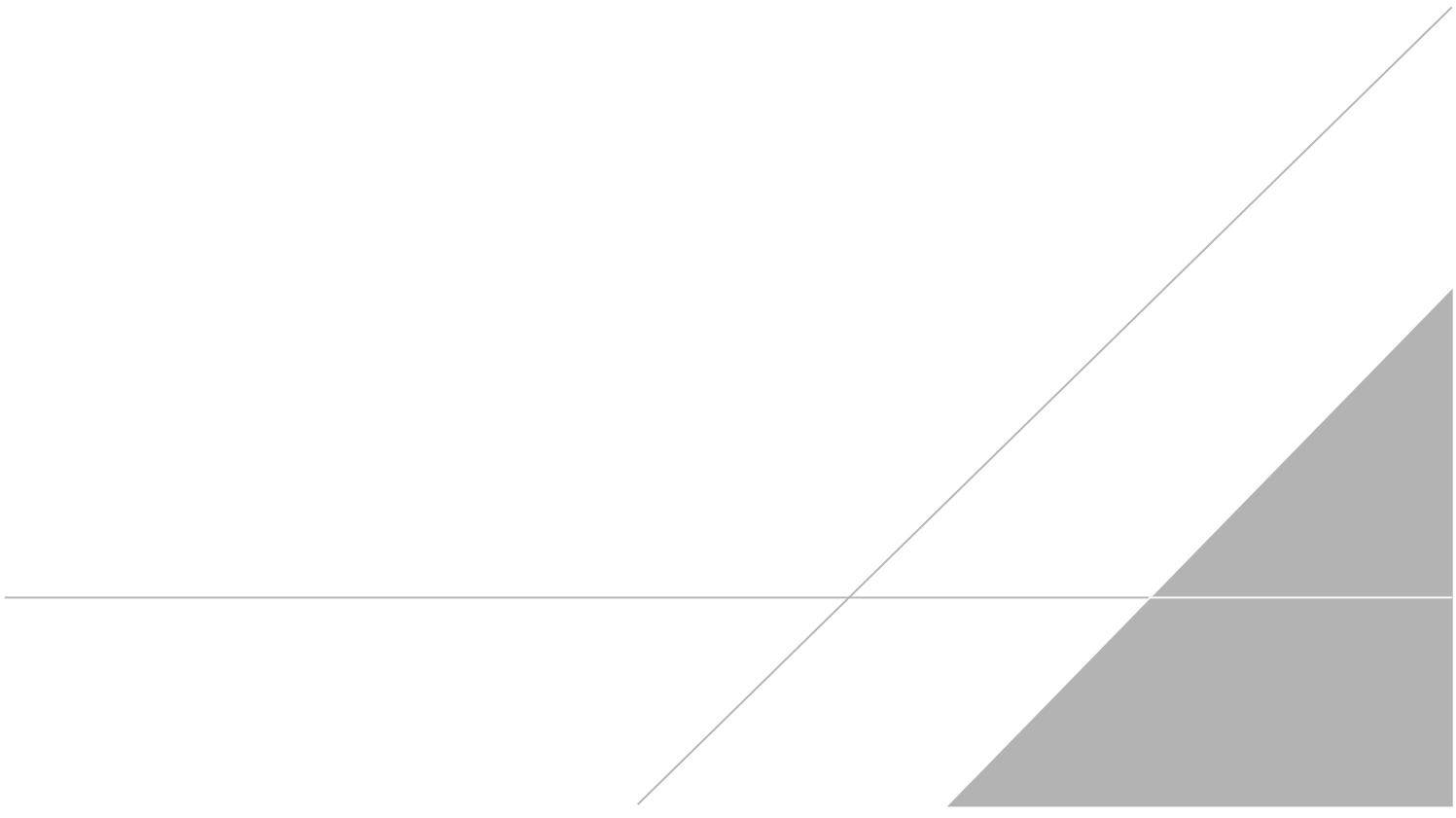
Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 0.5	+/- 100	+/- 5	
2/17/2020 1:55 PM	00:00	6.19 pH	16.06 °C	238.75 µS/cm	3.05 mg/L	8.09 NTU	29.9 mV	31.42 ft	150.00 ml/min
2/17/2020 1:59 PM	04:32	5.90 pH	16.73 °C	239.46 µS/cm	4.03 mg/L	7.45 NTU	82.2 mV	31.70 ft	160.00 ml/min
2/17/2020 2:04 PM	09:32	5.85 pH	16.91 °C	238.89 µS/cm	3.26 mg/L	4.59 NTU	61.3 mV	31.70 ft	160.00 ml/min
2/17/2020 2:09 PM	14:32	5.83 pH	16.99 °C	237.16 µS/cm	2.82 mg/L	4.40 NTU	95.7 mV	31.80 ft	160.00 ml/min
2/17/2020 2:14 PM	19:32	5.83 pH	17.00 °C	237.23 µS/cm	2.62 mg/L	4.16 NTU	61.1 mV	31.80 ft	160.00 ml/min
2/17/2020 2:19 PM	24:32	5.82 pH	17.00 °C	237.04 µS/cm	2.52 mg/L	4.04 NTU	94.1 mV	31.90 ft	160.00 ml/min
2/17/2020 2:24 PM	29:32	5.82 pH	16.95 °C	237.52 µS/cm	2.47 mg/L	3.76 NTU	60.1 mV	31.90 ft	160.00 ml/min

Samples

Sample ID:	Description:

March 2020



Product Name: Low-Flow System

Date: 2020-03-25 10:27:25

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates	Tubing Diameter	.25 in
Site Name	Plant Yates - Ash Pond 3	Tubing Length	49 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	44 ft

Well Information:		Pumping Information:	
Well ID	YGWA-4I	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	0.8629838 L
Well Total Depth	49.70 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	12 in
Depth to Water	18.66 ft	Total Volume Pumped	4.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 25
Last 5	10:06:45	1500.04	15.97	6.36	166.78	3.34	19.70	1.67	89.93
Last 5	10:11:45	1800.04	16.02	6.30	167.04	3.23	19.70	1.52	86.45
Last 5	10:16:45	2100.04	15.97	6.30	166.19	3.19	19.70	1.42	84.18
Last 5	10:21:45	2400.04	15.97	6.28	166.33	2.02	19.70	1.35	82.38
Last 5	10:26:45	2700.04	16.07	6.26	166.16	1.98	19.70	1.31	80.86
Variance 0			-0.05	-0.01	-0.85			-0.10	-2.28
Variance 1			-0.00	-0.02	0.15			-0.07	-1.80
Variance 2			0.10	-0.02	-0.18			-0.05	-1.51

Notes

Sampled at 10:26. Sunny, 60’s.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-24 12:05:34

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates	Tubing Diameter	.25 in
Site Name	Plant Yates - Ash Pond 3	Tubing Length	111 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	106 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	1.461453 L
Well Total Depth	131.60 ft	Calculated Sample Rate	300 sec
Screen Length	50 ft	Stabilization Drawdown	4 in
Depth to Water	21.95 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 25
Last 5	11:44:42	1500.04	17.35	7.38	214.95	5.18	22.30	0.53	-29.56
Last 5	11:49:42	1800.04	17.31	7.37	212.14	3.55	22.30	0.42	-23.83
Last 5	11:54:42	2100.04	17.31	7.36	210.51	3.13	22.30	0.33	-20.77
Last 5	11:59:42	2400.04	17.27	7.35	209.51	2.74	22.30	0.29	-18.22
Last 5	12:04:42	2700.04	17.18	7.34	209.01	2.83	22.30	0.28	-16.14
Variance 0			0.00	-0.01	-1.64			-0.09	3.05
Variance 1			-0.05	-0.01	-0.99			-0.04	2.55
Variance 2			-0.09	-0.01	-0.51			-0.01	2.08

Notes

Sampled at 12:04. Cloudy, 60’s.

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-24 14:15:48

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates	Tubing Diameter	.25 in
Site Name	Plant Yates - Ash Pond 3	Tubing Length	58.50 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	53.50 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.9546848 L
Well Total Depth	58.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1 in
Depth to Water	14.95 ft	Total Volume Pumped	14.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 25
Last 5	13:54:45	3612.04	17.04	5.82	86.95	8.47	15.00	5.89	86.74
Last 5	13:59:45	3912.05	17.05	5.82	86.83	6.35	15.00	5.91	86.55
Last 5	14:04:45	4212.05	17.05	5.82	87.34	6.67	15.00	5.91	87.55
Last 5	14:09:45	4512.05	17.11	5.82	86.73	6.13	15.00	5.89	87.62
Last 5	14:14:45	4812.05	17.22	5.81	86.86	4.90	15.00	5.90	88.48
Variance 0			-0.00	-0.01	0.51			0.00	0.99
Variance 1			0.06	0.01	-0.61			-0.02	0.08
Variance 2			0.11	-0.01	0.13			0.01	0.86

Notes

Sampled at 14:14. Sunny. 70s

Grab Samples

Low-Flow Test Report:

Test Date / Time: 3/24/2020 9:51:53 AM
Project: Plant Yates - AP 3
Operator Name: Anna Schnittker

Location Name: YGWA-17S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 30 ft** **Total Depth: 39.91 ft** **Initial Depth to Water: 9.94 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 35 ft** **Estimated Total Volume Pumped: 7.8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 6 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
Sample time: 10:40
Weather: raining 60s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/24/2020 9:51 AM	00:00	5.50 pH	17.05 °C	66.27 µS/cm	3.17 mg/L		97.9 mV	9.94 ft	200.00 ml/min
3/24/2020 9:56 AM	05:00	5.51 pH	17.15 °C	67.67 µS/cm	2.56 mg/L	9.80 NTU	96.8 mV	10.40 ft	200.00 ml/min
3/24/2020 10:02 AM	10:29	5.53 pH	17.19 °C	68.50 µS/cm	2.37 mg/L	8.70 NTU	95.5 mV	10.40 ft	200.00 ml/min
3/24/2020 10:03 AM	11:40	5.54 pH	17.23 °C	67.95 µS/cm	2.37 mg/L	8.20 NTU	95.1 mV	10.40 ft	200.00 ml/min
3/24/2020 10:08 AM	16:40	5.55 pH	17.12 °C	68.31 µS/cm	2.36 mg/L	7.00 NTU	95.2 mV	10.40 ft	200.00 ml/min
3/24/2020 10:11 AM	19:18	5.53 pH	17.10 °C	68.30 µS/cm	2.34 mg/L	7.00 NTU	96.3 mV	10.40 ft	200.00 ml/min
3/24/2020 10:16 AM	24:18	5.56 pH	17.10 °C	68.99 µS/cm	2.30 mg/L	7.00 NTU	95.1 mV	10.40 ft	200.00 ml/min
3/24/2020 10:21 AM	29:18	5.55 pH	17.15 °C	69.07 µS/cm	2.33 mg/L	6.00 NTU	95.6 mV	10.40 ft	200.00 ml/min
3/24/2020 10:26 AM	34:18	5.57 pH	17.19 °C	69.70 µS/cm	2.34 mg/L	5.70 NTU	96.3 mV	10.40 ft	200.00 ml/min
3/24/2020 10:31 AM	39:18	5.57 pH	17.28 °C	69.25 µS/cm	2.34 mg/L	4.60 NTU	95.5 mV	10.40 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 3/24/2020 11:36:15 AM
Project: Plant Yates - AP 3
Operator Name: Anna Schnittker

Location Name: YGWA-18I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 70 ft** **Total Depth: 79.67 ft** **Initial Depth to Water: 19.8 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 75 ft** **Estimated Total Volume Pumped: 5.7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 6 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
SAMPLE TIME: 12:10
Weather: Cloudy 60s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/24/2020 11:36 AM	00:00	6.07 pH	17.01 °C	93.10 µS/cm	3.56 mg/L		119.6 mV	19.80 ft	200.00 ml/min
3/24/2020 11:41 AM	05:00	5.98 pH	16.84 °C	94.28 µS/cm	3.53 mg/L	6.60 NTU	115.2 mV	20.30 ft	200.00 ml/min
3/24/2020 11:46 AM	10:00	5.97 pH	16.88 °C	94.13 µS/cm	3.55 mg/L	5.80 NTU	114.6 mV	20.30 ft	200.00 ml/min
3/24/2020 11:49 AM	13:40	5.97 pH	16.85 °C	94.10 µS/cm	3.56 mg/L	5.40 NTU	114.2 mV	20.30 ft	200.00 ml/min
3/24/2020 11:54 AM	18:40	5.98 pH	16.83 °C	95.03 µS/cm	3.61 mg/L	4.00 NTU	111.5 mV	20.30 ft	200.00 ml/min
3/24/2020 11:59 AM	23:40	5.96 pH	16.83 °C	95.29 µS/cm	3.66 mg/L	3.70 NTU	112.1 mV	20.30 ft	200.00 ml/min
3/24/2020 12:04 PM	28:40	5.98 pH	16.83 °C	95.12 µS/cm	3.67 mg/L	3.50 NTU	110.6 mV	20.30 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 3/24/2020 1:04:13 PM
Project: Plant Yates - AP 3
Operator Name: Anna Schnittker

Location Name: YGWA-18S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 30 ft** **Total Depth: 39.86 ft** **Initial Depth to Water: 16.08 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 35 ft** **Estimated Total Volume Pumped: 12 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 9 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
SAMPLE TIME: 14:30
Weather: Cloudy 60s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/24/2020 1:04 PM	00:00	5.46 pH	18.44 °C	51.89 µS/cm	5.72 mg/L		116.6 mV	16.08 ft	150.00 ml/min
3/24/2020 1:09 PM	05:00	5.37 pH	17.72 °C	50.52 µS/cm	4.11 mg/L	15.60 NTU	113.6 mV	16.80 ft	150.00 ml/min
3/24/2020 1:14 PM	10:00	5.35 pH	17.55 °C	50.90 µS/cm	3.94 mg/L	11.80 NTU	113.4 mV	16.80 ft	150.00 ml/min
3/24/2020 1:19 PM	15:00	5.34 pH	17.50 °C	50.82 µS/cm	3.65 mg/L	12.00 NTU	113.0 mV	16.80 ft	150.00 ml/min
3/24/2020 1:24 PM	20:00	5.33 pH	17.82 °C	50.83 µS/cm	3.42 mg/L	11.10 NTU	112.3 mV	16.80 ft	150.00 ml/min
3/24/2020 1:29 PM	25:00	5.32 pH	18.79 °C	50.69 µS/cm	3.28 mg/L	9.20 NTU	111.2 mV	16.80 ft	150.00 ml/min
3/24/2020 1:34 PM	30:00	5.32 pH	18.84 °C	50.59 µS/cm	3.20 mg/L	8.50 NTU	110.7 mV	16.80 ft	150.00 ml/min
3/24/2020 1:39 PM	35:00	5.33 pH	18.46 °C	50.66 µS/cm	3.16 mg/L	8.30 NTU	110.4 mV	16.80 ft	150.00 ml/min
3/24/2020 1:44 PM	40:00	5.32 pH	19.15 °C	50.77 µS/cm	3.12 mg/L	7.60 NTU	109.7 mV	16.80 ft	150.00 ml/min
3/24/2020 1:49 PM	45:00	5.33 pH	18.39 °C	50.55 µS/cm	3.06 mg/L	6.60 NTU	109.8 mV	16.80 ft	150.00 ml/min
3/24/2020 1:54 PM	50:00	5.33 pH	17.97 °C	50.76 µS/cm	3.06 mg/L	6.30 NTU	109.7 mV	16.80 ft	150.00 ml/min
3/24/2020 1:59 PM	55:00	5.33 pH	17.85 °C	50.84 µS/cm	3.03 mg/L	5.80 NTU	109.5 mV	16.80 ft	150.00 ml/min
3/24/2020 2:04 PM	01:00:00	5.32 pH	18.50 °C	51.26 µS/cm	3.00 mg/L	5.20 NTU	110.6 mV	16.80 ft	150.00 ml/min
3/24/2020 2:09 PM	01:05:00	5.33 pH	19.02 °C	50.65 µS/cm	2.97 mg/L	5.10 NTU	108.6 mV	16.80 ft	150.00 ml/min
3/24/2020 2:14 PM	01:10:00	5.32 pH	18.86 °C	50.77 µS/cm	2.96 mg/L	5.40 NTU	108.6 mV	16.80 ft	150.00 ml/min

3/24/2020 2:19 PM	01:15:00	5.31 pH	18.71 °C	50.96 µS/cm	2.98 mg/L	5.10 NTU	108.2 mV	16.80 ft	150.00 ml/min
3/24/2020 2:24 PM	01:20:00	5.33 pH	18.54 °C	50.88 µS/cm	2.98 mg/L	3.80 NTU	108.0 mV	16.80 ft	150.00 ml/min

Samples

Sample ID:	Description:

Product Name: Low-Flow System

Date: 2020-03-24 11:41:16

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	30 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	25 ft

Well Information:		Pumping Information:	
Well ID	YGWA-20S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	12 in
Depth to Water	11.01 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	11:20:06	3900.00	16.75	5.85	58.44	7.10	12.06	7.20	87.12
Last 5	11:25:06	4200.00	16.82	5.85	58.34	6.60	12.11	7.20	88.37
Last 5	11:30:06	4500.00	16.82	5.86	58.29	5.80	12.15	7.19	89.35
Last 5	11:35:08	4802.00	16.82	5.86	58.28	5.10	12.19	7.15	90.75
Last 5	11:40:08	5102.00	16.83	5.86	58.22	4.40	12.24	7.21	92.00
Variance 0			0.00	0.01	-0.05			-0.01	0.98
Variance 1			-0.01	-0.00	-0.01			-0.04	1.39
Variance 2			0.01	0.00	-0.07			0.05	1.25

Notes

Sampled at 1140. Cloudy 66 degrees

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-24 12:56:14

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	80 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA-21I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.4470738 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	12:35:13	900.02	17.66	6.20	221.82	1.38	--	0.63	82.16
Last 5	12:40:13	1200.02	17.81	6.27	209.21	1.22	--	0.51	68.54
Last 5	12:45:13	1500.02	17.88	6.32	196.15	1.17	--	0.47	60.32
Last 5	12:50:13	1800.02	18.16	6.33	189.64	1.08	--	0.41	54.85
Last 5	12:55:13	2100.02	18.10	6.35	187.66	0.97	--	0.28	50.37
Variance 0			0.08	0.05	-13.06			-0.04	-8.22
Variance 1			0.28	0.02	-6.50			-0.06	-5.47
Variance 2			-0.06	0.01	-1.98			-0.13	-4.48

Notes

Sampled at 1255. Cloudy 68 degrees; Transducer in well - can not measure WL

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-25 10:06:21

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	69 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	64 ft

Well Information:		Pumping Information:	
Well ID	YGWA-39	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3979762 L
Well Total Depth	68.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	21.31 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	09:45:07	600.03	18.00	5.80	132.49	7.23	21.63	0.17	94.64
Last 5	09:50:07	900.02	18.03	5.77	131.15	4.44	21.69	0.10	92.12
Last 5	09:55:07	1200.02	18.00	5.78	126.58	2.82	21.77	0.10	90.92
Last 5	10:00:07	1500.02	18.00	5.78	124.39	2.56	21.83	0.10	90.26
Last 5	10:05:07	1800.02	17.90	5.78	123.21	2.22	21.90	0.10	90.05
Variance 0			-0.03	0.00	-4.56			-0.00	-1.20
Variance 1			0.00	0.00	-2.19			-0.00	-0.66
Variance 2			-0.10	-0.00	-1.18			0.00	-0.22

Notes

Sampled at 1005. Mostly cloudy 63 degrees

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-24 14:27:16

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	49 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	44 ft

Well Information:		Pumping Information:	
Well ID	YGWA-40	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.3087077 L
Well Total Depth	48.35 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	12 in
Depth to Water	21.73 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	14:06:32	600.02	18.62	5.47	103.26	5.54	22.45	5.93	56.66
Last 5	14:11:32	900.02	18.66	5.39	102.54	4.53	22.58	5.75	66.86
Last 5	14:16:32	1200.02	18.71	5.34	104.15	3.39	22.65	5.67	76.76
Last 5	14:21:32	1500.02	18.86	5.31	105.41	2.85	22.78	5.60	85.80
Last 5	14:26:32	1800.01	18.43	5.29	106.57	2.55	22.83	5.64	93.76
Variance 0			0.06	-0.05	1.61			-0.08	9.90
Variance 1			0.15	-0.04	1.26			-0.07	9.04
Variance 2			-0.43	-0.02	1.16			0.04	7.96

Notes

Sampled at 1426. Cloudy 72 degrees

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-26 11:03:50

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	39 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWC-23S	Final Pumping Rate	225 mL/min
Well diameter	2 in	Total System Volume	0.2640735 L
Well Total Depth	39.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	10:43:20	600.03	17.95	5.70	123.27	4.44	--	7.68	153.33
Last 5	10:48:20	900.02	18.01	5.69	123.68	3.02	--	7.68	212.37
Last 5	10:53:20	1200.02	18.07	5.70	123.69	2.75	--	7.68	372.64
Last 5	10:58:20	1500.02	18.17	5.69	122.96	2.49	--	7.69	448.30
Last 5	11:03:20	1800.02	18.17	5.69	123.17	1.55	--	7.69	504.49
Variance 0			0.06	0.00	0.01			-0.00	160.27
Variance 1			0.10	-0.00	-0.73			0.01	75.66
Variance 2			0.00	-0.00	0.21			0.01	56.19

Notes

Sampled at 1103. Sunny 61 degrees; Transducer in well - can not measure WL

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-26 12:19:24

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	57 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWC-24S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3444151 L
Well Total Depth	57.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	26.14 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	11:58:05	600.02	19.41	5.62	61.33	4.31	26.60	5.98	425.52
Last 5	12:03:05	900.02	19.45	5.59	61.06	3.84	26.66	5.91	437.87
Last 5	12:08:05	1200.02	19.58	5.57	60.72	3.65	26.74	5.81	452.56
Last 5	12:13:05	1500.02	19.59	5.57	60.61	2.10	26.80	5.79	470.14
Last 5	12:18:05	1800.02	19.62	5.57	60.92	1.65	26.88	5.78	493.84
Variance 0			0.12	-0.01	-0.34			-0.10	14.68
Variance 1			0.02	-0.00	-0.11			-0.02	17.58
Variance 2			0.02	-0.00	0.30			-0.01	23.70

Notes

Sampled at 1218. Sunny 70 degrees

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-25 12:47:57

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	39 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2640735 L
Well Total Depth	38.73 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	12:27:22	600.02	18.79	3.94	1046.09	1.70	--	1.16	142.67
Last 5	12:32:22	900.02	18.87	3.87	1040.14	1.55	--	0.93	173.80
Last 5	12:37:22	1200.02	18.85	3.86	1036.71	1.27	--	0.63	200.31
Last 5	12:42:22	1500.02	18.97	3.86	1033.72	1.23	--	0.43	223.15
Last 5	12:47:22	1800.02	19.06	3.86	1032.22	1.08	--	0.33	243.20
Variance 0			-0.02	-0.01	-3.44			-0.30	26.51
Variance 1			0.13	-0.00	-2.98			-0.20	22.83
Variance 2			0.08	-0.00	-1.50			-0.10	20.06

Notes

Sampled at 1247. Partly cloudy 71 degrees; Transducer in well - can not measure WL

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-25 12:46:24

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates	Tubing Diameter	.25 in
Site Name	Plant Yates - Ash Pond 3	Tubing Length	60 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	55 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	180 mL/min
Well diameter	2 in	Total System Volume	0.9691639 L
Well Total Depth	60.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	ft	Total Volume Pumped	14.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 25
Last 5	12:25:13	3600.04	18.96	5.49	227.69	1.13	--	2.35	696.21
Last 5	12:30:13	3900.05	19.06	5.48	228.68	1.27	--	2.36	716.32
Last 5	12:35:13	4200.05	19.01	5.49	228.57	1.49	--	2.35	720.30
Last 5	12:40:13	4500.05	19.05	5.46	229.17	1.12	--	2.37	726.80
Last 5	12:45:13	4800.05	19.07	5.49	229.26	1.08	--	2.38	729.23
Variance 0			-0.05	0.00	-0.11			-0.00	3.98
Variance 1			0.04	-0.02	0.60			0.01	6.50
Variance 2			0.02	0.03	0.09			0.01	2.43

Notes

Sampled at 12:45 on 3/25/20. Sunny, 80’s. Transducer in well. Unable to get WL.

Grab Samples

Low-Flow Test Report:

Test Date / Time: 3/25/2020 2:50:09 PM
Project: Plant Yates - AP 3
Operator Name: Anna Schnittker

Location Name: YGWC-38 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 40 ft** **Total Depth: 50.12 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 45 ft** **Estimated Total Volume Pumped: 3.9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
SAMPLE TIME: 15:25
Weather: Sunny 70s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/25/2020 2:50 PM	00:00	5.22 pH	34.13 °C	906.26 µS/cm	4.87 mg/L		154.3 mV		130.00 ml/min
3/25/2020 2:55 PM	05:00	4.94 pH	21.55 °C	920.89 µS/cm	3.45 mg/L	1.10 NTU	163.9 mV		130.00 ml/min
3/25/2020 3:00 PM	10:00	4.90 pH	20.25 °C	910.07 µS/cm	3.14 mg/L	1.10 NTU	152.9 mV		130.00 ml/min
3/25/2020 3:05 PM	15:00	4.89 pH	19.93 °C	911.34 µS/cm	3.05 mg/L	1.00 NTU	150.7 mV		130.00 ml/min
3/25/2020 3:10 PM	20:00	4.88 pH	19.89 °C	919.27 µS/cm	3.14 mg/L	1.00 NTU	157.2 mV		130.00 ml/min
3/25/2020 3:15 PM	25:00	4.88 pH	19.78 °C	930.22 µS/cm	2.96 mg/L	0.90 NTU	147.8 mV		130.00 ml/min
3/25/2020 3:20 PM	30:00	4.89 pH	19.99 °C	934.69 µS/cm	2.86 mg/L	0.60 NTU	146.3 mV		130.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 3/25/2020 1:19:54 PM
Project: Plant Yates - AP 3
Operator Name: Anna Schnittker

Location Name: YGWC-41 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57 ft** **Total Depth: 67.7 ft** **Initial Depth to Water: 23.84 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 62 ft** **Estimated Total Volume Pumped: 4.2 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 140 ml/min** **Final Draw Down: 11 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
SAMPLE TIME: 14:00
Weather: sunny 70s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/25/2020 1:19 PM	00:00	4.90 pH	21.29 °C	484.35 µS/cm	3.55 mg/L		134.5 mV	23.84 ft	140.00 ml/min
3/25/2020 1:24 PM	05:00	4.88 pH	20.40 °C	478.92 µS/cm	3.42 mg/L	1.30 NTU	134.6 mV	24.7 ft	140.00 ml/min
3/25/2020 1:29 PM	10:00	4.87 pH	20.33 °C	476.72 µS/cm	3.30 mg/L	1.20 NTU	134.2 mV	24.7 ft	140.00 ml/min
3/25/2020 1:34 PM	15:00	4.87 pH	20.45 °C	479.69 µS/cm	3.37 mg/L	1.30 NTU	134.0 mV	24.7 ft	140.00 ml/min
3/25/2020 1:39 PM	20:00	4.87 pH	20.44 °C	478.70 µS/cm	3.47 mg/L	1.20 NTU	140.1 mV	24.7ft	140.00 ml/min
3/25/2020 1:44 PM	25:00	4.87 pH	20.31 °C	478.76 µS/cm	3.48 mg/L	0.90 NTU	140.4 mV	24.7 ft	140.00 ml/min
3/25/2020 1:49 PM	30:00	4.87 pH	20.26 °C	477.52 µS/cm	3.61 mg/L	0.80 NTU	140.5 mV	24.7 ft	140.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 3/25/2020 9:54:29 AM
Project: Plant Yates - AP 3
Operator Name: Anna Schnittker

Location Name: YGWC-42 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 50 ft** **Total Depth: 60 ft** **Initial Depth to Water: 24.1 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: Poly** **Pump Intake From TOC: 55 ft** **Estimated Total Volume Pumped: 7.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 30 in**	**Instrument Used: Aqua TROLL 400** **Serial Number: 714293**

Test Notes:
SAMPLE TIME: 10:50
Weather: Sunny 60s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/25/2020 9:54 AM	00:00	5.65 pH	19.06 °C	1,181.3 µS/cm	4.83 mg/L		169.5 mV	24.10 ft	150.00 ml/min
3/25/2020 9:59 AM	05:00	5.62 pH	17.84 °C	1,154.5 µS/cm	1.16 mg/L	40.10 NTU	148.5 mV	26.60 ft	150.00 ml/min
3/25/2020 10:04 AM	10:00	5.62 pH	17.73 °C	1,154.2 µS/cm	0.73 mg/L	34.60 NTU	159.3 mV	26.60 ft	150.00 ml/min
3/25/2020 10:09 AM	15:00	5.61 pH	17.82 °C	1,137.0 µS/cm	0.55 mg/L	27.70 NTU	147.3 mV	26.60 ft	150.00 ml/min
3/25/2020 10:14 AM	20:00	5.60 pH	17.90 °C	1,134.6 µS/cm	0.52 mg/L	15.80 NTU	146.3 mV	26.60 ft	150.00 ml/min
3/25/2020 10:19 AM	25:00	5.58 pH	17.94 °C	1,137.5 µS/cm	0.55 mg/L	9.30 NTU	145.2 mV	26.60 ft	150.00 ml/min
3/25/2020 10:24 AM	30:00	5.56 pH	18.08 °C	1,146.2 µS/cm	0.64 mg/L	7.80 NTU	144.0 mV	26.60 ft	150.00 ml/min
3/25/2020 10:29 AM	35:00	5.55 pH	18.25 °C	1,156.0 µS/cm	0.73 mg/L	5.10 NTU	142.8 mV	26.60 ft	150.00 ml/min
3/25/2020 10:34 AM	40:00	5.54 pH	18.25 °C	1,165.5 µS/cm	0.80 mg/L	4.50 NTU	141.9 mV	26.60 ft	150.00 ml/min
3/25/2020 10:39 AM	45:00	5.54 pH	18.52 °C	1,171.7 µS/cm	0.82 mg/L	4.00 NTU	140.9 mV	26.60 ft	150.00 ml/min
3/25/2020 10:44 AM	50:00	5.53 pH	18.46 °C	1,179.1 µS/cm	0.88 mg/L	3.90 NTU	140.0 mV	26.60 ft	150.00 ml/min

Samples

Sample ID:	Description:

Product Name: Low-Flow System

Date: 2020-03-25 11:23:47

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	80 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWC-43	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.4470738 L
Well Total Depth	80.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	13.85 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	11:03:04	900.03	17.83	5.75	470.72	11.70	14.06	0.27	83.10
Last 5	11:08:04	1200.02	17.94	5.77	472.60	7.29	14.12	0.13	79.41
Last 5	11:13:04	1500.02	17.98	5.78	473.85	5.05	14.19	0.10	76.50
Last 5	11:18:04	1800.02	18.06	5.79	474.68	4.23	14.25	0.10	73.80
Last 5	11:23:04	2100.02	18.12	5.79	475.71	3.99	14.31	0.10	71.55
Variance 0			0.05	0.01	1.24			-0.03	-2.91
Variance 1			0.08	0.00	0.83			-0.00	-2.70
Variance 2			0.06	0.01	1.03			0.00	-2.25

Notes

Sampled at 1123. Partly cloudy 67 degrees

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-25 14:18:35

Project Information:		Pump Information:	
Operator Name	Taylor Goble	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	Plant Yates R6	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	79 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	512733		
Turbidity Make/Model	HACH	Pump placement from TOC	74 ft

Well Information:		Pumping Information:	
Well ID	YGWC-49	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.4426104 L
Well Total Depth	79.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	11 in
Depth to Water	29.08 ft	Total Volume Pumped	0 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	13:57:52	600.02	19.58	5.72	248.30	7.67	29.65	2.77	225.91
Last 5	14:02:52	900.02	19.68	5.71	246.88	4.89	29.71	2.56	227.58
Last 5	14:07:52	1200.02	19.69	5.70	246.75	3.14	29.79	2.34	229.73
Last 5	14:12:52	1500.02	19.81	5.69	247.53	2.58	29.86	2.29	232.59
Last 5	14:17:52	1800.02	19.76	5.69	248.09	2.26	29.95	2.28	235.92
Variance 0			0.01	-0.01	-0.13			-0.22	2.15
Variance 1			0.12	-0.01	0.78			-0.05	2.86
Variance 2			-0.05	-0.00	0.56			-0.01	3.33

Notes

Sampled at 1417. Sunny 74 degrees

Grab Samples

September 2020

Semiannual Event

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	9/21/2020
Sampler:	Michael Guy
Equipment:	--

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
PZ-05S	9/21/2020	10:56:00	19.81	41.94	--
YGWA-5I	9/21/2020	11:04:00	19.82	58.94	--
YGWA-5D	9/21/2020	11:07:00	22.51	129.13	--
YGWA-4I	9/21/2020	11:09:00	23.45	48.81	--
PZ-04S	9/21/2020	11:15:00	24.95	33.33	--
YGWA-21I	9/21/2020	11:18:00	31.29	79.90	--
YGWA-20S	9/21/2020	11:51:00	11.44	29.52	--
YGWC-23S	9/21/2020	13:22:00	17.61	38.91	--
YGWA-18I	9/21/2020	16:06:00	23.59	79.97	--
YGWA-18S	9/21/2020	16:07:00	20.39	39.97	--
YGWA-17S	9/21/2020	16:11:00	12.62	39.85	--

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	9/21/2020
Sampler:	Katie Pupkiewicz
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
PZ-35	9/21/2020	15:42:00	15.44	50.01	--
YAMW-1	9/21/2020	15:43:00	15.14	69.93	--
YGWC-24SA	9/21/2020	15:52:00	28.77	57.00	--
PZ-24IA	9/21/2020	15:53:00	29.13	89.85	--
YGWC-49	9/21/2020	15:58:00	31.00	78.53	--
PZ-48	9/21/2020	16:03:00	19.94	58.73	Spider in well stick up
PZ-06D	9/21/2020	16:09:00	21.43	134.02	--
YGWA-6S	9/21/2020	16:10:00	18.22	39.87	--
YGWA-6I	9/21/2020	16:10:00	18.48	69.03	--

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA R6 CCR Landfill
Date:	9/21/2020
Sampler:	Michael Guy
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWA-39	9/21/2020	12:43:00	21.81	68.59	--
YGWC-38	9/21/2020	13:02:00	29.82	50.59	--
YAMW-5	9/21/2020	13:12:00	12.84	90.34	--
PZ-37	9/21/2020	13:40:00	13.79	49.78	--
YGWA-40	9/21/2020	13:48:00	25.44	48.23	--
YAMW-4	9/21/2020	14:00:00	30.61	96.55	--
YGWC-41	9/21/2020	14:05:00	26.91	67.32	--
YGWC-42	9/21/2020	14:09:00	27.48	59.76	--
YAMW-3	9/21/2020	14:13:00	35.28	91.44	--
YAMW-2	9/21/2020	14:36:00	22.18	46.48	--
PZ-51	9/21/2020	14:49:00	6.94	36.00	--
YGWC-43	9/21/2020	15:01:00	15.11	79.66	--

Groundwater Sampling Form

Project Number	30052918	**Well ID**	YGWA-4I			**Date**	09/22/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	32.0 degrees F and Clear. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	23.46	**Total Depth (ft-bmp)**	48.81	**Water Column(ft)**	25.35	**Gallons in Well**	4.12
MP Elevation	784.21	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:20	**Well Volumes Purged**	0.26	**Sample ID**	YGWA-4I	**Sampled by**	Michael Guy
Purge Start	08:56	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:40						

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)
08:56:45	00:00	200	24.69	6.0	0.06	1.3	3.8	17.4	224.0
09:01:45	05:00	200	25.18	5.9	0.06	1.8	2.0	17.1	216.5
09:06:45	10:00	200	25.53	5.9	0.06	1.0	1.8	17.0	209.7
09:11:45	15:00	200	25.68	5.8	0.06	1.1	1.7	16.9	203.9
09:16:45	20:00	200	25.81	5.8	0.07	1.0	1.7	16.9	200.3

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None

Comments: Rental tablet time set 2 hours behind actual time.

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	30052918	**Well ID**	YGWA-5I			**Date**	09/22/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	66.7 degrees F and Clear. The wind is blowing E at 20.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	19.79	**Total Depth (ft-bmp)**	58.94	**Water Column(ft)**	39.15	**Gallons in Well**	6.36
MP Elevation	784.54	**Pump Intake (ft-bmp)**	53	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:05	**Well Volumes Purged**	0.13	**Sample ID**	YGWA-5I	**Sampled by**	Michael Guy
Purge Start	12:41	**Gallons Purged**	0.85	**Replicate/ Code No.**	DUP-01	**Color**	Clear
Purge End	13:57						

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)
12:41:52	00:00	160	19.99	6.4	0.06	1.1	8.9	19.1	128.7
12:46:52	05:00	160	20.02	6.3	0.06	1.0	8.8	19.1	130.2
12:51:52	10:00	160	20.05	6.0	0.06	1.3	8.9	19.2	124.2
12:56:52	15:00	160	20.02	6.0	0.06	1.6	8.8	19.5	126.5
13:01:52	20:00	160	20	6.0	0.06	1.1	8.6	19.7	135.5

Constituent Sampled	Container	Number	Preservative
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	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 centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052918	**Well ID**	YGWA-5D			**Date**	09/22/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	69.6 degrees F and Clear. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	22.6	**Total Depth (ft-bmp)**	129.13	**Water Column(ft)**	106.53	**Gallons in Well**	17.31
MP Elevation	784.53	**Pump Intake (ft-bmp)**	124.4	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:40	**Well Volumes Purged**	0.02	**Sample ID**	YGWA-5D	**Sampled by**	Michael Guy
Purge Start	15:28	**Gallons Purged**	0.26	**Replicate/ Code No.**	FIELD BLANK-01	**Color**	Clear
Purge End	16:09						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
15:28:57	00:00	100	22.95	7.3	241.26	1.2	0.4	19.7	-138.6
15:33:57	05:00	100	22.95	7.2	237.86	1.1	0.3	19.3	-146.4
15:38:57	10:00	100	22.95	7.2	233.26	1.2	0.3	19.1	-148.4

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments: Measured to top of pump. A/C not keeping air pressure up. Pump may need to be repaired prior to next event.

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	30052918	**Well ID**	YGWA-17S			**Date**	09/23/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	61.2 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.63	**Total Depth (ft-bmp)**	39.85	**Water Column(ft)**	27.22	**Gallons in Well**	4.42
MP Elevation	783.05	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:20	**Well Volumes Purged**	0.13	**Sample ID**	YGWA-17S	**Sampled by**	Michael Guy
Purge Start	09:03	**Gallons Purged**	0.59	**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)
09:03:34	00:00	150	12.91	5.7	85.19	2.0	4.1	18.5	205.4
09:08:34	05:00	150	12.94	5.6	83.45	2.0	2.4	18.4	203.2
09:13:34	10:00	150	12.92	5.6	83.59	3.9	1.9	18.4	200.5
09:18:34	15:00	150	12.93	5.6	84.85	4.1	1.6	18.4	200.6

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Well Locked at Arrival:

Condition of Well:

Well Locked at Departure:

Well Completion: NA

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052918	**Well ID**	YGWA-18S			**Date**	09/23/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	70.5 degrees F and Clear. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	20.36	**Total Depth (ft-bmp)**	39.97	**Water Column(ft)**	19.61	**Gallons in Well**	3.19
MP Elevation	790.57	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:40	**Well Volumes Purged**	1.46	**Sample ID**	YGWA-18S	**Sampled by**	Michael Guy
Purge Start	11:41	**Gallons Purged**	4.65	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:03						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
11:41:17	00:00	150	21.01	5.4	60.35	6.2	7.2	20.7	199.6
11:46:17	05:00	150	21.24	5.3	57.39	14.2	7.4	20.0	212.7
11:51:17	10:00	150	21.32	5.3	57.83	20.3	6.8	19.6	218.8
11:56:17	15:00	150	21.36	5.3	59.47	16.9	6.4	19.3	225.5
12:01:17	20:00	150	21.38	5.3	57.37	9.0	6.5	19.2	227.6
12:06:17	25:00	150	21.4	5.3	58.13	8.5	5.9	19.1	231.1
12:11:17	30:00	150	21.4	5.3	57.33	10.7	4.8	19.1	234.7
12:16:17	35:00	150	21.4	5.3	56.99	6.2	4.9	19.0	237.1
12:21:17	40:00	150	21.41	5.3	57.14	8.1	4.7	19.0	239.0
12:26:17	45:00	150	21.41	5.3	56.99	7.2	4.2	19.1	241.9
12:31:17	50:00	150	21.41	5.3	56.73	7.9	4.8	19.0	245.4
12:36:17	55:00	150	21.42	5.3	56.93	7.5	3.8	19.0	246.4
12:41:17	00:00	150	21.42	5.3	57.64	8.5	3.9	19.0	250.1
12:46:17	05:00	150	21.41	5.3	56.73	6.2	3.2	19.0	252.6
12:51:17	10:00	150	21.42	5.3	56.86	7.3	3.6	19.1	254.1
12:56:17	15:00	150	21.42	5.3	57.02	7.6	3.6	19.2	257.5
13:01:17	20:00	150	21.43	5.3	56.47	6.0	3.6	19.3	256.9
13:06:17	25:00	150	21.43	5.3	56.63	4.4	4.7	19.3	258.6
13:11:17	30:00	150	21.43	5.3	56.55	5.0	3.8	19.1	259.9
13:16:17	35:00	150	21.42	5.3	56.23	4.7	3.2	19.2	261.3
13:23:32	42:15	150	21.42	5.3	58.39	14.2	4.0	19.3	273.5
13:28:32	47:15	150	21.42	5.3	57.28	4.5	1.4	20.0	270.0
13:33:32	52:15	150	21.41	5.3	56.94	4.4	1.2	20.8	270.9
13:38:32	57:15	150	21.41	5.3	56.81	4.2	1.2	20.3	269.5

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
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments: Lost connectivity during test.

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	30052918	**Well ID**	YGWA-18I			**Date**	09/23/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	74.3 degrees F and Mostly Cloudy. The wind is blowing S at 12.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	23.58	**Total Depth (ft-bmp)**	79.97	**Water Column(ft)**	56.39	**Gallons in Well**	9.16
MP Elevation	790.57	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:40	**Well Volumes Purged**	0.17	**Sample ID**	YGWA-18S	**Sampled by**	Michael Guy
Purge Start	14:43	**Gallons Purged**	1.60	**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)
14:43:36	00:00	110	23.67	6.7	0.06	1.3	8.0	22.9	193.4
14:48:36	05:00	110	23.69	6.6	0.06	1.2	8.0	23.0	207.7
14:53:36	10:00	110	23.7	6.6	0.06	1.9	8.1	22.8	213.7
14:58:36	15:00	110	23.72	6.4	0.00	1.3	8.0	22.7	219.9
15:03:36	20:00	110	23.74	6.0	27.99	1.2	8.1	21.4	242.0
15:08:36	25:00	110	23.74	6.0	24.49	1.2	8.1	21.5	241.7
15:13:36	30:00	110	23.74	6.0	19.92	1.2	8.0	21.4	241.4
15:18:36	35:00	110	23.75	6.0	19.76	1.2	8.2	21.4	240.8
15:23:36	40:00	110	23.75	6.0	0.06	1.2	8.1	21.5	238.0
15:28:36	45:00	110	23.75	6.0	108.31	1.4	7.6	20.5	241.5
15:33:36	50:00	110	23.75	6.0	108.58	1.7	7.8	20.5	241.7
15:38:36	55:00	110	23.75	6.0	108.20	1.3	7.8	20.5	241.5

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____

Well Locked at Arrival: _____

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	30052918	**Well ID**	YGWA-20S			**Date**	09/24/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	65.7 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.5	**Total Depth (ft-bmp)**	29.52	**Water Column(ft)**	18.02	**Gallons in Well**	2.93
MP Elevation	767.12	**Pump Intake (ft-bmp)**	24.5	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:15	**Well Volumes Purged**	0.43	**Sample ID**	YGWA-20S	**Sampled by**	Michael Guy
Purge Start	08:44	**Gallons Purged**	1.27	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:35						

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)
08:44:25	00:00	160	11.98	6.0	75.01	13.4	7.8	19.6	202.2
08:49:25	05:00	160	12.05	5.9	60.21	14.4	7.6	19.1	201.9
08:54:25	10:00	160	12.08	5.9	57.93	5.9	7.6	18.9	203.4
08:59:25	15:00	160	12.08	5.8	56.99	5.2	7.5	18.8	205.8
09:04:25	20:00	160	12.08	5.8	56.53	4.7	7.5	18.6	208.0
09:09:25	25:00	160	12.08	5.8	56.40	2.9	7.5	18.5	211.2
09:14:25	30:00	160	12.08	5.8	56.33	4.0	7.5	18.4	214.7

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Well Locked at Arrival:

Condition of Well:

Well Locked at Departure:

Well Completion: NA

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052918	**Well ID**	YGWA-21I			**Date**	09/24/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	67.1 degrees F and Cloudy. The wind is blowing E at 12.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.25	**Total Depth (ft-bmp)**	79.9	**Water Column(ft)**	48.65	**Gallons in Well**	7.91
MP Elevation	783.7	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:45	**Well Volumes Purged**	0.22	**Sample ID**	YGWA-21I	**Sampled by**	Michael Guy
Purge Start	11:10	**Gallons Purged**	1.71	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:08						

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)
11:10:08	00:00	200	33.51	6.8	161.33	9.6	3.8	19.6	-22.6
11:15:08	05:00	200	34.35	6.8	167.50	4.3	1.8	19.0	-36.5
11:20:08	10:00	200	35.71	6.8	175.95	2.7	0.5	18.8	-47.6
11:25:08	15:00	200	35.94	6.8	165.05	3.5	0.5	18.7	-52.7
11:30:08	20:00	200	36.29	6.7	161.01	2.3	0.4	18.7	-48.5
11:35:08	25:00	200	36.38	6.7	160.18	1.8	0.4	18.7	-54.5
11:40:08	30:00	200	36.44	6.7	159.74	1.5	0.4	18.8	-53.1
11:42:32	32:24	200	36.46	6.7	159.44	2.4	0.5	18.9	-52.3

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Well Locked at Arrival:

Condition of Well:

Well Locked at Departure:

Well Completion: NA

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052918	**Well ID**	YGWC-23S			**Date**	09/24/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	68.9 degrees F and Rain. The wind is blowing SE at 33.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	17.54	**Total Depth (ft-bmp)**	38.91	**Water Column(ft)**	21.37	**Gallons in Well**	3.47
MP Elevation	764.91	**Pump Intake (ft-bmp)**	34	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:05	**Well Volumes Purged**	0.72	**Sample ID**	YGWC-23S	**Sampled by**	Michael Guy
Purge Start	15:44	**Gallons Purged**	2.49	**Replicate/ Code No.**		**Color**	Clear
Purge End	17:25						

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)
15:44:02	00:00	120	17.88	5.7	164.32	38.8	8.2	20.0	198.3
15:49:02	05:00	120	17.96	5.6	176.92	42.3	8.0	19.7	217.9
15:54:02	10:00	120	18.01	5.5	177.57	38.5	7.7	19.3	226.7
15:59:02	15:00	120	18.03	5.5	175.50	34.9	7.7	19.2	232.3
16:06:35	22:33	120	18.03	5.6	176.98	21.0	7.7	19.2	230.3
16:11:35	27:33	120	18.03	5.6	177.37	15.6	7.7	19.4	229.4
16:16:35	32:33	120	18.03	5.6	177.57	14.1	7.7	19.5	229.4
16:21:35	37:33	120	17.95	5.5	176.74	15.3	7.7	19.6	293.6
16:26:35	42:33	120	18.02	5.5	174.05	21.2	7.7	19.3	266.3
16:31:35	47:33	120	18.03	5.5	173.95	20.6	7.6	19.2	261.6
16:36:35	52:33	120	18.07	5.5	174.34	22.3	9.2	19.1	315.3
16:41:35	57:33	120	18.09	5.5	172.56	8.4	8.0	19.1	286.9
16:42:43	58:41	120	18.09	5.5	172.10	9.7	8.0	19.1	284.0
16:47:43	03:41	120	18.09	5.5	170.74	5.5	8.1	19.1	276.6
16:52:43	08:41	120	18.1	5.5	170.04	4.6	9.1	19.1	272.0
16:57:43	13:41	120	18.1	5.5	169.96	3.4	8.4	19.2	268.9
17:02:43	18:41	120	18.1	5.5	170.02	2.6	8.0	19.2	282.0

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	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: Battery for air compressor died. Able to hook to truck. Considering readings after restart for stabilization (37:33).

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	30053437	**Well ID**	YGWC-24SA			**Date**	09/23/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	74.1 degrees F and Partly Cloudy. The wind is blowing E/SE at 16.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	28.82	**Total Depth (ft-bmp)**	57	**Water Column(ft)**	28.18	**Gallons in Well**	4.58
MP Elevation	765	**Pump Intake (ft-bmp)**	52	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:05	**Well Volumes Purged**	0.25	**Sample ID**	YGWC-24SA (092320)	**Sampled by**	Katie Pupkiewicz
Purge Start	13:29	**Gallons Purged**	1.14	**Replicate/ Code No.**	DUP-02(092320)	**Color**	Clear
Purge End	14:53						

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)
13:29:56	00:00	136	29.26	5.5	0.05	2.1	6.7	27.4	152.9
13:34:56	05:00	136	29.22	5.6	81.06	50.8	5.5	22.0	169.4
13:39:56	10:00	136	29.16	5.6	80.45	24.9	5.5	22.1	185.4
13:44:56	15:00	136	29.16	5.6	78.94	20.3	5.6	21.8	194.2
13:49:56	20:00	136	29.1	5.5	78.89	20.3	5.1	21.7	200.5
13:51:30	21:34	136	29.1	5.6	79.31	20.0	5.4	22.0	200.6
13:51:45	21:49	136	29.1	5.6	79.31	20.9	5.5	22.0	200.0
13:56:45	26:49	136	29.1	5.6	79.35	18.2	5.2	22.4	198.5
14:01:45	31:49	136	29.1	5.6	79.96	18.9	5.2	23.3	199.0

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: Final turbidity was 1.64

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	30052918	**Well ID**	YGWC-38			**Date**	09/25/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	71.8 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	29.87	**Total Depth (ft-bmp)**	50.59	**Water Column(ft)**	20.72	**Gallons in Well**	3.37
MP Elevation	799.69	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:40	**Well Volumes Purged**	0.35	**Sample ID**	YGWC-38	**Sampled by**	Michael Guy
Purge Start	09:10	**Gallons Purged**	1.19	**Replicate/ Code No.**	Field Blank-02	**Color**	Clear
Purge End	10:38						

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)
09:10:28	00:00	180	30.69	5.3	1092.70	7.9	7.4	21.6	215.8
09:15:28	05:00	180	30.89	5.0	1003.77	17.3	7.1	20.7	211.0
09:20:28	10:00	180	31.07	4.9	971.36	10.8	5.2	20.0	209.1
09:25:28	15:00	180	31.21	4.9	970.04	2.3	4.3	19.9	211.1
09:30:28	20:00	180	31.32	4.9	968.62	1.7	5.1	19.8	214.4
09:35:28	25:00	180	31.38	4.9	968.35	1.4	4.1	19.8	219.3

Constituent Sampled	Container	Number	Preservative
Mercury,Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Well Locked at Arrival:

Condition of Well:

Well Locked at Departure:

Well Completion: NA

Key Number To Well: NA

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-39			**Date**	09/24/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	67.1 degrees F and Cloudy. The wind is blowing E at 12.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	21.74	**Total Depth (ft-bmp)**	68.59	**Water Column(ft)**	46.85	**Gallons in Well**	7.61
MP Elevation	818.19	**Pump Intake (ft-bmp)**	63	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:02	**Well Volumes Purged**	0.18	**Sample ID**	YGWA-39(092420)	**Sampled by**	Katie Pupkiewicz
Purge Start	09:41	**Gallons Purged**	1.41	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:12						

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)
09:41:24	00:00	280	22.3	5.8	138.88	0.8	2.6	18.8	34.9
09:46:24	05:00	280	22.35	5.6	160.91	0.7	0.5	18.3	39.3
09:51:24	10:00	280	22.4	5.6	158.44	0.7	0.2	18.2	48.6
09:56:24	15:00	280	22.38	5.6	153.48	0.6	0.2	18.2	54.4
10:00:24	19:00	280	22.38	5.7	150.61	0.7	0.1	18.2	53.8

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3

Comments: Final turbidity was 1.62

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-40			**Date**	09/24/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	66.2 degrees F and Light Rain. The wind is blowing E/SE at 29.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	25.17	**Total Depth (ft-bmp)**	48.23	**Water Column(ft)**	23.06	**Gallons in Well**	3.75
MP Elevation	815.73	**Pump Intake (ft-bmp)**	42	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:37	**Well Volumes Purged**	0.29	**Sample ID**	YGWA-40(092420)	**Sampled by**	Katie Pupkiewicz
Purge Start	11:14	**Gallons Purged**	1.08	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:47						

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)
11:14:56	00:00	220	26	5.4	0.06	0.5	7.8	18.6	158.1
11:19:56	05:00	220	26.47	5.3	100.87	0.8	5.8	18.3	200.4
11:24:56	10:00	220	26.5	5.3	102.03	0.7	5.8	18.1	213.3
11:29:56	15:00	220	26.56	5.2	103.02	0.6	5.8	18.2	220.1
11:33:29	18:33	220	26.56	5.4	0.00	0.5	5.8	18.7	204.9

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3

Comments: Final turbidity was 0.45

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	30052918	**Well ID**	YGWC-41			**Date**	09/25/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	73.6 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	26.93	**Total Depth (ft-bmp)**	67.32	**Water Column(ft)**	40.39	**Gallons in Well**	6.56
MP Elevation	803.92	**Pump Intake (ft-bmp)**	62	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:35	**Well Volumes Purged**	0.21	**Sample ID**	YGWC-41	**Sampled by**	Michael Guy
Purge Start	13:00	**Gallons Purged**	1.35	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:59						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
13:00:29	00:00	170	27.82	5.2	0.05	46.0	7.1	25.4	167.6
13:05:29	05:00	170	27.83	5.0	430.62	3.0	5.0	22.3	244.7
13:10:29	10:00	170	27.84	5.0	436.58	8.8	4.3	22.3	259.9
13:15:29	15:00	170	27.84	5.0	442.39	18.8	4.3	22.2	267.7
13:20:29	20:00	170	27.85	5.0	449.25	17.6	4.1	21.9	273.7
13:25:29	25:00	170	27.85	5.0	450.98	9.8	4.1	21.8	278.3
13:30:29	30:00	170	27.85	5.0	455.03	12.9	4.2	21.9	281.0

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments: Used LaMotte turbidimeter for stabilization.

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	30052918	**Well ID**	YGWC-42			**Date**	09/24/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	67.5 degrees F and Rain. The wind is blowing E/SE at 37.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.45	**Total Depth (ft-bmp)**	59.76	**Water Column(ft)**	32.31	**Gallons in Well**	5.25
MP Elevation	797.86	**Pump Intake (ft-bmp)**	55	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:20	**Well Volumes Purged**	0.28	**Sample ID**	YGWC-42	**Sampled by**	Michael Guy
Purge Start	13:42	**Gallons Purged**	1.48	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:37						

Time	Total Elapsed Minutes	Rate ()	Depth to Water ()	pH (standard units)	Specific Conductivity ()	Turbidity ()	Dissolved Oxygen ()	Temperature	Redox ()

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Well Locked at Arrival:

Condition of Well:

Well Locked at Departure:

Well Completion: NA

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052918	**Well ID**	YGWC-43			**Date**	09/25/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	73.2 degrees F and Cloudy. The wind is blowing W/SW at 20.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	15.15	**Total Depth (ft-bmp)**	79.66	**Water Column(ft)**	64.51	**Gallons in Well**	10.48
MP Elevation	744.96	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:55	**Well Volumes Purged**	0.06	**Sample ID**	YGWC-43	**Sampled by**	Michael Guy
Purge Start	11:35	**Gallons Purged**	0.67	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:10						

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)
11:35:29	00:00	170	15.31	6.3	469.74	1.3	7.6	22.4	-65.6
11:40:29	05:00	170	15.32	5.8	693.44	1.4	3.6	21.4	-16.3
11:45:29	10:00	170	15.34	5.7	704.11	1.3	6.4	21.2	-6.3
11:50:29	15:00	170	15.36	5.8	710.33	1.3	3.8	21.1	-2.1

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anion	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Well Locked at Arrival:

Condition of Well:

Well Locked at Departure:

Well Completion: NA

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053437	**Well ID**	YGWC-49			**Date**	09/24/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	65.7 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.08	**Total Depth (ft-bmp)**	78.53	**Water Column(ft)**	47.45	**Gallons in Well**	7.71
MP Elevation	782.73	**Pump Intake (ft-bmp)**	73	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	08:55	**Well Volumes Purged**	0.14	**Sample ID**	YGWC-49(092420)	**Sampled by**	Katie Pupkiewicz
Purge Start	08:29	**Gallons Purged**	1.11	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:04						

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)
08:29:28	00:00	140	31.74	5.9	255.00	0.8	3.4	19.4	81.2
08:34:28	05:00	240	31.69	5.6	249.26	1.0	2.8	19.0	151.0
08:39:28	10:00	240	31.99	5.6	244.75	0.9	2.4	18.6	186.3
08:39:58	10:30	240	31.99	5.6	244.68	0.7	2.4	18.6	187.4
08:44:58	15:30	240	32.02	5.6	247.80	0.7	2.3	18.5	195.7
08:49:58	20:30	240	32.04	5.6	245.90	0.7	2.4	18.5	196.4

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3

Comments: Final turbidity was 0.62

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-36A			**Date**	10/07/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	Sunny, warm °, , winds at mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	14.3	**Total Depth (ft-bmp)**	51.2	**Water Column(ft)**	36.9	**Gallons in Well**	6
MP Elevation	739.61	**Pump Intake (ft-bmp)**	46	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:10	**Well Volumes Purged**	0.81	**Sample ID**	YGWC-36A(100720)	**Sampled by**	Becky Steever
Purge Start	13:11	**Gallons Purged**	4.89	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:45						

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)
13:11:19	00:00	200	14.3	6.3	98.05	0.5	3.7	25.2	83.5
13:16:19	05:00	200	14.57	5.8	117.71	77.6	3.0	22.6	106.8
13:21:19	10:00	200	14.57	5.7	115.03	223.9	2.7	22.5	124.3
13:26:19	15:00	200	14.57	5.8	116.37	226.8	2.6	22.6	133.3
13:31:19	20:00	200	14.57	5.8	121.19	168.3	2.4	24.9	134.2
13:36:19	25:00	200	14.57	5.9	123.25	131.3	2.3	26.0	135.9
13:41:19	30:00	200	14.57	5.9	125.91	118.7	2.4	26.1	137.9
13:46:19	35:00	200	14.57	5.9	127.11	91.9	2.5	26.5	139.2
13:51:19	40:00	200	14.57	5.9	124.89	75.1	2.5	26.4	145.0
13:56:19	45:00	200	14.57	5.8	122.80	82.7	2.6	25.6	148.5
14:01:19	50:00	200	14.57	5.9	125.48	84.4	2.6	25.6	150.1
14:06:19	55:00	200	14.57	5.9	127.19	93.5	2.6	25.9	151.9
14:11:19	00:00	200	14.57	5.8	125.73	76.6	2.6	26.7	152.6
14:16:19	05:00	200	14.57	5.9	131.15	102.7	2.6	27.7	155.3
14:21:19	10:00	100	14.57	5.8	135.68	101.8	2.6	27.2	153.7
14:26:19	15:00	100	14.57	5.8	126.50	164.2	2.7	27.0	154.8
14:31:19	20:00	100	14.57	5.7	120.68	147.9	2.5	27.5	159.4
14:36:19	25:00	100	14.57	5.8	124.31	136.6	2.6	27.7	162.9
14:41:19	30:00	100	14.57	5.8	129.15	173.9	2.6	28.1	163.9
14:46:19	35:00	100	14.57	5.9	135.74	189.5	2.8	28.0	162.2
14:51:19	40:00	100	14.57	5.8	142.89	26.8	3.0	26.1	161.8
14:56:19	45:00	100	14.57	5.9	146.35	320.4	3.0	26.1	162.5
15:01:19	50:00	100	14.57	5.9	146.83	64.9	3.0	25.4	163.6
15:06:19	55:00	100	14.57	5.9	146.17	0.6	3.0	25.4	163.8

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

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 centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	PZ-35			**Date**	09/24/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	69.4 degrees F and Cloudy. The wind is blowing SE at 33.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	15.24	**Total Depth (ft-bmp)**	50.01	**Water Column(ft)**	34.77	**Gallons in Well**	5.65
MP Elevation	743.81	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:05	**Well Volumes Purged**	0.11	**Sample ID**	PZ-35(09242020)	**Sampled by**	Jake Swanson
Purge Start	12:42	**Gallons Purged**	0.59	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:57						

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)
12:42:17	00:00	150	15.24	5.6	80.28	1.4	5.0	19.1	168.5
12:47:17	05:00	150	15.68	5.6	78.32	1.3	4.6	19.0	183.1
12:52:17	10:00	150	15.85	5.5	78.42	1.2	4.5	18.8	194.5
12:57:17	15:00	150	15.89	5.5	78.62	1.2	4.8	18.7	201.3

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:

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**	PZ-37			**Date**	09/25/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	71.8 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	13.75	**Total Depth (ft-bmp)**	49.78	**Water Column(ft)**	36.03	**Gallons in Well**	5.85
MP Elevation	760.78	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:05	**Well Volumes Purged**	0.14	**Sample ID**	PZ-37(09252020)	**Sampled by**	Jake Swanson
Purge Start	12:42	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear

Purge End

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)
12:42:50	00:00	150	13.75	6.7	1180.38	2.6	4.8	22.5	200.7
12:47:50	05:00	150	14	5.9	1144.27	1.9	1.3	21.4	204.5
12:52:50	10:00	150	14.03	5.5	1143.41	1.8	0.4	21.2	203.8
12:57:50	15:00	150	14.03	5.5	1144.38	1.9	0.3	21.2	199.9
13:02:50	20:00	150	14.03	5.5	1183.52	1.9	0.3	21.3	201.9

Constituent Sampled	Container	Number	Preservative
Mercury,Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

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**	YAMW-1			**Date**	09/24/2020
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	66.6 degrees F and Light Rain. The wind is blowing E at 20.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	15.3	**Total Depth (ft-bmp)**	69.93	**Water Column(ft)**	54.63	**Gallons in Well**	8.88
MP Elevation	743.83	**Pump Intake (ft-bmp)**	64	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:05	**Well Volumes Purged**	0.16	**Sample ID**	YAMW-1(09242020)	**Sampled by**	Jake Swanson
Purge Start	11:19	**Gallons Purged**	1.41	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:55						

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)
11:19:09	00:00	150	15.3	6.1	166.36	1.2	4.8	19.0	190.6
11:24:09	05:00	150	17.17	6.0	141.18	1.2	3.1	19.1	193.1
11:29:38	10:29	150	18.4	6.0	139.43	1.4	2.9	19.2	318.7
11:34:38	15:29	150	18.91	6.0	140.29	1.2	2.9	19.3	262.0
11:39:38	20:29	150	19.29	6.0	136.78	1.3	3.0	19.2	237.5
11:44:38	25:29	150	19.58	6.0	140.19	1.3	3.0	19.5	225.6
11:49:38	30:29	150	19.69	6.0	136.32	1.3	3.1	19.2	218.2
11:54:38	35:29	150	19.78	6.0	136.26	1.2	3.1	19.0	214.8

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Mercury,Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

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**	YAMW-2			**Date**	09/23/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	74.1 degrees F and Mostly Cloudy. The wind is blowing S/SW at 12.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	22.24	**Total Depth (ft-bmp)**	46.48	**Water Column(ft)**	24.24	**Gallons in Well**	3.94
MP Elevation	781.04	**Pump Intake (ft-bmp)**	39	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:00	**Well Volumes Purged**	0.34	**Sample ID**	YAMW-2 (09/23/2020)	**Sampled by**	Jake Swanson
Purge Start	13:13	**Gallons Purged**	1.33	**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)
13:13:43	00:00	125	22.24	5.8	121.76	1.5	5.1	22.4	188.5
13:18:43	05:00	125	22.33	5.7	89.21	3.2	4.7	21.0	192.5
13:23:43	10:00	125	22.34	5.6	97.04	2.4	4.3	20.9	201.1
13:28:43	15:00	125	22.35	5.7	104.55	2.6	4.2	21.7	199.1
13:33:43	20:00	125	22.36	5.7	103.53	4.0	4.3	22.2	196.9
13:38:43	25:00	125	22.36	5.7	95.13	4.6	4.2	21.0	198.1
13:43:43	30:00	125	22.36	5.6	83.32	1.6	4.7	18.6	207.9
13:48:43	35:00	125	22.36	5.6	83.13	1.9	4.4	18.5	210.9
13:52:36	38:53	125	22.36	5.6	82.52	3.0	4.3	18.6	368.4
13:53:52	40:09	125	22.36	5.7	82.27	2.2	4.1	19.4	338.8

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:

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**	YAMW-4			**Date**	09/23/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	76.3 degrees F and Partly Cloudy. The wind is blowing NW at 12.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	30.57	**Total Depth (ft-bmp)**	96.55	**Water Column(ft)**	65.98	**Gallons in Well**	10.72
MP Elevation	805.59	**Pump Intake (ft-bmp)**	91	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:35	**Well Volumes Purged**	0.15	**Sample ID**	YAMW-5(09232020)	**Sampled by**	Jake Swanson
Purge Start	15:31	**Gallons Purged**	1.59	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:31						

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)
15:31:38	00:00	100	30.56	6.2	560.28	34.3	2.8	23.7	-119.5
15:36:38	05:00	100	31.86	5.7	571.72	40.8	1.8	21.8	-73.5
15:41:38	10:00	100	32.96	5.6	572.76	52.4	0.9	21.1	-55.6
15:46:38	15:00	100	34.24	5.6	574.01	33.6	0.6	21.2	-60.8
15:51:38	20:00	100	35.22	5.8	567.75	19.2	0.5	21.6	-128.6
15:56:38	25:00	100	36.22	6.0	560.45	9.3	1.8	21.3	-128.5
16:01:38	30:00	100	36.84	5.8	567.18	16.0	0.9	20.6	-134.4
16:06:38	35:00	100	37.81	5.8	567.72	8.3	0.6	20.9	-140.0
16:11:38	40:00	100	38.43	5.9	565.50	4.0	0.5	20.4	-147.0
16:16:38	45:00	100	38.95	5.8	569.54	3.4	0.8	20.2	-138.3
16:21:38	50:00	100	39.04	6.0	570.10	4.2	0.9	21.6	-149.0
16:26:38	55:00	100	39.06	5.9	573.07	2.8	1.1	21.6	-135.4
16:31:38	00:00	100	39.13	5.9	571.15	2.3	1.2	21.2	-142.4

Constituent Sampled	Container	Number	Preservative
Dissolved Metals	500 mL Plastic	1	None
Mercury,Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

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

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**	YAMW-5			**Date**	09/24/2020
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	67.1 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.82	**Total Depth (ft-bmp)**	90.34	**Water Column(ft)**	77.52	**Gallons in Well**	12.6
MP Elevation	788.9	**Pump Intake (ft-bmp)**	85	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:15	**Well Volumes Purged**	0.17	**Sample ID**	YAMW-5(09242020)	**Sampled by**	Jake Swanson
Purge Start	09:28	**Gallons Purged**	2.16	**Replicate/ Code No.**		**Color**	Yellow
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)
09:28:01	00:00	200	12.82	6.4	996.72	5.6	10.1	18.7	227.7
09:36:36	08:35	200	14.52	5.4	950.69	4.4	4.0	17.6	222.1
09:37:37	09:36	200	14.52	5.4	950.44	5.7	3.7	17.6	221.7
09:38:07	10:06	200	14.83	5.4	951.08	6.7	3.6	17.6	219.2
09:43:07	15:06	200	15.05	5.3	951.20	14.8	2.9	17.5	221.5
09:48:07	20:06	200	15.28	5.3	946.25	23.9	2.5	17.5	219.9
09:53:07	25:06	200	15.48	5.3	947.36	30.7	2.3	17.4	219.0
09:58:07	30:06	200	15.74	5.3	946.29	1.3	2.1	17.5	224.5
10:03:07	35:06	200	15.93	5.4	947.18	1.2	2.0	17.4	223.2
10:08:07	40:06	200	16.03	5.4	947.10	1.6	1.8	17.4	219.8
10:08:55	40:54	200	16.03	5.4	947.18	1.2	1.8	17.3	219.0

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Mercury,Metals	250 mL Plastic	1	HNO3
Anions	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

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

August 2020 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Jake Swanson/ Michael Guy/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 9/22/20 Time: 1030

Parameter	Units	Standard	SmarTROLL SN 611846	SmarTROLL SN 518534	SmarTROLL SN 513586	SmarTROLL SN 689918
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	--	--	--	--
pH	S.U.	6.98	7.02	7.02	7.02	7.02
pH	S.U.	10.00	--	--	--	--
ORP	mV	232.0	232.1	233.2	233.1	232.8

Turbidity Standard	Units	LaMotte SN 5961-3815	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

: 9/23/20 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 611846	SmarTROLL SN 518534	SmarTROLL SN 513586	SmarTROLL SN 689918
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	--	--	--	--
pH	S.U.	6.98	7.02	7.02	7.02	7.02
pH	S.U.	10.00	--	--	--	--
ORP	mV	233.0	233.2	229.9	234.2	232.80

Turbidity Standard	Units	LaMotte SN 5961-3815	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

August 2020 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Jake Swanson/ Michael Guy/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 9/24/20 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 611846	SmarTROLL SN 518534	SmarTROLL SN 513586	SmarTROLL SN 689918
DO	% saturation	100	100	99.9	99.9	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	--	--	--	--
pH	S.U.	7.00	7.02	7.00	7.00	7.00
pH	S.U.	10.00	--	--	--	--
ORP	mV	229	232.1	228.3	230.5	228.4

Turbidity Standard	Units	LaMotte SN 5961-3815	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

Date: 9/25/20 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 611846	SmarTROLL SN 518534	SmarTROLL SN 513586	SmarTROLL SN 689918
DO	% saturation	100	100	NA	100	NA
Conductivity	us/cm	8000	8000	NA	8000	NA
pH	S.U.	4.00	--	NA	--	NA
pH	S.U.	7.00	7.00	NA	7.00	NA
pH	S.U.	10.00	--	NA	--	NA
ORP	mV	228	226.0	NA	229.1	NA

Turbidity Standard	Units	LaMotte SN 5961-3815	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	NA	0.00	NA
10.0	NTU	10.00	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

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-06D			
Person Gauging:		Joey Gallegos			
Date:		8/21/2020			
Time		14:01:00			
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☑	☐	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☐	☑	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☐	☐	☑
	b	Is the well pad sloped away from the protective casing?	☐	☑	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWA-39			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		12:43:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-38			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		13:02:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YAMW-5			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		13:12:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		PZ-37			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWC-23S			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWA-40			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		13:48:00			
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☐	☑	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-41			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		14:05:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YAMW-4			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		14:00:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YAMW-3			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-42			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		14:09:00			
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☐	☑	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YAMW-2			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		14:36:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-43			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		15:01:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		PZ-51			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		14:49:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

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	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-35			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YAMW-1			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWC-24SA			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
Time		15:52:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-24IA			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWC-49			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
Time		15:58:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-48			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
Time		16:03:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-06D			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
Time		16:09:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-6S			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
Time		16:10:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-6I			
Person Gauging:		Katie Pupkiewicz			
Date:		9/21/2020			
Time		16:10:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-18S			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		16:07:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-18I			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built environment

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-17S			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		16:11:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built environment

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-4I			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-04S			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		11:15:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-05S			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		10:56:00			
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☐	☑	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-5I			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		11:04:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built environment

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-5D			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		11:07:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-21I			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		11:18:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-20S			
Person Gauging:		Michael Guy			
Date:		9/21/2020			
Time		11:51:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YAMW-4			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		07:52:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-41			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:15:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWA-40			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:18:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWA-39			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:22:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-38			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:26:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YAMW-5			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:31:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWC-23S			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:34:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		PZ-37			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWC-24SA			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-24IA			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:53:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-35			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:59:00			
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☑	☐	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YAMW-1			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		09:01:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-43			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		PZ-51			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-42			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

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	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YAMW-3			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		09:22:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWC-49			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		10:24:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-48			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-17S			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		10:55:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-18S			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		11:16:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-18I			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-6I			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		11:31:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-6S			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		11:32:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-06D			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-4I			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		11:43:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-04S			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		11:45:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-5D			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		11:51:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		PZ-05S			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		11:54:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-5I			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		11:52:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-21I			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA AP-3, A, B and B'			
Permit Number:					
Well ID:		YGWA-20S			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		12:11:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YAMW-2			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		14:00:00			
			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?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

Groundwater Gauging Well Inspection Report

Project Location:		AMA R6 CCR Landfill			
Permit Number:					
Well ID:		YGWC-36A			
Person Gauging:		Becky Steever			
Date:		11/10/2020			
Time		08:59:00			
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☑	☐	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐

Groundwater Gauging Well Inspection Report

	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:				

Groundwater Gauging Well Inspection Report

		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:						
Signature and Seal of PE/PG responsible for inspection							

APPENDIX C

Well Installation and Abandonment Reports

August 2020

YGWC-24SA and PZ-24IA

ARCADIS Design & Consultancy for natural and built assets

Georgia Power

GEORGIA POWER COMPANY PLANT YATES - AP-3/A/B/B' AND R6 LANDFILL

Groundwater Monitoring Well Installation Report

August 10, 2020

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

Clement Quartey-Papafio, P.G.
Project Geologist

Geoffrey Gay, P.E.
Principal Environmental Engineer / Project Manager

Prepared by:

Arcadis U.S., Inc.

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Atlanta

Georgia 30339

Tel 770 431 8666

Fax 770 435 2666

Our Ref:

30055278

Date:

August 10, 2020

CONTENTS

TABLES

FIGURES

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.
Principal Environmental Engineer
Georgia Registration No. 27801

8.10.20
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 8 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 downgradient groundwater monitoring well (YGWC-24SA), a piezometer (PZ-24IA), and the abandonment of former locations YGWC-24S and PZ-24I. **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. The field activities for this investigation were performed from June 2 through June 15, 2020. 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 YGWC-24SA was designed to monitor the upper fractured bedrock transition zone. The installation date, location, elevation, screen interval, and designation for YGWC- 24SA and PZ-24IA are provided in the following sections. Boring and Well Construction logs are provided in **Appendix A**. **Table 1** provides a summary of well construction.

2.1 Drilling Method

Monitoring wells were 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. A copy of the Cascade Drilling Bond is included in **Appendix A.**

The monitoring well and piezometer installations were performed under the oversight and direction of a Georgia Registered Professional Geologist 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 4-inch sonic core rods with a 6-inch outer-casing sleeve. During the drilling, continuous core samples were logged in the field for lithologic properties.

2.2 Screened Interval

Groundwater well YGWC-24SA was screened in the saprolitic zone and piezometer PZ-24IA was screened within the upper fractured bedrock transition zone. The well completion depths are similar to former wells YGWC-24S and PZ-24I. The monitoring well and piezometer were constructed with 10 feet of prepacked well screen.

In each case, 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 wells were designed and constructed to: (1) allow sufficient groundwater flow to the well for sampling; (2) minimize the passage of formation materials (turbidity) into the wells; and (3) ensure sufficient structural integrity to prevent collapse of the well. The wells are 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 #1A. This size sand is an approximately 12-40 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 2 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 wells were 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 2 feet was present above the screen.

2.3.2 Annular Seal

An annular seal composed of approximately 3 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 using potable water and allowed to cure prior to grouting the well.

Following hydration of the bentonite, the remaining annular space was tremie-grouted with a Portland cement / bentonite mixture consisting of approximately 6% bentonite. The monitoring well and piezometer surface completion consists of a locked, aluminum protective casing and a 4-foot by 4-foot by 4-inch concrete pad.

2.3.3 Cap and Protective Casing

The well risers were 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 wells are marked with the proper well identification number on the stand-up casing.

3 WELL DEVELOPMENT

The monitoring wells were initially developed using a combination of pumping with a Waterra inertial pump fitted with a surge block to removed fine-grained sediment to minimize turbidity during groundwater sampling. A submersible pump was also used during well development until the water was visibly clear of particulates. Turbidity, pH, temperature, and conductivity measurements were made to ensure that each well was fully developed. Final turbidity measurements following development were less than 10 NTUs. The development forms are included in **Appendix B**. All equipment and tubing placed in the well were new.

4 WELL ABANDONMENT

Monitoring well abandonment was performed by Cascade Environmental under the observation of Arcadis and SCS Field Services. A Georgia registered Professional Geologist directed the well abandonments. Piezometer/monitoring wells PZ - 24I, YGWC-24S, and YGWC- 33S were abandoned by grouting in place. The concrete pads and bollards were removed, and the casing was cut off at a depth of 3-feet below ground surface. The screen and riser pipe were tremie-grouted with a 30% solids bentonite grout in the saturated zone. A neat cement grout was used above the saturated zone for resistance to desiccation. The ground surface was completed to match the surrounding surface condition.

5 SURVEY

The monitoring well locations 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 copy of the survey report (which included all wells at the site) is included in **Appendix C**.

6 REFERENCES

Georgia Environmental Protection Division, Georgia Department of Natural Resources. Manual for Groundwater Monitoring, September 1991.

TABLES

Table 1 - Well Construction Summary
Georgia Power Company
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

Well ID	Installation Date	Northing	Easting	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)
YGWC-24SA	6/4/2020	1258907.98	2073924.81	765.00	57.00	708.00	47.00	718.00
PZ-24IA	6/3/2020	1258910.76	2073930.07	764.65	89.85	674.80	79.85	685.19

Notes:

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

Horizontal survey to Georgia State Plan Grid (NAD83) West Zone

Acronyms and Abbreviations:

bTOC = below top of casing

ft = feet

FIGURES

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-24I
YGWC-24S
PZ-24IA
YGWC-24SA
PZ-35
YAMW-1
YGWC-36
YGWC-33S
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
YAMW-4
YGWC-41
PZ-37
YGWC-23S
ASH POND 3
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
- ABANDONED MONITORING WELL
- ABANDONED NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY

NOTE:
1. YGWC-33S WAS ABANDONED IN JUNE 2020.

2. YGWC-24SA WAS INSTALLED AS REPLACEMENT WELL FOR YGWC-24S IN JUNE 2020.

3. PZ-24IA WAS INSTALLED AS REPLACEMENT WELL FOR PZ-24I IN JUNE 2020.

4. AERIAL IMAGE SOURCE: 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
WELL INSTALLATION REPORT

WELL LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

APPENDIX A

Boring & Well Construction Logs
Well Abandonment Forms

COPY

CONTINUATION
CERTIFICATE

Atlantic Specialty Insurance Company , Surety upon

a certain Bond No. **800031223**

dated effective June 30, 2017
(MONTH-DAY-YEAR)

on behalf of Michael C. Rice and Cascade Drilling, L.P., any and all employees, officers and partners
(PRINCIPAL)

and in favor of State of Georgia
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on June 30, 2019
(MONTH-DAY-YEAR)

and ending on June 30, 2021
(MONTH-DAY-YEAR)

Amount of bond Thirty Thousand and Zero/100 ($30,000.00)

Description of bond Water Well Contractor Performance Bond

Premium: $1,200.00

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 this 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 had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on May 9, 2019
(MONTH-DAY-YEAR)
Atlantic Specialty Insurance Company

By _____
Attorney-in-Fact Elizabeth R. Hahn

Parker, Smith & Feek, Inc.
Agent

2233 112th Ave NE Bellevue, WA 98004
Address of Agent

(425) 709-3600
Telephone Number of Agent

S-0157/GE 8/08

XDP

OneBeacon
INSURANCE GROUP

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Deanna M. French, Susan B. Larson, Elizabeth R. Hahn, Jana M. Roy, Scott McGilvray, Mindee L. Rankin, Ronald J. Lange, John R. Claeys, Roger Kaltenbach, Guy Armfield, Scott Fisher, Andrew P. Larsen, Nicholas Fredrickson**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **sixty million dollars ($60,000,000)** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-sixth day of October, 2017.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

By _____
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-sixth day of October, 2017, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.

TARA JANELLE STAFFORD
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2020

_____
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 9 day of May 2019

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
October 1, 2019

_____
Christopher V. Jerry, Secretary

ARCADIS Design & Consultancy for natural and built assets

Boring No.: PZ-24IA

Boring Log/Well Construction Log

Sheet: 1 of 3

Project Name: Plant Yates
Project Number: 30055278
Project Location: Newnan, GA

Date Started: 06/02/2020
Date Completed: 06/03/2020

Logger: Clement Papafio
Editor: Grant Willford
Weather Conditions: -

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Photo Log	PID (ppm)	Graphic Log	Description	Construction Details	Well
0									
1							(0.0-19.0') No recovery. Hydrovac to 19.0 ft bgs for borehole clearance.	Surface completion consists of a locking monument above 2.85' ground surface with a weep hole, vent hole in well casing, pea gravel between well monument and well casing, 4'x4'x4" concrete pad, and four concrete bollards.	
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19								Portland Cement with 6% Bentonite. 2 inch diameter Schedule 40 PVC riser.	
20							(19.0-29.0') Silty sand (SM); mottled very pale brown (10YR7/4) and white (10YR 8/1); fine grained to medium grained sand; very loose; some mica; iron oxidation present; low recovery; saprolitic.		
21									
22									
23									
24									
25									
26									
27									
28									
29									

Drilling Co.: Cascade Drilling
Driller: Ike Young
Drilling Method: Rotosonic
Drilling Fluid: Water
Remarks: ' / ft = feet; " / in = inch; bgs = below ground surface; NA = not applicable / available.

Sampling Method: Core Barrel
Sampling Interval: Continous
Water Level Start (ft. bgs.):
Water Level Finish (ft. btoc.):
Converted to Well: ☒ Yes ☐ No
Surface Elev.: 761.80
North Coor: 1258910.76
East Coor: 2073930.07

MPC BORING LOGS TO GINT L C:\USERS\GWILLFORD\DESKTOP\FOR NIKKI\GINT FILES\MPC BORING LOGS PASF P.GPJ ARCADIS.GDT 7/17/20

ARCADIS Design & Consultancy for natural and built assets

Boring Log/Well Construction Log

Boring No.: PZ-24IA

Sheet: 2 of 3

Project Name: Plant Yates
Project Number: 30055278
Project Location: Newnan, GA

Date Started: 06/02/2020
Date Completed: 06/03/2020
Logger: Clement Papafio
Editor: Grant Willford
Weather Conditions: -

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Photo Log	PID (ppm)	Graphic Log	Description	Construction Details	Well
30–39							(29.0-39.0') Silty sand (SM); grayish brown (10YR 5/2); fine grained to medium grained sand; loose; iron oxidation present. (33.0-34.0') Color change to mottled very pale brown (10YR 7/4) and white (10YR 8/1). (34.0-39.0') Color change to very pale brown (10YR 8/2); loose; dry; saprolitic.		
39–44							(39.0-44.0') Clayey silty sand (SM-SC); light yellowish brown (10YR 6/4); fine grained to medium grained sand; trace clay; loose; slight plasticity; mica present; moist.		
44–48							(44.0-48.0) Silty sand (SM); pale brown (10YR 6/3); fine grained to medium grained sand; loose; moist.	Portland Cement with 6% Bentonite. 2 inch diameter Schedule 40 PVC riser.	
48–49							(48.0-49.0') Sand; white (10YR 8/1); fine grained to coarse grained sand; weathered quartz vein; moist.		
49–59							(49.0-52.0') Poorly graded sand (SP); very pale brown (10YR 8/3); fine grained to medium grained sand; some silt; loose; dry. (52.0-54.0') Silty sand (SM); mottled light brown (7.5YR 6/3) and light olive gray (5Y 6/2); fine grained to medium grained sand; mica present; wet. (54.0-59.0') Well graded sand (SW); mottled reddish brown (2.5YR 6/4) and white (10YR 8/1); fine grained to coarse grained sand; loose to medium dense; residual rock gravel; possible transition to partially weathered bedrock (PWR); dry.		
59–62							(59.0-71.0') Granitic gneiss; light gray (5YR 7/1); feldspar, quartz, mica mineralogy; highly to moderately weathered; intensely fractured; sub horizontal to horizontal fractures; staining on fracture surface medium foliation; joints and fractures parallel to foliation; low recovery; very poor RQD.		

Remarks:

ARCADIS Design & Consultancy for natural and built assets

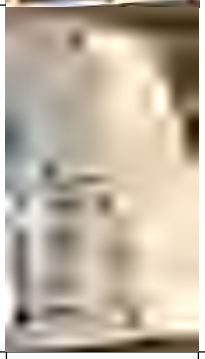
Boring No.: PZ-24IA

Boring Log/Well Construction Log

Sheet: 3 of 3

Project Name: Plant Yates
Project Number: 30055278
Project Location: Newnan, GA

Date Started: 06/02/2020
Date Completed: 06/03/2020
Logger: Clement Papafio
Editor: Grant Willford
Weather Conditions: -

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Photo Log	PID (ppm)	Graphic Log	Description	Construction Details	Well
63							(59.0-71.0') Granitic gneiss; light gray (5YR 7/1); feldspar, quartz, mica mineralogy; highly to moderately weathered; intensely fractured; sub horizontal to horizontal fractures; staining on fracture surface medium foliation; joints and fractures parallel to foliation; low recovery; very poor RQD.	Portland Cement with 6% Bentonite. 2 inch diameter Schedule 40 PVC riser.	
64									
65									
66									
67									
68									
69									
70									
71									
72							(71.0-82.5') Granitic gneiss; gray (7.5YR 5/1); feldspar, quartz, mica mineralogy; thin to moderate foliation moderately weathered; moderately fractured; staining on fracture surface.		
73								Bentonite seal.	
74									
75									
76							(75.0-82.5') Near horizontal fractures; moderately foliated; slightly weathered to fresh; hard; fair RQD; color change to white (7.5YR 8/1).	Filter pack: #1A (12-40) sand	
77									
78									
79									
80									
81									
82									
83								2 inch diameter Sch. 40 PVC U-Pack dual wall 0.010-inch slotted screen.	
84									
85									
86									
87							(82.5-87.0') Granitic gneiss; light gray (5Y 7/1); feldspar, quartz, mica mineralogy; intensely to moderately fractured; near horizontal to sub horizontal fractures; very slightly weathered to fresh rock; moderatly hard; very poor RQD.		
88							End of boring 87.0 ft bgs.		
89									
90									
91									
92									
93									
94									
95									

Remarks:

ARCADIS Design & Consultancy for natural and built assets

Boring Log/Well Construction Log

Boring No.: YGWC-24SA

Sheet: 1 of 2

Project Name: Plant Yates
Project Number: 30055278
Project Location: Newnan, GA

Date Started: 06/03/2020
Date Completed: 06/04/2020

Logger: Clement Papafio
Editor: Grant Willford
Weather Conditions: -

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Photo Log	PID (ppm)	Graphic Log	Description	Construction Details	Well
0									
1							(0.0-13.0') No recovery. Hydrovac to 13.0 ft bgs for borehole clearance.	Surface completion consists of a locking monument 3.00' above ground surface with a weep hole, vent hole in well casing, pea gravel between well monument and well casing, 4'x4'x4" concrete pad, and four concrete bollards.	
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14							(13.0-16.0') Silty sand (SM); pale brown (10YR 8/3) mottled with white (10YR 8/1); fine grained sand to medium grained sand; very loose; mics present; weathered quartz vein present; saprolitic; moist.	Portland Cement with 6% Bentonite. 2 inch diameter schedule 40 PVC riser.	
15									
16									
17							(16.0-19.0') Silty sand (SM); brownish yellow (10YR 6/8); trace clay; loose; slight plasticity; mica present; moist.		
18									
19									
20							(19.0-29.0') Silty sand (SM); brownish yellow (10YR 6/8); fine grained to medium grained sand; mica present; weathered quartz vein present; oxidised iron present; saprolitic; dry.		
21									
22									
23									
24									
25									
26									
27									
28									
29									

Drilling Co.: Cascade Drilling
Driller: Ike Young
Drilling Method: Rotosonic
Drilling Fluid: Water
Remarks: ' / ft = feet; " / in = inch; bgs = below ground surface; NA = not applicable / available.

Sampling Method: Core Barrel
Sampling Interval: Continous
Water Level Start (ft. bgs.):
Water Level Finish (ft. btoc.):
Converted to Well: ☒ Yes ☐ No
Surface Elev.: 762.00
North Coor: 1258907.98
East Coor: 2073924.81

ARCADIS Design & Consultancy for natural and built assets

Boring No.: YGWC-24SA

Boring Log/Well Construction Log

Sheet: 2 of 2

Project Name: Plant Yates
Project Number: 30055278
Project Location: Newnan, GA

Date Started: 06/03/2020
Date Completed: 06/04/2020

Logger: Clement Papafio
Editor: Grant Willford
Weather Conditions: -

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Photo Log	PID (ppm)	Graphic Log	Description	Construction Details	Well
30–39							(29.0-39.0') Silty sand (SM); yellowish brown (10YR 5/8); fine grained to medium grained sand; loose to medium dense; mica present; feldspars present. (34.0-36.0') Color change to dark brown (10YR 3/3); medium dense; dry. (36.0-39.0') Color change to white (10YR 8/1); oxidised iron present. (37.0-37.5') Weathered quartz vein.	Portland Cement with 6% Bentonite. 2 inch diameter schedule 40 PVC riser.	
40–49							(39.0-49.0') Silty sand (SM); mottled pale brown (10YR 6/3) with yellow (10YR 8/8/); mica present; wet. (41.0-49.0') Color change to yellowish brown (10YR 5/8); quartz seam present; moist.	Bentonite seal. Filter pack: #1A (12-40) sand.	
50–54							(49.0-54.0') Silty sand (SM); light olive gray (5Y 6/2); fine grained to coarse grained sand; loose; mica present; weathered quartz vein present; wet.	2 inch diameter Sch. 40 PVC U-Pack dual wall 0.010-inch slotted screen .	
55–62							End of boring 54.0 ft bgs.		

Remarks:

ARCADIS U.S., Inc.
2839 Paces Ferry Rd SE,
Suite 900, Atlanta, GA 30339

Well Abandonment Documentation Form

General Information

Project Name	Plant Yates	**Inspector**	Clement Quartey-Papafio	**Well Id.**	YGWC-33S
Project Number	30055278	**Weather**	Sunny	**Sheet** 1	**of** 1
Drilling Company	Cascade	**Temperature**	80°F	**Started**	6/9/2020
Client Name	Georgia Power	**Driller**	Isaac Young	**Completed**	6/9/2020

Well Construction Information

Well Depth (ft bTOC)	38.5’	**Screen Type**	Schedule 40 PVC	**Grout Type**	Bentonite grout
Well Casing Dia.	2” **L.F.** 28.53’	**Slot Size (in.)**	0.010” Slotted	**End Cap/Sump**	0.3’ Silt Trap
Casing Type	Schedule 40 PVC	**Pack Type & Size**	20/30 silica sand	**Protective Casing**	4”x4” Aluminum
Joint Type	Flush Threaded	**Seal Type**	Bentonite pellets		
Well Screen Dia.	2” **L.F.** 10’			**Well Pad Size**	4’x4’x4”

Abandonment Procedures and Volumes

Expected Grout Volume 0.8 ft^3 **Approximate Grout Volume:** 1.1 ft^3

Grout Mixture:
~16 lbs Portland/gal

DTW – 17.15’ bTOC

- Drillers tremie grouted saturated zone with 30% solids bentonite grout slurry from the bottom up; cement grout to surface
- Removed bollards, well casing and well pad
- The PVC Riser was cut off 3 feet below ground surface

Notes:

No obstruction noted.
Removed pump, tubing, and a transducer prior to abandonment; handed over to Mr. Shawn Milan

ARCADIS U.S., Inc.
2839 Paces Ferry Rd SE,
Suite 900, Atlanta, GA 30339

Well Abandonment Documentation Form

General Information

Project Name	Plant Yates	**Inspector**	Clement Quartey-Papafio	**Well Id.**	YGWC-24S
Project Number	30055278	**Weather**	Sunny	**Sheet** 1 **of** 1	
Drilling Company	Cascade	**Temperature**	80° F	**Started**	6/4/2020
Client Name	Georgia Power	**Driller**	Isaac Young	**Completed**	6/4/2020

Well Construction Information

Well Depth (ft bgs)	54			**Screen Type**	Sch. 40 PVC pre-pack	**Grout Type**	Bentonite grout
Well Casing Dia.	2”	**L.F.**	57.57	**Slot Size (in.)**	0.010” Slotted	**End Cap/Sump**	0.3’ Silt Trap
Casing Type	Schedule 40 PVC			**Pack Type & Size**	20/30 silica sand	**Protective Casing**	4”x4” Aluminum
Joint Type	Flush Threaded			**Seal Type**	Bentonite pellets		
Well Screen Dia.	2”	**L.F.**	10’			**Well Pad Size**	4’x4’x4”

Abandonment Procedures and Volumes

Expected Grout Volume = 1.1 ft^3 **Approximate Grout Volume** = 1.3 ft^3

Grout Mixture:

~16 lbs Portland/gal. **DTW** – 25.45 bTOC

- Drillers tremie grouted saturated zone with 30% solids bentonite grout slurry from the bottom up; cement grout to surface
- Removed bollards, well casing and well pad
- The PVC Riser was cut off 3 feet below ground surface

Notes:

No obstruction noted.

ARCADIS U.S., Inc.
2839 Paces Ferry Rd SE,
Suite 900, Atlanta, GA 30339

Well Abandonment Documentation Form

General Information

Project Name	Plant Yates	**Inspector**	Clement Quartey-Papafio	**Well Id.**	PZ-24I
Project Number	30055278	**Weather**	Sunny	**Sheet** 1 **of** 1	
Drilling Company	Cascade	**Temperature**	80° F	**Started**	6/4/2020
Client Name	Georgia Power	**Driller**	Isaac Young	**Completed**	6/4/2020

Well Construction Information

Well Depth (ft bgs)	87	**Screen Type**	Sch. 40 PVC pre-pack	**Grout Type**	Cement/Bentonite
Well Casing Dia.	2” **L.F.** 79.8	**Slot Size (in.)**	0.010” Slotted	**End Cap/Sump**	0.3’ Silt Trap
Casing Type	Schedule 40 PVC	**Pack Type & Size**	20/30 silica sand	**Protective**	4”x4” Aluminum
Joint Type	Flush Threaded	**Seal Type**	Bentonite pellets		
Well Screen Dia.	2” **L.F.** 10’			**Well Pad Size**	4’x4’x4”

Abandonment Procedures and Volumes

Expected Grout Volume = 1.8 ft^3 **Approximate Grout Volume =** 1.9 ft^3

Grout Mixture:

~16 lbs Portland/gal **DTW** – 24.71’ bTOC

- Drillers tremie grouted saturated zone with 30% solids bentonite grout slurry from the bottom up; cement grout to surface
- Removed bollards, well casing and well pad
- The PVC riser was cut off 3 feet below ground surface

Notes:

No obstruction noted.

Removed pump prior to abandonment; handed over to Mr. Shawn Milan

APPENDIX B

Well Development Forms

ARCADIS Design & Consultancy for natural and built assets

WELL DEVELOPMENT LOG

Site/Well No. YGWC-24SA

Project PLANT YATES Project No. 30052922 Page 1 of 1

Site Location 708 DYER ROAD, NEWNAN GA Date 6-12-2020

Weather CLEAR SUNNY Development Time Begin 1330 End 1423

Evacuation Data

Measuring Point	TOP OF CASING	Sample Pump Intake Setting (ft bmp)	45
MP Elevation (ft)	NO	Pumping Rate (gpm)	1 GPM
Land Surface Elevation (ft)	NO	Evacuation Method	WHALE PUMP W/ 3/8 ID TUBING
Sounded Well Depth (ft bmp)	57.20		
Depth to Water (ft bmp)	27.10		
Water-Level Elevation (ft)	NO	**Field Parameters**	
Water Column in Well (ft)	30.10	Color	CLEAR
Casing Diameter/Type	2-INCH	Odor	NONE
Gallons in Well	4.8	Appearance	CLEAR

Well Volume	Total Gallons Removed	pH (s.u.)	Conductivity (mS/cm or umhos/cm)	Turbidity (NTU)	Temperature (°F/°C)	DTW Remarks
Initial	1.0	7.53	102.54	364	19.48	33.00
1st 5mins	5.0	6.91	94.02	180	18.88	33.65
2nd 10mins	10.0	6.33	92.35	111	18.85	33.90
3rd 15"	15	6.11	91.89	89.3	18.54	34.10
4th 20"	20	5.97	90.82	32.4	18.73	34.20
5th 25"	25	5.87	90.04	10.2	18.71	34.50
6th 30"	30	5.83	89.19	6.16	18.49	34.60
7th 35"	35	5.78	88.78	4.06	18.63	34.65
8th 40"	40	5.76	87.34	4.01	18.55	34.65
9th 45"	45	5.71	87.87	3.14	18.41	34.80
10th 50"	50	5.73	87.57	2.20	18.63	34.80

Development Personnel: Clement Papafio

Notes: USED WATERRA PUMP AND SURGE BLOCK WITH A CHECK VALVE TO REMOVE FINES AND APPROXIMATELY 70 GALLONS DURING WELL DEVELOPMENT. UTILIZED EVERY 1 FOOT SCREEN DEPTH TO FLUSH OUT DRILLING MUD.
SWITCHED TO WHALE PUMP TO COLLECT PARAMETERS.

Well Casing Volumes (gallon/feet)

1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	below measuring point	ml	mililiter	NTU	Nephelometric Turbidity Units
°C	Degrees Celsius	mS/cm	Milisiemens per centimeter	PVC	Polyvinyl chloride
ft	feet	msl	mean sea-level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not Applicable	umhos/cm	Micromhos per centimeter
mg/L	Miligrams per liter	NM	Not Measured	VOC	Volatile Organic Compounds

ARCADIS Design & Consultancy for natural and built assets

WELL DEVELOPMENT LOG

Site/Well No. PZ-24IA

Project PLANT YATES Project No. 30052922 Page 1 of 1

Site Location 708 DYER ROAD, NEWNAN GA Date 6-15-2020

Weather CLEAR, SUNNY, LOW 80 Development Time Begin 1430 End 15:30

Evacuation Data

Measuring Point	TOP OF CASING	Sample Pump Intake Setting (ft bmp)	70'
MP Elevation (ft)	NO	Pumping Rate (gpm)	0.2 GPM
Land Surface Elevation (ft)	NO	Evacuation Method	SUBMERSIBLE W/SHEET OFF
Sounded Well Depth (ft bmp)	90.18		
Depth to Water (ft bmp)	27.55		
Water-Level Elevation (ft)		**Field Parameters**	
Water Column in Well (ft)	62.63	Color	CLEAR
Casing Diameter/Type	2-INCH	Odor	NONE
Gallons in Well	10	Appearance	CLEAR

Well Volume	Total Gallons Removed	pH (s.u.)	Conductivity (mS/cm or umhos/cm)	Turbidity (NTU)	Temperature (°F/°C)	ORP	Remarks	DO	DTW
Initial	0.5	6.76	95.30	11.7	20.15	110.90		4.11	34.10
1st	1.0	6.65	124.20	11.4	21.26	106.70		3.90	36.25
2nd	2.0	6.52	126.70	11.1	20.37	109.10		3.85	42.30
3rd	3.0	6.51	127.70	10.4	21.49	108.80		3.77	44.20
4th	4.0	6.46	126.50	9.67	21.93	109.90		3.83	46.40
5th	5.0	6.43	126.10	10.10	21.26	106.20		3.88	48.10
6th	6.0	6.42	126.60	10.60	21.34	104.90		3.85	49.40
7th	6.5	6.41	126.20	9.60	21.37	103.90		3.87	51.00
8th	7.0	6.40	128.00	9.81	22.47	102.40		3.84	51.95
9th	7.5	6.41	127.30	9.66	23.88	102.50		3.74	52.70
10th	8.0	6.40	126.60	9.53	24.17	103.10		3.72	53.50
	8.5	6.37	126.10	9.42	24.24	106.10		3.94	54.20

Development Personnel: Clement Papafio

Notes:

USED WATERRA AND SURGE BLOCK W/ CHECK VALVE TO DEVELOP WELL, APPROXIMATELY 21 GALLONS OF WATER AND FINES WERE REMOVED.
SWITCHED TO A SUBMERSIBLE PUMP TO COLLECT INTRINSIC PARAMETERS.

Well Casing Volumes (gallon/feet)

1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	below measuring point	ml	milliliter	NTU	Nephelometric Turbidity Units
°C	Degrees Celsius	mS/cm	Milisiemens per centimeter	PVC	Polyvinyl chloride
ft	feet	msl	mean sea-level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not Applicable	umhos/cm	Micromhos per centimeter
mg/L	Miligrams per liter	NM	Not Measured	VOC	Volatile Organic Compounds

APPENDIX C

Well Survey Data

Arcadis U.S., Inc.
1210 Premier Drive
Suite 200
Chattanooga
Tennessee 37421
Tel 423 756 7193
Fax 423 756 7197
www.arcadis-us.com

Mr. Joju Abraham
Southern Company
Environmental Solutions
241 Ralph McGill Blvd, NE
Atlanta, Georgia 30308

Subject:
Monitoring Well and Piezometer Surveys
Plant Yates, 708 Dyer Road, Newnan, Georgia

Date:
June 29, 2020

Contact:
Cory Williams, PLS

Phone:
919.415.2348

Email:
cory.williams@arcadis.com

Our ref:
30054533

Dear Mr. Abraham:

Attached is a copy of the reports for the Monitoring Well and Piezometer Surveys for the Phase I and Phase II Sites at Plant Yates. The Phase I and Phase II sites surveyed include the following specific areas:

- AMA, Ash Management Area
- AP-1, Former Ash Pond 1
- AP-2, Ash Pond 2
- Gypsum Landfill

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, PLS
Survey Department Manager

Attachments

Copies:
Geoffrey Gay, PE
Rick Helmadollar, PE
A. Lee Robertson IV, PLS

DESCRIPTION AND SCOPE

The task included performing horizontal and vertical field survey locations of the existing well networks (including all monitoring wells and piezometers). The Arcadis field survey team obtained horizontal and vertical locations for the top of the well casing (TOC) and surveyed the nail located on the concrete pad around the well. Where no nail was present, the field crew surveyed the top of the concrete well pad. The Arcadis field team utilized a combination of Leica GS16 Global Positioning System (GPS) with traditional Leica MS60 Robotic Total Station field survey equipment and methods to obtain horizontal locations of the TOC and/or nail or top of the concrete well pad. All horizontal field survey locations are relative to the Georgia State Plane Coordinate System, West Zone, NAD1983, US Survey Feet. All horizontal locations meet or exceed an accuracy level of 0.50 foot. All vertical field survey locations were obtained from a level loop, performed with the Leica DNA03 digital level. Next, we began from a benchmark set, by utilizing GPS Static Session with an OPUS solution and subsequently verified via the eGPS RTN Network and ran through all well and piezometer locations to close on the beginning benchmark to confirm accuracy. All vertical elevations are referenced to NAVD1988, US Survey Feet and meet an accuracy standard of 0.01 foot.

See the attached exhibits detailing the Monitoring Well and Piezometer surveyed locations for each Phase I and Phase II site.

SUMMARY

The field survey crew performed the survey in June 2020 with the findings or observations summarized below:

- The ground elevation survey location was taken adjacent to the concrete base point (PK, Disk or Chiseled X). Note that at some locations, the concrete base was buried under soil; consequently, the ground elevation is higher than the concrete base point location.

- The horizontal location for monitoring well GWC-6R at the Gypsum Landfill is approximately +/-51 feet southeasterly of the provided coordinate location as detailed in “Georgia Power Company Plant Yates, Private Industrial Landfill, Permit No. 038-014D (I), Replacement Monitoring Well GWC-6R Certification, ES1703”, dated July 2010. See attached Photograph Log.

Monitoring Well Summary

Site	Monitoring Wells	Piezometers
AMA = Ash Management Area	25	8
AP-1 = Former Ash Pond 1	5	5
AP-2 = Ash Pond 2	14	8
Gypsum Landfill	7	0

CERTIFICATION

I, A. Lee Robertson IV, being a Georgia Licensed Professional Land Surveyor, in accordance with the Georgia Board of Professional Engineers and Land Surveyors do hereby certify that the information contained herein is true and correct and has been prepared in accordance with generally accepted good land survey practices under my supervision, and the data is reliable to a horizontal accuracy of 0.5 foot and an elevational accuracy of 0.01 foot for each surveyed point.

FINAL REVIEW:

A. Lee Robertson IV DATE: June 29, 2020

A. Lee Robertson IV, ARM, PLS, PSM
1301 Riverplace Blvd., Suite 700
Jacksonville, FL 32207
904.493.8589

EXHIBIT 1

Plant Yates – AMA Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWA-4I	Casing	784.21	1254436.68	2075455.62	33° 26' 47.432" N	84° 53' 29.831" W
	Disk	782.00	1254436.75	2075456.65		
	Ground	781.9				
YGWA-5I	Casing	784.54	1254399.95	2076218.86	33° 26' 47.122" N	84° 53' 20.821" W
	Disk	782.21	1254400.71	2076219.39		
	Ground	782.1				
YGWA-5D	Casing	784.53	1254396.67	2076223.63	33° 26' 47.089" N	84° 53' 20.764" W
	Disk	782.16	1254397.45	2076224.30		
	Ground	781.9				
YGWA-17S	Casing	783.05	1257602.79	2076758.31	33° 27' 18.846" N	84° 53' 14.717" W
	PK Nail	780.14	1257603.70	2076758.38		
	Ground	780.2				
YGWA-18S	Casing	790.57	1257116.05	2077015.25	33° 27' 14.048" N	84° 53' 11.644" W
	PK Nail	787.69	1257116.98	2077015.60		
	Ground	787.6				
YGWA-18I	Casing	790.57	1257090.05	2077015.82	33° 27' 13.791" N	84° 53' 11.635" W
	PK Nail	787.90	1257094.38	2077023.55		
	Ground	787.9				
YGWA-20S	Casing	767.12	1255531.55	2077410.37	33° 26' 58.399" N	84° 53' 06.851" W
	PK Nail	764.41	1255531.12	2077409.22		
	Ground	764.6				
YGWA-21I	Casing	783.70	1255538.27	2076768.14	33° 26' 58.421" N	84° 53' 14.432" W
	PK Nail	780.62	1255537.44	2076768.81		
	Ground	780.8				
YGWC-23S	Casing	764.91	1256366.93	2074734.07	33° 27' 06.479" N	84° 53' 38.506" W
	PK Nail	761.74	1256367.40	2074734.44		
	Ground	762.0				
YGWC-24SA	Casing	765.00	1258907.98	2073924.81	33° 27' 31.563" N	84° 53' 48.268" W
	PK Nail	762.08	1258909.02	2073924.05		
	Ground	762.0				
YGWC-36	Casing	739.61	1258514.02	2073770.14	33° 27' 27.654" N	84° 53' 50.061" W
	PK Nail	737.04	1258513.74	2073771.01		
	Ground	736.9				
YGWC-49	Casing	782.73	1259375.23	2074337.51	33° 27' 36.214" N	84° 53' 43.435" W
	PK Nail	780.11	1259375.91	2074337.14		
	Ground	780.1				

EXHIBIT 1

Plant Yates – AMA Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWA-6S	Casing	782.47	1260484.87	2074786.49	33° 27' 47.223" N	84° 53' 38.227" W
	Disk	780.06	1260485.50	2074785.70		
	Ground	779.8				
YGWA-6I	Casing	782.73	1260490.02	2074790.49	33° 27' 47.275" N	84° 53' 38.181" W
	Disk	780.36	1260490.74	2074789.66		
	Ground	780.2				
YAMW-1	Casing	743.83	1258602.12	2073814.55	33° 27' 28.529" N	84° 53' 49.543" W
	PK Nail	741.11	1258602.93	2073815.29		
	Ground	740.9				
PZ-04S	Casing	784.25	1254442.86	2075454.20	33° 26' 47.493" N	84° 53' 29.848" W
	Disk	781.94	1254443.16	2075455.15		
	Ground	781.8				
PZ-05S	Casing	784.64	1254404.42	2076211.43	33° 26' 47.165" N	84° 53' 20.909" W
	Disk	782.31	1254405.12	2076212.12		
	Ground	782.2				
PZ-06D	Casing	782.02	1260480.15	2074782.68	33° 27' 47.176" N	84° 53' 38.272" W
	Disk	779.65	1260480.84	2074782.04		
	Ground	779.5				
PZ-24IA	Casing	764.65	1258910.76	2073930.07	33° 27' 31.591" N	84° 53' 48.206" W
	PK Nail	761.89	1258911.68	2073929.64		
	Ground	761.8				
PZ-35	Casing	743.81	1258593.16	2073805.60	33° 27' 28.440" N	84° 53' 49.649" W
	PK Nail	741.09	1258593.85	2073806.06		
	Ground	740.9				
PZ-48	Casing	779.83	1259868.04	2074528.00	33° 27' 41.103" N	84° 53' 41.228" W
	PK Nail	777.29	1259868.75	2074527.27		
	Ground	777.2				
YGWA-39	Casing	818.19	1255717.13	2073865.58	33° 26' 59.990" N	84° 53' 48.702" W
	PK Nail	815.58	1255717.96	2073865.39		
	Ground	815.6				
YGWA-40	Casing	815.73	1255791.95	2073431.34	33° 27' 00.700" N	84° 53' 53.833" W
	PK Nail	813.45	1255792.83	2073431.58		
	Ground	813.5				

EXHIBIT 1

Plant Yates – AMA Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWC-38	Casing	799.69	1256108.38	2074446.80	33° 27' 03.901" N	84° 53' 41.875" W
	PK Nail	797.24	1256108.41	2074446.02		
	Ground	797.1				
YGWC-41	Casing	803.92	1256510.62	2073274.41	33° 27' 07.799" N	84° 53' 55.745" W
	PK Nail	801.23	1256509.74	2073274.29		
	Ground	801.1				
YGWC-42	Casing	797.86	1256882.87	2073326.52	33° 27' 11.486" N	84° 53' 55.161" W
	PK Nail	795.34	1256881.68	2073326.58		
	Ground	795.1				
YGWC-43	Casing	744.96	1257547.41	2073199.65	33° 27' 18.052" N	84° 53' 56.714" W
	PK Nail	742.50	1257546.78	2073200.55		
	Ground	742.3				
PZ-37	Casing	760.78	1256471.14	2074699.59	33° 27' 07.508" N	84° 53' 38.922" W
	PK Nail	758.10	1256471.89	2074700.06		
	Ground	758.0				
PZ-51	Casing	744.30	1257595.80	2073182.55	33° 27' 18.529" N	84° 53' 56.920" W
	PK Nail	741.23	1257595.53	2073181.53		
	Ground	741.3				
YAMW-2	Casing	781.04	1256780.59	2072924.89	33° 27' 10.446" N	84° 53' 59.893" W
	PK Nail	777.81	1256781.38	2072926.79		
	Ground	777.9				
YAMW-3	Casing	796.05	1256915.25	2073345.21	33° 27' 11.808" N	84° 53' 54.943" W
	PK Nail	792.98	1256914.96	2073344.24		
	Ground	793.2				
YAMW-4	Casing	805.59	1256532.64	2073280.71	33° 27' 08.018" N	84° 53' 55.673" W
	PK Nail	802.60	1256532.72	2073281.78		
	Ground	802.6				
YAMW-5	Casing	788.90	1256140.21	2074486.69	33° 27' 04.219" N	84° 53' 41.407" W
	PK Nail	785.87	1256139.54	2074487.44		
	Ground	785.9				

Notes:
NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions
Elevations derived from Arcadis BM#1 (El. 758.24)
Elevations & coordinates are U.S. Survey feet

EXHIBIT 2

Plant Yates – AP-1 Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWA-47	Casing	758.22	1262411.84	2071818.05	33° 28' 06.081" N	84° 54' 13.428" W
	PK Nail	755.73	1262410.74	2071817.99		
	Ground	755.6				
YGWC-44	Casing	758.35	1261874.34	2071219.39	33° 28' 00.721" N	84° 54' 20.449" W
	PK Nail	755.7	1261874.44	2071218.47		
	Ground	755.5				
YGWC-45	Casing	719.36	1261668.95	2070912.60	33° 27' 58.667" N	84° 54' 24.053" W
	PK Nail	716.72	1261668.87	2070911.87		
	Ground	716.5				
YGWC-52	Casing	755.86	1262145.22	2071464.36	33° 28' 03.418" N	84° 54' 17.580" W
	PK Nail	752.99	1262144.65	2071465.21		
	Ground	752.9				
YGWC-46A	Casing	733.04	1260994.59	2070970.30	33° 27' 52.000" N	84° 54' 23.316" W
	PK Nail	730.16	1260994.40	2070971.40		
	Ground	730.1				
PZ-09S	Casing	712.08	1262003.49	2070720.43	33° 28' 01.963" N	84° 54' 26.350" W
	Disk	709.90	1262003.23	2070721.54		
	Ground	709.8				
PZ-09I	Casing	712.13	1261995.81	2070720.09	33° 28' 01.887" N	84° 54' 26.353" W
	Disk	709.92	1261995.51	2070721.11		
	Ground	709.8				
PZ-10S	Casing	700.43	1260802.29	2070552.32	33° 27' 50.068" N	84° 54' 28.233" W
	Disk	698.02	1260802.21	2070553.31		
	Ground	698.1				
PZ-10I	Casing	700.25	1260809.64	2070551.98	33° 27' 50.068" N	84° 54' 28.233" W
	Disk	697.96	1260809.55	2070552.97		
	Ground	697.8				
PZ-53	Casing	732.90	1260964.50	2070920.38	33° 27' 51.698" N	84° 54' 23.902" W
	PK Nail	729.99	1260964.35	2070921.22		
	Ground	729.9				

Notes:
NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions
Elevations derived from Arcadis BM#1 (El. 758.24)
Elevations & coordinates are U.S. Survey feet

EXHIBIT 3

Plant Yates – AP-2 Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWA-1I	Casing	836.60	1256876.13	2070097.91	33° 27' 11.193" N	84° 54' 33.266" W
	Disk	834.33	1256876.76	2070098.84		
	Ground	834.3				
YGWA-1D	Casing	837.25	1256867.34	2070104.61	33° 27' 11.106" N	84° 54' 33.186" W
	Disk	835.04	1256868.01	2070105.52		
	Ground	834.9				
YGWA-2I	Casing	866.25	1256144.08	2070790.49	33° 27' 03.999" N	84° 54' 25.030" W
	Disk	864.2	1256144.35	2070791.29		
	Ground	864.0				
YGWA-3I	Casing	796.55	1256405.20	2072024.20	33° 27' 06.669" N	84° 54' 10.492" W
	Disk	794.34	1256405.65	2072025.23		
	Ground	794.0				
YGWA-3D	Casing	796.78	1256399.94	2072026.21	33° 27' 06.617" N	84° 54' 10.468" W
	Disk	794.39	1256400.26	2072027.12		
	Ground	794.1				
YGWA-14S	Casing	748.76	1257828.64	2072537.24	33° 27' 20.788" N	84° 54' 04.555" W
	Disk	746.58	1257829.68	2072537.61		
	Ground	746.8				
YGWA-30I	Casing	762.58	1258421.86	2071107.11	33° 27' 26.556" N	84° 54' 21.485" W
	PK Nail	759.95	1258421.69	2071106.13		
	Ground	760.1				
YGWC-26S	Casing	716.28	1259734.66	2070615.87	33° 27' 39.510" N	84° 54' 27.393" W
	PK Nail	713.17	1259734.57	2070614.87		
	Ground	713.1				
YGWC-26I	Casing	715.91	1259725.79	2070613.56	33° 27' 39.422" N	84° 54' 27.420" W
	PK Nail	713.21	1259725.80	2070612.71		
	Ground	713.1				
YGWC-27S	Casing	716.52	1259417.12	2070454.17	33° 27' 36.357" N	84° 54' 29.275" W
	PK Nail	713.27	1259416.33	2070454.96		
	Ground	713.0				
YGWC-27I	Casing	716.19	1259423.73	2070460.89	33° 27' 36.423" N	84° 54' 29.196" W
	PK Nail	713.35	1259423.32	2070461.64		
	Ground	713.2				
YGWC-28S	Casing	717.95	1259218.37	2070322.23	33° 27' 34.381" N	84° 54' 30.816" W
	PK Nail	715.09	1259217.72	2070323.07		
	Ground	715.0				

EXHIBIT 3

Plant Yates – AP-2 Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
YGWC-28I	Casing	717.93	1259226.47	2070328.27	33° 27' 34.462" N	84° 54' 30.745" W
	PK Nail	715.06	1259225.93	2070329.06		
	Ground	715.0				
YGWC-29I	Casing	717.39	1258974.06	2070203.26	33° 27' 31.956" N	84° 54' 32.199" W
	PK Nail	714.94	1258973.51	2070203.93		
	Ground	714.8				
PZ-01S	Casing	836.84	1256871.97	2070101.24	33° 27' 11.152" N	84° 54' 33.226" W
	Disk	834.73	1256874.29	2070101.35		
	Ground	834.5				
PZ-03S	Casing	796.39	1256410.86	2072021.63	33° 27' 06.725" N	84° 54' 10.523" W
	Disk	794.31	1256411.38	2072022.63		
	Ground	794.0				
PZ-13S	Casing	807.79	1257849.98	2069810.25	33° 27' 20.807" N	84° 54' 36.743" W
	Disk	805.59	1257848.97	2069810.38		
	Ground	805.5				
PZ-13I	Casing	807.62	1257850.30	2069817.10	33° 27' 20.811" N	84° 54' 36.662" W
	Disk	805.42	1257849.17	2069817.19		
	Ground	805.4				
PZ-14I	Casing	749.06	1257826.16	2072542.59	33° 27' 20.764" N	84° 54' 04.492" W
	Disk	746.84	1257827.25	2072543.09		
	Ground	747.2				
PZ-25S	Casing	766.60	1258856.99	2073497.99	33° 27' 31.029" N	84° 53' 53.301" W
	PK Nail	763.77	1258857.85	2073498.45		
	Ground	763.8				
PZ-25I	Casing	766.38	1258860.75	2073491.10	33° 27' 31.065" N	84° 53' 53.383" W
	PK Nail	763.69	1258861.69	2073491.62		
	Ground	763.8				
PZ-31S	Casing	738.62	1258313.70	2072820.25	33° 27' 25.606" N	84° 54' 01.256" W
	PK Nail	736.04	1258312.79	2072820.01		
	Ground	735.9				

Notes:
NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions
Elevations derived from Arcadis BM#1 (El. 758.24)
Elevations & coordinates are U.S. Survey feet

EXHIBIT 4

Plant Yates – Gypsum Landfill Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
GWA-2	Casing	805.62	1261383.11	2073509.98	33° 27' 56.021" N	84° 53' 53.370" W
	Bolt	803.25	1261383.21	2073507.93		
	Ground	803.1				
GWC-1R	Casing	773.27	1261869.77	2073279.85	33° 28' 00.820" N	84° 53' 56.127" W
	Bolt	770.69	1261868.10	2073281.57		
	Ground	770.5				
GWC-2R	Casing	769.76	1261942.15	2072755.92	33° 28' 01.499" N	84° 54' 02.317" W
	Bolt	767.13	1261944.58	2072756.60		
	Ground	766.8				
GWC-3R	Casing	775.25	1261647.10	2072841.28	33° 27' 58.586" N	84° 54' 01.285" W
	Bolt	772.32	1261646.62	2072843.63		
	Ground	772.2				
GWC-4R	Casing	757.48	1262046.56	2072953.68	33° 28' 02.546" N	84° 53' 59.992" W
	Bolt	754.88	1262044.70	2072955.00		
	Ground	754.6				
GWC-5R	Casing	782.45	1261439.91	2073027.56	33° 27' 56.550" N	84° 53' 59.069" W
	Bolt	779.69	1261441.13	2073029.78		
	Ground	780.0				
GWC-6R	Casing	788.98	1261732.91	2073479.40	33° 27' 59.480" N	84° 53' 53.760" W
	Bolt	785.95	1261730.98	2073478.53		
	Ground	785.6				

Notes:
NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions
Elevations derived from Arcadis BM#1 (El. 758.24)
Elevations & coordinates are U.S. Survey feet

PHOTOGRAPH LOG

Plant Yates – Monitoring Well and Piezometer Survey
June 2020

Photograph: 1

Description:
Staked Coordinate Location for GWC-6R

Photograph: 2

Description:
From Staked Location of GWC-6R to Found Location of GWC-6R

Photograph: 3

Description:
Existing Location of GWC-6R

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November 2020

YGWC-36A

ARCADIS Design & Consultancy for natural and built assets

Georgia Power

GEORGIA POWER COMPANY PLANT YATES - AP-3/A/B/B' AND R6 LANDFILL

Groundwater Monitoring Well Installation Report

November 12, 2020

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

Becky Steever
Staff Geologist

Geoffrey Gay, P.E.
Principal Environmental Engineer / 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:

30061098

Date:

November 12, 2020

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FIGURES

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.
Principal Environmental Engineer
Georgia Registration No. 27801

11.12.20
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 downgradient groundwater monitoring well (YGWC-36A) and the abandonment of former location YGWC-36. **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. YGWC-36 was abandoned on July 2, 2020 and the replacement well, YGWC-36A was installed on September 22, 2020. 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 YGWC-36 was designed to monitor the saprolitic zone. The installation date, location, elevation, screen interval, and designation for YGWC- 36A 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

Monitoring wells were 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 monitoring well and piezometer installations were 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

Groundwater well YGWC-36A was screened in the saprolitic zone. The well completion depth is similar to former well YGWC-36. 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 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 using potable water 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 pumping with a Waterra inertial pump fitted with a surge block to removed fine-grained sediment to minimize turbidity during groundwater sampling. A submersible pump was also used during well development until the water was visibly clear of particulates. Turbidity, pH, temperature, and conductivity measurements ensured that the well was fully developed. Final turbidity measurements following development were less than 10 NTUs. The development forms are included in **Appendix B**.

4 WELL ABANDONMENT

Monitoring well abandonment was performed by Cascade Environmental under the direction of Arcadis and SCS Field Services. A Georgia registered Professional Engineer directed the well abandonment. Monitoring well YGWC- 36 was abandoned by grouting in place. The concrete pads and bollards were removed, and the casing was cut off at a depth of 3-feet below ground surface. The screen and riser pipe were tremie-grouted with a 30% solids bentonite grout to 3-feet below ground surface. The remaining riser was grouted to surface with a neat cement grout. The ground surface was completed to match the surrounding surface condition.

5 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.

6 REFERENCES

Georgia Environmental Protection Division, Georgia Department of Natural Resources. Manual for Groundwater Monitoring, September 1991.

TABLES

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)
YGWC-36A	9/22/2020	1258547.74	2073748.73	737.7	740.88	699.7	689.7	51.2

Notes:
Elevation in U.S. Survey Feet (NAVD88)
Northing and Easting Georgia State Plane West, NAD83
Latitude and Longitude, WGS84

FIGURES

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-24I
YGWC-24S
PZ-24IA
YGWC-24SA
PZ-35
YAMW-1
YGWC-36A
ASH POND B
YGWC-33S
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-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
- ABANDONED MONITORING WELL
- ABANDONED NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY

NOTE:
1. YGWC-33S WAS ABANDONED IN JUNE 2020.

2. YGWC-24SA WAS INSTALLED AS REPLACEMENT WELL FOR YGWC-24S IN JUNE 2020.

3. PZ-24IA WAS INSTALLED AS REPLACEMENT WELL FOR PZ-24I IN JUNE 2020.

4. AERIAL IMAGE SOURCE: 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
2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WELL LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

PATH: T:\GA_Power\GPC_Plant_Yates\MXD\2020\Basemap\F2_Well_Map_AMA_v2.mxd DATE SAVED: 10/15/2020 6:47:09 AM LAST SAVED BY: tdrum

APPENDIX A

Well Driller Performance Bond

COPY

CONTINUATION
CERTIFICATE

Atlantic Specialty Insurance Company , Surety upon

a certain Bond No. **800031223**

dated effective June 30, 2017
(MONTH-DAY-YEAR)

on behalf of Michael C. Rice and Cascade Drilling, L.P., any and all employees, officers and partners
(PRINCIPAL)

and in favor of State of Georgia
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on June 30, 2019
(MONTH-DAY-YEAR)

and ending on June 30, 2021
(MONTH-DAY-YEAR)

Amount of bond Thirty Thousand and Zero/100 ($30,000.00)

Description of bond Water Well Contractor Performance Bond

Premium: $1,200.00

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 this 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 had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on May 9, 2019
(MONTH-DAY-YEAR)
Atlantic Specialty Insurance Company

By _____
Attorney-in-Fact Elizabeth R. Hahn

Parker, Smith & Feek, Inc.
Agent

2233 112th Ave NE Bellevue, WA 98004
Address of Agent

(425) 709-3600
Telephone Number of Agent

S-0157/GE 8/08

XDP

OneBeacon
INSURANCE GROUP

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Deanna M. French, Susan B. Larson, Elizabeth R. Hahn, Jana M. Roy, Scott McGilvray, Mindee L. Rankin, Ronald J. Lange, John R. Claeys, Roger Kaltenbach, Guy Armfield, Scott Fisher, Andrew P. Larsen, Nicholas Fredrickson**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **sixty million dollars ($60,000,000)** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-sixth day of October, 2017.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

By _____
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-sixth day of October, 2017, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.

TARA JANELLE STAFFORD
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2020

_____
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 9 day of May 2019

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
October 1, 2019

_____
Christopher V. Jerry, Secretary

APPENDIX B

Well Construction & Abandonment Logs

ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: YGWC-36A

Sheet: 1 of 2

Project Name: Yates
Project Number: 30061098
Project Location: Newnan, Georgia

Date Started: 09/21/2020
Date Completed: 09/22/2020

Logger: Becky Steever
Editor: Geoff Gay
Weather Conditions: Sunny & Warm

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Photo Log	PID (ppm)	Graphic Log	Description	Well Construction
1–35							(0.0-8.0'): Fill, Silty Clayey Sand (SM); tan to orange-red; fine grained to medium grained sand; no staining/odor; wet	TOC Elev. 740.88; Aluminum Stick-up with 4x4 Pad
							(8.0-10'); Sand; tan to medium gray; medium grained sand; no staining/odor; some silt; moist	
							(10-14'); Silty Sandy Clay; mottled gray; orange, tan, and brown; saprolite, relict structure; fine grained sand; dry	
							(14-35); Silty Sand (SM); medium brown; fine to medium grained sand; no staining/odor; wet	AQUAGUARD 30% Bentonite Solids; Riser; 3/8" Bentonite Pellets Seal

Drilling Co.: Cascade
Driller:
Drilling Method: Sonic
Drilling Fluid: None
Remarks:

Sampling Method: Cont.
Sampling Interval: Cont.
Water Level Start: 14
Water Level Finish: 12.1
Converted to Well: ☒ Yes ☐ No
Surface Elev.: 737.7
North Coor.: 1258547.74
East Coor.: 2073748.73

SOIL BORING LOG C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\PROJECT FILE-2.GPJ ARCADIS.GDT 11/11/20

ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: YGWC-36A

Sheet: 2 of 2

Project Name: Yates
Project Number: 30061098
Project Location: Newnan, Georgia

Date Started: 09/21/2020
Date Completed: 09/22/2020

Logger: Becky Steever
Editor: Geoff Gay
Weather Conditions: Sunny & Warm

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Photo Log	PID (ppm)	Graphic Log	Description	Well Construction
36–53							(35-38'); Silty Sand (SM); brown to gray; fine to medium grained sand; no staining/odor; slightly moist Same as above, some clay Pulverized rock sand; pale gray; some fine plagioclase gravel; fine grained sand	So. Products Filter Pack #1 (16-40) Top of Screen 2" PVC Screen Bottom of Screen HOLEPLUG Bentonite Backfill
54–72								

Remarks:

SOIL BORING LOG C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\PROJECT FILE-2.GPJ ARCADIS.GDT 11/11/20

ARCADIS

ARCADIS U.S., Inc.
2839 Paces Ferry Rd SE,
Suite 900, Atlanta, GA 30339

Well Abandonment Documentation Form

General Information

Project Name	Plant Yates	**Inspector**	Grant Willford	**Well Id.**	YGWC-36
Project Number	30055278	**Weather**	Sunny	**Sheet** 1 **of** 1	
Drilling Company	Southern Company	**Temperature**	90°F	**Started**	7/20/2020
Client Name	Georgia Power	**Driller**	Shawn Millem	**Completed**	7/20/2020

Well Construction Information

Well Depth (ft)	56.00’	**Screen Type**	U-Pack Schedule 40 PVC	**Grout Type**	Portland Type 1
Well Casing Dia.	2” **L.F.** 46.00’	**Slot Size (in.)**	0.010” Slotted	**End Cap/Sump**	0.3’ Silt Trap
Casing Type	Schedule 40 PVC	**Pack Type & Size**	#1 Type Sand	**Protective Casing**	4”x4” Aluminum
Joint Type	Flush Threaded	**Seal Type**	Bentonite pellets		
Well Screen Dia.	2” **L.F.** 10’			**Well Pad Size**	4’x4’x4”

Abandonment Procedures and Volumes

Expected Grout Volume 0.8 ft^3 **Approximate Grout Volume:** 1 ft^3

Grout Mixture:

~16 lbs Portland/gal Note: **DTW –** 15.00’ bTOC **TD –** 56.00’ bTOC

- Drillers tremie grouted saturated zone with 30% solids bentonite grout slurry from the bottom up; cement grout to surface
- Removed bollards, well casing and well pad
- The PVC Riser was cut off 3 feet below ground surface

Notes:

No obstruction noted.

Removed pump, tubing, and a transducer prior to abandonment.

APPENDIX C

Well Development Forms

ARCADIS

MONITORING WELL DEVELOPMENT LOG

Project/No. Georgia Power - Yates | Well YGWC-36A | Date 9/24/2020

Total Depth	50.68	Casing Diameter (inches)	2	Purge Method Centrifugal	
Water Level	7.3	Well Volume (gal)	6.94	Submersible	
Water Column	43.38	Total Volume Purged		Other	waterra
Pump On	15:50	Pump Off	17:20	Developed By	Peter A.

Well Casing Volumes

gallon/foot	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

Time	Minutes Elapsed	Rate (gpm) (ML)	DTW	Gallons Purged	pH	Specific Conductance ms/cm	Temp. (C) (F)	Turb. (ntu)	REMARKS
15:50	0		7.3	0	4.86	0.518	18.91	3784	Surge Well
16:00	10					0.176	18.8	2855	Surge Well
16:10	20					0.182	18.9	2829	Surge Well
16:20	30		27.16			0.306	19.6	2016	Surge Well
16:30	40					0.207	18.1	2440	Surge Well
16:50	60					0.281	19.18	1832	Surge Well
17:00	70					0.211	18.6	1386	Surge Well
17:10	80				4.22	0.16	18.9	808	Surge Well
17:20	90		29.02		4.18	0.24	19.4	731	Surge Well

ARCADIS

MONITORING WELL DEVELOPMENT LOG

Well Casing Volumes

gallons/foot

Time	Minutes Purged	Rate (gpm)	DTW	Gallons Purged	pH	Specific Conductance Mmhos	Temp (C)	Turb (NTU)	DO (mg/L)
1435	5	1.5	15.39	0		117		1785	
1432	0	1.5	15.39	0		117		1785	
1437	5	1.5	15.55	7.5				128	
1442	10	1.5	37.26	15.0	5.76	105	18.8	50.8	11.8 / 2.22
1447	15	1.5	37.08	22.5	5.63	103	18.89	36.2	133.1 / 3.92
1452	20	1.5	37.95	30.0	5.54	100	19.59	28.3	134.7 / 4.15
1457	25	1.5	38.17	37.5	5.57	97	19.89	21.8	130.5 / 4.60
1502	30	2.5 gpm	21.46		5.62	96	18.88	11.3	115.8 / 4.15
1507	35	2.5 gpm	16.61		5.79	96	21.44	5.09	107.3 / 8.06
1512	40	2.5 gpm	15.24		5.84	96	21.76	16.1	107.5 / 8.09
1517	45	2.5 gpm	15.87		5.89	107	21.65	16.4	116.8 / 7.62
1522	50	2.5 gpm	[illegible]		6.12	119	21.74	16.2	1.9 / 6.70
1527	55	2.5 gpm	Neste		6.10	125	21.78	11.6	8.55 / 6.03
1532	60	2.5 gpm	14.95		6.09	126	21.73	9.84	[illegible] / 6.29
1537	65	2.5 gpm	14.93		6.17	129	21.68	8.22	91.4 / 6.32
1542	70	2.5 gpm	14.91		6.20	130	21.54	5.60	91.6 / 6.32
				37.22					

37.22 volumes removed

Purge to Discharge

Pump to 55 gal drum on the South

Water to Tank

Arcadis U.S., Inc.

2839 Paces Ferry Road

Suite 900

Atlanta, Georgia 30339

Tel 770 431 8666

Fax 770 435 2666

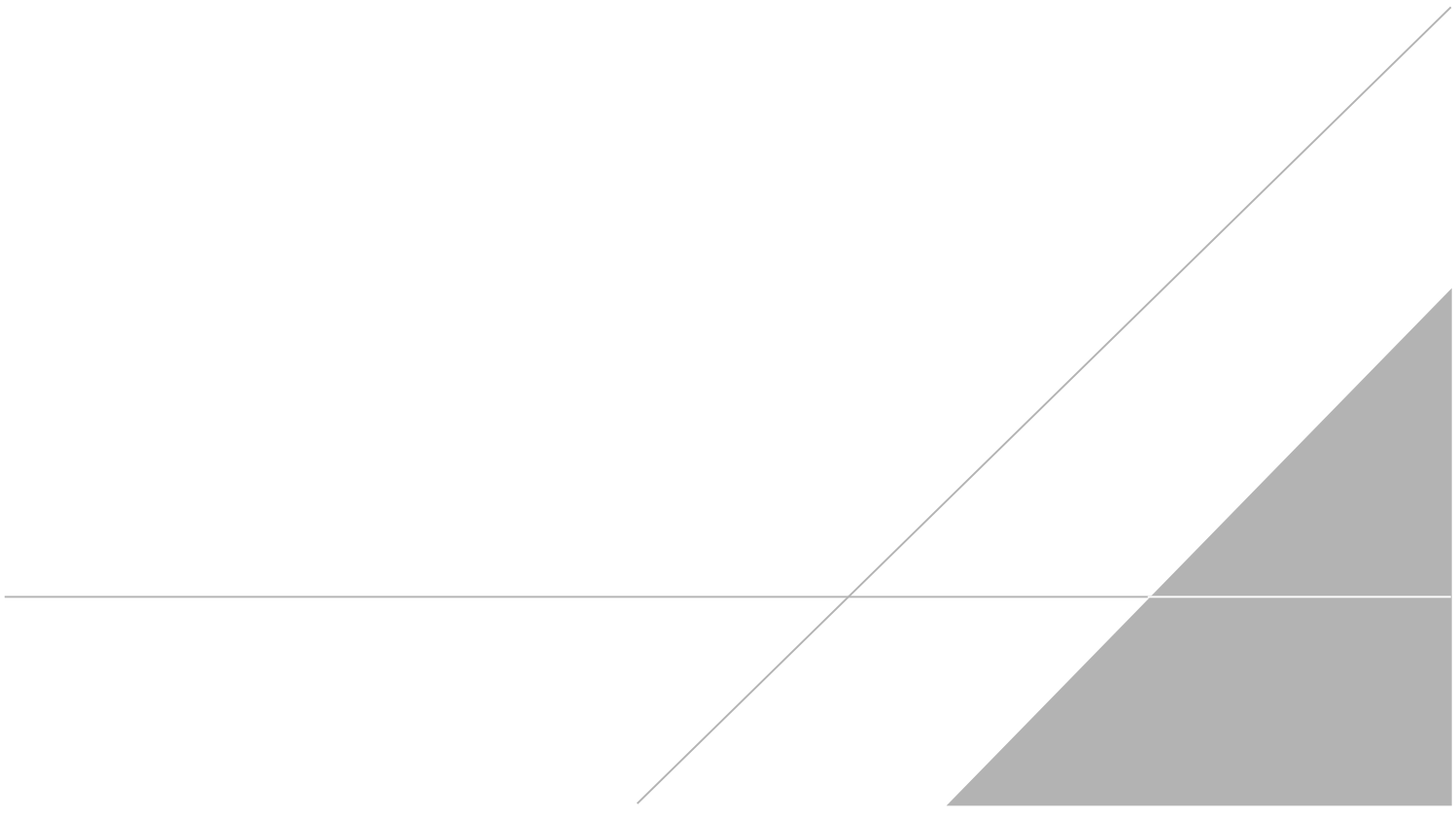
www.arcadis.com

APPENDIX D

Analytical Lab Data and Validation Reports (February, March, September, and October 2020)

February 2020

Scan Event



LEVEL 2A LABORATORY DATA VALIDATIONS

Plant Yates AMA/R6

Scan Event February 2020

Georgia Power Company – Plant Yates AMA/R6

Quality Control Review of Analytical Data – February 2020

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Atlanta, Asheville, and Pittsburgh for groundwater samples collected at Plant Yates AMA/R6 between February 11, 2020 and February 17, 2020. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detected monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)[1] and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)[2]. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains-of-custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met, with the exception of Radium-226 on YGWA-18I (2628973003) as described in the qualifications section below.

Field Precision: Field goals for precision were met, with the exceptions of Arsenic and Chromium on YGWA-18I (2628973003) and DUP-1 (2628973008) and Barium on YGWC-24S (2628973013) and DUP-2 (2628973014) as described in the qualifications section below.

Accuracy: Laboratory goals for accuracy were met, with the exceptions of Fluoride on YGWA-20S (2628973010) and YGWC-38 (2628973021) as described in the qualifications section below.

Detection Limits: Project goals for detection limits were met.

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

Holding Times: Holding time requirements were met.

QUALIFICATIONS

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

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

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

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

- Samples YGWA-18I (2628973003) and DUP-1 (268973008) were qualified as estimated (J) for Arsenic and Chromium as the respective field relative percent differences (RPDs) exceeded QC criteria (39.32% and 28.57% above limit of 25).

- Samples YGWC-24S (2628973013) and DUP-2 (2628973014) were qualified as estimated (J) for Barium as the field RPD exceeded QC criteria (140.74% above limit of 25).

- Sample YGWA-20S (2628973010) was qualified as estimated (J) for Fluoride as the associated matrix spike (MS) recovery was below the QC criteria (89% below the range of 90-110).

- Sample YGWC-38 (2628973021) was qualified as estimated (J) for Fluoride as the associated MS and matrix spike duplicate (MSD) recoveries were above the QC criteria (118 % and 115% above the range of 90-110).

- Sample YGWA-18I (2628973003) was qualified as estimated (J) for Radium-226 as the laboratory RPD exceeded QC criteria (84.62% above limit of 25).

- Certain arsenic results in SDG 2628973 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the method detection limit (MDL) was raised to the sample result as part of the qualification process.

- Certain Radium results in SDG 2628973 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Yates AMA/R6 sampled between February 11, 2020 and February 17, 2020 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

REFERENCES

[1]USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

[2]USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1

Georgia Power Company – Plant Yates AMA/R6

Sample Summary Table – February 2020

						Analyses		
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (6020B, 7470A)	Anions (300.0)	Radium-226/-228 (9315, 9320)
28973	YGWA-18S	2/11/2020	2628973001	GW		X	X	X
28973	YGWA-17S	2/11/2020	2628973002	GW		X	X	X
28973	YGWA-18I	2/11/2020	2628973003	GW		X	X	X
28973	YGWA-5D	2/12/2020	2628973004	GW		X	X	X
28973	YGWA-40	2/12/2020	2628973005	GW		X	X	X
28973	YGWA-5I	2/12/2020	2628973001	GW		X	X	X
28973	FB-1-2-12-20	2/12/2020	2628973007	WQ	FB	X	X	X
28973	DUP-1	2/11/2020	2628973008	GW	FD (YGWA-18I)	X	X	X
28973	YGWA-4I	2/12/2020	2628973009	GW		X	X	X
28973	YGWA-20S	2/12/2020	2628973010	GW		X	X	X
28973	YGWA-39	2/12/2020	2628973011	GW		X	X	X
28973	YGWA-21I	2/12/2020	2628973012	GW		X	X	X
28973	YGWC-24S	2/13/2020	2628973013	GW		X	X	X
28973	DUP-2	2/13/2020	2628973014	GW	FD (YGWC-24S)	X	X	X
28973	EB-1-2-14-20	2/14/2020	2628973015	WQ	EB	X	X	X
28973	YGWC-41	2/14/2020	2628973016	GW		X	X	X
28973	YGWC-33S	2/14/2020	2628973017	GW		X	X	X
28973	YGWC-36	2/14/2020	2628973018	WQ		X	X	X
28973	YGWC-42	2/14/2020	2628973019	GW		X	X	X
28973	FB-2-2-14-20	2/14/2020	2628973020	WQ	FB	X	X	X
28973	YGWC-38	2/14/2020	2628973021	GW		X	X	X
28973	YGWC-43	2/17/2020	2628973022	GW		X	X	X
28973	EB-2-2-17-20	2/17/2020	2628973023	WQ	EB	X	X	X
28973	YGWC-23S	2/17/2020	2628973024	GW		X	X	X
28973	YGWC-49	2/17/2020	2628973025	GW		X	X	X

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

TABLE 2

Georgia Power Company – Plant Yates AMA/R6

Qualifier Summary Table – February 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
28973	YGWA-18I	Arsenic			J	RPD exceeds field goal
28973	DUP-1	Arsenic			J	RPD exceeds field goal
28973	YGWA-18I	Chromium			J	RPD exceeds field goal
28973	DUP-1	Chromium			J	RPD exceeds field goal
28973	YGWC-24S	Barium			J	RPD exceeds field goal
28973	DUP-2	Barium			J	RPD exceeds field goal
28973	YGWA-20S	Fluoride			J	MSD recovery below QC criteria
28973	YGWC-38	Fluoride			J	MS/MSD recoveries above QC criteria
28973	YGWA-18S	Arsenic		0.0026	ND	Blank detection
28973	YGWA-17S	Arsenic		0.0022	ND	Blank detection
28973	YGWA-18I	Arsenic		0.0014	ND	Blank detection
28973	YGWA-5D	Arsenic		0.0046	ND	Blank detection
28973	YGWA-40	Arsenic		0.0034	ND	Blank detection
28973	YGWA-5I	Arsenic		0.0020	ND	Blank detection
28973	YGWA-18I	Radium-226			J	RPD exceeds laboratory goal
28973	YGWA-18S	Radium-226		0.389	ND	Blank detection
28973	YGWA-18S	Radium-228		0.599	ND	Blank detection
28973	YGWA-17S	Radium-226		0.343	ND	Blank detection
28973	YGWA-17S	Radium-228		0.612	ND	Blank detection
28973	YGWA-18I	Radium-226		0.487	ND	Blank detection
28973	YGWA-18I	Radium-228		0.763	ND	Blank detection
28973	YGWA-5D	Radium-226		0.346	ND	Blank detection
28973	YGWA-5D	Radium-228		0.677	ND	Blank detection
28973	YGWA-40	Radium-226		0.419	ND	Blank detection
28973	YGWA-40	Radium-228		0.650	ND	Blank detection
28973	YGWA-5I	Radium-226		0.458	ND	Blank detection
28973	YGWA-5I	Radium-228		0.664	ND	Blank detection
28973	YGWA-4I	Radium-226		0.270	ND	Blank detection
28973	YGWA-4I	Radium-228		0.732	ND	Blank detection

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

Qualifiers:
J – Estimated Result
ND – Non-Detect Result

TABLE 2 (continued)

Georgia Power Company – Plant Yates AMA/R6

Qualifier Summary Table – February 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
28973	YGWA-20S	Radium-226		0.282	ND	Blank detection
28973	YGWA-20S	Radium-228		1.01	ND	Blank detection
28973	YGWA-39	Radium-226		0.243	ND	Blank detection
28973	YGWA-39	Radium-228		0.825	ND	Blank detection
28973	YGWA-21I	Radium-226		0.339	ND	Blank detection
28973	YGWA-21I	Radium-228		1.05	ND	Blank detection
28973	YGWC-24S	Radium-226		0.239	ND	Blank detection
28973	YGWC-24S	Radium-228		0.891	ND	Blank detection
28973	YGWC-41	Radium-226		0.402	ND	Blank detection
28973	YGWC-41	Radium-228		0.792	ND	Blank detection
28973	YGWC-33S	Radium-226		0.426	ND	Blank detection
28973	YGWC-33S	Radium-228		0.838	ND	Blank detection
28973	YGWC-36	Radium-226		0.358	ND	Blank detection
28973	YGWC-36	Radium-228		0.808	ND	Blank detection
28973	YGWC-42	Radium-226		0.400	ND	Blank detection
28973	YGWC-42	Radium-228		0.707	ND	Blank detection
28973	YGWC-38	Radium-228		0.820	ND	Blank detection
28973	YGWC-43	Radium-226		0.543	ND	Blank detection
28973	YGWC-43	Radium-228		0.793	ND	Blank detection
28973	YGWC-23S	Radium-228		0.841	ND	Blank detection
28973	YGWC-49	Radium-228		0.697	ND	Blank detection

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

Qualifiers:
J – Estimated Result
ND – Non-Detect Result

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

March 02, 2020

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

RE: Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory between February 12, 2020 and February 17, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

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

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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

SAMPLE SUMMARY

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2628973001	**YGWA-18S**	Water	02/11/20 12:39	02/12/20 15:15
2628973002	**YGWA-17S**	Water	02/11/20 11:21	02/12/20 15:15
2628973003	**YGWA-18I**	Water	02/11/20 13:56	02/12/20 15:15
2628973004	**YGWA-5D**	Water	02/12/20 10:38	02/12/20 15:15
2628973005	**YGWA-40**	Water	02/12/20 10:42	02/12/20 15:15
2628973006	**YGWA-5I**	Water	02/12/20 11:55	02/12/20 15:15
2628973007	**FB-1-2-12-20**	Water	02/12/20 10:20	02/12/20 15:15
2628973008	**DUP-1**	Water	02/11/20 00:00	02/12/20 15:15
2628973009	**YGWA-4I**	Water	02/12/20 13:48	02/14/20 14:39
2628973010	**YGWA-20S**	Water	02/12/20 13:45	02/14/20 14:39
2628973011	**YGWA-39**	Water	02/12/20 12:20	02/14/20 14:39
2628973012	**YGWA-21I**	Water	02/12/20 14:45	02/14/20 14:39
2628973013	**YGWC-24S**	Water	02/13/20 14:53	02/14/20 14:39
2628973014	**DUP-2**	Water	02/13/20 00:00	02/14/20 14:39
2628973015	**EB-1-2-14-20**	Water	02/14/20 09:45	02/14/20 14:39
2628973016	**YGWC-41**	Water	02/14/20 10:00	02/14/20 14:39
2628973017	**YGWC-33S**	Water	02/14/20 11:40	02/14/20 14:39
2628973018	**YGWC-36**	Water	02/14/20 11:55	02/14/20 14:39
2628973019	**YGWC-42**	Water	02/14/20 10:30	02/14/20 14:39
2628973020	**FB-2-2-14-20**	Water	02/14/20 12:00	02/14/20 14:39
2628973021	**YGWC-38**	Water	02/14/20 13:25	02/17/20 16:37
2628973022	**YGWC-43**	Water	02/17/20 12:00	02/17/20 16:37
2628973023	**EB-2-2-17-20**	Water	02/17/20 11:50	02/17/20 16:37
2628973024	**YGWC-23S**	Water	02/17/20 13:20	02/17/20 16:37
2628973025	**YGWC-49**	Water	02/17/20 14:30	02/17/20 16:37

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2628973001	**YGWA-18S**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973002	**YGWA-17S**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973003	**YGWA-18I**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973004	**YGWA-5D**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973005	**YGWA-40**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973006	**YGWA-5I**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973007	**FB-1-2-12-20**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973008	**DUP-1**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973009	**YGWA-4I**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973010	**YGWA-20S**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973011	**YGWA-39**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973012	**YGWA-21I**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973013	**YGWC-24S**	EPA 6020B	CSW	12	PASI-GA

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

SAMPLE ANALYTE COUNT

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973014	**DUP-2**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973015	**EB-1-2-14-20**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973016	**YGWC-41**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973017	**YGWC-33S**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973018	**YGWC-36**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973019	**YGWC-42**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973020	**FB-2-2-14-20**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973021	**YGWC-38**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973022	**YGWC-43**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973023	**EB-2-2-17-20**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973024	**YGWC-23S**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2628973025	**YGWC-49**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA

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SAMPLE ANALYTE COUNT

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A

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SUMMARY OF DETECTION

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2628973001	**YGWA-18S**					
	Field pH	5.30	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.0026J	mg/L	0.0050	02/20/20 20:37	B
EPA 6020B	Barium	0.019	mg/L	0.010	02/20/20 20:37	
EPA 6020B	Beryllium	0.000076J	mg/L	0.0030	02/20/20 20:37	
EPA 6020B	Chromium	0.00088J	mg/L	0.010	02/20/20 20:37	
EPA 6020B	Lithium	0.0050J	mg/L	0.030	02/20/20 20:37	
2628973002	**YGWA-17S**					
	Field pH	5.58	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.0022J	mg/L	0.0050	02/20/20 20:43	B
EPA 6020B	Barium	0.015	mg/L	0.010	02/20/20 20:43	
EPA 6020B	Beryllium	0.000078J	mg/L	0.0030	02/20/20 20:43	
EPA 6020B	Chromium	0.00087J	mg/L	0.010	02/20/20 20:43	
2628973003	**YGWA-18I**					
	Field pH	6.07	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	02/20/20 20:48	B
EPA 6020B	Barium	0.022	mg/L	0.010	02/20/20 20:48	
EPA 6020B	Chromium	0.0010J	mg/L	0.010	02/20/20 20:48	
EPA 6020B	Lithium	0.0033J	mg/L	0.030	02/20/20 20:48	
2628973004	**YGWA-5D**					
	Field pH	7.52	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.0046J	mg/L	0.0050	02/20/20 20:54	B
EPA 6020B	Barium	0.0079J	mg/L	0.010	02/20/20 20:54	
EPA 6020B	Cobalt	0.00037J	mg/L	0.0050	02/20/20 20:54	
EPA 6020B	Lithium	0.0066J	mg/L	0.030	02/20/20 20:54	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	02/20/20 20:54	
2628973005	**YGWA-40**					
	Field pH	5.30	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.0034J	mg/L	0.0050	02/20/20 21:00	B
EPA 6020B	Barium	0.035	mg/L	0.010	02/20/20 21:00	
EPA 6020B	Beryllium	0.00018J	mg/L	0.0030	02/20/20 21:00	
EPA 6020B	Chromium	0.00065J	mg/L	0.010	02/20/20 21:00	
EPA 6020B	Selenium	0.0020J	mg/L	0.010	02/20/20 21:00	
2628973006	**YGWA-5I**					
	Field pH	5.83	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.0020J	mg/L	0.0050	02/20/20 21:06	B
EPA 6020B	Barium	0.021	mg/L	0.010	02/20/20 21:06	
EPA 6020B	Chromium	0.00043J	mg/L	0.010	02/20/20 21:06	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/20/20 21:06	
2628973007	**FB-1-2-12-20**					
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	02/20/20 21:11	B
2628973008	**DUP-1**					
EPA 6020B	Arsenic	0.00094J	mg/L	0.0050	02/20/20 21:17	B
EPA 6020B	Barium	0.023	mg/L	0.010	02/20/20 21:17	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2628973008	**DUP-1**					
EPA 6020B	Chromium	0.00075J	mg/L	0.010	02/20/20 21:17	
EPA 6020B	Lithium	0.0033J	mg/L	0.030	02/20/20 21:17	
2628973009	**YGWA-4I**					
	Field pH	6.15	Std. Units		02/17/20 08:42	
EPA 6020B	Barium	0.012	mg/L	0.010	02/24/20 17:18	
EPA 6020B	Lithium	0.011J	mg/L	0.030	02/24/20 17:18	
2628973010	**YGWA-20S**					
	Field pH	6.0	Std. Units		02/17/20 08:42	
EPA 6020B	Barium	0.014	mg/L	0.010	02/24/20 18:48	
EPA 6020B	Beryllium	0.000078J	mg/L	0.0030	02/24/20 18:48	
EPA 6020B	Chromium	0.00045J	mg/L	0.010	02/24/20 18:48	
2628973011	**YGWA-39**					
	Field pH	5.97	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.00058J	mg/L	0.0050	02/24/20 18:54	
EPA 6020B	Barium	0.011	mg/L	0.010	02/24/20 18:54	
EPA 6020B	Cobalt	0.00034J	mg/L	0.0050	02/24/20 18:54	
EPA 6020B	Lithium	0.0041J	mg/L	0.030	02/24/20 18:54	
EPA 6020B	Molybdenum	0.0025J	mg/L	0.010	02/24/20 18:54	
2628973012	**YGWA-21I**					
	Field pH	7.13	Std. Units		02/17/20 08:42	
EPA 6020B	Antimony	0.0015J	mg/L	0.0030	02/24/20 18:59	
EPA 6020B	Arsenic	0.0025J	mg/L	0.0050	02/24/20 18:59	
EPA 6020B	Barium	0.011	mg/L	0.010	02/24/20 18:59	
EPA 6020B	Cobalt	0.0081	mg/L	0.0050	02/24/20 18:59	
EPA 6020B	Lithium	0.0065J	mg/L	0.030	02/24/20 18:59	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10J	mg/L	0.30	02/20/20 11:08	
2628973013	**YGWC-24S**					
	Field pH	5.69	Std. Units		02/17/20 08:42	
EPA 6020B	Barium	0.016	mg/L	0.010	02/24/20 19:05	
EPA 6020B	Beryllium	0.00014J	mg/L	0.0030	02/24/20 19:05	
2628973014	**DUP-2**					
EPA 6020B	Barium	0.092	mg/L	0.010	02/24/20 19:11	
EPA 6020B	Cobalt	0.0025J	mg/L	0.0050	02/24/20 19:11	
EPA 6020B	Lead	0.000077J	mg/L	0.0050	02/24/20 19:11	
EPA 6020B	Thallium	0.00010J	mg/L	0.0010	02/24/20 19:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.093J	mg/L	0.30	02/20/20 11:38	
2628973016	**YGWC-41**					
	Field pH	4.84	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	02/26/20 18:31	
EPA 6020B	Barium	0.024	mg/L	0.010	02/26/20 18:31	
EPA 6020B	Beryllium	0.0026J	mg/L	0.0030	02/26/20 18:31	
EPA 6020B	Cadmium	0.00020J	mg/L	0.0025	02/26/20 18:31	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	02/26/20 18:31	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2628973016	**YGWC-41**					
EPA 6020B	Selenium	0.059	mg/L	0.010	02/26/20 18:31	
2628973017	**YGWC-33S**					
	Field pH	3.76	Std. Units		02/17/20 08:42	
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	02/26/20 18:54	
EPA 6020B	Arsenic	0.0027J	mg/L	0.0050	02/26/20 18:54	
EPA 6020B	Barium	0.013	mg/L	0.010	02/26/20 18:54	
EPA 6020B	Beryllium	0.016	mg/L	0.0030	02/26/20 18:54	
EPA 6020B	Cadmium	0.0021J	mg/L	0.0025	02/26/20 18:54	
EPA 6020B	Chromium	0.00078J	mg/L	0.010	02/26/20 18:54	
EPA 6020B	Cobalt	0.023	mg/L	0.0050	02/26/20 18:54	
EPA 6020B	Lead	0.0010J	mg/L	0.0050	02/26/20 18:54	
EPA 6020B	Lithium	0.024J	mg/L	0.030	02/26/20 18:54	
EPA 6020B	Selenium	0.015	mg/L	0.010	02/26/20 18:54	
EPA 6020B	Thallium	0.00019J	mg/L	0.0010	02/26/20 18:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.23J	mg/L	0.30	02/20/20 12:22	
2628973018	**YGWC-36**					
	Field pH	5.71	Std. Units		02/17/20 08:42	
EPA 6020B	Antimony	0.0027J	mg/L	0.0030	02/26/20 19:00	
EPA 6020B	Arsenic	0.0026J	mg/L	0.0050	02/26/20 19:00	
EPA 6020B	Barium	0.026	mg/L	0.010	02/26/20 19:00	
EPA 6020B	Beryllium	0.00019J	mg/L	0.0030	02/26/20 19:00	
EPA 6020B	Cadmium	0.00017J	mg/L	0.0025	02/26/20 19:00	
EPA 6020B	Cobalt	0.00041J	mg/L	0.0050	02/26/20 19:00	
EPA 6020B	Lead	0.00016J	mg/L	0.0050	02/26/20 19:00	
EPA 6020B	Lithium	0.0024J	mg/L	0.030	02/26/20 19:00	
EPA 6020B	Selenium	0.0020J	mg/L	0.010	02/26/20 19:00	
EPA 6020B	Thallium	0.000057J	mg/L	0.0010	02/26/20 19:00	
2628973019	**YGWC-42**					
	Field pH	5.80	Std. Units		02/17/20 08:42	
EPA 6020B	Arsenic	0.0033J	mg/L	0.0050	02/26/20 19:05	
EPA 6020B	Barium	0.031	mg/L	0.010	02/26/20 19:05	
EPA 6020B	Cadmium	0.00025J	mg/L	0.0025	02/26/20 19:05	
EPA 6020B	Cobalt	0.0019J	mg/L	0.0050	02/26/20 19:05	
EPA 6020B	Lithium	0.038	mg/L	0.030	02/26/20 19:05	
EPA 6020B	Selenium	0.040	mg/L	0.010	02/26/20 19:05	
2628973020	**FB-2-2-14-20**					
EPA 6020B	Arsenic	0.0023J	mg/L	0.0050	02/26/20 19:25	
2628973021	**YGWC-38**					
	Field pH	4.84	Std. Units		02/27/20 08:48	
EPA 6020B	Antimony	0.00031J	mg/L	0.0030	02/26/20 19:31	
EPA 6020B	Arsenic	0.0021J	mg/L	0.0050	02/26/20 19:31	
EPA 6020B	Barium	0.019	mg/L	0.010	02/26/20 19:31	
EPA 6020B	Beryllium	0.0042	mg/L	0.0030	02/26/20 19:31	
EPA 6020B	Cadmium	0.0021J	mg/L	0.0025	02/26/20 19:31	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2628973021	**YGWC-38**					
EPA 6020B	Chromium	0.0023J	mg/L	0.010	02/26/20 19:31	
EPA 6020B	Lithium	0.0076J	mg/L	0.030	02/26/20 19:31	
EPA 6020B	Selenium	0.11	mg/L	0.010	02/26/20 19:31	
2628973022	**YGWC-43**					
	Field pH	5.93	Std. Units		02/27/20 08:48	
EPA 6020B	Barium	0.037	mg/L	0.010	02/26/20 19:36	
EPA 6020B	Beryllium	0.00034J	mg/L	0.0030	02/26/20 19:36	
EPA 6020B	Cobalt	0.00088J	mg/L	0.0050	02/26/20 19:36	
EPA 6020B	Lithium	0.015J	mg/L	0.030	02/26/20 19:36	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15J	mg/L	0.30	02/26/20 16:39	
2628973024	**YGWC-23S**					
	Field pH	5.84	Std. Units		02/27/20 08:48	
EPA 6020B	Arsenic	0.0019J	mg/L	0.0050	02/26/20 19:48	
EPA 6020B	Barium	0.024	mg/L	0.010	02/26/20 19:48	
EPA 6020B	Beryllium	0.000081J	mg/L	0.0030	02/26/20 19:48	
EPA 6020B	Chromium	0.00087J	mg/L	0.010	02/26/20 19:48	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	02/26/20 19:48	
EPA 6020B	Selenium	0.020	mg/L	0.010	02/26/20 19:48	
2628973025	**YGWC-49**					
	Field pH	5.82	Std. Units		02/27/20 08:49	
EPA 6020B	Arsenic	0.0028J	mg/L	0.0050	02/26/20 19:53	
EPA 6020B	Barium	0.071	mg/L	0.010	02/26/20 19:53	
EPA 6020B	Beryllium	0.00011J	mg/L	0.0030	02/26/20 19:53	
EPA 6020B	Chromium	0.0020J	mg/L	0.010	02/26/20 19:53	
EPA 6020B	Lead	0.000071J	mg/L	0.0050	02/26/20 19:53	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/26/20 19:53	
EPA 6020B	Selenium	0.0068J	mg/L	0.010	02/26/20 19:53	

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-18S **Lab ID: 2628973001** Collected: 02/11/20 12:39 Received: 02/12/20 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.30**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/19/20 13:38	02/20/20 20:37	7440-36-0	
Arsenic	**0.0026J**	mg/L	0.0050	0.00035	1	02/19/20 13:38	02/20/20 20:37	7440-38-2	B
Barium	**0.019**	mg/L	0.010	0.00049	1	02/19/20 13:38	02/20/20 20:37	7440-39-3	
Beryllium	**0.000076J**	mg/L	0.0030	0.000074	1	02/19/20 13:38	02/20/20 20:37	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/19/20 13:38	02/20/20 20:37	7440-43-9	
Chromium	**0.00088J**	mg/L	0.010	0.00039	1	02/19/20 13:38	02/20/20 20:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/19/20 13:38	02/20/20 20:37	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/19/20 13:38	02/20/20 20:37	7439-92-1	
Lithium	**0.0050J**	mg/L	0.030	0.00078	1	02/19/20 13:38	02/20/20 20:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/19/20 13:38	02/20/20 20:37	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/19/20 13:38	02/20/20 20:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/19/20 13:38	02/20/20 20:37	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/18/20 16:17	02/19/20 17:19	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/18/20 14:41	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-17S **Lab ID: 2628973002** Collected: 02/11/20 11:21 Received: 02/12/20 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.58**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/19/20 13:38	02/20/20 20:43	7440-36-0	
Arsenic	**0.0022J**	mg/L	0.0050	0.00035	1	02/19/20 13:38	02/20/20 20:43	7440-38-2	B
Barium	**0.015**	mg/L	0.010	0.00049	1	02/19/20 13:38	02/20/20 20:43	7440-39-3	
Beryllium	**0.000078J**	mg/L	0.0030	0.000074	1	02/19/20 13:38	02/20/20 20:43	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/19/20 13:38	02/20/20 20:43	7440-43-9	
Chromium	**0.00087J**	mg/L	0.010	0.00039	1	02/19/20 13:38	02/20/20 20:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/19/20 13:38	02/20/20 20:43	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/19/20 13:38	02/20/20 20:43	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/19/20 13:38	02/20/20 20:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/19/20 13:38	02/20/20 20:43	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/19/20 13:38	02/20/20 20:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/19/20 13:38	02/20/20 20:43	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/18/20 16:17	02/19/20 17:21	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/18/20 14:55	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-18I **Lab ID: 2628973003** Collected: 02/11/20 13:56 Received: 02/12/20 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.07**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/19/20 13:38	02/20/20 20:48	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.00035	1	02/19/20 13:38	02/20/20 20:48	7440-38-2	B
Barium	**0.022**	mg/L	0.010	0.00049	1	02/19/20 13:38	02/20/20 20:48	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/19/20 13:38	02/20/20 20:48	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/19/20 13:38	02/20/20 20:48	7440-43-9	
Chromium	**0.0010J**	mg/L	0.010	0.00039	1	02/19/20 13:38	02/20/20 20:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/19/20 13:38	02/20/20 20:48	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/19/20 13:38	02/20/20 20:48	7439-92-1	
Lithium	**0.0033J**	mg/L	0.030	0.00078	1	02/19/20 13:38	02/20/20 20:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/19/20 13:38	02/20/20 20:48	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/19/20 13:38	02/20/20 20:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/19/20 13:38	02/20/20 20:48	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/18/20 16:17	02/19/20 17:23	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/18/20 15:10	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-5D **Lab ID: 2628973004** Collected: 02/12/20 10:38 Received: 02/12/20 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**7.52**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/19/20 13:38	02/20/20 20:54	7440-36-0	
Arsenic	**0.0046J**	mg/L	0.0050	0.00035	1	02/19/20 13:38	02/20/20 20:54	7440-38-2	B
Barium	**0.0079J**	mg/L	0.010	0.00049	1	02/19/20 13:38	02/20/20 20:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/19/20 13:38	02/20/20 20:54	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/19/20 13:38	02/20/20 20:54	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/19/20 13:38	02/20/20 20:54	7440-47-3	
Cobalt	**0.00037J**	mg/L	0.0050	0.00030	1	02/19/20 13:38	02/20/20 20:54	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/19/20 13:38	02/20/20 20:54	7439-92-1	
Lithium	**0.0066J**	mg/L	0.030	0.00078	1	02/19/20 13:38	02/20/20 20:54	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00095	1	02/19/20 13:38	02/20/20 20:54	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/19/20 13:38	02/20/20 20:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/19/20 13:38	02/20/20 20:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/18/20 16:17	02/19/20 17:26	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/18/20 15:55	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-40 **Lab ID: 2628973005** Collected: 02/12/20 10:42 Received: 02/12/20 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.30**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/19/20 13:38	02/20/20 21:00	7440-36-0	
Arsenic	**0.0034J**	mg/L	0.0050	0.00035	1	02/19/20 13:38	02/20/20 21:00	7440-38-2	B
Barium	**0.035**	mg/L	0.010	0.00049	1	02/19/20 13:38	02/20/20 21:00	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.0030	0.000074	1	02/19/20 13:38	02/20/20 21:00	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/19/20 13:38	02/20/20 21:00	7440-43-9	
Chromium	**0.00065J**	mg/L	0.010	0.00039	1	02/19/20 13:38	02/20/20 21:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/19/20 13:38	02/20/20 21:00	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/19/20 13:38	02/20/20 21:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/19/20 13:38	02/20/20 21:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/19/20 13:38	02/20/20 21:00	7439-98-7	
Selenium	**0.0020J**	mg/L	0.010	0.0013	1	02/19/20 13:38	02/20/20 21:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/19/20 13:38	02/20/20 21:00	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/18/20 16:17	02/19/20 17:28	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/18/20 16:09	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-5I **Lab ID: 2628973006** Collected: 02/12/20 11:55 Received: 02/12/20 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.83**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/19/20 13:38	02/20/20 21:06	7440-36-0	
Arsenic	**0.0020J**	mg/L	0.0050	0.00035	1	02/19/20 13:38	02/20/20 21:06	7440-38-2	B
Barium	**0.021**	mg/L	0.010	0.00049	1	02/19/20 13:38	02/20/20 21:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/19/20 13:38	02/20/20 21:06	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/19/20 13:38	02/20/20 21:06	7440-43-9	
Chromium	**0.00043J**	mg/L	0.010	0.00039	1	02/19/20 13:38	02/20/20 21:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/19/20 13:38	02/20/20 21:06	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/19/20 13:38	02/20/20 21:06	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00078	1	02/19/20 13:38	02/20/20 21:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/19/20 13:38	02/20/20 21:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/19/20 13:38	02/20/20 21:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/19/20 13:38	02/20/20 21:06	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/18/20 16:17	02/19/20 17:30	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 08:21	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: FB-1-2-12-20 **Lab ID: 2628973007** Collected: 02/12/20 10:20 Received: 02/12/20 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/19/20 13:38	02/20/20 21:11	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.00035	1	02/19/20 13:38	02/20/20 21:11	7440-38-2	B
Barium	ND	mg/L	0.010	0.00049	1	02/19/20 13:38	02/20/20 21:11	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/19/20 13:38	02/20/20 21:11	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/19/20 13:38	02/20/20 21:11	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/19/20 13:38	02/20/20 21:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/19/20 13:38	02/20/20 21:11	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/19/20 13:38	02/20/20 21:11	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/19/20 13:38	02/20/20 21:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/19/20 13:38	02/20/20 21:11	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/19/20 13:38	02/20/20 21:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/19/20 13:38	02/20/20 21:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/18/20 16:17	02/19/20 17:37	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 08:36	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: DUP-1 **Lab ID: 2628973008** Collected: 02/11/20 00:00 Received: 02/12/20 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/19/20 13:38	02/20/20 21:17	7440-36-0	
Arsenic	**0.00094J**	mg/L	0.0050	0.00035	1	02/19/20 13:38	02/20/20 21:17	7440-38-2	B
Barium	**0.023**	mg/L	0.010	0.00049	1	02/19/20 13:38	02/20/20 21:17	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/19/20 13:38	02/20/20 21:17	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/19/20 13:38	02/20/20 21:17	7440-43-9	
Chromium	**0.00075J**	mg/L	0.010	0.00039	1	02/19/20 13:38	02/20/20 21:17	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/19/20 13:38	02/20/20 21:17	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/19/20 13:38	02/20/20 21:17	7439-92-1	
Lithium	**0.0033J**	mg/L	0.030	0.00078	1	02/19/20 13:38	02/20/20 21:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/19/20 13:38	02/20/20 21:17	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/19/20 13:38	02/20/20 21:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/19/20 13:38	02/20/20 21:17	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/18/20 16:17	02/19/20 17:40	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 08:50	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-4I **Lab ID: 2628973009** Collected: 02/12/20 13:48 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.15**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/22/20 17:25	02/24/20 17:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	02/22/20 17:25	02/24/20 17:18	7440-38-2	
Barium	**0.012**	mg/L	0.010	0.00049	1	02/22/20 17:25	02/24/20 17:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/22/20 17:25	02/24/20 17:18	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/22/20 17:25	02/24/20 17:18	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/22/20 17:25	02/24/20 17:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/22/20 17:25	02/24/20 17:18	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/22/20 17:25	02/24/20 17:18	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00078	1	02/22/20 17:25	02/24/20 17:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/22/20 17:25	02/24/20 17:18	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/22/20 17:25	02/24/20 17:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/22/20 17:25	02/24/20 17:18	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 11:27	02/25/20 10:41	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 09:20	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-20S **Lab ID: 2628973010** Collected: 02/12/20 13:45 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.0**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/22/20 17:25	02/24/20 18:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	02/22/20 17:25	02/24/20 18:48	7440-38-2	
Barium	**0.014**	mg/L	0.010	0.00049	1	02/22/20 17:25	02/24/20 18:48	7440-39-3	
Beryllium	**0.000078J**	mg/L	0.0030	0.000074	1	02/22/20 17:25	02/24/20 18:48	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/22/20 17:25	02/24/20 18:48	7440-43-9	
Chromium	**0.00045J**	mg/L	0.010	0.00039	1	02/22/20 17:25	02/24/20 18:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/22/20 17:25	02/24/20 18:48	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/22/20 17:25	02/24/20 18:48	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/22/20 17:25	02/24/20 18:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/22/20 17:25	02/24/20 18:48	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/22/20 17:25	02/24/20 18:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/22/20 17:25	02/24/20 18:48	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 11:27	02/25/20 10:44	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 10:09	16984-48-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-39 **Lab ID: 2628973011** Collected: 02/12/20 12:20 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.97**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/22/20 17:25	02/24/20 18:54	7440-36-0	
Arsenic	**0.00058J**	mg/L	0.0050	0.00035	1	02/22/20 17:25	02/24/20 18:54	7440-38-2	
Barium	**0.011**	mg/L	0.010	0.00049	1	02/22/20 17:25	02/24/20 18:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/22/20 17:25	02/24/20 18:54	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/22/20 17:25	02/24/20 18:54	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/22/20 17:25	02/24/20 18:54	7440-47-3	
Cobalt	**0.00034J**	mg/L	0.0050	0.00030	1	02/22/20 17:25	02/24/20 18:54	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/22/20 17:25	02/24/20 18:54	7439-92-1	
Lithium	**0.0041J**	mg/L	0.030	0.00078	1	02/22/20 17:25	02/24/20 18:54	7439-93-2	
Molybdenum	**0.0025J**	mg/L	0.010	0.00095	1	02/22/20 17:25	02/24/20 18:54	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/22/20 17:25	02/24/20 18:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/22/20 17:25	02/24/20 18:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 10:58	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 10:53	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWA-21I **Lab ID: 2628973012** Collected: 02/12/20 14:45 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**7.13**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.0015J**	mg/L	0.0030	0.00027	1	02/22/20 17:25	02/24/20 18:59	7440-36-0	
Arsenic	**0.0025J**	mg/L	0.0050	0.00035	1	02/22/20 17:25	02/24/20 18:59	7440-38-2	
Barium	**0.011**	mg/L	0.010	0.00049	1	02/22/20 17:25	02/24/20 18:59	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/22/20 17:25	02/24/20 18:59	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/22/20 17:25	02/24/20 18:59	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/22/20 17:25	02/24/20 18:59	7440-47-3	
Cobalt	**0.0081**	mg/L	0.0050	0.00030	1	02/22/20 17:25	02/24/20 18:59	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/22/20 17:25	02/24/20 18:59	7439-92-1	
Lithium	**0.0065J**	mg/L	0.030	0.00078	1	02/22/20 17:25	02/24/20 18:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/22/20 17:25	02/24/20 18:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/22/20 17:25	02/24/20 18:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/22/20 17:25	02/24/20 18:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:12	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.10J**	mg/L	0.30	0.050	1		02/20/20 11:08	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-24S **Lab ID: 2628973013** Collected: 02/13/20 14:53 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.69**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/22/20 17:25	02/24/20 19:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	02/22/20 17:25	02/24/20 19:05	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00049	1	02/22/20 17:25	02/24/20 19:05	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.0030	0.000074	1	02/22/20 17:25	02/24/20 19:05	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/22/20 17:25	02/24/20 19:05	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/22/20 17:25	02/24/20 19:05	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/22/20 17:25	02/24/20 19:05	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/22/20 17:25	02/24/20 19:05	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/22/20 17:25	02/24/20 19:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/22/20 17:25	02/24/20 19:05	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/22/20 17:25	02/24/20 19:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/22/20 17:25	02/24/20 19:05	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:15	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 11:23	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: DUP-2 **Lab ID: 2628973014** Collected: 02/13/20 00:00 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/22/20 17:25	02/24/20 19:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	02/22/20 17:25	02/24/20 19:11	7440-38-2	
Barium	**0.092**	mg/L	0.010	0.00049	1	02/22/20 17:25	02/24/20 19:11	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/22/20 17:25	02/24/20 19:11	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/22/20 17:25	02/24/20 19:11	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/22/20 17:25	02/24/20 19:11	7440-47-3	
Cobalt	**0.0025J**	mg/L	0.0050	0.00030	1	02/22/20 17:25	02/24/20 19:11	7440-48-4	
Lead	**0.000077J**	mg/L	0.0050	0.000046	1	02/22/20 17:25	02/24/20 19:11	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/22/20 17:25	02/24/20 19:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/22/20 17:25	02/24/20 19:11	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/22/20 17:25	02/24/20 19:11	7782-49-2	
Thallium	**0.00010J**	mg/L	0.0010	0.000052	1	02/22/20 17:25	02/24/20 19:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:17	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.093J**	mg/L	0.30	0.050	1		02/20/20 11:38	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: EB-1-2-14-20 **Lab ID: 2628973015** Collected: 02/14/20 09:45 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 18:25	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 18:25	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 18:25	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 18:25	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 18:25	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 18:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 18:25	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 18:25	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 18:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 18:25	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 18:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 18:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:19	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 11:53	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-41 **Lab ID: 2628973016** Collected: 02/14/20 10:00 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**4.84**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 18:31	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 18:31	7440-38-2	
Barium	**0.024**	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 18:31	7440-39-3	
Beryllium	**0.0026J**	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 18:31	7440-41-7	
Cadmium	**0.00020J**	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 18:31	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 18:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 18:31	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 18:31	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 18:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 18:31	7439-98-7	
Selenium	**0.059**	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 18:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 18:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:22	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 12:07	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-33S **Lab ID: 2628973017** Collected: 02/14/20 11:40 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**3.76**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.0013J**	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 18:54	7440-36-0	
Arsenic	**0.0027J**	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 18:54	7440-38-2	
Barium	**0.013**	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 18:54	7440-39-3	
Beryllium	**0.016**	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 18:54	7440-41-7	
Cadmium	**0.0021J**	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 18:54	7440-43-9	
Chromium	**0.00078J**	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 18:54	7440-47-3	
Cobalt	**0.023**	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 18:54	7440-48-4	
Lead	**0.0010J**	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 18:54	7439-92-1	
Lithium	**0.024J**	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 18:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 18:54	7439-98-7	
Selenium	**0.015**	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 18:54	7782-49-2	
Thallium	**0.00019J**	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 18:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:24	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.23J**	mg/L	0.30	0.050	1		02/20/20 12:22	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-36 **Lab ID: 2628973018** Collected: 02/14/20 11:55 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.71**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.0027J**	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 19:00	7440-36-0	
Arsenic	**0.0026J**	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 19:00	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 19:00	7440-39-3	
Beryllium	**0.00019J**	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 19:00	7440-41-7	
Cadmium	**0.00017J**	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 19:00	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 19:00	7440-47-3	
Cobalt	**0.00041J**	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 19:00	7440-48-4	
Lead	**0.00016J**	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 19:00	7439-92-1	
Lithium	**0.0024J**	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 19:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 19:00	7439-98-7	
Selenium	**0.0020J**	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 19:00	7782-49-2	
Thallium	**0.000057J**	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 19:00	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:26	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 13:21	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-42 **Lab ID: 2628973019** Collected: 02/14/20 10:30 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.80**	Std. Units			1		02/17/20 08:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 19:05	7440-36-0	
Arsenic	**0.0033J**	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 19:05	7440-38-2	
Barium	**0.031**	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 19:05	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 19:05	7440-41-7	
Cadmium	**0.00025J**	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 19:05	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 19:05	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 19:05	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 19:05	7439-92-1	
Lithium	**0.038**	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 19:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 19:05	7439-98-7	
Selenium	**0.040**	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 19:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 19:05	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:29	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/20/20 13:36	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: FB-2-2-14-20 **Lab ID: 2628973020** Collected: 02/14/20 12:00 Received: 02/14/20 14:39 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 19:25	7440-36-0	
Arsenic	**0.0023J**	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 19:25	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 19:25	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 19:25	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 19:25	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 19:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 19:25	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 19:25	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 19:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 19:25	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 19:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 19:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:36	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/21/20 13:08	16984-48-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-38 **Lab ID: 2628973021** Collected: 02/14/20 13:25 Received: 02/17/20 16:37 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**4.84**	Std. Units			1		02/27/20 08:48		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.00031J**	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 19:31	7440-36-0	
Arsenic	**0.0021J**	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 19:31	7440-38-2	
Barium	**0.019**	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 19:31	7440-39-3	
Beryllium	**0.0042**	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 19:31	7440-41-7	
Cadmium	**0.0021J**	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 19:31	7440-43-9	
Chromium	**0.0023J**	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 19:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 19:31	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 19:31	7439-92-1	
Lithium	**0.0076J**	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 19:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 19:31	7439-98-7	
Selenium	**0.11**	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 19:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 19:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:45	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/26/20 15:55	16984-48-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-43 **Lab ID: 2628973022** Collected: 02/17/20 12:00 Received: 02/17/20 16:37 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.93**	Std. Units			1		02/27/20 08:48		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 19:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 19:36	7440-38-2	
Barium	**0.037**	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 19:36	7440-39-3	
Beryllium	**0.00034J**	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 19:36	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 19:36	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 19:36	7440-47-3	
Cobalt	**0.00088J**	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 19:36	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 19:36	7439-92-1	
Lithium	**0.015J**	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 19:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 19:36	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 19:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 19:36	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:48	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.15J**	mg/L	0.30	0.050	1		02/26/20 16:39	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: EB-2-2-17-20 **Lab ID: 2628973023** Collected: 02/17/20 11:50 Received: 02/17/20 16:37 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 19:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 19:42	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 19:42	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 19:42	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 19:42	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 19:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 19:42	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 19:42	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 19:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 19:42	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 19:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 19:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:50	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/26/20 16:53	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-23S **Lab ID: 2628973024** Collected: 02/17/20 13:20 Received: 02/17/20 16:37 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.84**	Std. Units			1		02/27/20 08:48		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 19:48	7440-36-0	
Arsenic	**0.0019J**	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 19:48	7440-38-2	
Barium	**0.024**	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 19:48	7440-39-3	
Beryllium	**0.000081J**	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 19:48	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 19:48	7440-43-9	
Chromium	**0.00087J**	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 19:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 19:48	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 19:48	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 19:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 19:48	7439-98-7	
Selenium	**0.020**	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 19:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 19:48	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:52	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/26/20 17:08	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Sample: YGWC-49 **Lab ID: 2628973025** Collected: 02/17/20 14:30 Received: 02/17/20 16:37 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.82**	Std. Units			1		02/27/20 08:49		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	02/25/20 20:05	02/26/20 19:53	7440-36-0	
Arsenic	**0.0028J**	mg/L	0.0050	0.00035	1	02/25/20 20:05	02/26/20 19:53	7440-38-2	
Barium	**0.071**	mg/L	0.010	0.00049	1	02/25/20 20:05	02/26/20 19:53	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.0030	0.000074	1	02/25/20 20:05	02/26/20 19:53	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	02/25/20 20:05	02/26/20 19:53	7440-43-9	
Chromium	**0.0020J**	mg/L	0.010	0.00039	1	02/25/20 20:05	02/26/20 19:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	02/25/20 20:05	02/26/20 19:53	7440-48-4	
Lead	**0.000071J**	mg/L	0.0050	0.000046	1	02/25/20 20:05	02/26/20 19:53	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00078	1	02/25/20 20:05	02/26/20 19:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	02/25/20 20:05	02/26/20 19:53	7439-98-7	
Selenium	**0.0068J**	mg/L	0.010	0.0013	1	02/25/20 20:05	02/26/20 19:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	02/25/20 20:05	02/26/20 19:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	02/24/20 14:20	02/25/20 11:55	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		02/26/20 17:22	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 43498 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005, 2628973006, 2628973007, 2628973008

METHOD BLANK: 199117 Matrix: Water
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005, 2628973006, 2628973007, 2628973008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00016J	0.00050	0.00014	02/19/20 16:43	

LABORATORY CONTROL SAMPLE: 199118

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0029	115	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 199119 199120

Parameter	Units	2628972001 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	95	98	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 43742 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2628973009, 2628973010

METHOD BLANK: 200407 Matrix: Water
Associated Lab Samples: 2628973009, 2628973010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	02/25/20 09:37	

LABORATORY CONTROL SAMPLE: 200408

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: 200409 200410

Parameter	Units	2628972006 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	0.0020	97	82	75-125	17	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 43762 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2628973011, 2628973012, 2628973013, 2628973014, 2628973015, 2628973016, 2628973017, 2628973018, 2628973019, 2628973020, 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

METHOD BLANK: 200481 Matrix: Water
Associated Lab Samples: 2628973011, 2628973012, 2628973013, 2628973014, 2628973015, 2628973016, 2628973017, 2628973018, 2628973019, 2628973020, 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	02/25/20 10:53	

LABORATORY CONTROL SAMPLE: 200482

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: 200483 200484

Parameter	Units	2628973011 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	81	82	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 43544 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005, 2628973006, 2628973007, 2628973008

METHOD BLANK: 199284 Matrix: Water
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005, 2628973006, 2628973007, 2628973008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	02/20/20 19:28	
Arsenic	mg/L	0.00079J	0.0050	0.00035	02/20/20 19:28	
Barium	mg/L	ND	0.010	0.00049	02/20/20 19:28	
Beryllium	mg/L	ND	0.0030	0.000074	02/20/20 19:28	
Cadmium	mg/L	ND	0.0025	0.00011	02/20/20 19:28	
Chromium	mg/L	ND	0.010	0.00039	02/20/20 19:28	
Cobalt	mg/L	ND	0.0050	0.00030	02/20/20 19:28	
Lead	mg/L	ND	0.0050	0.000046	02/20/20 19:28	
Lithium	mg/L	ND	0.030	0.00078	02/20/20 19:28	
Molybdenum	mg/L	ND	0.010	0.00095	02/20/20 19:28	
Selenium	mg/L	ND	0.010	0.0013	02/20/20 19:28	
Thallium	mg/L	ND	0.0010	0.000052	02/20/20 19:28	

LABORATORY CONTROL SAMPLE: 199285

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.11	108	80-120	
Cobalt	mg/L	0.1	0.10	105	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 199286 199287

Parameter	Units	2628972001 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	103	75-125	0	20	
Arsenic	mg/L	0.00050J	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Barium	mg/L	0.0091J	0.1	0.1	0.11	0.11	102	103	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.090	95	90	75-125	5	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	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: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 199286 199287

Parameter	Units	2628972001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	105	106	75-125	0	20	
Cobalt	mg/L	0.0016J	0.1	0.1	0.11	0.10	104	103	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Lithium	mg/L	0.0023J	0.1	0.1	0.096	0.095	94	92	75-125	1	20	
Molybdenum	mg/L	0.0062J	0.1	0.1	0.11	0.11	107	108	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125	2	20	
Thallium	mg/L	0.000055J	0.1	0.1	0.10	0.10	102	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 43713 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2628973009, 2628973010, 2628973011, 2628973012, 2628973013, 2628973014

METHOD BLANK: 200292 Matrix: Water
Associated Lab Samples: 2628973009, 2628973010, 2628973011, 2628973012, 2628973013, 2628973014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	02/24/20 15:12	
Arsenic	mg/L	ND	0.0050	0.00035	02/24/20 15:12	
Barium	mg/L	ND	0.010	0.00049	02/24/20 15:12	
Beryllium	mg/L	ND	0.0030	0.000074	02/24/20 15:12	
Cadmium	mg/L	ND	0.0025	0.00011	02/24/20 15:12	
Chromium	mg/L	ND	0.010	0.00039	02/24/20 15:12	
Cobalt	mg/L	ND	0.0050	0.00030	02/24/20 15:12	
Lead	mg/L	ND	0.0050	0.000046	02/24/20 15:12	
Lithium	mg/L	ND	0.030	0.00078	02/24/20 15:12	
Molybdenum	mg/L	ND	0.010	0.00095	02/24/20 15:12	
Selenium	mg/L	ND	0.010	0.0013	02/24/20 15:12	
Thallium	mg/L	ND	0.0010	0.000052	02/24/20 15:12	

LABORATORY CONTROL SAMPLE: 200293

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	0.095	95	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Cadmium	mg/L	0.1	0.098	98	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	0.097	97	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 200294 200295

Parameter	Units	2628972007 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	106	105	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Barium	mg/L	0.0070J	0.1	0.1	0.11	0.11	103	100	75-125	3	20	
Beryllium	mg/L	0.00019J	0.1	0.1	0.11	0.11	105	106	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 200294 200295

Parameter	Units	2628972007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.10	106	103	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	0	20	
Lithium	mg/L	ND	0.1	0.1	0.11	0.11	106	106	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.097	100	95	75-125	5	20	
Thallium	mg/L	0.000089J	0.1	0.1	0.097	0.095	97	95	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 43868 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2628973015, 2628973016, 2628973017, 2628973018, 2628973019, 2628973020, 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

METHOD BLANK: 200856 Matrix: Water
Associated Lab Samples: 2628973015, 2628973016, 2628973017, 2628973018, 2628973019, 2628973020, 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	02/26/20 18:14	
Arsenic	mg/L	ND	0.0050	0.00035	02/26/20 18:14	
Barium	mg/L	ND	0.010	0.00049	02/26/20 18:14	
Beryllium	mg/L	ND	0.0030	0.000074	02/26/20 18:14	
Cadmium	mg/L	ND	0.0025	0.00011	02/26/20 18:14	
Chromium	mg/L	ND	0.010	0.00039	02/26/20 18:14	
Cobalt	mg/L	ND	0.0050	0.00030	02/26/20 18:14	
Lead	mg/L	ND	0.0050	0.000046	02/26/20 18:14	
Lithium	mg/L	ND	0.030	0.00078	02/26/20 18:14	
Molybdenum	mg/L	ND	0.010	0.00095	02/26/20 18:14	
Selenium	mg/L	ND	0.010	0.0013	02/26/20 18:14	
Thallium	mg/L	ND	0.0010	0.000052	02/26/20 18:14	

LABORATORY CONTROL SAMPLE: 200857

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.099	99	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	0.095	95	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 200858 200859

Parameter	Units	2628973016 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	112	105	75-125	6	20	
Arsenic	mg/L	0.0014J	0.1	0.1	0.11	0.099	105	98	75-125	7	20	
Barium	mg/L	0.024	0.1	0.1	0.14	0.14	118	112	75-125	4	20	
Beryllium	mg/L	0.0026J	0.1	0.1	0.094	0.091	91	88	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 200858 200859

Parameter	Units	2628973016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	0.00020J	0.1	0.1	0.11	0.099	105	99	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	106	100	75-125	5	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.099	106	99	75-125	6	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.095	102	95	75-125	7	20	
Lithium	mg/L	0.0029J	0.1	0.1	0.090	0.088	87	85	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	113	102	75-125	10	20	
Selenium	mg/L	0.059	0.1	0.1	0.16	0.15	103	93	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.097	103	97	75-125	6	20	

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 525418 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
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005

METHOD BLANK: 2808346 Matrix: Water
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/18/20 08:29	

LABORATORY CONTROL SAMPLE: 2808347

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2808348 2808349

Parameter	Units	92464515069 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.058J	2.5	2.5	2.5	2.4	97	94	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2808350 2808351

Parameter	Units	2628972001 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	2.3	2.3	93	92	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 525820 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
Associated Lab Samples: 2628973006, 2628973007, 2628973008, 2628973009, 2628973010, 2628973011, 2628973012, 2628973013, 2628973014, 2628973015, 2628973016, 2628973017, 2628973018, 2628973019

METHOD BLANK: 2810550 Matrix: Water
Associated Lab Samples: 2628973006, 2628973007, 2628973008, 2628973009, 2628973010, 2628973011, 2628973012, 2628973013, 2628973014, 2628973015, 2628973016, 2628973017, 2628973018, 2628973019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/20/20 05:38	

LABORATORY CONTROL SAMPLE: 2810551

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2810552 2810553

Parameter	Units	92464515104 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.26	2.5	2.5	2.4	2.4	85	86	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2810554 2810555

Parameter	Units	2628973010 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	2.3	2.2	90	89	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 526047 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
Associated Lab Samples: 2628973020

METHOD BLANK: 2811595 Matrix: Water
Associated Lab Samples: 2628973020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/21/20 12:40	

LABORATORY CONTROL SAMPLE: 2811596

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.7	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2811597 2811598

Parameter	Units	2628973020 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	2.6	112	104	90-110	7	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2811599 2811600

Parameter	Units	2628972015 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	108	107	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

QC Batch: 527043 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
Associated Lab Samples: 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

METHOD BLANK: 2816192 Matrix: Water
Associated Lab Samples: 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/26/20 14:43	

LABORATORY CONTROL SAMPLE: 2816193

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2816194 2816195

Parameter	Units	2628973021 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	3.0	2.9	118	115	90-110	3	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2816196 2816197

Parameter	Units	92466616005 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	111	109	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

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

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
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2628973001	YGWA-18S				
2628973002	YGWA-17S				
2628973003	YGWA-18I				
2628973004	YGWA-5D				
2628973005	YGWA-40				
2628973006	YGWA-5I				
2628973009	YGWA-4I				
2628973010	YGWA-20S				
2628973011	YGWA-39				
2628973012	YGWA-21I				
2628973013	YGWC-24S				
2628973016	YGWC-41				
2628973017	YGWC-33S				
2628973018	YGWC-36				
2628973019	YGWC-42				
2628973021	YGWC-38		43595		
2628973022	YGWC-43		43595		
2628973024	YGWC-23S		43595		
2628973025	YGWC-49		43595		
2628973001	YGWA-18S	EPA 3005A	43544	EPA 6020B	43556
2628973002	YGWA-17S	EPA 3005A	43544	EPA 6020B	43556
2628973003	YGWA-18I	EPA 3005A	43544	EPA 6020B	43556
2628973004	YGWA-5D	EPA 3005A	43544	EPA 6020B	43556
2628973005	YGWA-40	EPA 3005A	43544	EPA 6020B	43556
2628973006	YGWA-5I	EPA 3005A	43544	EPA 6020B	43556
2628973007	FB-1-2-12-20	EPA 3005A	43544	EPA 6020B	43556
2628973008	DUP-1	EPA 3005A	43544	EPA 6020B	43556
2628973009	YGWA-4I	EPA 3005A	43713	EPA 6020B	43729
2628973010	YGWA-20S	EPA 3005A	43713	EPA 6020B	43729
2628973011	YGWA-39	EPA 3005A	43713	EPA 6020B	43729
2628973012	YGWA-21I	EPA 3005A	43713	EPA 6020B	43729
2628973013	YGWC-24S	EPA 3005A	43713	EPA 6020B	43729
2628973014	DUP-2	EPA 3005A	43713	EPA 6020B	43729
2628973015	EB-1-2-14-20	EPA 3005A	43868	EPA 6020B	43877
2628973016	YGWC-41	EPA 3005A	43868	EPA 6020B	43877
2628973017	YGWC-33S	EPA 3005A	43868	EPA 6020B	43877
2628973018	YGWC-36	EPA 3005A	43868	EPA 6020B	43877
2628973019	YGWC-42	EPA 3005A	43868	EPA 6020B	43877
2628973020	FB-2-2-14-20	EPA 3005A	43868	EPA 6020B	43877
2628973021	YGWC-38	EPA 3005A	43868	EPA 6020B	43877
2628973022	YGWC-43	EPA 3005A	43868	EPA 6020B	43877
2628973023	EB-2-2-17-20	EPA 3005A	43868	EPA 6020B	43877
2628973024	YGWC-23S	EPA 3005A	43868	EPA 6020B	43877
2628973025	YGWC-49	EPA 3005A	43868	EPA 6020B	43877
2628973001	YGWA-18S	EPA 7470A	43498	EPA 7470A	43503
2628973002	YGWA-17S	EPA 7470A	43498	EPA 7470A	43503

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: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2628973003	YGWA-18I	EPA 7470A	43498	EPA 7470A	43503
2628973004	YGWA-5D	EPA 7470A	43498	EPA 7470A	43503
2628973005	YGWA-40	EPA 7470A	43498	EPA 7470A	43503
2628973006	YGWA-5I	EPA 7470A	43498	EPA 7470A	43503
2628973007	FB-1-2-12-20	EPA 7470A	43498	EPA 7470A	43503
2628973008	DUP-1	EPA 7470A	43498	EPA 7470A	43503
2628973009	YGWA-4I	EPA 7470A	43742	EPA 7470A	43802
2628973010	YGWA-20S	EPA 7470A	43742	EPA 7470A	43802
2628973011	YGWA-39	EPA 7470A	43762	EPA 7470A	43803
2628973012	YGWA-21I	EPA 7470A	43762	EPA 7470A	43803
2628973013	YGWC-24S	EPA 7470A	43762	EPA 7470A	43803
2628973014	DUP-2	EPA 7470A	43762	EPA 7470A	43803
2628973015	EB-1-2-14-20	EPA 7470A	43762	EPA 7470A	43803
2628973016	YGWC-41	EPA 7470A	43762	EPA 7470A	43803
2628973017	YGWC-33S	EPA 7470A	43762	EPA 7470A	43803
2628973018	YGWC-36	EPA 7470A	43762	EPA 7470A	43803
2628973019	YGWC-42	EPA 7470A	43762	EPA 7470A	43803
2628973020	FB-2-2-14-20	EPA 7470A	43762	EPA 7470A	43803
2628973021	YGWC-38	EPA 7470A	43762	EPA 7470A	43803
2628973022	YGWC-43	EPA 7470A	43762	EPA 7470A	43803
2628973023	EB-2-2-17-20	EPA 7470A	43762	EPA 7470A	43803
2628973024	YGWC-23S	EPA 7470A	43762	EPA 7470A	43803
2628973025	YGWC-49	EPA 7470A	43762	EPA 7470A	43803
2628973001	YGWA-18S	EPA 300.0 Rev 2.1 1993	525418		
2628973002	YGWA-17S	EPA 300.0 Rev 2.1 1993	525418		
2628973003	YGWA-18I	EPA 300.0 Rev 2.1 1993	525418		
2628973004	YGWA-5D	EPA 300.0 Rev 2.1 1993	525418		
2628973005	YGWA-40	EPA 300.0 Rev 2.1 1993	525418		
2628973006	YGWA-5I	EPA 300.0 Rev 2.1 1993	525820		
2628973007	FB-1-2-12-20	EPA 300.0 Rev 2.1 1993	525820		
2628973008	DUP-1	EPA 300.0 Rev 2.1 1993	525820		
2628973009	YGWA-4I	EPA 300.0 Rev 2.1 1993	525820		
2628973010	YGWA-20S	EPA 300.0 Rev 2.1 1993	525820		
2628973011	YGWA-39	EPA 300.0 Rev 2.1 1993	525820		
2628973012	YGWA-21I	EPA 300.0 Rev 2.1 1993	525820		
2628973013	YGWC-24S	EPA 300.0 Rev 2.1 1993	525820		
2628973014	DUP-2	EPA 300.0 Rev 2.1 1993	525820		
2628973015	EB-1-2-14-20	EPA 300.0 Rev 2.1 1993	525820		
2628973016	YGWC-41	EPA 300.0 Rev 2.1 1993	525820		
2628973017	YGWC-33S	EPA 300.0 Rev 2.1 1993	525820		
2628973018	YGWC-36	EPA 300.0 Rev 2.1 1993	525820		
2628973019	YGWC-42	EPA 300.0 Rev 2.1 1993	525820		
2628973020	FB-2-2-14-20	EPA 300.0 Rev 2.1 1993	526047		
2628973021	YGWC-38	EPA 300.0 Rev 2.1 1993	527043		
2628973022	YGWC-43	EPA 300.0 Rev 2.1 1993	527043		
2628973023	EB-2-2-17-20	EPA 300.0 Rev 2.1 1993	527043		

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: PLANT YATES AMA AND R6 FEB
Pace Project No.: 2628973

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2628973024	**YGWC-23S**	EPA 300.0 Rev 2.1 1993	527043		
2628973025	**YGWC-49**	EPA 300.0 Rev 2.1 1993	527043		

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: of

Section A Required Client Information:
Company: GA Power
Address: Atlanta, GA
Bill To: SCS Contacts
Phone: Fax:
Requested Due Date/TAT: 10 Day

Section B Required Project Information:
Report To: SCS Contacts
Copy To: ACC Contacts
Purchase Order No.:
Project Name: Plant Yates ~~AP-2~~ - Feb Event - RG AMA
Project Number:

Section C Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #: 2916-1

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR
Site Location STATE: GA

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes: 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 COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Fluoride	App. IV Metals 6020/7470	RAD 226 & 228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	YGWA-4I	W	G	—	—	2-12-20	1348		4	1		3							x	x	x		2624973
2	YGWA-20S	W	G	—	—	2-12-20	1345		4	1		3							x	x	x		pH = 6.15
3	YGWA-39	W	G	—	—	2-12-20	1220		4	1		3							x	x	x		pH = 6.00
4	YGWA-21I	W	G	—	—	2-12-20	1445		6	1		3							x	x	x		pH = 5.97
5	YGWC-24S	W	G	—	—	2-13-20	1453		4	1		3							x	x	x		pH = 7.13, extra rad
6	Dup-2	W	G	—	—	2-13-20	—		4	1		3							x	x	x		pH = 5.69, date: 2-17-20
7	FB-1-2-14-20	W	G	—	—	2-14-20	0945		4	1		3							x	x	x		
8	YGWC-4i	W	G	—	—	2-14-20	1000		4	1		3							x	x	x		pH = 4.84
9	YGWC-33S	W	G	—	—	2-14-20	1140		4	1		3							x	x	x		pH = 3.76
10	YGWC-36	W	G	—	—	2-14-20	1155		4	1		3							x	x	x		pH = 5.71
11	YGWC-42	W	G	—	—	2-14-20	1030		4	1		3							x	x	x		pH = 5.80
12	FB-2-2-14-20	W	G	—	—	2-14-20	1200		4	1		3							x	x	x		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells and note when the last sample for the event has been taken.		2/14/20	7439	MIWD/PACE	2/14/20	1439	3.7	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Hunter Auld
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2-13-20

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	ACC Contacts
Purchase Order No.:	
Project Name:	Plant Yates AMA and R6 - Feb Event
Project Number:	

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	2916-1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Fluoride	App. IV Metals 6020/7470	RAD 228 & 228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	YGWA-18S	W	G	—	—	2-11-20	1239		4	1		3							X	X	X		pH: 5.30
2	YGWA-17S	W	G	—	—	2-11-20	1121		4	1		3							X	X	X		pH 5.58
3	YGWA-18I	W	G	—	—	2-11-20	1356		4	1		3							X	X	X		pH: 6.07
4	YGWA-5D	W	G	—	—	2-12-20	1038		4	1		3							X	X	X		pH: 7.52
5	YGWA-4D	W	G	—	—	2-12-20	1042		4	1		3							X	X	X		pH: 5.30
6	YGWA-5I	W	G	—	—	2-12-20	1155		4	1		3							X	X	X		pH: 5.83
7										1		3							X	X	X		
8										1		3							X	X	X		
9										1		3							X	X	X		
10										1		3							X	X	X		
11	EB-2-12-20 EB-2-12-20 FB-1-2-12-20	W	G	—	—	2-12-20	1020		4	1		3							X	X	X		
12	DUP-1	W	G	—	—	2-11-20	/		4	1		3							X	X	X		

2628973

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells and note when the last sample for the event has been taken.		2-12-20	1515	IPACE	02/12/20	1515	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: O. ENRIQUEZ, H. AULD

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 2-11-20

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

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical
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CHAIN-OF-CUS[T]ODY / Analytical Request Document

The Chain-of-Custody is a LEG[AL] DOCUMENT. All relevant fields must be completed accurately.

(Final page)

Page: of

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	ACC Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Yates AMA and R6 - Feb Event	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	2916-1

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Valid 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

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE (Year 2020)	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Fluoride	App. IV Metals 6020/7470	RAD 226 & 228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	YGWC-38	W	G	—	—	2-14-20	1325		4	1		3							x	x	x		pH = 4.84
2	YGWC-43	W	G	—	—	2-17	1200		4	1		3							x	x	x		pH = 5.93
3	EB-2-2-17-20	W	G	—	—	2-17	1150		4	1		3							x	x	x		pH
4	YGWC-23S	W	G	—	—	2-17	1320		4	1		3							x	x	x		pH = 5.84
5	YGWC-49	W	G	—	—	2-17	1430		4	1		3							x	x	x		pH = 5.82
6										1		3							x	x	x		
7										1		3							x	x	x		
8										1		3							x	x	x		
9										1		3							x	x	x		
10										1		3							x	x	x		
11										1		3							x	x	x		
12										1		3							x	x	x		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells and note when the last sample for the event has been taken.	Chris Parker / ACC	2-17-20	1637	K. Wellington / Pace	2/17/20	1637	3.3	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Parker

SIGNATURE of SAMPLER: Chris Parker

DATE Signed (MM/DD/YY): 2-17-20

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project # _____

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

Tracking #: _____ [redacted]

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

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

Thermometer Used THR233 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.3 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: KW 2/17/20

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☐No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☐No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☐Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WW		
All containers needing preservation have been checked.	☐Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed KW 2/17/20 Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2008

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	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 bottle

Project #

Matrix	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)	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)	SPST-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)
	1		1				1																		BP3N			
	2		1				1																					
	3		1				1																					
	4		1				1																					
	5		1				1																					
	6		1				1																					
	7		1				1																					
	8		1				1																					
	9		1				1																					
	10		1				1																					
	11		1				1																					
	12		1				1																					

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 Offic
Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	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 bottle.**

Project #

Matrix	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	BP4A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	[illegible] mL Scintillation 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 Of
Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	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 bottle**

Project # V1

Matrix	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)	AG8A(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)-VPH/Gas 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	BP3K-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation 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 Offic
Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

March 15, 2020

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

RE: Project: 2628973
Pace Project No.: 30350267

Dear Mr. Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory between February 14, 2020 and February 19, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

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

Enclosures

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 2628973
Pace Project No.: 30350267

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 2628973
Pace Project No.: 30350267

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2628973001	**YGWA-18S**	Water	02/11/20 12:39	02/14/20 10:15
2628973002	**YGWA-17S**	Water	02/11/20 11:21	02/14/20 10:15
2628973003	**YGWA-18I**	Water	02/11/20 13:56	02/14/20 10:15
2628973004	**YGWA-5D**	Water	02/12/20 10:38	02/14/20 10:15
2628973005	**YGWA-40**	Water	02/12/20 10:42	02/14/20 10:15
2628973006	**YGWA-5I**	Water	02/12/20 11:55	02/14/20 10:15
2628973007	**FB-1-2-12-20**	Water	02/12/20 10:20	02/14/20 10:15
2628973008	**DUP-1**	Water	02/12/20 00:00	02/14/20 10:15
2628973009	**YGWA-4I**	Water	02/12/20 13:48	02/18/20 09:10
2628973010	**YGWA-20S**	Water	02/12/20 13:45	02/18/20 09:10
2628973011	**YGWA-39**	Water	02/12/20 12:20	02/18/20 09:10
2628973012	**YGWA-21I**	Water	02/12/20 14:45	02/18/20 09:10
2628973013	**YGWC-24S**	Water	02/13/20 14:53	02/18/20 09:10
2628973014	**DUP-2**	Water	02/13/20 00:00	02/18/20 09:10
2628973015	**EB-1-2-14-20**	Water	02/14/20 09:45	02/18/20 09:10
2628973016	**YGWC-41**	Water	02/14/20 10:00	02/18/20 09:10
2628973017	**YGWC-33S**	Water	02/14/20 11:40	02/18/20 09:10
2628973018	**YGWC-36**	Water	02/14/20 11:55	02/18/20 09:10
2628973019	**YGWC-42**	Water	02/14/20 10:30	02/18/20 09:10
2628973020	**FB-2-2-14-20**	Water	02/14/20 12:00	02/18/20 09:10
2628973021	**YGWC-38**	Water	02/14/20 13:25	02/19/20 09:20
2628973022	**YGWC-43**	Water	02/17/20 12:00	02/19/20 09:20
2628973023	**EB-2-2-17-20**	Water	02/17/20 11:50	02/19/20 09:20
2628973024	**YGWC-23S**	Water	02/17/20 13:20	02/19/20 09:20
2628973025	**YGWC-49**	Water	02/17/20 14:30	02/19/20 09:20

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 2628973
Pace Project No.: 30350267

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2628973001	YGWA-18S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973002	YGWA-17S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973003	YGWA-18I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973004	YGWA-5D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973005	YGWA-40	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973006	YGWA-5I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973007	FB-1-2-12-20	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973008	DUP-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973009	YGWA-4I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973010	YGWA-20S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973011	YGWA-39	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973012	YGWA-21I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973013	YGWC-24S	EPA 9315	LAL	1	PASI-PA

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: 2628973
Pace Project No.: 30350267

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973014	**DUP-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973015	**EB-1-2-14-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973016	**YGWC-41**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973017	**YGWC-33S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973018	**YGWC-36**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973019	**YGWC-42**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973020	**FB-2-2-14-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2628973021	**YGWC-38**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2628973022	**YGWC-43**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2628973023	**EB-2-2-17-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2628973024	**YGWC-23S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2628973025	**YGWC-49**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 2628973
Pace Project No.: 30350267

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA

Pace Analytical Services, LLC
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Greensburg, PA 15601
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

Sample: YGWA-18S **Lab ID: 2628973001** Collected: 02/11/20 12:39 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.247 ± 0.207 (0.389) C:88% T:NA**	pCi/L	03/02/20 19:27	13982-63-3	
Radium-228	EPA 9320	**0.350 ± 0.301 (0.599) C:81% T:95%**	pCi/L	03/11/20 16:09	15262-20-1	
Total Radium	Total Radium Calculation	**0.597 ± 0.508 (0.988)**	pCi/L	03/12/20 11:02	7440-14-4	

Sample: YGWA-17S **Lab ID: 2628973002** Collected: 02/11/20 11:21 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.364 ± 0.251 (0.343) C:89% T:NA**	pCi/L	03/03/20 08:24	13982-63-3	
Radium-228	EPA 9320	**0.0973 ± 0.272 (0.612) C:81% T:96%**	pCi/L	03/11/20 16:09	15262-20-1	
Total Radium	Total Radium Calculation	**0.461 ± 0.523 (0.955)**	pCi/L	03/12/20 11:02	7440-14-4	

Sample: YGWA-18I **Lab ID: 2628973003** Collected: 02/11/20 13:56 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.22 ± 0.478 (0.487) C:83% T:NA**	pCi/L	03/03/20 08:16	13982-63-3	
Radium-228	EPA 9320	**0.256 ± 0.356 (0.763) C:79% T:87%**	pCi/L	03/11/20 16:09	15262-20-1	
Total Radium	Total Radium Calculation	**1.48 ± 0.834 (1.25)**	pCi/L	03/12/20 11:02	7440-14-4	

Sample: YGWA-5D **Lab ID: 2628973004** Collected: 02/12/20 10:38 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**3.06 ± 0.764 (0.346) C:92% T:NA**	pCi/L	03/03/20 08:23	13982-63-3	
Radium-228	EPA 9320	**0.956 ± 0.417 (0.677) C:80% T:96%**	pCi/L	03/11/20 16:09	15262-20-1	
Total Radium	Total Radium Calculation	**4.02 ± 1.18 (1.02)**	pCi/L	03/12/20 11:02	7440-14-4	

Sample: YGWA-40 **Lab ID: 2628973005** Collected: 02/12/20 10:42 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.692 ± 0.347 (0.419) C:88% T:NA**	pCi/L	03/03/20 08:18	13982-63-3	
Radium-228	EPA 9320	**1.14 ± 0.439 (0.650) C:81% T:91%**	pCi/L	03/11/20 16:09	15262-20-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

Sample: YGWA-40 **Lab ID: 2628973005** Collected: 02/12/20 10:42 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**1.83 ± 0.786 (1.07)**	pCi/L	03/12/20 11:02	7440-14-4	

Sample: YGWA-5I **Lab ID: 2628973006** Collected: 02/12/20 11:55 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.907 ± 0.396 (0.458) C:89% T:NA**	pCi/L	03/03/20 08:19	13982-63-3	
Radium-228	EPA 9320	**0.00580 ± 0.284 (0.664) C:82% T:91%**	pCi/L	03/11/20 16:09	15262-20-1	
Total Radium	Total Radium Calculation	**0.913 ± 0.680 (1.12)**	pCi/L	03/12/20 11:02	7440-14-4	

Sample: FB-1-2-12-20 **Lab ID: 2628973007** Collected: 02/12/20 10:20 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.198 ± 0.221 (0.441) C:91% T:NA**	pCi/L	03/03/20 08:23	13982-63-3	
Radium-228	EPA 9320	**0.596 ± 0.374 (0.696) C:82% T:88%**	pCi/L	03/11/20 16:09	15262-20-1	
Total Radium	Total Radium Calculation	**0.794 ± 0.595 (1.14)**	pCi/L	03/12/20 11:02	7440-14-4	

Sample: DUP-1 **Lab ID: 2628973008** Collected: 02/12/20 00:00 Received: 02/14/20 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.621 ± 0.355 (0.549) C:88% T:NA**	pCi/L	03/03/20 08:23	13982-63-3	
Radium-228	EPA 9320	**0.462 ± 0.384 (0.771) C:81% T:92%**	pCi/L	03/11/20 16:10	15262-20-1	
Total Radium	Total Radium Calculation	**1.08 ± 0.739 (1.32)**	pCi/L	03/12/20 11:02	7440-14-4	

Sample: YGWA-4I **Lab ID: 2628973009** Collected: 02/12/20 13:48 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.848 ± 0.258 (0.270) C:85% T:NA**	pCi/L	03/03/20 18:49	13982-63-3	
Radium-228	EPA 9320	**0.403 ± 0.362 (0.732) C:75% T:94%**	pCi/L	03/11/20 16:12	15262-20-1	
Total Radium	Total Radium Calculation	**1.25 ± 0.620 (1.00)**	pCi/L	03/12/20 11:03	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

Sample: YGWA-20S **Lab ID: 2628973010** Collected: 02/12/20 13:45 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.318 ± 0.173 (0.282) C:93% T:NA**	pCi/L	03/03/20 18:32	13982-63-3	
Radium-228	EPA 9320	**0.791 ± 0.522 (1.01) C:71% T:90%**	pCi/L	03/11/20 16:12	15262-20-1	
Total Radium	Total Radium Calculation	**1.11 ± 0.695 (1.29)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: YGWA-39 **Lab ID: 2628973011** Collected: 02/12/20 12:20 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.351 ± 0.166 (0.243) C:90% T:NA**	pCi/L	03/03/20 18:33	13982-63-3	
Radium-228	EPA 9320	**0.0993 ± 0.365 (0.825) C:74% T:95%**	pCi/L	03/11/20 16:12	15262-20-1	
Total Radium	Total Radium Calculation	**0.450 ± 0.531 (1.07)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: YGWA-21I **Lab ID: 2628973012** Collected: 02/12/20 14:45 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.915 ± 0.284 (0.339) C:89% T:NA**	pCi/L	03/03/20 18:34	13982-63-3	
Radium-228	EPA 9320	**0.695 ± 0.526 (1.05) C:74% T:85%**	pCi/L	03/11/20 16:13	15262-20-1	
Total Radium	Total Radium Calculation	**1.61 ± 0.810 (1.39)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: YGWC-24S **Lab ID: 2628973013** Collected: 02/13/20 14:53 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.474 ± 0.186 (0.239) C:94% T:NA**	pCi/L	03/03/20 18:34	13982-63-3	
Radium-228	EPA 9320	**-0.0282 ± 0.385 (0.891) C:78% T:96%**	pCi/L	03/11/20 16:13	15262-20-1	
Total Radium	Total Radium Calculation	**0.474 ± 0.571 (1.13)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: DUP-2 **Lab ID: 2628973014** Collected: 02/13/20 00:00 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.642 ± 0.207 (0.187) C:90% T:NA**	pCi/L	03/03/20 18:34	13982-63-3	
Radium-228	EPA 9320	**0.300 ± 0.346 (0.727) C:78% T:90%**	pCi/L	03/11/20 16:13	15262-20-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

Sample: DUP-2 **Lab ID: 2628973014** Collected: 02/13/20 00:00 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**0.942 ± 0.553 (0.914)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: EB-1-2-14-20 **Lab ID: 2628973015** Collected: 02/14/20 09:45 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.316 ± 0.228 (0.356) C:91% T:NA**	pCi/L	03/04/20 08:55	13982-63-3	
Radium-228	EPA 9320	**0.498 ± 0.359 (0.697) C:78% T:98%**	pCi/L	03/11/20 16:13	15262-20-1	
Total Radium	Total Radium Calculation	**0.814 ± 0.587 (1.05)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: YGWC-41 **Lab ID: 2628973016** Collected: 02/14/20 10:00 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.663 ± 0.326 (0.402) C:89% T:NA**	pCi/L	03/04/20 08:55	13982-63-3	
Radium-228	EPA 9320	**0.500 ± 0.401 (0.792) C:77% T:83%**	pCi/L	03/11/20 16:13	15262-20-1	
Total Radium	Total Radium Calculation	**1.16 ± 0.727 (1.19)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: YGWC-33S **Lab ID: 2628973017** Collected: 02/14/20 11:40 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.666 ± 0.331 (0.426) C:93% T:NA**	pCi/L	03/04/20 08:55	13982-63-3	
Radium-228	EPA 9320	**0.346 ± 0.398 (0.838) C:78% T:88%**	pCi/L	03/11/20 16:13	15262-20-1	
Total Radium	Total Radium Calculation	**1.01 ± 0.729 (1.26)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: YGWC-36 **Lab ID: 2628973018** Collected: 02/14/20 11:55 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.618 ± 0.307 (0.358) C:89% T:NA**	pCi/L	03/04/20 08:55	13982-63-3	
Radium-228	EPA 9320	**0.443 ± 0.398 (0.808) C:78% T:89%**	pCi/L	03/11/20 16:13	15262-20-1	
Total Radium	Total Radium Calculation	**1.06 ± 0.705 (1.17)**	pCi/L	03/12/20 11:03	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

Sample: YGWC-42 **Lab ID: 2628973019** Collected: 02/14/20 10:30 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.896 ± 0.371 (0.400) C:91% T:NA**	pCi/L	03/04/20 08:55	13982-63-3	
Radium-228	EPA 9320	**0.660 ± 0.386 (0.707) C:79% T:93%**	pCi/L	03/11/20 16:13	15262-20-1	
Total Radium	Total Radium Calculation	**1.56 ± 0.757 (1.11)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: FB-2-2-14-20 **Lab ID: 2628973020** Collected: 02/14/20 12:00 Received: 02/18/20 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.327 ± 0.248 (0.424) C:97% T:NA**	pCi/L	03/04/20 08:29	13982-63-3	
Radium-228	EPA 9320	**0.545 ± 0.414 (0.814) C:75% T:91%**	pCi/L	03/11/20 16:13	15262-20-1	
Total Radium	Total Radium Calculation	**0.872 ± 0.662 (1.24)**	pCi/L	03/12/20 11:03	7440-14-4	

Sample: YGWC-38 **Lab ID: 2628973021** Collected: 02/14/20 13:25 Received: 02/19/20 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.788 ± 0.349 (0.387) C:92% T:NA**	pCi/L	03/04/20 08:29	13982-63-3	
Radium-228	EPA 9320	**0.334 ± 0.389 (0.820) C:76% T:86%**	pCi/L	03/11/20 12:17	15262-20-1	
Total Radium	Total Radium Calculation	**1.12 ± 0.738 (1.21)**	pCi/L	03/13/20 08:38	7440-14-4	

Sample: YGWC-43 **Lab ID: 2628973022** Collected: 02/17/20 12:00 Received: 02/19/20 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**3.00 ± 0.757 (0.543) C:94% T:NA**	pCi/L	03/04/20 08:29	13982-63-3	
Radium-228	EPA 9320	**1.19 ± 0.496 (0.793) C:78% T:80%**	pCi/L	03/11/20 12:17	15262-20-1	
Total Radium	Total Radium Calculation	**4.19 ± 1.25 (1.34)**	pCi/L	03/13/20 08:38	7440-14-4	

Sample: EB-2-2-17-20 **Lab ID: 2628973023** Collected: 02/17/20 11:50 Received: 02/19/20 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.426 ± 0.295 (0.503) C:95% T:NA**	pCi/L	03/04/20 08:29	13982-63-3	
Radium-228	EPA 9320	**0.809 ± 0.465 (0.859) C:74% T:83%**	pCi/L	03/11/20 12:17	15262-20-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

Sample: EB-2-2-17-20 **Lab ID: 2628973023** Collected: 02/17/20 11:50 Received: 02/19/20 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**1.24 ± 0.760 (1.36)**	pCi/L	03/13/20 08:38	7440-14-4	

Sample: YGWC-23S **Lab ID: 2628973024** Collected: 02/17/20 13:20 Received: 02/19/20 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.610 ± 0.329 (0.475) C:91% T:NA**	pCi/L	03/04/20 08:14	13982-63-3	
Radium-228	EPA 9320	**0.850 ± 0.466 (0.841) C:77% T:74%**	pCi/L	03/11/20 12:17	15262-20-1	
Total Radium	Total Radium Calculation	**1.46 ± 0.795 (1.32)**	pCi/L	03/13/20 08:38	7440-14-4	

Sample: YGWC-49 **Lab ID: 2628973025** Collected: 02/17/20 14:30 Received: 02/19/20 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.292 ± 0.241 (0.418) C:90% T:NA**	pCi/L	03/04/20 08:15	13982-63-3	
Radium-228	EPA 9320	**1.23 ± 0.471 (0.697) C:78% T:79%**	pCi/L	03/11/20 12:18	15262-20-1	
Total Radium	Total Radium Calculation	**1.52 ± 0.712 (1.12)**	pCi/L	03/13/20 08:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Greensburg, PA 15601
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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

QC Batch: 385672 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

METHOD BLANK: 1868416 Matrix: Water
Associated Lab Samples: 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.190 ± 0.252 (0.542) C:98% T:NA	pCi/L	03/04/20 08:30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

QC Batch: 385673 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

METHOD BLANK: 1868417 Matrix: Water
Associated Lab Samples: 2628973021, 2628973022, 2628973023, 2628973024, 2628973025

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.892 ± 0.402 (0.648) C:79% T:78%	pCi/L	03/11/20 12:18	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

QC Batch: 385668 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005, 2628973006, 2628973007, 2628973008

METHOD BLANK: 1868413 Matrix: Water
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005, 2628973006, 2628973007, 2628973008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.411 ± 0.292 (0.553) C:86% T:91%	pCi/L	03/11/20 16:09	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

QC Batch: 385669 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2628973009, 2628973010, 2628973011, 2628973012, 2628973013, 2628973014, 2628973015, 2628973016, 2628973017, 2628973018, 2628973019, 2628973020

METHOD BLANK: 1868414 Matrix: Water
Associated Lab Samples: 2628973009, 2628973010, 2628973011, 2628973012, 2628973013, 2628973014, 2628973015, 2628973016, 2628973017, 2628973018, 2628973019, 2628973020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.486 ± 0.182 (0.217) C:96% T:NA	pCi/L	03/03/20 17:19	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Greensburg, PA 15601
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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

QC Batch: 385666 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005, 2628973006, 2628973007, 2628973008

METHOD BLANK: 1868412 Matrix: Water
Associated Lab Samples: 2628973001, 2628973002, 2628973003, 2628973004, 2628973005, 2628973006, 2628973007, 2628973008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.603 ± 0.260 (0.342) C:89% T:NA	pCi/L	03/02/20 19:23	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2628973
Pace Project No.: 30350267

QC Batch: 385670 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2628973009, 2628973010, 2628973011, 2628973012, 2628973013, 2628973014, 2628973015, 2628973016, 2628973017, 2628973018, 2628973019, 2628973020

METHOD BLANK: 1868415 Matrix: Water
Associated Lab Samples: 2628973009, 2628973010, 2628973011, 2628973012, 2628973013, 2628973014, 2628973015, 2628973016, 2628973017, 2628973018, 2628973019, 2628973020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.127 ± 0.308 (0.687) C:77% T:91%	pCi/L	03/11/20 16:12	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 2628973
Pace Project No.: 30350267

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

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

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

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No
Owner Received Date: 2/12/2020 **Results Requested By:** ~~2/26/2020~~ 21 days

Workorder: 2628973 **Workorder Name:** PLANT YATES AMA AND R6 FEB

Report To

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

Subcontract To

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

Requested Analysis

WO# : 30350267

30350267

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						RAD 9315	RAD 9320	LAB USE ONLY
1	YGWA-18S	PS	2/11/2020 12:39	2628973001	Water	1	2					X	X	C01
2	YGWA-17S	PS	2/11/2020 11:21	2628973002	Water	1	2					X	X	C02
3	YGWA-18I	PS	2/11/2020 13:56	2628973003	Water	1	2					X	X	C03
4	YGWA-5D	PS	2/12/2020 10:38	2628973004	Water	1	2					X	X	C04
5	YGWA-4D	PS	2/12/2020 10:42	2628973005	Water	1	2					X	X	C05
6	YGWA-5I	PS	2/12/2020 11:55	2628973006	Water	1	2					X	X	C06
7	FB-1-2-12-20	PS	2/12/2020 10:20	2628973007	Water	1	2					X	X	C07
8	DUP-1	PS	2/11/2020 00:00	2628973008	Water	1	2					X	X	C08

Comments

Transfers	Released By	Date/Time	Received By	Date/Time
1	Pace	2/13/2017:00		2-14-20 10:15
2				
3				

Cooler Temperature on Receipt N/A °C | **Custody Seal** Y or (N) | **Received on Ice** Y or (N) | **Samples Intact** (Y) or N

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

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No
Owner Received Date: 2/12/2020 **Results Requested By:** ~~2/26/2020~~ 21 days

Pace Analytical® www.pacelabs.com

Workorder: 2628973 **Workorder Name:** PLANT YATES AMA AND R6 FEB

Report To

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

Subcontract To

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

Requested Analysis

WO# : 30350267
PM: JAC Due Date: 03/06/20
CLIENT: PACE_26_ATGA

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3						RAD 9315	RAD 9320	LAB USE ONLY
1	YGWA-18S	PS	2/11/2020 12:39	2628973001	Water	1						X	X	
2	YGWA-17S	PS	2/11/2020 11:21	2628973002	Water	1						X	X	
3	YGWA-18I	PS	2/11/2020 13:56	2628973003	Water	1						X	X	
4	YGWA-5D	PS	2/12/2020 10:38	2628973004	Water	1						X	X	
5	YGWA-4D	PS	2/12/2020 10:42	2628973005	Water	1						X	X	
6	YGWA-5I	PS	2/12/2020 11:55	2628973006	Water	1						X	X	
7	FB-1-2-12-20	PS	2/12/2020 10:20	2628973007	Water	1						X	X	
8	DUP-1	PS	2/11/2020 00:00	2628973008	Water	1						X	X	
9	YGWA-4I	PS	2/12/2020 13:48	2628973009	Water	1	2					X	X	CL9
10	YGWA-20S	PS	2/12/2020 13:45	2628973010	Water	1	2					X	X	CL0
11	YGWA-39	PS	2/12/2020 12:20	2628973011	Water	1	2					X	X	CL1
12	YGWA-21I	PS	2/12/2020 14:45	2628973012	Water	1	4					X	X	CL2
13	YGWA-24S	PS	2/13/2020 14:53	2628973013	Water	1	2					X	X	CL3
14	DUP-2	PS	2/13/2020 00:00	2628973014	Water	1	2					X	X	CL4
15	EB-1-2-14-20	PS	2/14/2020 09:45	2628973015	Water	1	2					X	X	CL5
16	YGWC-41	PS	2/14/2020 10:00	2628973016	Water	1	2					X	X	CL6
17	YGWC-33S	PS	2/14/2020 11:40	2628973017	Water	1	2					X	X	CL7
18	YGWC-36	PS	2/14/2020 11:55	2628973018	Water	1	2					X	X	CL8
19	YGWC-42	PS	2/14/2020 10:30	2628973019	Water	1	2					X	X	CL9

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No
Owner Received Date: 2/12/2020 **Results Requested By:** 2/26/2020

Workorder: 2628973 **Workorder Name:** PLANT YATES AMA AND R6 FEB

Report To	Subcontract To
Kevin Herring Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3						Requested Analysis: RAD 9315	RAD 9320											LAB USE ONLY
20	FB-2-2-14-20	PS	2/14/2020 12:00	2628973020	Water	1	2					X	X											C20
21																								
22																								
23																								
24																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	Pace	2/17/2017:00		2-18-20 9:10
2				
3				

Comments: Add on

Cooler Temperature on Receipt N/A °C | **Custody Seal** Y or (N) | **Received on Ice** Y or (N) | **Samples Intact** (Y) or N

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

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 2628973 **Workorder Name:** PLANT YATES AMA AND R6 FEB
Owner Received Date: 2/12/2020 **Results Requested By:** 2/26/2020

Report To	Subcontract To
Kevin Herring Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

WO# : 30350267
PM: JAC Due Date: 03/06/20
CLIENT: PACE_26_ATGA

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis RAD 9315	RAD 9320										LAB USE ONLY
1	YGWA-18S	PS	2/11/2020 12:39	2628973001	Water	1						X	X										
2	YGWA-17S	PS	2/11/2020 11:21	2628973002	Water	1						X	X										
3	YGWA-18I	PS	2/11/2020 13:56	2628973003	Water	1						X	X										
4	YGWA-5D	PS	2/12/2020 10:38	2628973004	Water	1						X	X										
5	YGWA-40	PS	2/12/2020 10:42	2628973005	Water	1						X	X										
6	YGWA-5I	PS	2/12/2020 11:55	2628973006	Water	1						X	X										
7	FB-1-2-12-20	PS	2/12/2020 10:20	2628973007	Water	1						X	X										
8	DUP-1	PS	2/11/2020 00:00	2628973008	Water	1						X	X										
9	YGWA-4I	PS	2/12/2020 13:48	2628973009	Water	1						X	X										
10	YGWA-20S	PS	2/12/2020 13:45	2628973010	Water	1						X	X										
11	YGWA-39	PS	2/12/2020 12:20	2628973011	Water	1						X	X										
12	YGWA-21I	PS	2/12/2020 14:45	2628973012	Water	1						X	X										
13	YGWC-24S	PS	2/13/2020 14:53	2628973013	Water	1						X	X										
14	DUP-2	PS	2/13/2020 00:00	2628973014	Water	1						X	X										
15	EB-1-2-14-20	PS	2/14/2020 09:45	2628973015	Water	1						X	X										
16	YGWC-41	PS	2/14/2020 10:00	2628973016	Water	1						X	X										
17	YGWC-33S	PS	2/14/2020 11:40	2628973017	Water	1						X	X										
18	YGWC-36	PS	2/14/2020 11:55	2628973018	Water	1						X	X										
19	YGWC-42	PS	2/14/2020 10:30	2628973019	Water	1						X	X										

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No

Pace Analytical® www.pacelabs.com

Workorder: 2628973 **Workorder Name:** PLANT YATES AMA AND R6 FEB
Owner Received Date: 2/12/2020 **Results Requested By:** 2/26/2020

Report To	Subcontract To
Kevin Herring Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

WO# : 30350267
PM: JAC Due Date: 03/06/20
CLIENT: PACE_26_ATGA

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	RAD 9315	RAD 9320	LAB USE ONLY
20	FB-2-2-14-20	PS	2/14/2020 12:00	2628973020	Water	1	X	X	
21	YGWC-38	PS	2/14/2020 13:25	2628973021	Water	2	X	X	021
22	YGWC-43	PS	2/17/2020 12:00	2628973022	Water	2	X	X	022
23	EB-2-2-17-20	PS	2/17/2020 11:50	2628973023	Water	2	X	X	023
24	YGWC-23S	PS	2/17/2020 13:20	2628973024	Water	2	X	X	024
25	YGWC-49	PS	2/17/2020 14:30	2628973025	Water	2	X	X	025

Transfers	Released By	Date/Time	Received By	Date/Time
1	Pace	2/18/2017:00		2-19-20 09:20
2				
3				

Comments

Cooler Temperature on Receipt N/A °C | **Custody Seal** Y or (N) | **Received on Ice** Y or (N) | **Samples Intact** (Y) or N

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

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Pace NC Project # 30350267

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

Label DK

Tracking #: 1657 9506 2997

LIMS Login MM

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

pH paper Lot# (C)10391 Date and Initials of person examining contents: DK 2-17-20

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements.	✓			Initial when completed DK Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: DK Date: 2-17-20

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pittsburgh Lab Sample Condition Upon Receipt

WO# : 30350267

PM: JAC Due Date: 03/06/20

CLIENT: PACE_26_ATGA

Pace Analytical

Client Name: Pace NC

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

Label DL

Tracking #: 1657 9506 3368

LIMS Login DL

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

Thermometer Used N/A **Type of Ice:** Wet Blue (None)

Cooler Temperature **Observed Temp** — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 1C10391 / Date and Initials of person examining contents: DL 2-
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements.	✓			Initial when completed DL / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: DL Date: 2-18-20

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Pace NC Project # 30350267

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

Tracking #: 1657 9506 4033

Label BLM
LIMS Login BLM

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp ___ °C Correction Factor: ___ °C Final Temp: ___ °C

Temp should be above freezing to 6°C

pH paper Lot# 1C12191 Date and Initials of person examining contents: DK 2-20-20

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements.	✓			Initial when completed DK Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: DK Date: 2-20-20

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: missing samples 001-020 ; only recieved 021-025

☐ **A check in this box indicates that additional information has been stored in ereports.**

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)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/2/2020
Worklist:	52608
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1868412
MB concentration:	0.603
M/B Counting Uncertainty:	0.245
MB MDC:	0.342
MB Numerical Performance Indicator:	4.83
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS52608	LCSD52608
Count Date:	3/3/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.050	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.512	
Target Conc. (pCi/L, g, F):	4.695	
Uncertainty (Calculated):	0.056	
Result (pCi/L, g, F):	4.517	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.744	
Numerical Performance Indicator:	-0.47	
Percent Recovery:	96.22%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	2628973004	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2628973004DUP	
Sample Result (pCi/L, g, F):	3.060	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.623	
Sample Duplicate Result (pCi/L, g, F):	2.847	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.625	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.473	2628973004
Duplicate RPD:	7.20%	2628973004DUP
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

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

KLB 3-3-2020

LAM 3/3/20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/2/2020
Worklist:	52608
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1868412
MB concentration:	0.603
M/B Counting Uncertainty:	0.245
MB MDC:	0.342
MB Numerical Performance Indicator:	4.83
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS52608	LCSD52608
Count Date:	3/3/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.050	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.512	
Target Conc. (pCi/L, g, F):	4.695	
Uncertainty (Calculated):	0.056	
Result (pCi/L, g, F):	4.517	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.744	
Numerical Performance Indicator:	-0.47	
Percent Recovery:	96.22%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	2628973003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2628973003DUP	
Sample Result (pCi/L, g, F):	1.224	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.444	
Sample Duplicate Result (pCi/L, g, F):	0.496	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.335	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	2.565	2628973003
Duplicate RPD:	84.62%	2628973003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

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

***Batch must be re-prepped due to unacceptable precision. -Numerical indicator OK

KLB 3-3-2020

VAM 3/3/20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/3/2020
Worklist:	52610
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1868414
MB concentration:	0.486
M/B Counting Uncertainty:	0.168
MB MDC:	0.217
MB Numerical Performance Indicator:	5.69
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS52610	LCSD52610
Count Date:	3/4/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.050	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	4.795	
Uncertainty (Calculated):	0.058	
Result (pCi/L, g, F):	4.905	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.753	
Numerical Performance Indicator:	0.29	
Percent Recovery:	102.29%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	2628972014	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2628972014DUP	
Sample Result (pCi/L, g, F):	0.331	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.157	
Sample Duplicate Result (pCi/L, g, F):	0.427	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.278	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.596	2628972014
Duplicate RPD:	~~25.56%~~	2628972014DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

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

~~***Batch must be re-prepped due to unacceptable precision.~~ results < 5x MDC, NI < 3 acceptable

3/4/2020

LAM 3/4/20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/3/2020
Worklist:	52610
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1868414
MB concentration:	0.486
M/B Counting Uncertainty:	0.168
MB MDC:	0.217
MB Numerical Performance Indicator:	5.69
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS52610	LCSD52610
Count Date:	3/4/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.050	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	4.795	
Uncertainty (Calculated):	0.058	
Result (pCi/L, g, F):	4.905	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.753	
Numerical Performance Indicator:	0.29	
Percent Recovery:	102.29%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	2628972015	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2628972015DUP	
Sample Result (pCi/L, g, F):	0.376	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.151	
Sample Duplicate Result (pCi/L, g, F):	0.344	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.256	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.208	2628972015
Duplicate RPD:	8.79%	2628972015DUP
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

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

3/4/2020

LAM 3/4/20

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-226
Analyst:	LAL
Date:	3/3/2020
Worklist:	52612
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1868416
MB concentration:	0.190
M/B Counting Uncertainty:	0.250
MB MDC:	0.542
MB Numerical Performance Indicator:	1.49
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS52612	LCSD52612
Count Date:	3/4/2020	3/4/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.050	24.050
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.501
Target Conc. (pCi/L, g, F):	4.803	4.804
Uncertainty (Calculated):	0.058	0.058
Result (pCi/L, g, F):	4.425	4.603
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.745	0.754
Numerical Performance Indicator:	-0.99	-0.52
Percent Recovery:	92.14%	95.80%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS52612	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD52612	
Sample Result (pCi/L, g, F):	4.425	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.745	
Sample Duplicate Result (pCi/L, g, F):	4.603	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.754	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.328	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.90%	
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

Comments:

CMW 3/4/2020

LAM 3/4/20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/2/2020
Worklist:	52609
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1868413
MB concentration:	0.411
M/B 2 Sigma CSU:	0.292
MB MDC:	0.553
MB Numerical Performance Indicator:	2.76
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS52609	LCSD52609
Count Date:	3/11/2020	3/11/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.881	34.881
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.825	0.806
Target Conc. (pCi/L, g, F):	4.228	4.330
Uncertainty (Calculated):	0.304	0.312
Result (pCi/L, g, F):	3.216	3.862
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.783	0.924
Numerical Performance Indicator:	-2.36	-0.94
Percent Recovery:	76.07%	89.18%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS52609	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD52609	
Sample Result (pCi/L, g, F):	3.216	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.783	
Sample Duplicate Result (pCi/L, g, F):	3.862	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.924	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.044	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.87%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

JDT 3-12-20

KLG 3-12-2020

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/2/2020
Worklist:	52611
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1868415
MB concentration:	0.127
M/B 2 Sigma CSU:	0.308
MB MDC:	0.687
MB Numerical Performance Indicator:	0.81
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS52611	LCSD52611
Count Date:	3/11/2020	3/11/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.880	34.880
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.810	0.803
Target Conc. (pCi/L, g, F):	4.304	4.345
Uncertainty (Calculated):	0.310	0.313
Result (pCi/L, g, F):	3.175	3.167
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.788	0.804
Numerical Performance Indicator:	-2.61	-2.68
Percent Recovery:	73.78%	72.88%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS52611	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD52611	
Sample Result (pCi/L, g, F):	3.175	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.788	
Sample Duplicate Result (pCi/L, g, F):	3.167	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.804	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.015	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.23%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

JJ 3-12-20

3/12/20

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-228
Analyst:	VAL
Date:	3/2/2020
Worklist:	52613
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1868417
MB concentration:	0.892
M/B 2 Sigma CSU:	0.402
MB MDC:	0.648
MB Numerical Performance Indicator:	4.35
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS52613	LCSD52613
Count Date:	3/11/2020	3/11/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.882	34.882
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.822	0.813
Target Conc. (pCi/L, g, F):	4.243	4.289
Uncertainty (Calculated):	0.305	0.309
Result (pCi/L, g, F):	2.870	3.147
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.778	0.778
Numerical Performance Indicator:	-3.22	-2.67
Percent Recovery:	67.65%	73.38%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS52613	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD52613	
Sample Result (pCi/L, g, F):	2.870	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.778	
Sample Duplicate Result (pCi/L, g, F):	3.147	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.778	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.493	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	8.13%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

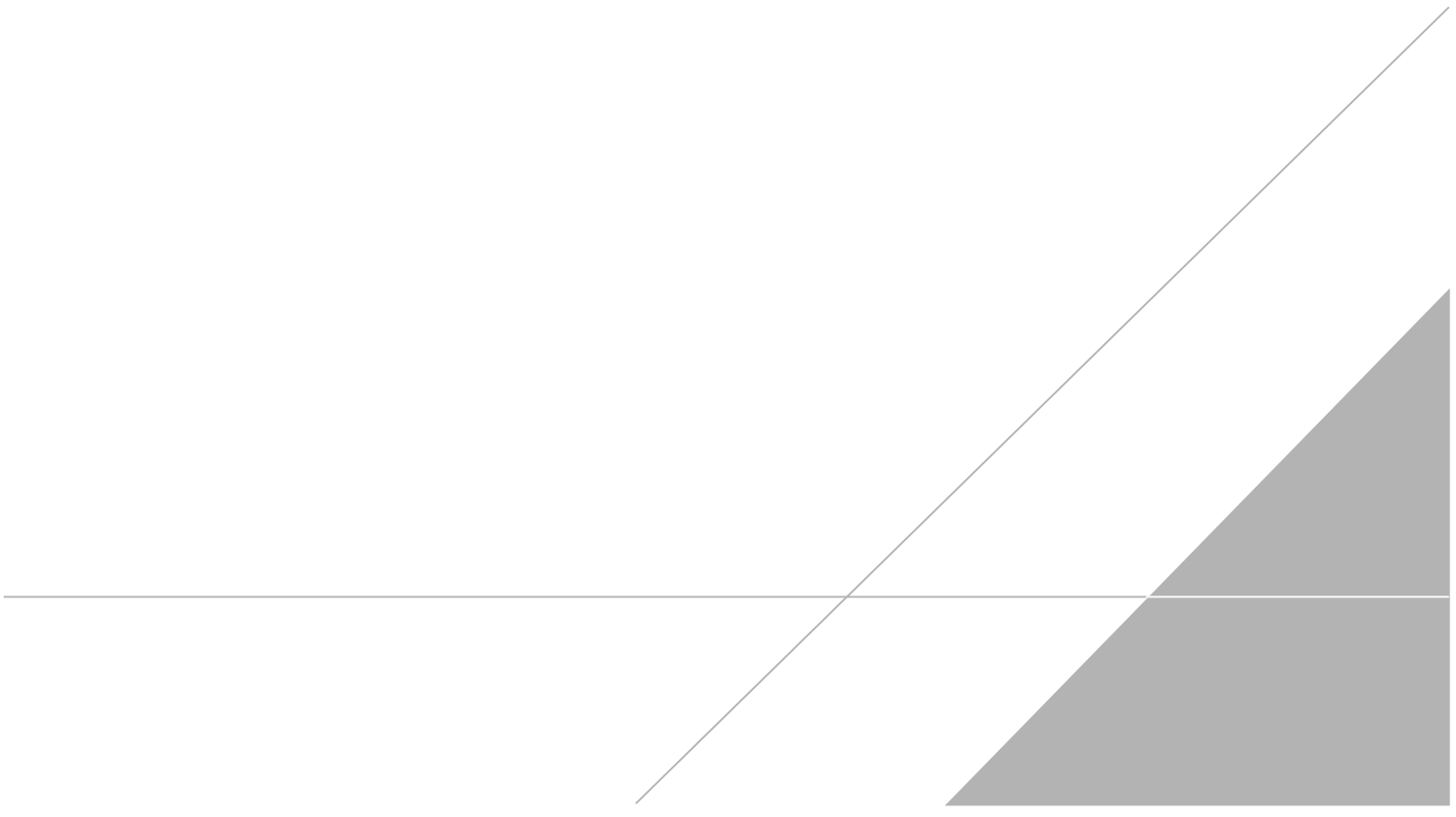
Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

JJ 3-12-20

KLB 3-12-2020

March 2020

Semiannual Event



LEVEL 2A LABORATORY DATA VALIDATIONS

Plant Yates AMA/R6

March 2020

Georgia Power Company – Plant Yates AMA/R6

Quality Control Review of Analytical Data – March 2020

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Atlanta, Asheville, and Pittsburgh for groundwater samples collected at Plant Yates AMA/R6 between March 24, 2020 and March 26, 2020. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detected monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma (USEPA 6010D), Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)[1] and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)[2]. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains-of-custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met.

Field Precision: Field goals for precision were met, with the exceptions of Chromium and Total Dissolved Solids (TDS) on YGWA-5I (2630435001) and DUP-1 (2630435008) and Chromium on YGWC-36 (2630435010) and DUP-2 (2630435011) as described in the qualifications section below.

Accuracy: Laboratory goals for accuracy were met, with the exceptions of calcium on YGWC-42 (2630435022) and Fluoride on YGWC-33S (2630435009) as described in the qualifications section below.

Detection Limits: Project goals for detection limits were met.

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

Holding Times: Holding time requirements were met.

QUALIFICATIONS

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

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

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

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

- Samples YGWA-5I (2630435001), DUP-1 (2630435008), YGWC-36 (2630435010), and DUP-2 (2630435001) were qualified as estimated (J) for Chromium as the respective field relative percent differences (RPDs) exceeded QC criteria (41.38% and 46.67%, above limit of 25).

- Samples YGWA-5I (2630435001) and DUP-1 (2630435008) were qualified as estimated (J) for TDS as the RPD exceeded QC criteria (49.72% above limit of 25).

- Sample YGWC-42 (2630435022) was qualified as estimated (J) for Calcium as the associated matrix spike recovery was above the QC criteria (372% above the range of 75-125).

- Sample YGWC-33S (2630435009) was qualified as estimated (J) for Fluoride as the associated matrix spike (MS) and matrix spike duplicate (MSD) recoveries were above the QC criteria (125 % and 133% above the range of 90-110).

- Certain Radium results in SDGs 2630435 and 2630481 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Yates AMA/R6 sampled between March 24, 2020 and March 26, 2020 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

REFERENCES

[1]USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

[2]USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1

Georgia Power Company – Plant Yates AMA/R6

Sample Summary Table – March 2020

						Analyses			
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (6010D, 6020B)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
30435	YGWA-5I	3/24/2020	2630435001	GW		X	X	X	X
30435	YGWA-5D	3/24/2020	2630435002	GW		X	X	X	X
30435	YGWA-17S	3/24/2020	2630435003	GW		X	X	X	X
30435	YGWA-20S	3/24/2020	2630435004	GW		X	X	X	X
30435	YGWA-21I	3/24/2020	2630435005	GW		X	X	X	X
30435	YGWA-40	3/24/2020	2630435006	GW		X	X	X	X
30435	EB-1-3-24-20	3/24/2020	2630435007	WQ	EB	X	X	X	X
30435	DUP-1	3/24/2020	2630435008	GW	FD (YGWA-5I)	X	X	X	X
30435	YGWC-33S	3/25/2020	2630435009	GW		X	X	X	X
30435	YGWC-36	3/25/2020	2630435010	GW		X	X	X	X
30435	DUP-2	3/25/2020	2630435011	GW	FD (YGWC-36)	X	X	X	X
30435	YGWC-43	3/25/2020	2630435012	GW		X	X	X	X
30435	YGWA-39	3/25/2020	2630435013	GW		X	X	X	X
30435	YGWC-49	3/25/2020	2630435014	GW		X	X	X	X
30435	FB-2-3-25-20	3/25/2020	2630435015	WQ	FB	X	X	X	X
30435	YGWA-18S	3/24/2020	2630435016	GW		X	X	X	X
30435	YGWA-18I	3/24/2020	2630435017	GW		X	X	X	X
30435	FB-1-3-24-20	3/24/2020	2630435018	WQ	FB	X	X	X	X
30435	YGWA-4I	3/25/2020	2630435019	GW		X	X	X	X
30435	YGWC-38	3/25/2020	2630435020	GW		X	X	X	X
30435	YGWC-41	3/25/2020	2630435021	GW		X	X	X	X
30435	YGWC-42	3/25/2020	2630435022	GW		X	X	X	X
30435	YGWC-23S	3/26/2020	2630435023	GW		X	X	X	X
30435	YGWC-24S	3/26/2020	2630435024	GW		X	X	X	X
30435	EB-2-3-25-20	3/25/2020	2630435025	WQ	EB	X	X	X	X
30481	YAMW-1	3/25/2020	2630481001	GW		X	X	X	X
30481	PZ-35	3/25/2020	2630481002	GW		X	X	X	X

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

TABLE 2

Georgia Power Company – Plant Yates AMA/R6

Qualifier Summary Table – March 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
30435	YGWA-5I	Chromium			J	RPD exceeds field goal
30435	DUP-1	Chromium			J	RPD exceeds field goal
30435	YGWA-5I	TDS			J	RPD exceeds field goal
30435	DUP-1	TDS			J	RPD exceeds field goal
30435	YGWC-36	Chromium			J	RPD exceeds field goal
30435	DUP-2	Chromium			J	RPD exceeds field goal
30435	YGWC-42	Calcium			J	MS recovery above QC criteria
30435	YGWC-33S	Fluoride			J	MS/MSD recoveries above QC criteria
30435	YGWA-5I	Radium-226		0.269	ND	Blank detection
30435	YGWA-5I	Radium-228		0.877	ND	Blank detection
30435	YGWA-5D	Radium-226		0.280	ND	Blank detection
30435	YGWA-5D	Radium-228		0.816	ND	Blank detection
30435	YGWA-17S	Radium-226		0.267	ND	Blank detection
30435	YGWA-17S	Radium-228		0.755	ND	Blank detection
30435	YGWA-20S	Radium-226		0.340	ND	Blank detection
30435	YGWA-20S	Radium-228		1.49	ND	Blank detection
30435	YGWA-21I	Radium-226		0.360	ND	Blank detection
30435	YGWA-21I	Radium-228		1.17	ND	Blank detection
30435	YGWA-40	Radium-226		0.361	ND	Blank detection
30435	YGWA-40	Radium-228		1.13	ND	Blank detection
30435	YGWC-33S	Radium-226		0.419	ND	Blank detection
30435	YGWC-33S	Radium-228		0.894	ND	Blank detection
30435	YGWC-36	Radium-226		0.369	ND	Blank detection
30435	YGWC-36	Radium-228		0.875	ND	Blank detection
30435	YGWC-43	Radium-226		0.332	ND	Blank detection
30435	YGWC-43	Radium-228		1.06	ND	Blank detection
30435	YGWA-39	Radium-226		0.300	ND	Blank detection
30435	YGWA-39	Radium-228		0.952	ND	Blank detection
30435	YGWC-49	Radium-226		0.603	ND	Blank detection
30435	YGWC-49	Radium-228		1.14	ND	Blank detection

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

Qualifiers:
J – Estimated Result
ND – Non-Detect Result

TABLE 2 (continued)

Georgia Power Company – Plant Yates AMA/R6

Qualifier Summary Table – March 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
30435	YGWA-4I	Radium-228		1.23	ND	Blank detection
30435	YGWC-38	Radium-226		0.459	ND	Blank detection
30435	YGWC-38	Radium-228		1.42	ND	Blank detection
30435	YGWC-41	Radium-228		1.29	ND	Blank detection
30435	YGWC-42	Radium-228		1.16	ND	Blank detection
30435	YGWC-23S	Radium-228		1.16	ND	Blank detection
30435	YGWC-24S	Radium-228		1.01	ND	Blank detection
30435	YGWA-18S	Radium-226		0.111	ND	Blank detection
30435	YGWA-18S	Radium-228		0.796	ND	Blank detection
30435	YGWA-18I	Radium-226		0.192	ND	Blank detection
30435	YGWA-18I	Radium-228		0.827	ND	Blank detection
30481	YAMW-1	Radium-226		0.501	ND	Blank detection
30481	YAMW-1	Radium-228		0.832	ND	Blank detection
30481	PZ-35	Radium-226		0.522	ND	Blank detection
30481	PZ-35	Radium-228		0.795	ND	Blank detection

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

Qualifiers:
J – Estimated Result
ND – Non-Detect Result

Pace Analytical Services, LLC
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(770)734-4200

April 09, 2020

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

RE: Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between March 25, 2020 and March 26, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

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

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630435001	**YGWA-5I**	Water	03/24/20 14:14	03/25/20 16:15
2630435002	**YGWA-5D**	Water	03/24/20 12:04	03/25/20 16:15
2630435003	**YGWA-17S**	Water	03/24/20 10:40	03/25/20 16:15
2630435004	**YGWA-20S**	Water	03/24/20 11:40	03/25/20 16:15
2630435005	**YGWA-21I**	Water	03/24/20 12:55	03/25/20 16:15
2630435006	**YGWA-40**	Water	03/24/20 14:26	03/25/20 16:15
2630435007	**EB-1-3-24-20**	Water	03/24/20 14:10	03/25/20 16:15
2630435008	**DUP-1**	Water	03/24/20 00:00	03/25/20 16:15
2630435009	**YGWC-33S**	Water	03/25/20 12:47	03/25/20 16:15
2630435010	**YGWC-36**	Water	03/25/20 12:45	03/25/20 16:15
2630435011	**DUP-2**	Water	03/25/20 00:00	03/25/20 16:15
2630435012	**YGWC-43**	Water	03/25/20 11:23	03/25/20 16:15
2630435013	**YGWA-39**	Water	03/25/20 10:05	03/25/20 16:15
2630435014	**YGWC-49**	Water	03/25/20 14:17	03/25/20 16:15
2630435015	**FB-2-3-25-20**	Water	03/25/20 14:00	03/25/20 16:15
2630435016	**YGWA-18S**	Water	03/24/20 14:30	03/25/20 16:15
2630435017	**YGWA-18I**	Water	03/24/20 12:10	03/25/20 16:15
2630435018	**FB-1-3-24-20**	Water	03/24/20 12:20	03/25/20 16:15
2630435019	**YGWA-4I**	Water	03/25/20 10:26	03/26/20 15:20
2630435020	**YGWC-38**	Water	03/25/20 15:25	03/26/20 15:20
2630435021	**YGWC-41**	Water	03/25/20 14:00	03/26/20 15:20
2630435022	**YGWC-42**	Water	03/25/20 10:50	03/26/20 15:20
2630435023	**YGWC-23S**	Water	03/26/20 11:03	03/26/20 15:20
2630435024	**YGWC-24S**	Water	03/26/20 12:18	03/26/20 15:20
2630435025	**EB-2-3-25-20**	Water	03/25/20 14:25	03/26/20 15:20

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SAMPLE ANALYTE COUNT

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630435001	YGWA-5I	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435002	YGWA-5D	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435003	YGWA-17S	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435004	YGWA-20S	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435005	YGWA-21I	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435006	YGWA-40	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435007	EB-1-3-24-20	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435008	DUP-1	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435009	YGWC-33S	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435010	YGWC-36	EPA 6010D	KLH	1	PASI-GA

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SAMPLE ANALYTE COUNT

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435011	**DUP-2**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435012	**YGWC-43**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435013	**YGWA-39**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435014	**YGWC-49**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435015	**FB-2-3-25-20**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435016	**YGWA-18S**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435017	**YGWA-18I**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435018	**FB-1-3-24-20**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435019	**YGWA-4I**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435020	**YGWC-38**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435021	**YGWC-41**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435022	**YGWC-42**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435023	**YGWC-23S**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435024	**YGWC-24S**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630435025	**EB-2-3-25-20**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	13	PASI-GA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

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

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

SUMMARY OF DETECTION

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630435001	**YGWA-5I**					
	Field pH	5.81	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	2.5	mg/L	1.0	03/31/20 19:38	
EPA 6020B	Barium	0.021	mg/L	0.010	04/02/20 18:41	
EPA 6020B	Boron	0.0068J	mg/L	0.10	04/02/20 18:41	
EPA 6020B	Chromium	0.0014J	mg/L	0.010	04/02/20 18:41	
EPA 6020B	Lead	0.000068J	mg/L	0.0050	04/02/20 18:41	
EPA 6020B	Lithium	0.0033J	mg/L	0.030	04/02/20 18:41	
SM 2540C	Total Dissolved Solids	68.0	mg/L	10.0	03/26/20 15:32	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	04/03/20 02:25	
EPA 300.0 Rev 2.1 1993	Sulfate	2.1	mg/L	1.0	04/03/20 02:25	
2630435002	**YGWA-5D**					
	Field pH	7.34	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	26.1	mg/L	1.0	03/31/20 19:41	
EPA 6020B	Arsenic	0.00065J	mg/L	0.0050	04/02/20 18:46	
EPA 6020B	Barium	0.0076J	mg/L	0.010	04/02/20 18:46	
EPA 6020B	Boron	0.011J	mg/L	0.10	04/02/20 18:46	
EPA 6020B	Cobalt	0.00035J	mg/L	0.0050	04/02/20 18:46	
EPA 6020B	Lead	0.000054J	mg/L	0.0050	04/02/20 18:46	
EPA 6020B	Lithium	0.0064J	mg/L	0.030	04/02/20 18:46	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	04/02/20 18:46	
SM 2540C	Total Dissolved Solids	139	mg/L	10.0	03/26/20 15:32	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	04/03/20 02:39	
EPA 300.0 Rev 2.1 1993	Sulfate	5.9	mg/L	1.0	04/03/20 02:39	
2630435003	**YGWA-17S**					
	Field pH	5.57	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	2.7	mg/L	1.0	03/31/20 19:45	
EPA 6020B	Barium	0.015	mg/L	0.010	04/02/20 18:52	
EPA 6020B	Beryllium	0.000080J	mg/L	0.0030	04/02/20 18:52	
EPA 6020B	Boron	0.0092J	mg/L	0.10	04/02/20 18:52	
EPA 6020B	Chromium	0.00087J	mg/L	0.010	04/02/20 18:52	
EPA 6020B	Lead	0.000064J	mg/L	0.0050	04/02/20 18:52	
EPA 6020B	Lithium	0.0034J	mg/L	0.030	04/02/20 18:52	
SM 2540C	Total Dissolved Solids	71.0	mg/L	10.0	03/26/20 15:32	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	04/03/20 03:35	
EPA 300.0 Rev 2.1 1993	Sulfate	5.4	mg/L	1.0	04/03/20 03:35	
2630435004	**YGWA-20S**					
	Field pH	5.86	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	2.6	mg/L	1.0	03/31/20 19:49	
EPA 6020B	Barium	0.015	mg/L	0.010	04/02/20 18:58	
EPA 6020B	Beryllium	0.000076J	mg/L	0.0030	04/02/20 18:58	
EPA 6020B	Chromium	0.00077J	mg/L	0.010	04/02/20 18:58	
EPA 6020B	Lead	0.00011J	mg/L	0.0050	04/02/20 18:58	
SM 2540C	Total Dissolved Solids	76.0	mg/L	10.0	03/26/20 15:33	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	04/03/20 03:49	

Pace Analytical Services, LLC
110 Technology Parkway
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SUMMARY OF DETECTION

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630435005	**YGWA-21I**					
	Field pH	6.35	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	6.0	mg/L	1.0	03/31/20 19:52	
EPA 6020B	Antimony	0.0017J	mg/L	0.0030	04/02/20 19:04	
EPA 6020B	Arsenic	0.0013J	mg/L	0.0050	04/02/20 19:04	
EPA 6020B	Barium	0.011	mg/L	0.010	04/02/20 19:04	
EPA 6020B	Boron	0.016J	mg/L	0.10	04/02/20 19:04	
EPA 6020B	Cobalt	0.0061	mg/L	0.0050	04/02/20 19:04	
EPA 6020B	Lithium	0.0064J	mg/L	0.030	04/02/20 19:04	
SM 2540C	Total Dissolved Solids	117	mg/L	10.0	03/26/20 15:33	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	04/03/20 04:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.081J	mg/L	0.30	04/03/20 04:03	
EPA 300.0 Rev 2.1 1993	Sulfate	3.0	mg/L	1.0	04/03/20 04:03	
2630435006	**YGWA-40**					
	Field pH	5.29	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	4.8	mg/L	1.0	03/31/20 19:56	
EPA 6020B	Barium	0.033	mg/L	0.010	04/02/20 19:09	
EPA 6020B	Beryllium	0.00022J	mg/L	0.0030	04/02/20 19:09	
EPA 6020B	Boron	0.088J	mg/L	0.10	04/02/20 19:09	
EPA 6020B	Chromium	0.00055J	mg/L	0.010	04/02/20 19:09	
EPA 6020B	Selenium	0.0020J	mg/L	0.010	04/02/20 19:09	
SM 2540C	Total Dissolved Solids	84.0	mg/L	10.0	03/26/20 15:33	
EPA 300.0 Rev 2.1 1993	Chloride	4.7	mg/L	1.0	04/03/20 04:17	
EPA 300.0 Rev 2.1 1993	Sulfate	25.2	mg/L	1.0	04/03/20 04:17	
2630435007	**EB-1-3-24-20**					
EPA 6010D	Calcium	0.22J	mg/L	1.0	03/31/20 19:59	
EPA 6020B	Chromium	0.00047J	mg/L	0.010	04/02/20 19:15	
2630435008	**DUP-1**					
EPA 6010D	Calcium	2.4	mg/L	1.0	03/31/20 20:09	
EPA 6020B	Barium	0.020	mg/L	0.010	04/02/20 19:21	
EPA 6020B	Boron	0.0056J	mg/L	0.10	04/02/20 19:21	
EPA 6020B	Chromium	0.00092J	mg/L	0.010	04/02/20 19:21	
EPA 6020B	Lead	0.000062J	mg/L	0.0050	04/02/20 19:21	
EPA 6020B	Lithium	0.0033J	mg/L	0.030	04/02/20 19:21	
SM 2540C	Total Dissolved Solids	113	mg/L	10.0	03/30/20 12:54	D6
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	04/03/20 04:45	
EPA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	04/03/20 04:45	
2630435009	**YGWC-33S**					
	Field pH	3.86	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	97.8	mg/L	1.0	03/31/20 20:13	
EPA 6020B	Arsenic	0.0030J	mg/L	0.0050	04/02/20 19:26	
EPA 6020B	Barium	0.012	mg/L	0.010	04/02/20 19:26	
EPA 6020B	Beryllium	0.017	mg/L	0.0030	04/02/20 19:26	
EPA 6020B	Boron	5.3	mg/L	0.10	04/02/20 19:26	
EPA 6020B	Cadmium	0.0020J	mg/L	0.0025	04/02/20 19:26	
EPA 6020B	Chromium	0.0012J	mg/L	0.010	04/02/20 19:26	

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630435009	**YGWC-33S**					
EPA 6020B	Cobalt	0.020	mg/L	0.0050	04/02/20 19:26	
EPA 6020B	Lead	0.00083J	mg/L	0.0050	04/02/20 19:26	
EPA 6020B	Lithium	0.029J	mg/L	0.030	04/02/20 19:26	
EPA 6020B	Selenium	0.022	mg/L	0.010	04/02/20 19:26	
EPA 6020B	Thallium	0.00015J	mg/L	0.0010	04/02/20 19:26	
SM 2540C	Total Dissolved Solids	839	mg/L	10.0	03/30/20 12:57	
EPA 300.0 Rev 2.1 1993	Chloride	3.8	mg/L	1.0	04/02/20 16:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.25J	mg/L	0.30	04/02/20 16:03	M1
EPA 300.0 Rev 2.1 1993	Sulfate	448	mg/L	9.0	04/03/20 07:17	
2630435010	**YGWC-36**					
	Field pH	5.49	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	10.6	mg/L	1.0	03/31/20 20:17	
EPA 6020B	Antimony	0.0011J	mg/L	0.0030	04/02/20 19:44	
EPA 6020B	Barium	0.025	mg/L	0.010	04/02/20 19:44	
EPA 6020B	Beryllium	0.00022J	mg/L	0.0030	04/02/20 19:44	
EPA 6020B	Boron	0.11	mg/L	0.10	04/02/20 19:44	
EPA 6020B	Cadmium	0.00019J	mg/L	0.0025	04/02/20 19:44	
EPA 6020B	Chromium	0.00074J	mg/L	0.010	04/02/20 19:44	
EPA 6020B	Cobalt	0.00038J	mg/L	0.0050	04/02/20 19:44	
EPA 6020B	Lead	0.00010J	mg/L	0.0050	04/02/20 19:44	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	04/02/20 19:44	
EPA 6020B	Selenium	0.0024J	mg/L	0.010	04/02/20 19:44	
SM 2540C	Total Dissolved Solids	164	mg/L	10.0	03/30/20 12:58	
EPA 300.0 Rev 2.1 1993	Chloride	6.3	mg/L	1.0	04/02/20 16:47	
EPA 300.0 Rev 2.1 1993	Sulfate	58.8	mg/L	1.0	04/02/20 16:47	
2630435011	**DUP-2**					
EPA 6010D	Calcium	10.6	mg/L	1.0	03/31/20 20:20	
EPA 6020B	Antimony	0.0011J	mg/L	0.0030	04/02/20 19:49	
EPA 6020B	Barium	0.026	mg/L	0.010	04/02/20 19:49	
EPA 6020B	Beryllium	0.00021J	mg/L	0.0030	04/02/20 19:49	
EPA 6020B	Boron	0.11	mg/L	0.10	04/02/20 19:49	
EPA 6020B	Cadmium	0.00015J	mg/L	0.0025	04/02/20 19:49	
EPA 6020B	Chromium	0.00046J	mg/L	0.010	04/02/20 19:49	
EPA 6020B	Cobalt	0.00037J	mg/L	0.0050	04/02/20 19:49	
EPA 6020B	Lead	0.00010J	mg/L	0.0050	04/02/20 19:49	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	04/02/20 19:49	
EPA 6020B	Selenium	0.0022J	mg/L	0.010	04/02/20 19:49	
SM 2540C	Total Dissolved Solids	184	mg/L	10.0	03/30/20 12:58	
EPA 300.0 Rev 2.1 1993	Chloride	6.2	mg/L	1.0	04/02/20 17:01	
EPA 300.0 Rev 2.1 1993	Sulfate	58.0	mg/L	1.0	04/02/20 17:01	
2630435012	**YGWC-43**					
	Field pH	5.79	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	12.1	mg/L	1.0	03/31/20 20:24	
EPA 6020B	Antimony	0.00031J	mg/L	0.0030	04/02/20 18:50	
EPA 6020B	Arsenic	0.00070J	mg/L	0.0050	04/02/20 18:50	
EPA 6020B	Barium	0.033	mg/L	0.010	04/02/20 18:50	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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SUMMARY OF DETECTION

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630435012	**YGWC-43**					
EPA 6020B	Beryllium	0.00034J	mg/L	0.0030	04/02/20 18:50	
EPA 6020B	Boron	2.4	mg/L	0.10	04/02/20 18:50	
EPA 6020B	Cobalt	0.0016J	mg/L	0.0050	04/02/20 18:50	
EPA 6020B	Lead	0.000075J	mg/L	0.0050	04/02/20 18:50	
EPA 6020B	Lithium	0.016J	mg/L	0.030	04/02/20 18:50	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	04/02/20 18:50	
SM 2540C	Total Dissolved Solids	352	mg/L	10.0	03/30/20 12:58	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	04/02/20 17:16	
EPA 300.0 Rev 2.1 1993	Fluoride	0.073J	mg/L	0.30	04/02/20 17:16	
EPA 300.0 Rev 2.1 1993	Sulfate	164	mg/L	3.0	04/03/20 08:01	
2630435013	**YGWA-39**					
	Field pH	5.78	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	2.7	mg/L	1.0	03/31/20 20:27	
EPA 6020B	Antimony	0.0014J	mg/L	0.0030	04/02/20 19:13	
EPA 6020B	Arsenic	0.0012J	mg/L	0.0050	04/02/20 19:13	
EPA 6020B	Barium	0.014	mg/L	0.010	04/02/20 19:13	
EPA 6020B	Boron	0.043J	mg/L	0.10	04/02/20 19:13	
EPA 6020B	Cobalt	0.00034J	mg/L	0.0050	04/02/20 19:13	
EPA 6020B	Lead	0.000051J	mg/L	0.0050	04/02/20 19:13	
EPA 6020B	Lithium	0.0049J	mg/L	0.030	04/02/20 19:13	
EPA 6020B	Molybdenum	0.0020J	mg/L	0.010	04/02/20 19:13	
SM 2540C	Total Dissolved Solids	158	mg/L	10.0	03/30/20 12:58	
EPA 300.0 Rev 2.1 1993	Chloride	1.9	mg/L	1.0	04/02/20 17:30	
EPA 300.0 Rev 2.1 1993	Sulfate	14.3	mg/L	1.0	04/02/20 17:30	
2630435014	**YGWC-49**					
	Field pH	5.69	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	13.2	mg/L	1.0	03/31/20 20:31	
EPA 6020B	Antimony	0.00053J	mg/L	0.0030	04/02/20 19:19	
EPA 6020B	Arsenic	0.00086J	mg/L	0.0050	04/02/20 19:19	
EPA 6020B	Barium	0.071	mg/L	0.010	04/02/20 19:19	
EPA 6020B	Beryllium	0.00013J	mg/L	0.0030	04/02/20 19:19	
EPA 6020B	Boron	0.012J	mg/L	0.10	04/02/20 19:19	
EPA 6020B	Chromium	0.0019J	mg/L	0.010	04/02/20 19:19	
EPA 6020B	Lead	0.000059J	mg/L	0.0050	04/02/20 19:19	
EPA 6020B	Lithium	0.0037J	mg/L	0.030	04/02/20 19:19	
EPA 6020B	Selenium	0.0085J	mg/L	0.010	04/02/20 19:19	
SM 2540C	Total Dissolved Solids	130	mg/L	10.0	03/30/20 12:58	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	04/02/20 17:45	
EPA 300.0 Rev 2.1 1993	Sulfate	76.1	mg/L	1.0	04/02/20 17:45	
2630435015	**FB-2-3-25-20**					
EPA 6020B	Arsenic	0.00053J	mg/L	0.0050	04/02/20 19:24	
EPA 6020B	Boron	0.0054J	mg/L	0.10	04/02/20 19:24	
EPA 6020B	Chromium	0.00051J	mg/L	0.010	04/02/20 19:24	
SM 2540C	Total Dissolved Solids	43.0	mg/L	10.0	03/30/20 12:58	

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SUMMARY OF DETECTION

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630435016	**YGWA-18S**					
	Field pH	5.33	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	1.0	mg/L	1.0	03/31/20 16:58	
EPA 6020B	Barium	0.017	mg/L	0.010	04/02/20 20:01	
EPA 6020B	Beryllium	0.000089J	mg/L	0.0030	04/02/20 20:01	
EPA 6020B	Boron	0.010J	mg/L	0.10	04/02/20 20:01	
EPA 6020B	Chromium	0.0011J	mg/L	0.010	04/02/20 20:01	
EPA 6020B	Lead	0.000054J	mg/L	0.0050	04/02/20 20:01	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	04/02/20 20:01	
SM 2540C	Total Dissolved Solids	59.0	mg/L	10.0	03/26/20 15:32	
EPA 300.0 Rev 2.1 1993	Chloride	6.8	mg/L	1.0	04/02/20 22:54	
EPA 300.0 Rev 2.1 1993	Sulfate	0.99J	mg/L	1.0	04/02/20 22:54	
2630435017	**YGWA-18I**					
	Field pH	5.98	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	5.3	mg/L	1.0	03/31/20 17:17	
EPA 6020B	Barium	0.021	mg/L	0.010	04/02/20 20:06	
EPA 6020B	Boron	0.0054J	mg/L	0.10	04/02/20 20:06	
EPA 6020B	Chromium	0.00095J	mg/L	0.010	04/02/20 20:06	
EPA 6020B	Lead	0.000071J	mg/L	0.0050	04/02/20 20:06	
EPA 6020B	Lithium	0.0033J	mg/L	0.030	04/02/20 20:06	
SM 2540C	Total Dissolved Solids	91.0	mg/L	10.0	03/26/20 15:32	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	04/02/20 23:08	
2630435018	**FB-1-3-24-20**					
EPA 6020B	Chromium	0.00062J	mg/L	0.010	04/02/20 20:12	
2630435019	**YGWA-4I**					
	Field pH	6.26	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	10.5	mg/L	1.0	04/02/20 14:53	
EPA 6020B	Barium	0.016	mg/L	0.010	04/03/20 15:09	
EPA 6020B	Boron	0.011J	mg/L	0.10	04/03/20 15:09	
EPA 6020B	Chromium	0.00058J	mg/L	0.010	04/03/20 15:09	
EPA 6020B	Cobalt	0.00056J	mg/L	0.0050	04/03/20 15:09	
EPA 6020B	Lithium	0.014J	mg/L	0.030	04/03/20 15:09	
SM 2540C	Total Dissolved Solids	146	mg/L	10.0	04/01/20 14:48	
EPA 300.0 Rev 2.1 1993	Chloride	3.9	mg/L	1.0	04/02/20 22:06	
EPA 300.0 Rev 2.1 1993	Sulfate	8.8	mg/L	1.0	04/02/20 22:06	
2630435020	**YGWC-38**					
	Field pH	4.89	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	124	mg/L	1.0	04/02/20 14:57	
EPA 6020B	Antimony	0.00063J	mg/L	0.0030	04/03/20 16:07	
EPA 6020B	Arsenic	0.00068J	mg/L	0.0050	04/03/20 16:07	
EPA 6020B	Barium	0.018	mg/L	0.010	04/03/20 16:07	
EPA 6020B	Beryllium	0.0038	mg/L	0.0030	04/03/20 16:07	
EPA 6020B	Boron	9.3	mg/L	0.10	04/03/20 16:07	
EPA 6020B	Cadmium	0.0018J	mg/L	0.0025	04/03/20 16:07	
EPA 6020B	Chromium	0.00065J	mg/L	0.010	04/03/20 16:07	
EPA 6020B	Lithium	0.0081J	mg/L	0.030	04/03/20 16:07	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630435020	**YGWC-38**					
EPA 6020B	Selenium	0.099	mg/L	0.010	04/03/20 16:07	
SM 2540C	Total Dissolved Solids	883	mg/L	10.0	04/01/20 14:49	
EPA 300.0 Rev 2.1 1993	Chloride	4.0	mg/L	1.0	04/02/20 22:21	
EPA 300.0 Rev 2.1 1993	Sulfate	483	mg/L	10.0	04/03/20 11:02	
2630435021	**YGWC-41**					
	Field pH	4.87	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	29.6	mg/L	1.0	04/02/20 15:00	
EPA 6020B	Arsenic	0.0010J	mg/L	0.0050	04/03/20 16:13	
EPA 6020B	Barium	0.021	mg/L	0.010	04/03/20 16:13	
EPA 6020B	Beryllium	0.0026J	mg/L	0.0030	04/03/20 16:13	
EPA 6020B	Boron	7.9	mg/L	0.10	04/03/20 16:13	
EPA 6020B	Cadmium	0.00018J	mg/L	0.0025	04/03/20 16:13	
EPA 6020B	Chromium	0.00039J	mg/L	0.010	04/03/20 16:13	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	04/03/20 16:13	
EPA 6020B	Selenium	0.057	mg/L	0.010	04/03/20 16:13	
SM 2540C	Total Dissolved Solids	428	mg/L	10.0	04/01/20 14:49	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	04/02/20 22:35	
EPA 300.0 Rev 2.1 1993	Sulfate	214	mg/L	5.0	04/03/20 11:17	
2630435022	**YGWC-42**					
	Field pH	5.53	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	107	mg/L	1.0	04/02/20 16:08	M1
EPA 6020B	Arsenic	0.0013J	mg/L	0.0050	04/03/20 16:19	
EPA 6020B	Barium	0.030	mg/L	0.010	04/03/20 16:19	
EPA 6020B	Boron	15.5	mg/L	1.0	04/07/20 13:42	
EPA 6020B	Cadmium	0.00021J	mg/L	0.0025	04/03/20 16:19	
EPA 6020B	Chromium	0.0013J	mg/L	0.010	04/03/20 16:19	
EPA 6020B	Cobalt	0.0018J	mg/L	0.0050	04/03/20 16:19	
EPA 6020B	Lead	0.000047J	mg/L	0.0050	04/03/20 16:19	
EPA 6020B	Lithium	0.045	mg/L	0.030	04/03/20 16:19	
EPA 6020B	Selenium	0.046	mg/L	0.010	04/03/20 16:19	
SM 2540C	Total Dissolved Solids	1200	mg/L	10.0	04/01/20 15:09	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	04/02/20 22:50	
EPA 300.0 Rev 2.1 1993	Sulfate	642	mg/L	13.0	04/03/20 11:31	
2630435023	**YGWC-23S**					
	Field pH	5.69	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	5.6	mg/L	1.0	04/02/20 16:22	
EPA 6020B	Arsenic	0.0012J	mg/L	0.0050	04/03/20 16:25	
EPA 6020B	Barium	0.027	mg/L	0.010	04/03/20 16:25	
EPA 6020B	Beryllium	0.000090J	mg/L	0.0030	04/03/20 16:25	
EPA 6020B	Boron	0.94	mg/L	0.10	04/03/20 16:25	
EPA 6020B	Chromium	0.0019J	mg/L	0.010	04/03/20 16:25	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	04/03/20 16:25	
EPA 6020B	Selenium	0.024	mg/L	0.010	04/03/20 16:25	
SM 2540C	Total Dissolved Solids	110	mg/L	10.0	04/01/20 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	04/02/20 23:04	
EPA 300.0 Rev 2.1 1993	Sulfate	36.5	mg/L	1.0	04/02/20 23:04	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630435024	**YGWC-24S**					
	Field pH	5.51	Std. Units		03/30/20 09:51	
EPA 6010D	Calcium	1.7	mg/L	1.0	04/02/20 16:36	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	04/03/20 16:30	
EPA 6020B	Barium	0.019	mg/L	0.010	04/03/20 16:30	
EPA 6020B	Beryllium	0.00016J	mg/L	0.0030	04/03/20 16:30	
EPA 6020B	Boron	0.033J	mg/L	0.10	04/03/20 16:30	
EPA 6020B	Chromium	0.00094J	mg/L	0.010	04/03/20 16:30	
EPA 6020B	Lead	0.000053J	mg/L	0.0050	04/03/20 16:30	
SM 2540C	Total Dissolved Solids	67.0	mg/L	10.0	04/01/20 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	5.4	mg/L	1.0	04/02/20 23:48	
2630435025	**EB-2-3-25-20**					
EPA 6020B	Thallium	0.000076J	mg/L	0.0010	04/02/20 20:41	

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-5I **Lab ID: 2630435001** Collected: 03/24/20 14:14 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.81**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**2.5**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 19:38	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 18:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 18:41	7440-38-2	
Barium	**0.021**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 18:41	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 18:41	7440-41-7	
Boron	**0.0068J**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 18:41	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 18:41	7440-43-9	
Chromium	**0.0014J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 18:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 18:41	7440-48-4	
Lead	**0.000068J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 18:41	7439-92-1	
Lithium	**0.0033J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 18:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 18:41	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 18:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 18:41	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**68.0**	mg/L	10.0	10.0	1		03/26/20 15:32		
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		04/03/20 02:25	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 02:25	16984-48-8	
Sulfate	**2.1**	mg/L	1.0	0.50	1		04/03/20 02:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-5D **Lab ID: 2630435002** Collected: 03/24/20 12:04 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**7.34**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**26.1**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 19:41	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 18:46	7440-36-0	
Arsenic	**0.00065J**	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 18:46	7440-38-2	
Barium	**0.0076J**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 18:46	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 18:46	7440-41-7	
Boron	**0.011J**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 18:46	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 18:46	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 18:46	7440-47-3	
Cobalt	**0.00035J**	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 18:46	7440-48-4	
Lead	**0.000054J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 18:46	7439-92-1	
Lithium	**0.0064J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 18:46	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 18:46	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 18:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 18:46	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**139**	mg/L	10.0	10.0	1		03/26/20 15:32		
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		04/03/20 02:39	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 02:39	16984-48-8	
Sulfate	**5.9**	mg/L	1.0	0.50	1		04/03/20 02:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-17S **Lab ID: 2630435003** Collected: 03/24/20 10:40 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.57**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**2.7**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 19:45	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 18:52	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 18:52	7440-38-2	
Barium	**0.015**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 18:52	7440-39-3	
Beryllium	**0.000080J**	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 18:52	7440-41-7	
Boron	**0.0092J**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 18:52	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 18:52	7440-43-9	
Chromium	**0.00087J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 18:52	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 18:52	7440-48-4	
Lead	**0.000064J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 18:52	7439-92-1	
Lithium	**0.0034J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 18:52	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 18:52	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 18:52	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 18:52	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**71.0**	mg/L	10.0	10.0	1		03/26/20 15:32		
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		04/03/20 03:35	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 03:35	16984-48-8	
Sulfate	**5.4**	mg/L	1.0	0.50	1		04/03/20 03:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-20S **Lab ID: 2630435004** Collected: 03/24/20 11:40 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.86**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**2.6**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 19:49	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 18:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 18:58	7440-38-2	
Barium	**0.015**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 18:58	7440-39-3	
Beryllium	**0.000076J**	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 18:58	7440-41-7	
Boron	ND	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 18:58	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 18:58	7440-43-9	
Chromium	**0.00077J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 18:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 18:58	7440-48-4	
Lead	**0.00011J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 18:58	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 18:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 18:58	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 18:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 18:58	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**76.0**	mg/L	10.0	10.0	1		03/26/20 15:33		
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		04/03/20 03:49	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 03:49	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		04/03/20 03:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-21I **Lab ID: 2630435005** Collected: 03/24/20 12:55 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**6.35**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**6.0**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 19:52	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	**0.0017J**	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 19:04	7440-36-0	
Arsenic	**0.0013J**	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 19:04	7440-38-2	
Barium	**0.011**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 19:04	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 19:04	7440-41-7	
Boron	**0.016J**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 19:04	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 19:04	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 19:04	7440-47-3	
Cobalt	**0.0061**	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 19:04	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 19:04	7439-92-1	
Lithium	**0.0064J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 19:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 19:04	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 19:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 19:04	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**117**	mg/L	10.0	10.0	1		03/26/20 15:33		
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		04/03/20 04:03	16887-00-6	
Fluoride	**0.081J**	mg/L	0.30	0.050	1		04/03/20 04:03	16984-48-8	
Sulfate	**3.0**	mg/L	1.0	0.50	1		04/03/20 04:03	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-40 **Lab ID: 2630435006** Collected: 03/24/20 14:26 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.29**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**4.8**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 19:56	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 19:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 19:09	7440-38-2	
Barium	**0.033**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 19:09	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 19:09	7440-41-7	
Boron	**0.088J**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 19:09	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 19:09	7440-43-9	
Chromium	**0.00055J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 19:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 19:09	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 19:09	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 19:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 19:09	7439-98-7	
Selenium	**0.0020J**	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 19:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 19:09	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**84.0**	mg/L	10.0	10.0	1		03/26/20 15:33		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.7**	mg/L	1.0	0.60	1		04/03/20 04:17	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 04:17	16984-48-8	
Sulfate	**25.2**	mg/L	1.0	0.50	1		04/03/20 04:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: EB-1-3-24-20 **Lab ID: 2630435007** Collected: 03/24/20 14:10 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**0.22J**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 19:59	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 19:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 19:15	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 19:15	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 19:15	7440-41-7	
Boron	ND	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 19:15	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 19:15	7440-43-9	
Chromium	**0.00047J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 19:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 19:15	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 19:15	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 19:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 19:15	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 19:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 19:15	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/26/20 15:33		
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		04/03/20 04:31	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 04:31	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		04/03/20 04:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: DUP-1 **Lab ID: 2630435008** Collected: 03/24/20 00:00 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**2.4**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 20:09	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 19:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 19:21	7440-38-2	
Barium	**0.020**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 19:21	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 19:21	7440-41-7	
Boron	**0.0056J**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 19:21	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 19:21	7440-43-9	
Chromium	**0.00092J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 19:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 19:21	7440-48-4	
Lead	**0.000062J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 19:21	7439-92-1	
Lithium	**0.0033J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 19:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 19:21	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 19:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 19:21	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**113**	mg/L	10.0	10.0	1		03/30/20 12:54		D6
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		04/03/20 04:45	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 04:45	16984-48-8	
Sulfate	**2.2**	mg/L	1.0	0.50	1		04/03/20 04:45	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 AMA R6
Pace Project No.: 2630435

Sample: YGWC-33S **Lab ID: 2630435009** Collected: 03/25/20 12:47 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**3.86**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**97.8**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 20:13	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 19:26	7440-36-0	
Arsenic	**0.0030J**	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 19:26	7440-38-2	
Barium	**0.012**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 19:26	7440-39-3	
Beryllium	**0.017**	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 19:26	7440-41-7	
Boron	**5.3**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 19:26	7440-42-8	
Cadmium	**0.0020J**	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 19:26	7440-43-9	
Chromium	**0.0012J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 19:26	7440-47-3	
Cobalt	**0.020**	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 19:26	7440-48-4	
Lead	**0.00083J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 19:26	7439-92-1	
Lithium	**0.029J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 19:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 19:26	7439-98-7	
Selenium	**0.022**	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 19:26	7782-49-2	
Thallium	**0.00015J**	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 19:26	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**839**	mg/L	10.0	10.0	1		03/30/20 12:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.8**	mg/L	1.0	0.60	1		04/02/20 16:03	16887-00-6	
Fluoride	**0.25J**	mg/L	0.30	0.050	1		04/02/20 16:03	16984-48-8	M1
Sulfate	**448**	mg/L	9.0	4.5	9		04/03/20 07:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWC-36 **Lab ID: 2630435010** Collected: 03/25/20 12:45 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.49**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**10.6**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 20:17	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	**0.0011J**	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 19:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 19:44	7440-38-2	
Barium	**0.025**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 19:44	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 19:44	7440-41-7	
Boron	**0.11**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 19:44	7440-42-8	
Cadmium	**0.00019J**	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 19:44	7440-43-9	
Chromium	**0.00074J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 19:44	7440-47-3	
Cobalt	**0.00038J**	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 19:44	7440-48-4	
Lead	**0.00010J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 19:44	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 19:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 19:44	7439-98-7	
Selenium	**0.0024J**	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 19:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 19:44	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**164**	mg/L	10.0	10.0	1		03/30/20 12:58		
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		04/02/20 16:47	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 16:47	16984-48-8	
Sulfate	**58.8**	mg/L	1.0	0.50	1		04/02/20 16:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: DUP-2 **Lab ID: 2630435011** Collected: 03/25/20 00:00 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**10.6**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 20:20	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	**0.0011J**	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 19:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 19:49	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 19:49	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 19:49	7440-41-7	
Boron	**0.11**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 19:49	7440-42-8	
Cadmium	**0.00015J**	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 19:49	7440-43-9	
Chromium	**0.00046J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 19:49	7440-47-3	
Cobalt	**0.00037J**	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 19:49	7440-48-4	
Lead	**0.00010J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 19:49	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 19:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 19:49	7439-98-7	
Selenium	**0.0022J**	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 19:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 19:49	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**184**	mg/L	10.0	10.0	1		03/30/20 12:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.2**	mg/L	1.0	0.60	1		04/02/20 17:01	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 17:01	16984-48-8	
Sulfate	**58.0**	mg/L	1.0	0.50	1		04/02/20 17:01	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: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWC-43 **Lab ID: 2630435012** Collected: 03/25/20 11:23 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.79**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**12.1**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 20:24	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	**0.00031J**	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 18:50	7440-36-0	
Arsenic	**0.00070J**	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 18:50	7440-38-2	
Barium	**0.033**	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 18:50	7440-39-3	
Beryllium	**0.00034J**	mg/L	0.0030	0.000074	1	03/31/20 21:03	04/02/20 18:50	7440-41-7	
Boron	**2.4**	mg/L	0.10	0.0049	1	03/31/20 21:03	04/02/20 18:50	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/31/20 21:03	04/02/20 18:50	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 18:50	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 18:50	7440-48-4	
Lead	**0.000075J**	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 18:50	7439-92-1	
Lithium	**0.016J**	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 18:50	7439-93-2	
Molybdenum	**0.0015J**	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 18:50	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 18:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 18:50	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**352**	mg/L	10.0	10.0	1		03/30/20 12:58		
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		04/02/20 17:16	16887-00-6	
Fluoride	**0.073J**	mg/L	0.30	0.050	1		04/02/20 17:16	16984-48-8	
Sulfate	**164**	mg/L	3.0	1.5	3		04/03/20 08:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-39 **Lab ID: 2630435013** Collected: 03/25/20 10:05 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.78**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**2.7**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 20:27	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	**0.0014J**	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 19:13	7440-36-0	
Arsenic	**0.0012J**	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 19:13	7440-38-2	
Barium	**0.014**	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 19:13	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/31/20 21:03	04/02/20 19:13	7440-41-7	
Boron	**0.043J**	mg/L	0.10	0.0049	1	03/31/20 21:03	04/02/20 19:13	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/31/20 21:03	04/02/20 19:13	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 19:13	7440-47-3	
Cobalt	**0.00034J**	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 19:13	7440-48-4	
Lead	**0.000051J**	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 19:13	7439-92-1	
Lithium	**0.0049J**	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 19:13	7439-93-2	
Molybdenum	**0.0020J**	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 19:13	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 19:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 19:13	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**158**	mg/L	10.0	10.0	1		03/30/20 12:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.9**	mg/L	1.0	0.60	1		04/02/20 17:30	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 17:30	16984-48-8	
Sulfate	**14.3**	mg/L	1.0	0.50	1		04/02/20 17:30	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWC-49 **Lab ID: 2630435014** Collected: 03/25/20 14:17 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.69**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**13.2**	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 20:31	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	**0.00053J**	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 19:19	7440-36-0	
Arsenic	**0.00086J**	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 19:19	7440-38-2	
Barium	**0.071**	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 19:19	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.0030	0.000074	1	03/31/20 21:03	04/02/20 19:19	7440-41-7	
Boron	**0.012J**	mg/L	0.10	0.0049	1	03/31/20 21:03	04/02/20 19:19	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/31/20 21:03	04/02/20 19:19	7440-43-9	
Chromium	**0.0019J**	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 19:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 19:19	7440-48-4	
Lead	**0.000059J**	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 19:19	7439-92-1	
Lithium	**0.0037J**	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 19:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 19:19	7439-98-7	
Selenium	**0.0085J**	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 19:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 19:19	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**130**	mg/L	10.0	10.0	1		03/30/20 12:58		
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		04/02/20 17:45	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 17:45	16984-48-8	
Sulfate	**76.1**	mg/L	1.0	0.50	1		04/02/20 17:45	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 AMA R6
Pace Project No.: 2630435

Sample: FB-2-3-25-20 **Lab ID: 2630435015** Collected: 03/25/20 14:00 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	ND	mg/L	1.0	0.14	1	03/30/20 21:21	03/31/20 20:34	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 19:24	7440-36-0	
Arsenic	**0.00053J**	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 19:24	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 19:24	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/31/20 21:03	04/02/20 19:24	7440-41-7	
Boron	**0.0054J**	mg/L	0.10	0.0049	1	03/31/20 21:03	04/02/20 19:24	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/31/20 21:03	04/02/20 19:24	7440-43-9	
Chromium	**0.00051J**	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 19:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 19:24	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 19:24	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 19:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 19:24	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 19:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 19:24	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**43.0**	mg/L	10.0	10.0	1		03/30/20 12:58		
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		04/02/20 18:43	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 18:43	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		04/02/20 18:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-18S **Lab ID: 2630435016** Collected: 03/24/20 14:30 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.33**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**1.0**	mg/L	1.0	0.14	1	03/30/20 21:31	03/31/20 16:58	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 20:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 20:01	7440-38-2	
Barium	**0.017**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 20:01	7440-39-3	
Beryllium	**0.000089J**	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 20:01	7440-41-7	
Boron	**0.010J**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 20:01	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 20:01	7440-43-9	
Chromium	**0.0011J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 20:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 20:01	7440-48-4	
Lead	**0.000054J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 20:01	7439-92-1	
Lithium	**0.0035J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 20:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 20:01	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 20:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 20:01	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**59.0**	mg/L	10.0	10.0	1		03/26/20 15:32		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.8**	mg/L	1.0	0.60	1		04/02/20 22:54	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 22:54	16984-48-8	
Sulfate	**0.99J**	mg/L	1.0	0.50	1		04/02/20 22:54	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: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWA-18I **Lab ID: 2630435017** Collected: 03/24/20 12:10 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.98**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**5.3**	mg/L	1.0	0.14	1	03/30/20 21:31	03/31/20 17:17	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 20:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 20:06	7440-38-2	
Barium	**0.021**	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 20:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 20:06	7440-41-7	
Boron	**0.0054J**	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 20:06	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 20:06	7440-43-9	
Chromium	**0.00095J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 20:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 20:06	7440-48-4	
Lead	**0.000071J**	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 20:06	7439-92-1	
Lithium	**0.0033J**	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 20:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 20:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 20:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 20:06	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**91.0**	mg/L	10.0	10.0	1		03/26/20 15:32		
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		04/02/20 23:08	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 23:08	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		04/02/20 23:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: FB-1-3-24-20 **Lab ID: 2630435018** Collected: 03/24/20 12:20 Received: 03/25/20 16:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	ND	mg/L	1.0	0.14	1	03/30/20 21:31	03/31/20 17:21	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/30/20 21:06	04/02/20 20:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/30/20 21:06	04/02/20 20:12	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/30/20 21:06	04/02/20 20:12	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/30/20 21:06	04/02/20 20:12	7440-41-7	
Boron	ND	mg/L	0.10	0.0049	1	03/30/20 21:06	04/02/20 20:12	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/30/20 21:06	04/02/20 20:12	7440-43-9	
Chromium	**0.00062J**	mg/L	0.010	0.00039	1	03/30/20 21:06	04/02/20 20:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/30/20 21:06	04/02/20 20:12	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/30/20 21:06	04/02/20 20:12	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/30/20 21:06	04/02/20 20:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/30/20 21:06	04/02/20 20:12	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/30/20 21:06	04/02/20 20:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/30/20 21:06	04/02/20 20:12	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/26/20 15:32		
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		04/02/20 23:22	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 23:22	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		04/02/20 23:22	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 AMA R6
Pace Project No.: 2630435

Sample: YGWA-4I **Lab ID: 2630435019** Collected: 03/25/20 10:26 Received: 03/26/20 15:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**6.26**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**10.5**	mg/L	1.0	0.14	1	03/31/20 20:57	04/02/20 14:53	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:07	04/03/20 15:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:07	04/03/20 15:09	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00049	1	03/31/20 21:07	04/03/20 15:09	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/31/20 21:07	04/03/20 15:09	7440-41-7	
Boron	**0.011J**	mg/L	0.10	0.0049	1	03/31/20 21:07	04/03/20 15:09	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/31/20 21:07	04/03/20 15:09	7440-43-9	
Chromium	**0.00058J**	mg/L	0.010	0.00039	1	03/31/20 21:07	04/03/20 15:09	7440-47-3	
Cobalt	**0.00056J**	mg/L	0.0050	0.00030	1	03/31/20 21:07	04/03/20 15:09	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:07	04/03/20 15:09	7439-92-1	
Lithium	**0.014J**	mg/L	0.030	0.00078	1	03/31/20 21:07	04/03/20 15:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:07	04/03/20 15:09	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:07	04/03/20 15:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:07	04/03/20 15:09	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**146**	mg/L	10.0	10.0	1		04/01/20 14:48		
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		04/02/20 22:06	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 22:06	16984-48-8	
Sulfate	**8.8**	mg/L	1.0	0.50	1		04/02/20 22:06	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: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWC-38 **Lab ID: 2630435020** Collected: 03/25/20 15:25 Received: 03/26/20 15:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**4.89**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**124**	mg/L	1.0	0.14	1	03/31/20 20:57	04/02/20 14:57	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	**0.00063J**	mg/L	0.0030	0.00027	1	03/31/20 21:07	04/03/20 16:07	7440-36-0	
Arsenic	**0.00068J**	mg/L	0.0050	0.00035	1	03/31/20 21:07	04/03/20 16:07	7440-38-2	
Barium	**0.018**	mg/L	0.010	0.00049	1	03/31/20 21:07	04/03/20 16:07	7440-39-3	
Beryllium	**0.0038**	mg/L	0.0030	0.000074	1	03/31/20 21:07	04/03/20 16:07	7440-41-7	
Boron	**9.3**	mg/L	0.10	0.0049	1	03/31/20 21:07	04/03/20 16:07	7440-42-8	
Cadmium	**0.0018J**	mg/L	0.0025	0.00011	1	03/31/20 21:07	04/03/20 16:07	7440-43-9	
Chromium	**0.00065J**	mg/L	0.010	0.00039	1	03/31/20 21:07	04/03/20 16:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:07	04/03/20 16:07	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:07	04/03/20 16:07	7439-92-1	
Lithium	**0.0081J**	mg/L	0.030	0.00078	1	03/31/20 21:07	04/03/20 16:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:07	04/03/20 16:07	7439-98-7	
Selenium	**0.099**	mg/L	0.010	0.0013	1	03/31/20 21:07	04/03/20 16:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:07	04/03/20 16:07	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**883**	mg/L	10.0	10.0	1		04/01/20 14:49		
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		04/02/20 22:21	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 22:21	16984-48-8	
Sulfate	**483**	mg/L	10.0	5.0	10		04/03/20 11:02	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: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWC-41 **Lab ID: 2630435021** Collected: 03/25/20 14:00 Received: 03/26/20 15:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**4.87**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**29.6**	mg/L	1.0	0.14	1	03/31/20 20:57	04/02/20 15:00	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:07	04/03/20 16:13	7440-36-0	
Arsenic	**0.0010J**	mg/L	0.0050	0.00035	1	03/31/20 21:07	04/03/20 16:13	7440-38-2	
Barium	**0.021**	mg/L	0.010	0.00049	1	03/31/20 21:07	04/03/20 16:13	7440-39-3	
Beryllium	**0.0026J**	mg/L	0.0030	0.000074	1	03/31/20 21:07	04/03/20 16:13	7440-41-7	
Boron	**7.9**	mg/L	0.10	0.0049	1	03/31/20 21:07	04/03/20 16:13	7440-42-8	
Cadmium	**0.00018J**	mg/L	0.0025	0.00011	1	03/31/20 21:07	04/03/20 16:13	7440-43-9	
Chromium	**0.00039J**	mg/L	0.010	0.00039	1	03/31/20 21:07	04/03/20 16:13	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:07	04/03/20 16:13	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:07	04/03/20 16:13	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00078	1	03/31/20 21:07	04/03/20 16:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:07	04/03/20 16:13	7439-98-7	
Selenium	**0.057**	mg/L	0.010	0.0013	1	03/31/20 21:07	04/03/20 16:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:07	04/03/20 16:13	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**428**	mg/L	10.0	10.0	1		04/01/20 14:49		
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		04/02/20 22:35	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 22:35	16984-48-8	
Sulfate	**214**	mg/L	5.0	2.5	5		04/03/20 11:17	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 AMA R6
Pace Project No.: 2630435

Sample: YGWC-42 **Lab ID: 2630435022** Collected: 03/25/20 10:50 Received: 03/26/20 15:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.53**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**107**	mg/L	1.0	0.14	1	04/01/20 15:36	04/02/20 16:08	7440-70-2	M1
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:07	04/03/20 16:19	7440-36-0	
Arsenic	**0.0013J**	mg/L	0.0050	0.00035	1	03/31/20 21:07	04/03/20 16:19	7440-38-2	
Barium	**0.030**	mg/L	0.010	0.00049	1	03/31/20 21:07	04/03/20 16:19	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/31/20 21:07	04/03/20 16:19	7440-41-7	
Boron	**15.5**	mg/L	1.0	0.049	10	03/31/20 21:07	04/07/20 13:42	7440-42-8	
Cadmium	**0.00021J**	mg/L	0.0025	0.00011	1	03/31/20 21:07	04/03/20 16:19	7440-43-9	
Chromium	**0.0013J**	mg/L	0.010	0.00039	1	03/31/20 21:07	04/03/20 16:19	7440-47-3	
Cobalt	**0.0018J**	mg/L	0.0050	0.00030	1	03/31/20 21:07	04/03/20 16:19	7440-48-4	
Lead	**0.000047J**	mg/L	0.0050	0.000046	1	03/31/20 21:07	04/03/20 16:19	7439-92-1	
Lithium	**0.045**	mg/L	0.030	0.00078	1	03/31/20 21:07	04/03/20 16:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:07	04/03/20 16:19	7439-98-7	
Selenium	**0.046**	mg/L	0.010	0.0013	1	03/31/20 21:07	04/03/20 16:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:07	04/03/20 16:19	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**1200**	mg/L	10.0	10.0	1		04/01/20 15:09		
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		04/02/20 22:50	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 22:50	16984-48-8	
Sulfate	**642**	mg/L	13.0	6.5	13		04/03/20 11:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWC-23S **Lab ID: 2630435023** Collected: 03/26/20 11:03 Received: 03/26/20 15:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.69**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**5.6**	mg/L	1.0	0.14	1	04/01/20 15:36	04/02/20 16:22	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:07	04/03/20 16:25	7440-36-0	
Arsenic	**0.0012J**	mg/L	0.0050	0.00035	1	03/31/20 21:07	04/03/20 16:25	7440-38-2	
Barium	**0.027**	mg/L	0.010	0.00049	1	03/31/20 21:07	04/03/20 16:25	7440-39-3	
Beryllium	**0.000090J**	mg/L	0.0030	0.000074	1	03/31/20 21:07	04/03/20 16:25	7440-41-7	
Boron	**0.94**	mg/L	0.10	0.0049	1	03/31/20 21:07	04/03/20 16:25	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/31/20 21:07	04/03/20 16:25	7440-43-9	
Chromium	**0.0019J**	mg/L	0.010	0.00039	1	03/31/20 21:07	04/03/20 16:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:07	04/03/20 16:25	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:07	04/03/20 16:25	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00078	1	03/31/20 21:07	04/03/20 16:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:07	04/03/20 16:25	7439-98-7	
Selenium	**0.024**	mg/L	0.010	0.0013	1	03/31/20 21:07	04/03/20 16:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:07	04/03/20 16:25	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**110**	mg/L	10.0	10.0	1		04/01/20 15:10		
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		04/02/20 23:04	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 23:04	16984-48-8	
Sulfate	**36.5**	mg/L	1.0	0.50	1		04/02/20 23:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: YGWC-24S **Lab ID: 2630435024** Collected: 03/26/20 12:18 Received: 03/26/20 15:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.51**	Std. Units			1		03/30/20 09:51		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	**1.7**	mg/L	1.0	0.14	1	04/01/20 15:36	04/02/20 16:36	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:07	04/03/20 16:30	7440-36-0	
Arsenic	**0.0015J**	mg/L	0.0050	0.00035	1	03/31/20 21:07	04/03/20 16:30	7440-38-2	
Barium	**0.019**	mg/L	0.010	0.00049	1	03/31/20 21:07	04/03/20 16:30	7440-39-3	
Beryllium	**0.00016J**	mg/L	0.0030	0.000074	1	03/31/20 21:07	04/03/20 16:30	7440-41-7	
Boron	**0.033J**	mg/L	0.10	0.0049	1	03/31/20 21:07	04/03/20 16:30	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/31/20 21:07	04/03/20 16:30	7440-43-9	
Chromium	**0.00094J**	mg/L	0.010	0.00039	1	03/31/20 21:07	04/03/20 16:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:07	04/03/20 16:30	7440-48-4	
Lead	**0.000053J**	mg/L	0.0050	0.000046	1	03/31/20 21:07	04/03/20 16:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/31/20 21:07	04/03/20 16:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:07	04/03/20 16:30	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:07	04/03/20 16:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:07	04/03/20 16:30	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	**67.0**	mg/L	10.0	10.0	1		04/01/20 15:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.4**	mg/L	1.0	0.60	1		04/02/20 23:48	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/02/20 23:48	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		04/02/20 23:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Sample: EB-2-3-25-20 **Lab ID: 2630435025** Collected: 03/25/20 14:25 Received: 03/26/20 15:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Atlanta, GA								
Calcium	ND	mg/L	1.0	0.14	1	04/01/20 15:36	04/02/20 16:39	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Antimony	ND	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 20:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/01/20 15:40	04/02/20 20:41	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	04/01/20 15:40	04/02/20 20:41	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	04/01/20 15:40	04/02/20 20:41	7440-41-7	
Boron	ND	mg/L	0.10	0.0049	1	04/01/20 15:40	04/02/20 20:41	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	04/01/20 15:40	04/02/20 20:41	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	04/01/20 15:40	04/02/20 20:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40	04/02/20 20:41	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40	04/02/20 20:41	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/01/20 15:40	04/02/20 20:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 20:41	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 20:41	7782-49-2	
Thallium	**0.000076J**	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 20:41	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Atlanta, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		04/01/20 15:10		
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		04/03/20 01:15	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 01:15	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		04/03/20 01:15	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 AMA R6
Pace Project No.: 2630435

QC Batch: 45066
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435016, 2630435017, 2630435018

METHOD BLANK: 207564 Matrix: Water
Associated Lab Samples: 2630435016, 2630435017, 2630435018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	03/31/20 16:27	

LABORATORY CONTROL SAMPLE: 207565

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207566 207567

Parameter	Units	2630414002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	68.0	1	1	69.5	67.6	149	-41	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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45067 — Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A — Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008, 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015

METHOD BLANK: 207568 — Matrix: Water
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008, 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	04/03/20 16:58	

LABORATORY CONTROL SAMPLE: 207569

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: 207570 207571

Parameter	Units	2630417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	81.2	1	1	81.9	81.9	68	67	75-125	0	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: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45121
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435019, 2630435020, 2630435021

METHOD BLANK: 207982 Matrix: Water
Associated Lab Samples: 2630435019, 2630435020, 2630435021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	04/02/20 13:05	

LABORATORY CONTROL SAMPLE: 207983

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207984 207985

Parameter	Units	2630449007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	157	1	1	158	157	93	15	75-125	0	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45172
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435022, 2630435023, 2630435024, 2630435025

METHOD BLANK: 208108 Matrix: Water
Associated Lab Samples: 2630435022, 2630435023, 2630435024, 2630435025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.14	04/02/20 16:01	

LABORATORY CONTROL SAMPLE: 208109

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 208110 208111

Parameter	Units	2630435022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	107	1	1	110	108	372	91	75-125	3	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45065
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008, 2630435009, 2630435010, 2630435011, 2630435016, 2630435017, 2630435018

METHOD BLANK: 207560 Matrix: Water
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008, 2630435009, 2630435010, 2630435011, 2630435016, 2630435017, 2630435018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	04/02/20 17:16	
Arsenic	mg/L	ND	0.0050	0.00035	04/02/20 17:16	
Barium	mg/L	ND	0.010	0.00049	04/02/20 17:16	
Beryllium	mg/L	ND	0.0030	0.000074	04/02/20 17:16	
Boron	mg/L	ND	0.10	0.0049	04/02/20 17:16	
Cadmium	mg/L	ND	0.0025	0.00011	04/02/20 17:16	
Chromium	mg/L	ND	0.010	0.00039	04/02/20 17:16	
Cobalt	mg/L	ND	0.0050	0.00030	04/02/20 17:16	
Lead	mg/L	ND	0.0050	0.000046	04/02/20 17:16	
Lithium	mg/L	ND	0.030	0.00078	04/02/20 17:16	
Molybdenum	mg/L	ND	0.010	0.00095	04/02/20 17:16	
Selenium	mg/L	ND	0.010	0.0013	04/02/20 17:16	
Thallium	mg/L	ND	0.0010	0.000052	04/02/20 17:16	

LABORATORY CONTROL SAMPLE: 207561

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	101	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.10	104	80-120	
Boron	mg/L	1	1.0	104	80-120	
Cadmium	mg/L	0.1	0.10	104	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207562 207563

Parameter	Units	2630414001 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	107	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: PLANT YATES AMA R6
Pace Project No.: 2630435

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207562 207563

Parameter	Units	2630414001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.00042J	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Barium	mg/L	0.032	0.1	0.1	0.13	0.13	102	101	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Boron	mg/L	0.011J	1	1	1.0	1.0	101	103	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Chromium	mg/L	0.0019J	0.1	0.1	0.11	0.10	104	102	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	
Lead	mg/L	0.00058J	0.1	0.1	0.10	0.097	99	97	75-125	2	20	
Lithium	mg/L	0.0039J	0.1	0.1	0.10	0.11	101	102	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	105	102	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Thallium	mg/L	0.000089J	0.1	0.1	0.098	0.096	98	96	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: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45112
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435012, 2630435013, 2630435014, 2630435015

METHOD BLANK: 207955 Matrix: Water
Associated Lab Samples: 2630435012, 2630435013, 2630435014, 2630435015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	04/02/20 18:39	
Arsenic	mg/L	ND	0.0050	0.00035	04/02/20 18:39	
Barium	mg/L	ND	0.010	0.00049	04/02/20 18:39	
Beryllium	mg/L	ND	0.0030	0.000074	04/02/20 18:39	
Boron	mg/L	ND	0.10	0.0049	04/02/20 18:39	
Cadmium	mg/L	ND	0.0025	0.00011	04/02/20 18:39	
Chromium	mg/L	ND	0.010	0.00039	04/02/20 18:39	
Cobalt	mg/L	ND	0.0050	0.00030	04/02/20 18:39	
Lead	mg/L	ND	0.0050	0.000046	04/02/20 18:39	
Lithium	mg/L	ND	0.030	0.00078	04/02/20 18:39	
Molybdenum	mg/L	ND	0.010	0.00095	04/02/20 18:39	
Selenium	mg/L	ND	0.010	0.0013	04/02/20 18:39	
Thallium	mg/L	ND	0.0010	0.000052	04/02/20 18:39	

LABORATORY CONTROL SAMPLE: 207956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	1.1	105	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207957 207958

Parameter	Units	2630435012 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	0.11	106	105	75-125	1	20	
Arsenic	mg/L	0.00070J	0.1	0.1	0.10	0.10	99	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: PLANT YATES AMA R6
Pace Project No.: 2630435

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207957 207958

Parameter	Units	2630435012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.033	0.1	0.1	0.14	0.13	102	99	75-125	2	20	
Beryllium	mg/L	0.00034J	0.1	0.1	0.096	0.099	95	99	75-125	4	20	
Boron	mg/L	2.4	1	1	3.4	3.4	97	102	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	107	102	75-125	4	20	
Cobalt	mg/L	0.0016J	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Lead	mg/L	0.000075J	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Lithium	mg/L	0.016J	0.1	0.1	0.12	0.12	101	103	75-125	2	20	
Molybdenum	mg/L	0.0015J	0.1	0.1	0.11	0.11	105	104	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	99	100	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	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: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45113
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435019, 2630435020, 2630435021, 2630435022, 2630435023, 2630435024

METHOD BLANK: 207961 Matrix: Water
Associated Lab Samples: 2630435019, 2630435020, 2630435021, 2630435022, 2630435023, 2630435024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	04/03/20 13:05	
Arsenic	mg/L	ND	0.0050	0.00035	04/03/20 13:05	
Barium	mg/L	ND	0.010	0.00049	04/03/20 13:05	
Beryllium	mg/L	ND	0.0030	0.000074	04/03/20 13:05	
Boron	mg/L	ND	0.10	0.0049	04/03/20 13:05	
Cadmium	mg/L	ND	0.0025	0.00011	04/03/20 13:05	
Chromium	mg/L	ND	0.010	0.00039	04/03/20 13:05	
Cobalt	mg/L	ND	0.0050	0.00030	04/03/20 13:05	
Lead	mg/L	ND	0.0050	0.000046	04/03/20 13:05	
Lithium	mg/L	ND	0.030	0.00078	04/03/20 13:05	
Molybdenum	mg/L	ND	0.010	0.00095	04/03/20 13:05	
Selenium	mg/L	ND	0.010	0.0013	04/03/20 13:05	
Thallium	mg/L	ND	0.0010	0.000052	04/03/20 13:05	

LABORATORY CONTROL SAMPLE: 207962

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	101	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	105	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	105	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207963 207964

Parameter	Units	2630472004 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	102	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	100	99	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: PLANT YATES AMA R6
Pace Project No.: 2630435

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207963 207964

Parameter	Units	2630472004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.19	0.1	0.1	0.28	0.29	92	97	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.097	0.094	97	94	75-125	4	20	
Boron	mg/L	0.021J	1	1	1.0	0.99	102	97	75-125	5	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	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	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	
Lithium	mg/L	0.011J	0.1	0.1	0.11	0.10	97	94	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Thallium	mg/L	0.000057J	0.1	0.1	0.099	0.098	99	98	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: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45171
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630435025

METHOD BLANK: 208104 Matrix: Water
Associated Lab Samples: 2630435025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	04/02/20 20:29	
Arsenic	mg/L	ND	0.0050	0.00035	04/02/20 20:29	
Barium	mg/L	ND	0.010	0.00049	04/02/20 20:29	
Beryllium	mg/L	ND	0.0030	0.000074	04/02/20 20:29	
Boron	mg/L	ND	0.10	0.0049	04/02/20 20:29	
Cadmium	mg/L	ND	0.0025	0.00011	04/02/20 20:29	
Chromium	mg/L	ND	0.010	0.00039	04/02/20 20:29	
Cobalt	mg/L	ND	0.0050	0.00030	04/02/20 20:29	
Lead	mg/L	ND	0.0050	0.000046	04/02/20 20:29	
Lithium	mg/L	ND	0.030	0.00078	04/02/20 20:29	
Molybdenum	mg/L	ND	0.010	0.00095	04/02/20 20:29	
Selenium	mg/L	ND	0.010	0.0013	04/02/20 20:29	
Thallium	mg/L	ND	0.0010	0.000052	04/02/20 20:29	

LABORATORY CONTROL SAMPLE: 208105

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	0.099	99	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.093	93	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 208106 208107

Parameter	Units	2630449011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00042J	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	102	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: PLANT YATES AMA R6
Pace Project No.: 2630435

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 208106 208107

Parameter	Units	2630449011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.0072J	0.1	0.1	0.11	0.11	101	101	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Boron	mg/L	0.24	1	1	1.2	1.2	94	97	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Chromium	mg/L	0.0016J	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.094	94	93	75-125	0	20	
Lithium	mg/L	0.0031J	0.1	0.1	0.10	0.10	98	97	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.097	95	96	75-125	2	20	
Thallium	mg/L	0.000085J	0.1	0.1	0.094	0.095	94	95	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: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 44951
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007

LABORATORY CONTROL SAMPLE: 206868

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	84-108	

SAMPLE DUPLICATE: 206869

Parameter	Units	2630417001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	278	277	0	10	

SAMPLE DUPLICATE: 206870

Parameter	Units	2630431001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L		60.0			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45027
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435008, 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015

LABORATORY CONTROL SAMPLE: 207416

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	414	104	84-108	

SAMPLE DUPLICATE: 207417

Parameter	Units	2630435008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	113	82.0	32	10	D6

SAMPLE DUPLICATE: 207427

Parameter	Units	2630435009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	839	851	1	10	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45079
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435016, 2630435017, 2630435018

LABORATORY CONTROL SAMPLE: 207691

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	84-108	

SAMPLE DUPLICATE: 207692

Parameter	Units	2630435016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	59.0	60.0	2	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45158
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435019, 2630435020, 2630435021

LABORATORY CONTROL SAMPLE: 208023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	370	92	84-108	

SAMPLE DUPLICATE: 208024

Parameter	Units	2630414005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	21.0	ND		10	

SAMPLE DUPLICATE: 208025

Parameter	Units	2630417005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	521	525	1	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: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 45160
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2630435022, 2630435023, 2630435024, 2630435025

LABORATORY CONTROL SAMPLE: 208030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	371	93	84-108	

SAMPLE DUPLICATE: 208031

Parameter	Units	2630449005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	278	272	2	10	

SAMPLE DUPLICATE: 208032

Parameter	Units	2630472002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	281	277	1	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: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 533750
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: 2630435016, 2630435017, 2630435018

METHOD BLANK: 2848969 Matrix: Water
Associated Lab Samples: 2630435016, 2630435017, 2630435018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	04/02/20 17:18	
Fluoride	mg/L	ND	0.10	0.050	04/02/20 17:18	
Sulfate	mg/L	ND	1.0	0.50	04/02/20 17:18	

LABORATORY CONTROL SAMPLE: 2848970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.9	102	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	50.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848971 2848972

Parameter	Units	2630325037 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1670	50	50	1670	1680	-1	8	90-110	0	10	M6
Fluoride	mg/L	0.056J	2.5	2.5	2.3	2.3	90	90	90-110	0	10	
Sulfate	mg/L	603	50	50	602	604	-2	2	90-110	0	10	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848973 2848974

Parameter	Units	2630414001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.6	50	50	56.2	56.2	105	105	90-110	0	10	
Fluoride	mg/L	0.076J	2.5	2.5	2.5	2.5	95	96	90-110	1	10	
Sulfate	mg/L	1.6	50	50	53.5	53.4	104	104	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 533753
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: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008

METHOD BLANK: 2848998 Matrix: Water
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	04/03/20 01:00	
Fluoride	mg/L	ND	0.10	0.050	04/03/20 01:00	
Sulfate	mg/L	ND	1.0	0.50	04/03/20 01:00	

LABORATORY CONTROL SAMPLE: 2848999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.0	102	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	50.6	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849000 2849001

Parameter	Units	2630417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.5	50	50	57.8	57.7	107	106	90-110	0	10	
Fluoride	mg/L	0.085J	2.5	2.5	2.4	2.5	93	95	90-110	2	10	
Sulfate	mg/L	25.9	50	50	77.5	77.4	103	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2851053 2851054

Parameter	Units	2630546001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	33.3	50	50	83.1	83.3	100	100	90-110	0	10	
Fluoride	mg/L	0.10	2.5	2.5	2.5	2.5	94	95	90-110	1	10	
Sulfate	mg/L	24.4	50	50	73.7	74.0	99	99	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 533970
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: 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015, 2630435019, 2630435020, 2630435021, 2630435022, 2630435023

METHOD BLANK: 2849811 Matrix: Water
Associated Lab Samples: 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015, 2630435019, 2630435020, 2630435021, 2630435022, 2630435023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	04/02/20 15:35	
Fluoride	mg/L	ND	0.10	0.050	04/02/20 15:35	
Sulfate	mg/L	ND	1.0	0.50	04/02/20 15:35	

LABORATORY CONTROL SAMPLE: 2849812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	47.6	95	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	47.5	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849813 2849814

Parameter	Units	2630435009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.8	50	50	54.6	55.8	102	104	90-110	2	10	
Fluoride	mg/L	0.25J	2.5	2.5	3.4	3.6	125	133	90-110	6	10	M1
Sulfate	mg/L	448	50	50	496	497	97	97	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849815 2849816

Parameter	Units	2630414008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.0	50	50	54.6	54.0	103	102	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	107	107	90-110	0	10	
Sulfate	mg/L	116	50	50	160	146	88	60	90-110	9	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

QC Batch: 533972
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: 2630435024, 2630435025

METHOD BLANK: 2849817 Matrix: Water
Associated Lab Samples: 2630435024, 2630435025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	04/02/20 23:19	
Fluoride	mg/L	ND	0.10	0.050	04/02/20 23:19	
Sulfate	mg/L	ND	1.0	0.50	04/02/20 23:19	

LABORATORY CONTROL SAMPLE: 2849818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	47.7	95	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	47.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849819 2849820

Parameter	Units	2630435024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.4	50	50	56.3	57.7	102	105	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	106	108	90-110	2	10	
Sulfate	mg/L	ND	50	50	51.2	52.1	102	104	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849821 2849822

Parameter	Units	2630449009 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	54.0	53.9	105	105	90-110	0	10	
Fluoride	mg/L	0.13J	2.5	2.5	2.8	2.8	107	107	90-110	0	10	
Sulfate	mg/L	39.1	50	50	89.7	89.4	101	101	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630435001	YGWA-5I				
2630435002	YGWA-5D				
2630435003	YGWA-17S				
2630435004	YGWA-20S				
2630435005	YGWA-21I				
2630435006	YGWA-40				
2630435009	YGWC-33S				
2630435010	YGWC-36				
2630435012	YGWC-43				
2630435013	YGWA-39				
2630435014	YGWC-49				
2630435016	YGWA-18S				
2630435017	YGWA-18I				
2630435019	YGWA-4I				
2630435020	YGWC-38				
2630435021	YGWC-41				
2630435022	YGWC-42				
2630435023	YGWC-23S				
2630435024	YGWC-24S				
2630435001	YGWA-5I	EPA 3010A	45067	EPA 6010D	45072
2630435002	YGWA-5D	EPA 3010A	45067	EPA 6010D	45072
2630435003	YGWA-17S	EPA 3010A	45067	EPA 6010D	45072
2630435004	YGWA-20S	EPA 3010A	45067	EPA 6010D	45072
2630435005	YGWA-21I	EPA 3010A	45067	EPA 6010D	45072
2630435006	YGWA-40	EPA 3010A	45067	EPA 6010D	45072
2630435007	EB-1-3-24-20	EPA 3010A	45067	EPA 6010D	45072
2630435008	DUP-1	EPA 3010A	45067	EPA 6010D	45072
2630435009	YGWC-33S	EPA 3010A	45067	EPA 6010D	45072
2630435010	YGWC-36	EPA 3010A	45067	EPA 6010D	45072
2630435011	DUP-2	EPA 3010A	45067	EPA 6010D	45072
2630435012	YGWC-43	EPA 3010A	45067	EPA 6010D	45072
2630435013	YGWA-39	EPA 3010A	45067	EPA 6010D	45072
2630435014	YGWC-49	EPA 3010A	45067	EPA 6010D	45072
2630435015	FB-2-3-25-20	EPA 3010A	45067	EPA 6010D	45072
2630435016	YGWA-18S	EPA 3010A	45066	EPA 6010D	45071
2630435017	YGWA-18I	EPA 3010A	45066	EPA 6010D	45071
2630435018	FB-1-3-24-20	EPA 3010A	45066	EPA 6010D	45071
2630435019	YGWA-4I	EPA 3010A	45121	EPA 6010D	45135
2630435020	YGWC-38	EPA 3010A	45121	EPA 6010D	45135
2630435021	YGWC-41	EPA 3010A	45121	EPA 6010D	45135
2630435022	YGWC-42	EPA 3010A	45172	EPA 6010D	45193
2630435023	YGWC-23S	EPA 3010A	45172	EPA 6010D	45193
2630435024	YGWC-24S	EPA 3010A	45172	EPA 6010D	45193
2630435025	EB-2-3-25-20	EPA 3010A	45172	EPA 6010D	45193
2630435001	YGWA-5I	EPA 3005A	45065	EPA 6020B	45069
2630435002	YGWA-5D	EPA 3005A	45065	EPA 6020B	45069

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630435003	YGWA-17S	EPA 3005A	45065	EPA 6020B	45069
2630435004	YGWA-20S	EPA 3005A	45065	EPA 6020B	45069
2630435005	YGWA-21I	EPA 3005A	45065	EPA 6020B	45069
2630435006	YGWA-40	EPA 3005A	45065	EPA 6020B	45069
2630435007	EB-1-3-24-20	EPA 3005A	45065	EPA 6020B	45069
2630435008	DUP-1	EPA 3005A	45065	EPA 6020B	45069
2630435009	YGWC-33S	EPA 3005A	45065	EPA 6020B	45069
2630435010	YGWC-36	EPA 3005A	45065	EPA 6020B	45069
2630435011	DUP-2	EPA 3005A	45065	EPA 6020B	45069
2630435012	YGWC-43	EPA 3005A	45112	EPA 6020B	45137
2630435013	YGWA-39	EPA 3005A	45112	EPA 6020B	45137
2630435014	YGWC-49	EPA 3005A	45112	EPA 6020B	45137
2630435015	FB-2-3-25-20	EPA 3005A	45112	EPA 6020B	45137
2630435016	YGWA-18S	EPA 3005A	45065	EPA 6020B	45069
2630435017	YGWA-18I	EPA 3005A	45065	EPA 6020B	45069
2630435018	FB-1-3-24-20	EPA 3005A	45065	EPA 6020B	45069
2630435019	YGWA-4I	EPA 3005A	45113	EPA 6020B	45136
2630435020	YGWC-38	EPA 3005A	45113	EPA 6020B	45136
2630435021	YGWC-41	EPA 3005A	45113	EPA 6020B	45136
2630435022	YGWC-42	EPA 3005A	45113	EPA 6020B	45136
2630435023	YGWC-23S	EPA 3005A	45113	EPA 6020B	45136
2630435024	YGWC-24S	EPA 3005A	45113	EPA 6020B	45136
2630435025	EB-2-3-25-20	EPA 3005A	45171	EPA 6020B	45192
2630435001	YGWA-5I	SM 2540C	44951		
2630435002	YGWA-5D	SM 2540C	44951		
2630435003	YGWA-17S	SM 2540C	44951		
2630435004	YGWA-20S	SM 2540C	44951		
2630435005	YGWA-21I	SM 2540C	44951		
2630435006	YGWA-40	SM 2540C	44951		
2630435007	EB-1-3-24-20	SM 2540C	44951		
2630435008	DUP-1	SM 2540C	45027		
2630435009	YGWC-33S	SM 2540C	45027		
2630435010	YGWC-36	SM 2540C	45027		
2630435011	DUP-2	SM 2540C	45027		
2630435012	YGWC-43	SM 2540C	45027		
2630435013	YGWA-39	SM 2540C	45027		
2630435014	YGWC-49	SM 2540C	45027		
2630435015	FB-2-3-25-20	SM 2540C	45027		
2630435016	YGWA-18S	SM 2540C	45079		
2630435017	YGWA-18I	SM 2540C	45079		
2630435018	FB-1-3-24-20	SM 2540C	45079		
2630435019	YGWA-4I	SM 2540C	45158		
2630435020	YGWC-38	SM 2540C	45158		
2630435021	YGWC-41	SM 2540C	45158		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES AMA R6
Pace Project No.: 2630435

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630435022	**YGWC-42**	SM 2540C	45160		
2630435023	**YGWC-23S**	SM 2540C	45160		
2630435024	**YGWC-24S**	SM 2540C	45160		
2630435025	**EB-2-3-25-20**	SM 2540C	45160		
2630435001	**YGWA-5I**	EPA 300.0 Rev 2.1 1993	533753		
2630435002	**YGWA-5D**	EPA 300.0 Rev 2.1 1993	533753		
2630435003	**YGWA-17S**	EPA 300.0 Rev 2.1 1993	533753		
2630435004	**YGWA-20S**	EPA 300.0 Rev 2.1 1993	533753		
2630435005	**YGWA-21I**	EPA 300.0 Rev 2.1 1993	533753		
2630435006	**YGWA-40**	EPA 300.0 Rev 2.1 1993	533753		
2630435007	**EB-1-3-24-20**	EPA 300.0 Rev 2.1 1993	533753		
2630435008	**DUP-1**	EPA 300.0 Rev 2.1 1993	533753		
2630435009	**YGWC-33S**	EPA 300.0 Rev 2.1 1993	533970		
2630435010	**YGWC-36**	EPA 300.0 Rev 2.1 1993	533970		
2630435011	**DUP-2**	EPA 300.0 Rev 2.1 1993	533970		
2630435012	**YGWC-43**	EPA 300.0 Rev 2.1 1993	533970		
2630435013	**YGWA-39**	EPA 300.0 Rev 2.1 1993	533970		
2630435014	**YGWC-49**	EPA 300.0 Rev 2.1 1993	533970		
2630435015	**FB-2-3-25-20**	EPA 300.0 Rev 2.1 1993	533970		
2630435016	**YGWA-18S**	EPA 300.0 Rev 2.1 1993	533750		
2630435017	**YGWA-18I**	EPA 300.0 Rev 2.1 1993	533750		
2630435018	**FB-1-3-24-20**	EPA 300.0 Rev 2.1 1993	533750		
2630435019	**YGWA-4I**	EPA 300.0 Rev 2.1 1993	533970		
2630435020	**YGWC-38**	EPA 300.0 Rev 2.1 1993	533970		
2630435021	**YGWC-41**	EPA 300.0 Rev 2.1 1993	533970		
2630435022	**YGWC-42**	EPA 300.0 Rev 2.1 1993	533970		
2630435023	**YGWC-23S**	EPA 300.0 Rev 2.1 1993	533970		
2630435024	**YGWC-24S**	EPA 300.0 Rev 2.1 1993	533972		
2630435025	**EB-2-3-25-20**	EPA 300.0 Rev 2.1 1993	533972		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GA Power	Report To: SCS Contacts	Attention: Southern Co.
Address: Atlanta, GA	Copy To: ACC Contacts	Company Name:
		Address:
Email To: SCS Contacts	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Plant Yates AMA R6	Pace Project Manager: Kevin Herring
Requested Due Date/TAT: 10 Day	Project Number:	Pace Profile #: 2916-15

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE

Valid 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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: TDS	Chloride/Fluoride/Sulfate 300.0	App. III + Detect Metals 6010/6020	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 2630435
1	YGWA-5I	WT	G	3-24-20	1414				5	2		3						X	X	X	X		pH= 5.81 001
2	YGWA-5D	WT	G	3-24-20	1204				5	2		3						X	X	X	X		pH= 7.34 002
3	YGWA-17S	WT	G	3-24-20	1040				5	2		3						X	X	X	X		pH= 5.57 003
4	YGWA-18S	WT	G	3-24-20	1430				5	2		3						X	X	X	X		pH= 5.33 016
5	YGWA-18I	WT	G	3-24-20	1210				5	2		3						X	X	X	X		pH= 5.98 017
6	YGWA-20S	WT	G	3-24-20	1140				5	2		3						X	X	X	X		pH= 5.86 004
7	YGWA-21I	WT	G	3-24-20	1255				5	2		3						X	X	X	X		pH= 6.35 005
8	YGWA-40	WT	G	3-24-20	1426				5	2		3						X	X	X	X		Extra Rad pH= 5.29 006
9	EB-1-3-24-20	WT	G	3-24-20	1410				5	2		3						X	X	X	X		pH= 007
10	FB-1-3-24-20	WT	G	3-24-20	1220				5	2		3						X	X	X	X		pH= 018
11	Dup-1	WT	G	3-24-20	-				5	2		3						X	X	X	X		pH= 508
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Ryan Walker ACC	3-25-20		K. Willingham Pace	3/25/20	1615	2.2	Y	N	Y
*Metals=B,Ca,Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Se,Mo,Tl										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ryan Walker

SIGNATURE of SAMPLER: Ryan Walker DATE Signed (MM/DD/YY): 03/25/20

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	ACC Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Yates AMA R6	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	2916-15

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	TDS	Chloride/Fluoride/Sulfate 300.0	App. III + Detect Metals 6010/6020	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 2630435
1	YGWC-33S	WT	G	3-25-20	1247				5	2		3						X	X	X	X			pH= 3.86 001
2	YGWC-36	WT	G	3-25-20	1245				5	2		3						X	X	X	X			pH= 5.49 010
3	Dup-2	WT	G	3-25-20	--				5	2		3						X	X	X	X			pH= 011
4	YGWC-43	WT	G	3-25-20	1123				5	2		3						X	X	X	X			pH= 5.79 012
5	YGWA-39	WT	G	3-25-20	1005				5	2		3						X	X	X	X			pH= 5.78 013
6	YGWC-49	WT	G	3-25-20	1417				5	2		3						X	X	X	X			pH= 5.69 014
7	FB-2-3-25-20	WT	G	3-25-20	1400				5	2		3						X	X	X	X			pH= 015
8									5	2		3						X	X	X	X			pH=
9									5	2		3						X	X	X	X			pH=
10									5	2		3						X	X	X	X			pH=
11									5	2		3						X	X	X	X			pH=
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Taylor Gold / ACC	3-25-20		K. Willingham / Pace	3/25/20	1615	2.2	Y	N	Y
*Metals=B,Ca,Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Se,Mo,Tl										

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Ryan Walker					
SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY): 03/25/20				

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	ACC Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Yates AMA R6	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	2916-15

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,) Sample IDs MUST BE UNIQUE

Valid 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

ITEM #	SAMPLE ID	MATRIX CODE (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	TDS	Chloride/Fluoride/Sulfate 300.0	App. III + Detect Metals 6010/6020*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																								2630475
1	YGWA-41	WT	G	3-25-20	1026				5	2		3							X	X	X	X		pH= 6.26
2	YGWC-38	WT	G	3-25-20	1525				5	2		3							X	X	X	X		pH= 4.89
3	YGWC-41	WT	G	3-25-20	1400				5	2		3							X	X	X	X		pH= 4.87
4	YGWC-42	WT	G	3-25-20	1050				5	2		3							X	X	X	X		pH= 5.53
5	YGWC-235	WT	G	3-26-20	1103				5	2		3							X	X	X	X		Extra Rad pH= 5.69
6	YGWC-245	WT	G	3-26-20	1218				5	2		3							X	X	X	X		pH= 5.57
7	EB-2-3-25-20	WT	G	3-25-20	1425				5	2		3							X	X	X	X		pH=
8									5	2		3							X	X	X	X		pH=
9									5	2		3							X	X	X	X		pH=
10									5	2		3							X	X	X	X		pH=
11									5	2		3							X	X	X	X		pH=
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells. strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Taylor Gobble / ACC	3-26-20	1520	Charlie Hunter	3/26/20	1520	4.5	Y	N	Y
Last Sample										
*Metals=B,Ca,Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Se,Mo,Tl										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Taylor Gobble

SIGNATURE of SAMPLER: Taylor Gobble DATE Signed (MM/DD/YY): 3-26-20

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 17, 2020

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

RE: Project: 2630435
Pace Project No.: 30356614

Dear Mr. Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 27, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

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

Enclosures

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 2630435
Pace Project No.: 30356614

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 2630435
Pace Project No.: 30356614

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630435001	**YGWA-5I**	Water	03/24/20 14:14	03/27/20 09:15
2630435002	**YGWA-5D**	Water	03/24/20 12:04	03/27/20 09:15
2630435003	**YGWA-17S**	Water	03/24/20 10:40	03/27/20 09:15
2630435004	**YGWA-20S**	Water	03/24/20 11:40	03/27/20 09:15
2630435005	**YGWA-21I**	Water	03/24/20 12:55	03/27/20 09:15
2630435006	**YGWA-40**	Water	03/24/20 14:26	03/27/20 09:15
2630435007	**EB-1-3-24-20**	Water	03/24/20 14:10	03/27/20 09:15
2630435008	**DUP-1**	Water	03/24/20 00:00	03/27/20 09:15
2630435009	**YGWC-33S**	Water	03/25/20 12:47	03/27/20 09:15
2630435010	**YGWC-36**	Water	03/25/20 12:45	03/27/20 09:15
2630435011	**DUP-2**	Water	03/25/20 00:00	03/27/20 09:15
2630435012	**YGWC-43**	Water	03/25/20 11:23	03/27/20 09:15
2630435013	**YGWA-39**	Water	03/25/20 10:05	03/27/20 09:15
2630435014	**YGWC-49**	Water	03/25/20 14:17	03/27/20 09:15
2630435015	**FB-2-3-25-20**	Water	03/25/20 14:00	03/27/20 09:15
2630435019	**YGWA-4I**	Water	03/25/20 10:26	03/27/20 10:35
2630435020	**YGWC-38**	Water	03/25/20 15:25	03/27/20 10:35
2630435021	**YGWC-41**	Water	03/25/20 14:00	03/27/20 10:35
2630435022	**YGWC-42**	Water	03/25/20 10:50	03/27/20 10:35
2630435023	**YGWC-23S**	Water	03/26/20 11:03	03/27/20 10:35
2630435024	**YGWC-24S**	Water	03/26/20 12:18	03/27/20 10:35
2630435025	**EB-2-3-25-20**	Water	03/25/20 14:25	03/27/20 10:35
2630435016	**YGWA-18S**	Water	03/24/20 14:30	03/27/20 09:15
2630435017	**YGWA-18I**	Water	03/24/20 12:10	03/27/20 09:15
2630435018	**FB-1-3-24-20**	Water	03/24/20 12:20	03/27/20 09:15

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 2630435
Pace Project No.: 30356614

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630435001	YGWA-5I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435002	YGWA-5D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435003	YGWA-17S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435004	YGWA-20S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435005	YGWA-21I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435006	YGWA-40	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435007	EB-1-3-24-20	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435008	DUP-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435009	YGWC-33S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435010	YGWC-36	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435011	DUP-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435012	YGWC-43	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435013	YGWA-39	EPA 9315	LAL	1	PASI-PA

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 2630435
Pace Project No.: 30356614

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435014	**YGWC-49**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435015	**FB-2-3-25-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435019	**YGWA-4I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435020	**YGWC-38**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435021	**YGWC-41**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435022	**YGWC-42**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435023	**YGWC-23S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435024	**YGWC-24S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435025	**EB-2-3-25-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435016	**YGWA-18S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435017	**YGWA-18I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630435018	**FB-1-3-24-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 2630435
Pace Project No.: 30356614

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: YGWA-5I **Lab ID: 2630435001** Collected: 03/24/20 14:14 Received: 03/27/20 09:15 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	**0.104 ± 0.135 (0.269) C:88% T:NA**	pCi/L	04/07/20 09:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.27 ± 0.536 (0.877) C:69% T:81%**	pCi/L	04/15/20 13:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.37 ± 0.671 (1.15)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: YGWA-5D **Lab ID: 2630435002** Collected: 03/24/20 12:04 Received: 03/27/20 09:15 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	**3.05 ± 0.711 (0.280) C:84% T:NA**	pCi/L	04/07/20 09:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.467 ± 0.403 (0.816) C:75% T:80%**	pCi/L	04/15/20 13:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.52 ± 1.11 (1.10)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: YGWA-17S **Lab ID: 2630435003** Collected: 03/24/20 10:40 Received: 03/27/20 09:15 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	**0.173 ± 0.158 (0.267) C:86% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.361 ± 0.365 (0.755) C:76% T:81%**	pCi/L	04/15/20 13:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.534 ± 0.523 (1.02)**	pCi/L	04/16/20 14:02	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: YGWA-20S **Lab ID: 2630435004** Collected: 03/24/20 11:40 Received: 03/27/20 09:15 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	**0.288 ± 0.211 (0.340) C:81% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.59 ± 0.805 (1.49) C:65% T:80%**	pCi/L	04/15/20 16:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.88 ± 1.02 (1.83)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: YGWA-21I **Lab ID: 2630435005** Collected: 03/24/20 12:55 Received: 03/27/20 09:15 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	**0.463 ± 0.259 (0.360) C:83% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.775 ± 0.586 (1.17) C:67% T:79%**	pCi/L	04/15/20 16:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.24 ± 0.845 (1.53)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: YGWA-40 **Lab ID: 2630435006** Collected: 03/24/20 14:26 Received: 03/27/20 09:15 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	**0.178 ± 0.186 (0.361) C:84% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.09 ± 0.607 (1.13) C:68% T:84%**	pCi/L	04/15/20 16:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.27 ± 0.793 (1.49)**	pCi/L	04/16/20 14:02	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: EB-1-3-24-20 **Lab ID: 2630435007** Collected: 03/24/20 14:10 Received: 03/27/20 09:15 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	**0.161 ± 0.154 (0.264) C:85% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.161 ± 0.520 (1.22) C:73% T:82%**	pCi/L	04/15/20 16:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.161 ± 0.674 (1.48)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: DUP-1 **Lab ID: 2630435008** Collected: 03/24/20 00:00 Received: 03/27/20 09:15 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	**0.169 ± 0.177 (0.341) C:83% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.536 ± 0.428 (0.856) C:74% T:87%**	pCi/L	04/15/20 16:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.705 ± 0.605 (1.20)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: YGWC-33S **Lab ID: 2630435009** Collected: 03/25/20 12:47 Received: 03/27/20 09:15 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	**0.432 ± 0.265 (0.419) C:83% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.01 ± 0.507 (0.894) C:72% T:84%**	pCi/L	04/15/20 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.44 ± 0.772 (1.31)**	pCi/L	04/16/20 14:02	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: YGWC-36 **Lab ID: 2630435010** Collected: 03/25/20 12:45 Received: 03/27/20 09:15 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	**0.111 ± 0.170 (0.369) C:77% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.11 ± 0.517 (0.875) C:71% T:83%**	pCi/L	04/15/20 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.22 ± 0.687 (1.24)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: DUP-2 **Lab ID: 2630435011** Collected: 03/25/20 00:00 Received: 03/27/20 09:15 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	**0.416 ± 0.245 (0.328) C:76% T:NA**	pCi/L	04/07/20 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.512 ± 0.479 (0.983) C:71% T:79%**	pCi/L	04/15/20 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.928 ± 0.724 (1.31)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: YGWC-43 **Lab ID: 2630435012** Collected: 03/25/20 11:23 Received: 03/27/20 09:15 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	**2.75 ± 0.685 (0.332) C:80% T:NA**	pCi/L	04/07/20 09:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.291 ± 0.485 (1.06) C:67% T:80%**	pCi/L	04/15/20 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.04 ± 1.17 (1.39)**	pCi/L	04/16/20 14:02	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: YGWA-39 **Lab ID: 2630435013** Collected: 03/25/20 10:05 Received: 03/27/20 09:15 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	**0.237 ± 0.189 (0.300) C:81% T:NA**	pCi/L	04/07/20 08:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.140 ± 0.424 (0.952) C:65% T:86%**	pCi/L	04/15/20 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.377 ± 0.613 (1.25)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: YGWC-49 **Lab ID: 2630435014** Collected: 03/25/20 14:17 Received: 03/27/20 09:15 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	**0.435 ± 0.329 (0.603) C:72% T:NA**	pCi/L	04/07/20 08:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.764 ± 0.578 (1.14) C:67% T:73%**	pCi/L	04/15/20 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.20 ± 0.907 (1.74)**	pCi/L	04/16/20 14:02	7440-14-4	

Sample: FB-2-3-25-20 **Lab ID: 2630435015** Collected: 03/25/20 14:00 Received: 03/27/20 09:15 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	**0.0455 ± 0.123 (0.305) C:85% T:NA**	pCi/L	04/07/20 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.54 ± 0.684 (1.14) C:68% T:70%**	pCi/L	04/15/20 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.59 ± 0.807 (1.45)**	pCi/L	04/16/20 14:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: YGWA-4I **Lab ID: 2630435019** Collected: 03/25/20 10:26 Received: 03/27/20 10:35 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	**0.766 ± 0.337 (0.411) C:80% T:NA**	pCi/L	04/07/20 08:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0434 ± 0.524 (1.23) C:75% T:79%**	pCi/L	04/16/20 18:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.766 ± 0.861 (1.64)**	pCi/L	04/17/20 10:30	7440-14-4	

Sample: YGWC-38 **Lab ID: 2630435020** Collected: 03/25/20 15:25 Received: 03/27/20 10:35 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	**0.321 ± 0.249 (0.459) C:89% T:NA**	pCi/L	04/07/20 08:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.196 ± 0.605 (1.42) C:75% T:89%**	pCi/L	04/16/20 18:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.321 ± 0.854 (1.88)**	pCi/L	04/17/20 10:30	7440-14-4	

Sample: YGWC-41 **Lab ID: 2630435021** Collected: 03/25/20 14:00 Received: 03/27/20 10:35 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	**0.348 ± 0.223 (0.308) C:80% T:NA**	pCi/L	04/07/20 07:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.220 ± 0.578 (1.29) C:76% T:78%**	pCi/L	04/16/20 18:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.568 ± 0.801 (1.60)**	pCi/L	04/17/20 10:30	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: YGWC-42 **Lab ID: 2630435022** Collected: 03/25/20 10:50 Received: 03/27/20 10:35 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	**0.638 ± 0.302 (0.344) C:78% T:NA**	pCi/L	04/07/20 07:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.532 ± 0.558 (1.16) C:73% T:86%**	pCi/L	04/16/20 18:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.860 (1.50)**	pCi/L	04/17/20 10:30	7440-14-4	

Sample: YGWC-23S **Lab ID: 2630435023** Collected: 03/26/20 11:03 Received: 03/27/20 10:35 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 ± 0.186 (0.374) C:75% T:NA**	pCi/L	04/07/20 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.122 ± 0.508 (1.16) C:75% T:81%**	pCi/L	04/16/20 18:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.281 ± 0.694 (1.53)**	pCi/L	04/17/20 10:30	7440-14-4	

Sample: YGWC-24S **Lab ID: 2630435024** Collected: 03/26/20 12:18 Received: 03/27/20 10:35 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 ± 0.176 (0.334) C:84% T:NA**	pCi/L	04/07/20 07:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.338 ± 0.473 (1.01) C:76% T:94%**	pCi/L	04/16/20 18:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.511 ± 0.649 (1.34)**	pCi/L	04/17/20 10:30	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: EB-2-3-25-20 **Lab ID: 2630435025** Collected: 03/25/20 14:25 Received: 03/27/20 10:35 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	**0.0826 ± 0.201 (0.477) C:85% T:NA**	pCi/L	04/07/20 07:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.318 ± 0.461 (0.991) C:79% T:81%**	pCi/L	04/16/20 18:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.401 ± 0.662 (1.47)**	pCi/L	04/17/20 10:30	7440-14-4	

Sample: YGWA-18S **Lab ID: 2630435016** Collected: 03/24/20 14:30 Received: 03/27/20 09:15 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	**0.262 ± 0.0996 (0.111) C:96% T:NA**	pCi/L	04/07/20 19:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.114 ± 0.333 (0.796) C:82% T:86%**	pCi/L	04/16/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.262 ± 0.433 (0.907)**	pCi/L	04/17/20 10:48	7440-14-4	

Sample: YGWA-18I **Lab ID: 2630435017** Collected: 03/24/20 12:10 Received: 03/27/20 09:15 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	**0.504 ± 0.169 (0.192) C:74% T:NA**	pCi/L	04/07/20 19:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.128 ± 0.370 (0.827) C:83% T:86%**	pCi/L	04/16/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.632 ± 0.539 (1.02)**	pCi/L	04/17/20 10:48	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

Sample: FB-1-3-24-20 **Lab ID: 2630435018** Collected: 03/24/20 12:20 Received: 03/27/20 09:15 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	**0.383 ± 0.125 (0.123) C:89% T:NA**	pCi/L	04/07/20 19:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.641 ± 0.431 (0.838) C:83% T:85%**	pCi/L	04/16/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02 ± 0.556 (0.961)**	pCi/L	04/17/20 10:48	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

QC Batch: 390590 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008, 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015

METHOD BLANK: 1891462 Matrix: Water
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008, 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0954 ± 0.125 (0.246) C:85% T:NA	pCi/L	04/07/20 09:13	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

QC Batch: 390593 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008, 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015

METHOD BLANK: 1891465 Matrix: Water
Associated Lab Samples: 2630435001, 2630435002, 2630435003, 2630435004, 2630435005, 2630435006, 2630435007, 2630435008, 2630435009, 2630435010, 2630435011, 2630435012, 2630435013, 2630435014, 2630435015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.112 ± 0.287 (0.643) C:74% T:91%	pCi/L	04/15/20 13:00	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

QC Batch: 390592
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2630435016, 2630435017, 2630435018

METHOD BLANK: 1891464
Matrix: Water
Associated Lab Samples: 2630435016, 2630435017, 2630435018

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.444 ± 0.130 (0.104) C:98% T:NA	pCi/L	04/07/20 18:26	

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

QC Batch: 390595
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2630435016, 2630435017, 2630435018

METHOD BLANK: 1891467
Matrix: Water
Associated Lab Samples: 2630435016, 2630435017, 2630435018

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.544 ± 0.340 (0.632) C:84% T:88%	pCi/L	04/16/20 14:15	

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

QC Batch: 390591 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2630435019, 2630435020, 2630435021, 2630435022, 2630435023, 2630435024, 2630435025

METHOD BLANK: 1891463 Matrix: Water
Associated Lab Samples: 2630435019, 2630435020, 2630435021, 2630435022, 2630435023, 2630435024, 2630435025

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0696 ± 0.172 (0.412) C:90% T:NA	pCi/L	04/07/20 08:03	

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630435
Pace Project No.: 30356614

QC Batch: 390594 | Analysis Method: EPA 9320
QC Batch Method: EPA 9320 | Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2630435019, 2630435020, 2630435021, 2630435022, 2630435023, 2630435024, 2630435025

METHOD BLANK: 1891466 Matrix: Water
Associated Lab Samples: 2630435019, 2630435020, 2630435021, 2630435022, 2630435023, 2630435024, 2630435025

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.184 ± 0.318 (0.783) C:80% T:81%	pCi/L	04/16/20 15:55	

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 2630435
Pace Project No.: 30356614

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

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

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

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No
Owner Received Date: 3/25/2020 Results Requested By: ~~4/8/2020~~ 21 days

Pace Analytical® www.pacelabs.com

Workorder: 2630435 **Workorder Name:** PLANT YATES AMA R6

Report To

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

Subcontract To

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

WO# : 30356614

30356614

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Preserved Containers: Other					RAD 9315	RAD 9320										LAB USE ONLY
1	YGWA-5I	PS	3/24/2020 14:14	2630435001	Water	X	2					X	X										CC1
2	YGWA-5D	PS	3/24/2020 12:04	2630435002	Water	X	2					X	X										CC2
3	YGWA-17S	PS	3/24/2020 10:40	2630435003	Water	X	2					X	X										CC3
4	YGWA-20S	PS	3/24/2020 11:40	2630435004	Water	X	2					X	X										CC4
5	YGWA-21I	PS	3/24/2020 12:55	2630435005	Water	X	2					X	X										CC5
6	YGWA-40	PS	3/24/2020 14:26	2630435006	Water	X	2					X	X										CC6
7	EB-1-3-24-20	PS	3/24/2020 14:10	2630435007	Water	X	2					X	X										CC7
8	DUP-1	PS	3/24/2020 00:00	2630435008	Water	X	2					X	X										CC8
9	YGWC-33S	PS	3/25/2020 12:47	2630435009	Water	X	2					X	X										CC9
10	YGWC-36	PS	3/25/2020 12:45	2630435010	Water	X	2					X	X										C10
11	DUP-2	PS	3/25/2020 00:00	2630435011	Water	X	2					X	X										C11
12	YGWC-43	PS	3/25/2020 11:23	2630435012	Water	X	2					X	X										C12
13	YGWA-39	PS	3/25/2020 10:05	2630435013	Water	X	2					X	X										C13
14	YGWC-49	PS	3/25/2020 14:17	2630435014	Water	X	2					X	X										C14
15	FB-2-3-25-20	PS	3/25/2020 14:00	2630435015	Water	X	2					X	X										C15
16	YGWA-18S	PS	3/24/2020 14:30	2630435016	Water		0					X	X										
17	YGWA-18I	PS	3/24/2020 12:10	2630435017	Water		0					X	X										
18	FB-1-3-24-20	PS	3/24/2020 12:20	2630435018	Water		0					X	X										

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	[illegible]	3/25/20 1700	[illegible]	3-27-20 0-15	For samples 2630435 016-018, upload resutls from 2630431 001-003 respectively.
2					
3					

Cooler Temperature on Receipt N/A °C	Custody Seal Y or (N)	Received on Ice Y or (N)	Samples Intact (Y) or N

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

#_30356614

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No
Owner Received Date: 3/25/2020 Results Requested By: ~~4/8/2020~~ 21 days

Pace Analytical® www.pacelabs.com

Workorder: 2630435 **Workorder Name:** PLANT YATES AMA R6

Report To	Subcontract To
Kevin Herring Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

WO# : 30356614
PM: JAC Due Date: 04/17/20
CLIENT: PACE_26_ATGA

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Preserved Containers: Other	Requested Analysis: RAD 9315	Requested Analysis: RAD 9320	LAB USE ONLY
1	YGWA-5I	PS	3/24/2020 14:14	2630435001	Water	1		X	X	
2	YGWA-5D	PS	3/24/2020 12:04	2630435002	Water	1		X	X	
3	YGWA-17S	PS	3/24/2020 10:40	2630435003	Water	1		X	X	
4	YGWA-20S	PS	3/24/2020 11:40	2630435004	Water	1		X	X	
5	YGWA-21I	PS	3/24/2020 12:55	2630435005	Water	1		X	X	
6	YGWA-4D	PS	3/24/2020 14:26	2630435006	Water	1		X	X	
7	EB-1-3-24-20	PS	3/24/2020 14:10	2630435007	Water	1		X	X	
8	DUP-1	PS	3/24/2020 00:00	2630435008	Water	1		X	X	
9	YGWC-33S	PS	3/25/2020 12:47	2630435009	Water	1		X	X	
10	YGWC-36	PS	3/25/2020 12:45	2630435010	Water	1		X	X	
11	DUP-2	PS	3/25/2020 00:00	2630435011	Water	1		X	X	
12	YGWC-43	PS	3/25/2020 11:23	2630435012	Water	1		X	X	
13	YGWA-39	PS	3/25/2020 10:05	2630435013	Water	1		X	X	
14	YGWC-49	PS	3/25/2020 14:17	2630435014	Water	1		X	X	
15	FB-2-3-25-20	PS	3/25/2020 14:00	2630435015	Water	1		X	X	
16	YGWA-18S	PS	3/24/2020 14:30	2630435016	Water		1	X	X	
17	YGWA-1I	PS	3/24/2020 12:10	2630435017	Water		1	X	X	
18	FB-1-3-24-20	PS	3/24/2020 12:20	2630435018	Water			X	X	
19	YGWA-4I	PS	3/25/2020 10:26	2630435019	Water	1	2	X	X	014

Chain of Custody

Pace Analytical®
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☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No

Workorder: 2630435 **Workorder Name:** PLANT YATES AMA R6

Owner Received Date: 3/25/2020 **Results Requested By:** 4/8/2020

Report To	Subcontract To
Kevin Herring Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Preserved Containers: Other					Requested Analysis: RAD 9315	Requested Analysis: RAD 9320										LAB USE ONLY
20	YGWC-38	PS	3/25/2020 15:25	2630435020	Water	1	2					X	X										C2L
21	YGWC-41	PS	3/25/2020 14:00	2630435021	Water	1	2					X	X										C21
22	YGWC-42	PS	3/25/2020 10:50	2630435022	Water	1	2					X	X										C22
23	YGWC-23S	PS	3/26/2020 11:03	2630435023	Water	1	2					X	X										C23
24	YGWC-24S	PS	3/26/2020 12:18	2630435024	Water	1	2					X	X										C24
25	EB-2-3-25-20	PS	3/25/2020 14:25	2630435025	Water	1	2					X	X										C25

Transfers	Released By	Date/Time	Received By	Date/Time
1				3-27-20 10:35
2				
3				

Comments: Add on project

Cooler Temperature on Receipt N/A °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

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

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA

Cert. Needed: ☐ Yes ☐ No

Pace Analytical®
www.pacelabs.com

21 days

Workorder: 2630431 **Workorder Name:** PLANT YATES AMA R6 SECOND **Owner Received Date:** 3/25/2020 **Results Requested By:** ~~4/8/2020~~

Report To	Subcontract To
Kevin Herring Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

WO# : 30356614

PM: JAC Due Date: 04/17/20

CLIENT: PACE_26_ATGA

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3						Requested Analysis: RAD 9315	RAD 9320	LAB USE ONLY
1	YGWA-18S	PS	3/24/2020 14:30	2630431001	Water	X	2					X	X	016
2	YGWA-18I	PS	3/24/2020 12:10	2630431002	Water	X	2					X	X	017
3	FB-1-3-24-20	PS	3/24/2020 12:20	2630431003	Water	X	2					X	X	018
4	YGWC-33S	PS	3/25/2020 12:47	2630431004	Water	X	2					X	X	
5	YGWC-36	PS	3/25/2020 12:45	2630431005	Water	X	2					X	X	
6	DUP-2	PS	3/25/2020 00:00	2630431006	Water	X	2					X	X	

Transfers	Released By	Date/Time	Received By	Date/Time
1	[illegible]	3/25/20 1700	[illegible]	3-27-20 9:15
2				
3				

Comments:

Cooler Temperature on Receipt °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

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

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Pace GA

Project # 30356614

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

Label DLC

LIMS Login PM

Tracking #: 1657 9507 1540

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

Thermometer Used NIR Type of Ice: Wet Blue None

Cooler Temperature Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

pH paper Lot# 1012191 Date and initials of person examining contents: DLC 3-27-20

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix: WT				
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements.	✓			Initial when completed: DLC Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: DLC Date: 3-27-20

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Jacquelyn Collins - Re: RADS for 2630431

From: Tyler Forney
To: Jacquelyn Collins
Date: 3/31/2020 4:22 PM
Subject: Re: RADS for 2630431

Those samples should correspond with 2630435-016, 017, 018 and ~~009, 010, 011.~~ If you don't have containers for that project logged in already then use the containers labeled as 2630431 for those samples.

Tyler Forney
Project Coordinator | Environmental Sciences
9800 Kincey Avenue; Suite 100, Huntersville, NC 28078
Office: 704-977-0962 | pacelabs.com

>>> Jacquelyn Collins 3/31/2020 4:19 PM >>>
We can dispose of the samples received?

Thanks!

Jacquelyn Collins
Project Manager|Environmental Sciences
1638 Roseytown Road, Suites 2, 3, & 4, Greensburg, PA 15601
office: 724-850-5600 |
fax: 724-850-5601
pacelabs.com

>>> Tyler Forney 3/31/2020 4:16 PM >>>
2630435 is going to end up being the report they want the results on

Pittsburgh Lab Sample Condition Upon Receipt

WO# : 30356614

PM: JAC Due Date: 04/17/20

CLIENT: PACE_26_ATGA

Pace Analytical

Client Name: Pace CA

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

Tracking #: 1657 9507 1804

Label DIC

LIMS Login DD

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

Thermometer Used N/A **Type of Ice:** Wet Blue (None)

Cooler Temperature **Observed Temp** — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

pH paper Lot# 10121901 **Date and Initials of person examining contents:** DM 3-30-20

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:		✓		3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements.	✓			Initial when completed: DIC Date/time of preservation:
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: DIC Date: 3-30-20

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO# : 30356614

PM: JAC Due Date: 04/17/20
CLIENT: PACE_26_ATGA

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Pace GA

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

Label DL
LIMS Login MM

Tracking #: 1657 9507 1540

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

Thermometer Used NIR Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

pH paper Lot# 10D2191 | Date and initials of person examining contents: DL 3-27-20

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT		✓		5. Only received samples 001-003
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements.	✓			Initial when completed DL Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: DL Date: 3-30-20

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	4/5/2020
Worklist:	53221
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891462
MB concentration:	0.095
M/B Counting Uncertainty:	0.124
MB MDC:	0.246
MB Numerical Performance Indicator:	1.51
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS53221	LCSD53221
Count Date:	4/7/2020	4/7/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.049	24.049
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.513	0.520
Target Conc. (pCi/L, g, F):	4.685	4.627
Uncertainty (Calculated):	0.056	0.056
Result (pCi/L, g, F):	4.614	4.549
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.725	0.687
Numerical Performance Indicator:	-0.19	-0.22
Percent Recovery:	98.48%	98.31%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS53221	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD53221	
Sample Result (pCi/L, g, F):	4.614	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.725	
Sample Duplicate Result (pCi/L, g, F):	4.549	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.687	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.128	2630435007
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.17%	2630435007DUP
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

Comments:

LAM 4/7/20

CLC 4/7/20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	4/5/2020
Worklist:	53221
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891462
MB concentration:	0.095
M/B Counting Uncertainty:	0.124
MB MDC:	0.246
MB Numerical Performance Indicator:	1.51
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	n
	LCS53221	LCSD53221
Count Date:	4/7/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.049	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.513	
Target Conc. (pCi/L, g, F):	4.685	
Uncertainty (Calculated):	0.056	
Result (pCi/L, g, F):	4.614	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.725	
Numerical Performance Indicator:	-0.19	
Percent Recovery:	98.48%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	2630435007	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2630435007DUP	
Sample Result (pCi/L, g, F):	0.161	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.152	
Sample Duplicate Result (pCi/L, g, F):	0.099	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.158	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.550	2630435007
Duplicate RPD:	47.42%	2630435007DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

***~~Batch must be re-prepped due to unacceptable precision.~~ N/A VAM 4/7/20

VAM 4/7/20

CL 4/7/20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	4/5/2020
Worklist:	53222
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891463
MB concentration:	0.070
M/B Counting Uncertainty:	0.172
MB MDC:	0.412
MB Numerical Performance Indicator:	0.79
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS53222	LCSD53222
Count Date:	4/7/2020	4/7/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.049	24.049
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.514	0.501
Target Conc. (pCi/L, g, F):	4.675	4.798
Uncertainty (Calculated):	0.056	0.058
Result (pCi/L, g, F):	4.859	4.698
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.707	0.719
Numerical Performance Indicator:	0.51	-0.27
Percent Recovery:	103.94%	97.92%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS53222	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD53222	
Sample Result (pCi/L, g, F):	4.859	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.707	
Sample Duplicate Result (pCi/L, g, F):	4.698	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.719	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.313	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.96%	
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

Comments:

KLB 4-7-2020

LAM 4/7/20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	4/5/2020
Worklist:	53222
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891463
MB concentration:	0.070
M/B Counting Uncertainty:	0.172
MB MDC:	0.412
MB Numerical Performance Indicator:	0.79
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS53222	LCSD53222
Count Date:	4/7/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.049	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.514	
Target Conc. (pCi/L, g, F):	4.675	
Uncertainty (Calculated):	0.056	
Result (pCi/L, g, F):	4.859	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.707	
Numerical Performance Indicator:	0.51	
Percent Recovery:	103.94%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	2630449010	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2630449010DUP	
Sample Result (pCi/L, g, F):	0.051	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.134	
Sample Duplicate Result (pCi/L, g, F):	0.127	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.138	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.770	2630449010
Duplicate RPD:	84.72%	2630449010DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ NJA 4/7/20

KLB 4-7-2020

LAM 4/7/20

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-226
Analyst:	LAL
Date:	4/7/2020
Worklist:	53223
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891464
MB concentration:	0.444
M/B Counting Uncertainty:	0.113
MB MDC:	0.104
MB Numerical Performance Indicator:	7.66
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	y
	LCS53223	LCSD53223
Count Date:	4/7/2020	4/7/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.049	24.049
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.509
Target Conc. (pCi/L, g, F):	4.761	4.727
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.967	4.483
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.343	0.323
Numerical Performance Indicator:	1.16	-1.45
Percent Recovery:	104.32%	94.85%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS53223	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD53223	
Sample Result (pCi/L, g, F):	4.967	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.343	
Sample Duplicate Result (pCi/L, g, F):	4.483	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.323	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	2.012	2630417003
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	9.51%	2630417003DUP
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

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

LAM 4/8/20

CLE 4/8/20

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-226
Analyst:	LAL
Date:	4/7/2020
Worklist:	53223
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891464
MB concentration:	0.444
M/B Counting Uncertainty:	0.113
MB MDC:	0.104
MB Numerical Performance Indicator:	7.66
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS53223	LCSD53223
Count Date:	4/7/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.049	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.761	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.967	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.343	
Numerical Performance Indicator:	1.16	
Percent Recovery:	104.32%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	2630417003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2630417003DUP	
Sample Result (pCi/L, g, F):	0.696	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.140	
Sample Duplicate Result (pCi/L, g, F):	0.776	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.142	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.786	2630417003
Duplicate RPD:	10.88%	2630417003DUP
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

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

LAM 4/8/20

CLC 4/8/20

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-228
Analyst:	VAL
Date:	4/7/2020
Worklist:	53224
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891465
MB concentration:	0.112
M/B 2 Sigma CSU:	0.287
MB MDC:	0.643
MB Numerical Performance Indicator:	0.76
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS53224	LCSD53224
Count Date:	4/15/2020	4/15/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.481	34.481
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.814	0.813
Target Conc. (pCi/L, g, F):	4.234	4.240
Uncertainty (Calculated):	0.305	0.305
Result (pCi/L, g, F):	4.852	4.733
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.102	1.081
Numerical Performance Indicator:	1.06	0.86
Percent Recovery:	114.60%	111.63%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS53224	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD53224	
Sample Result (pCi/L, g, F):	4.852	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.102	
Sample Duplicate Result (pCi/L, g, F):	4.733	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.081	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.151	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.63%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	4/7/2020
Worklist:	53225
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891466
MB concentration:	-0.184
M/B 2 Sigma CSU:	0.318
MB MDC:	0.783
MB Numerical Performance Indicator:	-1.13
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS53225	LCSD53225
Count Date:	4/16/2020	4/16/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.469	34.469
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.808	0.807
Target Conc. (pCi/L, g, F):	4.266	4.269
Uncertainty (Calculated):	0.307	0.307
Result (pCi/L, g, F):	4.487	4.458
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.030	1.019
Numerical Performance Indicator:	0.40	0.35
Percent Recovery:	105.19%	104.44%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS53225	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD53225	
Sample Result (pCi/L, g, F):	4.487	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.030	
Sample Duplicate Result (pCi/L, g, F):	4.458	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.019	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.039	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.72%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

4/7/20

4/17/20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: VAL
Date: 4/7/2020
Worklist: 53226
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1891467
MB concentration:	0.544
MB 2 Sigma CSU:	0.340
MB MDC:	0.632
MB Numerical Performance Indicator:	3.14
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS53226	LCSD53226
Count Date:	4/16/2020	4/16/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.469	34.469
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.806	0.804
Target Conc. (pCi/L, g, F):	4.276	4.289
Uncertainty (Calculated):	0.308	0.309
Result (pCi/L, g, F):	2.644	3.287
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.706	0.811
Numerical Performance Indicator:	-4.15	-2.26
Percent Recovery:	61.83%	76.63%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS53226	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD53226	
Sample Result (pCi/L, g, F):	2.644	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.706	
Sample Duplicate Result (pCi/L, g, F):	3.287	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.811	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.171	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	21.37%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.

JJ 4-17-20

September 2020

Semiannual Event

ARCADIS Design & Consultancy for natural and built assets

Georgia Power Co. – Plant Yates

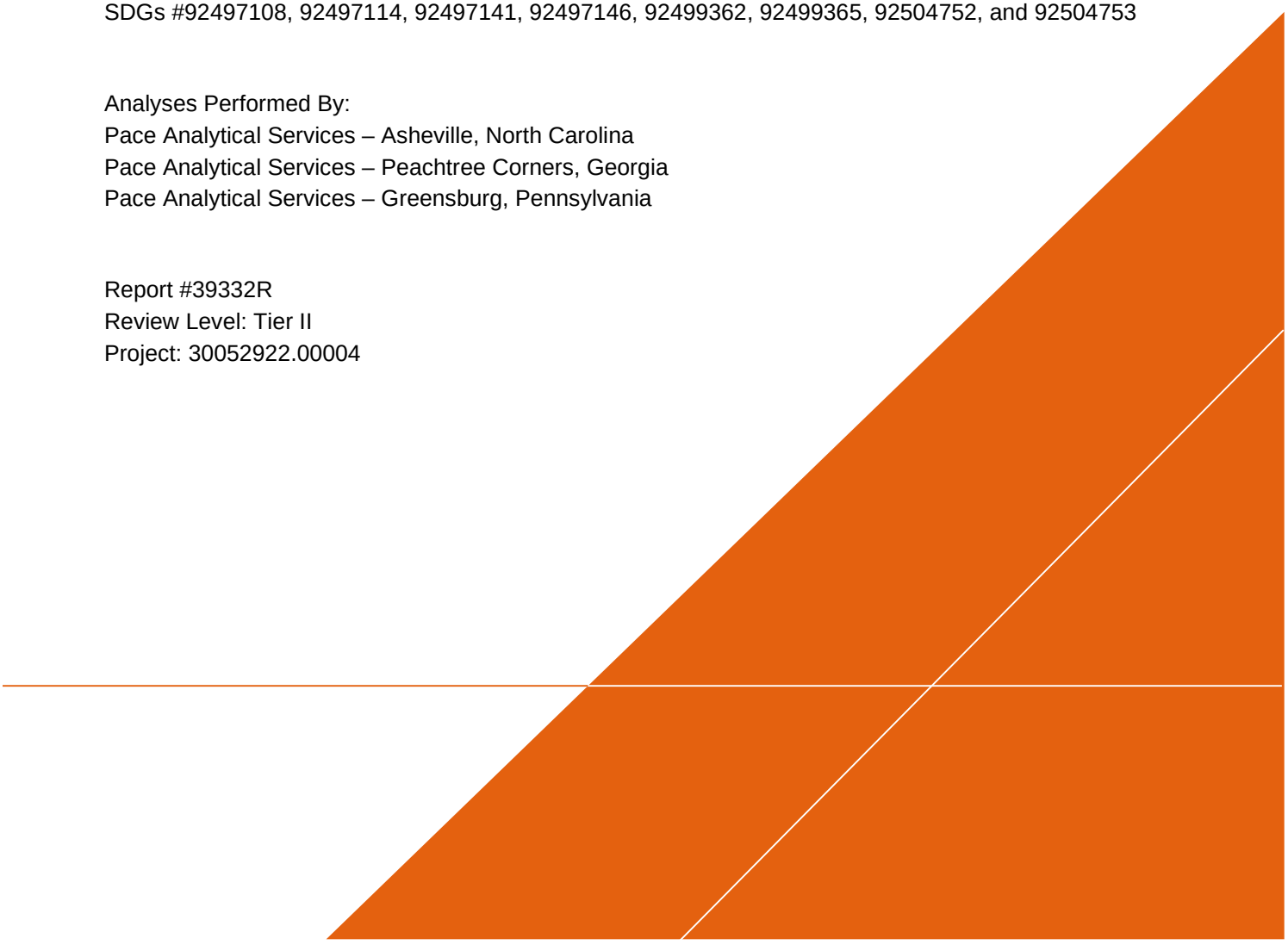
DATA REVIEW

Metals, Radium, and General Chemistry Analyses

SDGs #92497108, 92497114, 92497141, 92497146, 92499362, 92499365, 92504752, and 92504753

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

Report #39332R
Review Level: Tier II
Project: 30052922.00004



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) #92497108, 92497114, 92497141, 92497146, 92499362, 92499365, 92504752, and 92504753 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
92497114 92497141	DUP-01 (092220)	92497114001 92497141001	Water	9/22/2020	YGWA-5I (092220)	X	X	X
	YGWA-4I (092220)	92497114002 92497141002	Water	9/22/2020		X	X	X
	YGWA-5I (092220)	92497114003 92497141003	Water	9/22/2020		X	X	X
	YGWA-5D (092220)	92497114004 92497141004	Water	9/22/2020		X	X	X
	FIELD BLANK-01 (092220)	92497114005 92497141005	Water	9/22/2020		X	X	X
	YGWA-17S (092320)	92497114006 92497141006	Water	9/23/2020		X	X	X
	EQUIPMENT BLANK-01 (092320)	92497114007 92497141007	Water	9/23/2020		X	X	X
	YGWA-18S (092320)	92497114008 92497141008	Water	9/23/2020		X	X	X
	YGWC-24SA (092320)	92497114009 92497141009	Water	9/23/2020		X	X	X
	DUP-02 (092320)	92497114010 92497141010	Water	9/23/2020	YGWC-24SA (092320)	X	X	X
	YGWA-18I	92497114011 92497141011	Water	9/23/2020		X	X	X
	YGWA-20S	92497114012 92497141012	Water	9/24/2020		X	X	X
	YGWA-21I	92497114013 92497141013	Water	9/24/2020		X	X	X
	YGWC-42	92497114014 92497141014	Water	9/24/2020		X	X	X

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
	YGWC-23S	92497114015 92497141015	Water	9/24/2020		X	X	X
	FIELD BLANK-02	92497114016 92497141016	Water	9/25/2020		X	X	X
	YGWC-38	92497114017 92497141017	Water	9/25/2020		X	X	X
	YGWC-43	92497114018 92497141018	Water	9/25/2020		X	X	X
	YGWC-41	92497114019 92497141019	Water	9/25/2020		X	X	X
	EQUIPMENT BLANK-02	92497114020 92497141020	Water	9/25/2020		X	X	X
92497108 92497146	YAMW-2 (09/23/2020)	92497108001 92497146001	Water	9/23/2020		X	X	X
	YAMW-4 (09232020)	92497108002 92497146002	Water	9/23/2020		X	X	X
	YAMW-5 (09242020)	92497108003 92497146003	Water	9/24/2020		X	X	X
	YAMW-1 (09242020)	92497108004 92497146004	Water	9/24/2020		X	X	X
	PZ-35 (09242020)	92497108005 92497146005	Water	9/24/2020		X	X	X
	PZ-37 (09252020)	92497108006 92497146006	Water	9/25/2020		X	X	X
92499362 92499365	YGWC-36A (100720)	92499362001 92499365001	Water	10/7/2020		X	X	X
92504752 92504753	YGWC-49 (09242020)	92497108007 92497146007	Water	9/24/2020		X	X	X
	YGWA-39 (09242020)	92497108008 92497146008	Water	9/24/2020		X	X	X
	YGWA-40 (09242020)	92497108009 92497146009	Water	9/24/2020		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.

SDG #92497141: 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
YGWC-23S YGWC-38	Antimony (EB)	Detected sample results <RL and <BAL	"UB" at the RL
YGWA-20S YGWC-42 YGWC-23S	Beryllium (EB)		
YGWA-20S YGWA-21I	Boron (EB, FB)		
YGWA-20S YGWA-21I YGWC-23S	Lead (EB)		
YGWA-21I	Antimony (EB)	Detected sample results >RL and <BAL	"UB" at the detected sample concentration

Note:

EB Equipment blank

FB Field blank

RL Reporting limit

SDG #92497146: Mercury was detected in the associated method blank (batch 569684); however, the associated sample results were not detected. No qualification of the sample results was required.

SDG #92499365: Antimony was detected in the associated method blank (batch 572214); however, the associated sample results were not detected. No qualification of the sample results was required.

SDG #92504752: 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 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 #92497141: The MS/MSD analysis performed using sample YGWA-18S (092320) in association with SW-846 6010D analysis exhibited recoveries within the control limits.

SDG #92497141: The MS/MSD analysis performed using sample YGWC-42 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.

SDG #92497141: The MS/MSD analysis performed using sample YGWC-41 in association with SW-846 6020B analysis exhibited recoveries within the control limits.

SDGs #92497146, 92499365, and 92504752: 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.

SDG #92497141: MS/MSD analysis was performed using sample YGWA-18S (092320) in association with SW-846 6010D analysis in replacement of laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable an RPD.

SDG #92497141: MS/MSD analysis was performed using sample YGWC-42 in association with SW-846 6010D analysis in replacement of laboratory duplicate 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.

SDG #92497141: MS/MSD analysis was performed using sample YGWC-41 in association with SW-846 6020B analysis in replacement of laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPDs.

SDGs #92497146, 92499365, and 92504752: 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
YGWA-5I (092220) / DUP-01 (092220)	Calcium	2.6	2.6	AC
	Barium	0.019	0.018	
	Boron	0.0053 J	0.10 U	
	Lead	0.000042 J	0.000037 J	
	Lithium	0.0034 J	0.0031 J	
YGWC-24SA (092320) / DUP-02 (092320)	Calcium	2.4	2.4	AC
	Barium	0.026	0.024	
	Beryllium	0.000061 J	0.000060 J	

Notes:

AC = Acceptable

The differences in the results between the parent sample YGWA-5I (092220) and field duplicate sample DUP-01 (092220) were acceptable.

The differences in the results between the parent sample YGWC-24SA (092320) and field duplicate sample DUP-02 (092320) 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.

SDG #92497141: 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
DUP-01 (092220)	TDS (EB)	Detected sample results >RL and <BAL	"UB" at the detected sample concentration

Note:

EB Equipment blank

RL Reporting limit

SDGs #92497141 and 92497146: TDS was detected in the associated method blank (batch 569431); however, the associated sample results were greater than the BAL. No qualification of the sample results was required.

SDGs #92499365 and 92504752: 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.

SDG #92497141: The MS/MSD analysis performed using samples YGWC-24SA (092320) and FIELD BLANK-02 in association with chloride, fluoride, and sulfate analysis exhibited recoveries within the control limits.

SDG #92497146: The MS/MSD analysis performed using sample PZ-35 (09242020) in association with chloride, fluoride, and sulfate exhibited recoveries within control limits with the exception presented in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
PZ-35 (09242020)	Fluoride	71%	AC (81%)

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

SDGs #92499365 and 92504752: 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.

SDG #92497141: The laboratory duplicate analysis performed using sample YGWA-18S (092320) in association with TDS analysis exhibited an RPD outside of the control limits as presented in the following table.

Sample Location	Analytes	Lab Duplicate RPD
YGWA-18S (092320)	TDS	31%

The criteria used to evaluate laboratory duplicate RPD are presented in the following table. In the case of a laboratory duplicate RPD deviation, the sample results are qualified.

Sample Concentration	Control Limit	Sample Result	Qualification
Parent sample and laboratory duplicate sample concentration >5 times RL	Water 20%	Non-detect	UJ
		Detect	J
Parent sample and/or laboratory duplicate sample result ≤ five times the RL and difference between samples >RL	Water one times RL	Non-detect	UJ
		Detect	J

SDGs #92497141 and 92497146: The laboratory duplicate analyses performed on sample locations FIELD BLANK-01 (092220), YGWA-20S, and PZ-37 (09252020) in association with TDS analysis exhibited RPDs within the control limit.

SDGs #92497141 and 92497146: MS/MSD analysis was performed using samples YGWC-24SA (092320), FIELD BLANK-02, and PZ-35 (09242020) in association with chloride, fluoride, and sulfate analysis in replacement of laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPDs.

SDGs #92499365 and 92504752: 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. 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
YGWA-5I (092220) / DUP-01 (092220)	TDS	75.0	47.0 U	NC
	Chloride	4.2	4.2	AC
	Fluoride	0.10 U	0.10 U	
	Sulfate	2.1	2.1	

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-24SA (092320) / DUP-02 (092320)	TDS	87.0	73.0	17.5%
	Chloride	9.3	9.3	0.0%
	Fluoride	0.10 U	0.10 U	AC
	Sulfate	1.0 U	1.0 U	

Notes:

AC = Acceptable

NC = Not compliant

The difference in the TDS results between the parent sample YGWA-5I (092220) and field duplicate sample DUP-01 (092220) were not in agreement. The TDS results in samples YGWA-5I (092220) and DUP-01 (092220) were qualified as estimated.

The differences in the results between the parent sample YGWC-24SA (092320) and field duplicate sample DUP-02 (092320) 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:

$$Z_{Dup} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

x_1, x_2 = two measured activity concentrations.

$u^2(x_1)$, $u^2(x_2)$ = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

SDGs #92497108, 92499362, and 92504753: Laboratory duplicate analysis was not performed using a sample from these SDGs.

SDG #92497114: Laboratory duplicate analysis was performed using sample FIELD BLANK-01 (092220) 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
YGWA-5I (092220) / DUP-01 (092220)	Radium-226	0.0387 ± 0.202	0.142 ± 0.265	AC
	Radium-228	0.389 ± 0.366	0.291 ± 0.395	
	Total Radium	0.428 ± 0.568	0.433 ± 0.660	
YGWC-24SA (092320) / DUP-02 (092320)	Radium-226	-0.0240 ± 0.146	-0.00575 ± 0.196	AC
	Radium-228	0.786 ± 0.514	0.225 ± 0.376	
	Total Radium	0.786 ± 0.660	0.225 ± 0.572	

Notes:

AC = Acceptable

The differences in the results between the parent sample YGWA-5I (092220) and field duplicate sample DUP-01 (092220) were acceptable.

The differences in the results between the parent sample YGWC-24SA (092320) and field duplicate sample DUP-02 (092320) 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 #92497108: YAMW-2 (09/23/2020), YAMW-4 (09232020), YAMW-5 (09242020), and YAMW-1 (09242020); SDG #92497114: DUP-01 (092220), YGWA-5I (092220), FIELD BLANK-01 (092220), YGWA-17S (092320), EQUIPMENT BLANK-01 (092320), YGWA-18S (092320), YGWC-24SA (092320), DUP-02 (092320), YGWA-18I, YGWA-20S, YGWC-23S, FIELD BLANK-02, YGWC-38, YGWC-41, and EQUIPMENT BLANK-02; SDG #92504753: YGWC-49 (09242020), YGWA-39 (09242020), and YGWA-40 (09242020) – Radium-226, Radium-228, and total Radium
- SDG #92497108: PZ-35 (09242020) and PZ-37 (09252020) – Radium-226 and total Radium
- SDG #92497114: YGWA-4I (092220) and YGWC-42 – Radium-228 and total Radium
- SDG #92497114: YGWA-5D (092220) and YGWA-21I, YGWC-43 – 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

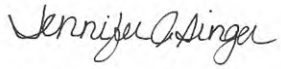
RADIOLOGICALS: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Gas-Flow Proportional System					
Tier II Validation					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Carrier (Surrogate) %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: Jennifer Singer

SIGNATURE: 

DATE: December 11, 2020

PEER REVIEW: Dennis Capria

DATE: December 14, 2020

CHAIN OF CUSTODY / DATA QUALIFIER SUMMARY TABLE

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #: JS
Project Name: Yates ~~Gypsum~~ AMA/RG
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

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	Anions	App III, IV & Hg	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YAMW-2(09232020)	WT	G	9/23	1400				5	✓		✓						✓	✓	✓	✓		92467146
2	YAMW-4(09232020)	WT	G	9/23	1635				5	✓		✓						✓	✓	✓	✓		Ph 5.66 002 TF 9/28
3	YAMW-5(09242020)	WT	G	9/24	1015				5	✓		✓						✓	✓	✓	✓		Ph 5.89 003
4	YAMW-1(09242020)	WT	G	9/24	1205				5	✓		✓						✓	✓	✓	✓		Ph 5.38 004
5	PZ-35(09242020)	WT	G	9/24	1305				5	✓		✓						✓	✓	✓	✓		Ph 6.00 005
6	PZ-37(09252020)	WT	G	9/25	1305				6	✓		✓						✓	✓	✓	✓		Ph 5.92 006
																		✓	-	✓	✓		Ph 5.46

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	9/25/20	1620		9/25/20	1620	
	9/25/20	1803		9/25/20	1803	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 9/25/20

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 1 Of 1

Section A — Required Client Information:

Company: Georgia Power
Address: 1070 Bridge Mill Ave
Suwanee, GA 30174
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B — Required Project Information:

Report To: Becky Sleever
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 (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1	DUP-01 (092220)	W		9/22/20	—				5	/		/							/	/	/	/		—	
2	YGWA-4I (092220)	W		9/22	1120				5	/		/							/	/	/	/		pH 5.80	
3	YGWA-5I (092220)	W		9/22	1305				5	/		/							/	/	/	/		pH 5.99	
4	YGWA-5D (092220)	W		9/22	1540				5	/		/							/	/	/	/		pH 7.19	
5	FIELD BLANK-01 (092220)	W		9/22	1615				5	/		/							/	/	/	/		—	
6	YGWA-17S (092320)	W		9/23	0930				5	/		/							/	/	/	/		pH: 5.58	
7	EQUIPMENT BLANK-01 (092320)	W		9/23	0930				5	/		/							/	/	/	/		—	
8	YGWA-18S (092320)	W		9/23	1340				5	/		/							/	/	/	/		pH: 5.29	
9																									
10																									
11																									
12																									

Residual Chlorine (Y/N): 92447141

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		9/23/20	1525		9/23/20	1525	
		9/23/20	1740		9/23/20	1740	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Guy

SIGNATURE of SAMPLER:

DATE Signed: 9/23/20

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 2 Of 2

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Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10640

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 Y/N	TDS	Anions	App III & IV Metals	App III & IV + Hg	RAD 9315/9320	Residual Chlorine (Y/N)	92497141
13	~~Dup~~	WT																	X	X		X	X		
14	YBWC-24SA(09232020)		G			9-23-20	1405		5	1		1													pH: 5.64
15	DUP-02(09232020)		G			9-23-20	—		5	1		1													
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									

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
	Katie Pupkiewicz/GPC	9-23-20	17:45	[signature] GPC	9/23/20	1740	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Pupkiewicz

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/23/2020

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marion, GA 30114
Mail:
Phone: (770)384-6526 Fax
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates BS AMA
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10640

Site Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YGWA-18I			9/24/20	1540				5	/		/							/	/	/	/		9246 7141
2	YGWA-20S			9/24	0915				5	/		/							/	/	/	/		pH: 6.01 011
3	YGWA-21I			9/24	1145				5	/		/							/	/	/	/		pH: 5.80 012
4	YGWC-42			9/24	1430				5	/		/							/	/	/	/		pH: 6.70 013
5	YGWC-23S			9/24	1705				5	/		/							/	/	/	/		pH: 5.55 014
6	FIELD BLANK-02			9/25	0910				5	/		/							/	/	/	/		pH: 5.51 015
7	YGWC-38			9/25	0940				5	/		/							/	/	/	/		016
8	YGWC-43			9/25	1155				5	/		/							/	/	/	/		pH: 4.90 017
9	YGWC-41			9/25	1335				5	/		/							/	/	/	/		pH: 5.75 018
10	EQUIPMENT BLANK-02			9/25	1350				5	/		/							/	/	/	/		pH: 4.95 019
11																									020
12																									

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Arundis	9/25/20	1620		9/25/20	1620
	9/25/20	1803		9/25/20	1803

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Guy

SIGNATURE of SAMPLER:

DATE Signed: 9/23/20

SAMPLE CONDITIONS

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Arcadis (GA Power)	Report To:	Becky Sleever	Attention:	
Address:	2839 Paces Ferry Rd	Copy To:		Company Name:	
	te 900, Atlanta, GA 30339			Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates	Pace Project Manager:	kevin.herring@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 (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	YGWC-36 A (100720)	WT		10/7	15:16														X	X	X	X	
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

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

Residual Chlorine (Y/N): 42449365

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	B Steven Arcadis	10/7		Charles Yeates	10/7/20	17:43	3.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Beck Steven

SIGNATURE of SAMPLER:

DATE Signed: 10/07/20

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 : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)354-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates ~~CCR~~ AWA/Rule VP
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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App III & IV Metals	RAD 8315/9320	Residual Chlorine (Y/N)	92467146
1	YGWC-49(092420)		G			9/24/20	9:55		5	/		/												pH: 5.62 001
2	YGWA-39(092420)		G			9/24/20	10:02		5	/		/												pH: 5.70 002
3	YGWA-40(092420)		G			9/24/20	11:37		5	/		/												pH: 5.43 003
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MATRIX: 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
		9/25/20	8:03		9/25/20	8:03	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Pypkiewicz
SIGNATURE of SAMPLER: DATE Signed: 9/24/2020

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
92497108	No qualifiers assigned						
92497114	No qualifiers assigned						
92497141	DUP-01 (092220)	SM2540C	TDS	47.0	mg/L	UBJ	Blank contamination, FD RPD > UCL
	YGWA-5I (092220)	SM2540C	TDS	75.0	mg/L	J	FD RPD > UCL
	YGWA-18S (092320)	SM2540C	TDS	81.0	mg/L	J	LD RPD >UCL
	YGWA-20S	SW846 6020	Beryllium	0.0030	mg/L	UB	Blank contamination
			Boron	0.10	mg/L	UB	Blank contamination
			Lead	0.0050	mg/L	UB	Blank contamination
	YGWA-21I	SW846 6020	Antimony	0.0047	mg/L	UB	Blank contamination
			Boron	0.10	mg/L	UB	Blank contamination
			Lead	0.0050	mg/L	UB	Blank contamination
	YGWC-42	SW846 6020	Beryllium	0.0030	mg/L	UB	Blank contamination
	YGWC-23S	SW846 6020	Antimony	0.0030	mg/L	UB	Blank contamination
			Beryllium	0.0030	mg/L	UB	Blank contamination
			Lead	0.0050	mg/L	UB	Blank contamination
	YGWC-38	SW846 6020	Antimony	0.0030	mg/L	UB	Blank contamination
92497146	PZ-35 (09242020)	EPA 300.0	Fluoride	0.10	mg/L	UJ	MS %R <LCL
92499362	No qualifiers assigned						
92499365	No qualifiers assigned						
92504752	No qualifiers assigned						
92504753	No qualifiers assigned						

Abbreviations:
%R = percent recovery
FD = field duplicate
LCL = lower control limit
LD = laboratory duplicate
mg/L = milligrams per liter
MS = matrix spike
RPD = relative percent difference
UCL = upper control limit

Qualifiers:
J = estimated result
UB = not detected due to blank contamination
UJ = not detected with approximate limit of detection

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

November 09, 2020

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

RE: Project: YATES AMA-R6 COMPLIANCE
Pace Project No.: 92504752

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 25, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

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

CERTIFICATIONS

Project: YATES AMA-R6 COMPLIANCE
Pace Project No.: 92504752

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
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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

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

SAMPLE SUMMARY

Project: YATES AMA-R6 COMPLIANCE
Pace Project No.: 92504752

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92497146007	**YGWC-49 (09242020)**	Water	09/24/20 08:55	09/25/20 18:03
92497146008	**YGWA-39 (09242020)**	Water	09/24/20 10:02	09/25/20 18:03
92497146009	**YGWA-40 (09242020)**	Water	09/24/20 11:37	09/25/20 18:03

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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA-R6 COMPLIANCE
Pace Project No.: 92504752

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92497146007	**YGWC-49 (09242020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497146008	**YGWA-39 (09242020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497146009	**YGWA-40 (09242020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	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 COMPLIANCE
Pace Project No.: 92504752

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497146007	**YGWC-49 (09242020)**					
	Performed by	CUSTOMER			10/08/20 08:23	
	pH	5.62	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	12.0	mg/L	1.0	10/01/20 23:03	
EPA 6020B	Barium	0.066	mg/L	0.010	10/05/20 16:35	
EPA 6020B	Beryllium	0.00013J	mg/L	0.0030	10/05/20 16:35	
EPA 6020B	Boron	0.062J	mg/L	0.10	10/05/20 16:35	
EPA 6020B	Chromium	0.0019J	mg/L	0.010	10/05/20 16:35	
EPA 6020B	Lithium	0.0037J	mg/L	0.030	10/05/20 16:35	
EPA 6020B	Selenium	0.0091J	mg/L	0.010	10/05/20 16:35	
SM 2450C-2011	Total Dissolved Solids	187	mg/L	10.0	09/29/20 19:39	
EPA 300.0 Rev 2.1 1993	Chloride	4.6	mg/L	1.0	09/30/20 17:23	
EPA 300.0 Rev 2.1 1993	Sulfate	77.0	mg/L	1.0	09/30/20 17:23	
92497146008	**YGWA-39 (09242020)**					
	Performed by	CUSTOMER			10/08/20 08:23	
	pH	5.70	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	3.7	mg/L	1.0	10/01/20 23:07	
EPA 6020B	Barium	0.016	mg/L	0.010	10/05/20 16:41	
EPA 6020B	Boron	0.037J	mg/L	0.10	10/05/20 16:41	
EPA 6020B	Cobalt	0.00053J	mg/L	0.0050	10/05/20 16:41	
EPA 6020B	Lithium	0.0054J	mg/L	0.030	10/05/20 16:41	
EPA 6020B	Molybdenum	0.0016J	mg/L	0.010	10/05/20 16:41	
SM 2450C-2011	Total Dissolved Solids	170	mg/L	10.0	09/29/20 19:39	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	09/30/20 17:37	
EPA 300.0 Rev 2.1 1993	Sulfate	11.7	mg/L	1.0	09/30/20 17:37	
92497146009	**YGWA-40 (09242020)**					
	Performed by	CUSTOMER			10/08/20 08:23	
	pH	5.43	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	4.4	mg/L	1.0	10/01/20 23:11	
EPA 6020B	Barium	0.028	mg/L	0.010	10/05/20 16:47	
EPA 6020B	Beryllium	0.00020J	mg/L	0.0030	10/05/20 16:47	
EPA 6020B	Boron	0.087J	mg/L	0.10	10/05/20 16:47	
EPA 6020B	Lead	0.000038J	mg/L	0.0050	10/05/20 16:47	
EPA 6020B	Selenium	0.0016J	mg/L	0.010	10/05/20 16:47	
SM 2450C-2011	Total Dissolved Solids	77.0	mg/L	10.0	09/30/20 09:31	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	09/30/20 17:52	
EPA 300.0 Rev 2.1 1993	Sulfate	22.9	mg/L	1.0	09/30/20 17:52	

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

ANALYTICAL RESULTS

Project: YATES AMA-R6 COMPLIANCE
Pace Project No.: 92504752

Sample: YGWC-49 (09242020) **Lab ID: 92497146007** Collected: 09/24/20 08:55 Received: 09/25/20 18:03 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		10/08/20 08:23		
pH	**5.62**	Std. Units			1		10/08/20 08:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**12.0**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 23:03	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	09/30/20 20:47	10/05/20 16:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 16:35	7440-38-2	
Barium	**0.066**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 16:35	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 16:35	7440-41-7	
Boron	**0.062J**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 16:35	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 16:35	7440-43-9	
Chromium	**0.0019J**	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 16:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 16:35	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 16:35	7439-92-1	
Lithium	**0.0037J**	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 16:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 16:35	7439-98-7	
Selenium	**0.0091J**	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 16:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 16:35	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**187**	mg/L	10.0	10.0	1		09/29/20 19:39		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.6**	mg/L	1.0	0.60	1		09/30/20 17:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/20 17:23	16984-48-8	
Sulfate	**77.0**	mg/L	1.0	0.50	1		09/30/20 17:23	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 COMPLIANCE
Pace Project No.: 92504752

Sample: YGWA-39 (09242020) **Lab ID: 92497146008** Collected: 09/24/20 10:02 Received: 09/25/20 18:03 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		10/08/20 08:23		
pH	**5.70**	Std. Units			1		10/08/20 08:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**3.7**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 23:07	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	09/30/20 20:47	10/05/20 16:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 16:41	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 16:41	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 16:41	7440-41-7	
Boron	**0.037J**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 16:41	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 16:41	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 16:41	7440-47-3	
Cobalt	**0.00053J**	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 16:41	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 16:41	7439-92-1	
Lithium	**0.0054J**	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 16:41	7439-93-2	
Molybdenum	**0.0016J**	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 16:41	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 16:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 16:41	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**170**	mg/L	10.0	10.0	1		09/29/20 19:39		
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		09/30/20 17:37	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/20 17:37	16984-48-8	
Sulfate	**11.7**	mg/L	1.0	0.50	1		09/30/20 17:37	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 COMPLIANCE
Pace Project No.: 92504752

Sample: YGWA-40 (09242020) **Lab ID: 92497146009** Collected: 09/24/20 11:37 Received: 09/25/20 18:03 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		10/08/20 08:23		
pH	**5.43**	Std. Units			1		10/08/20 08:23		
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	09/30/20 20:44	10/01/20 23:11	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/30/20 20:47	10/05/20 16:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 16:47	7440-38-2	
Barium	**0.028**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 16:47	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 16:47	7440-41-7	
Boron	**0.087J**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 16:47	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 16:47	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 16:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 16:47	7440-48-4	
Lead	**0.000038J**	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 16:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 16:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 16:47	7439-98-7	
Selenium	**0.0016J**	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 16:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 16:47	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**77.0**	mg/L	10.0	10.0	1		09/30/20 09:31		
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		09/30/20 17:52	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/20 17:52	16984-48-8	
Sulfate	**22.9**	mg/L	1.0	0.50	1		09/30/20 17:52	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 COMPLIANCE
Pace Project No.: 92504752

QC Batch: 570091
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497146007, 92497146008, 92497146009

METHOD BLANK: 3020059 Matrix: Water
Associated Lab Samples: 92497146007, 92497146008, 92497146009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	10/01/20 21:32	

LABORATORY CONTROL SAMPLE: 3020060

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.95J	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020061 3020062

Parameter	Units	92497141014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	84.3	1	1	87.0	87.6	271	337	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 COMPLIANCE
Pace Project No.: 92504752

QC Batch: 570092
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497146007, 92497146008, 92497146009

METHOD BLANK: 3020066 Matrix: Water
Associated Lab Samples: 92497146007, 92497146008, 92497146009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	10/05/20 14:57	
Arsenic	mg/L	ND	0.0050	0.00078	10/05/20 14:57	
Barium	mg/L	ND	0.010	0.00071	10/05/20 14:57	
Beryllium	mg/L	ND	0.0030	0.000046	10/05/20 14:57	
Boron	mg/L	ND	0.10	0.0052	10/05/20 14:57	
Cadmium	mg/L	ND	0.0025	0.00012	10/05/20 14:57	
Chromium	mg/L	ND	0.010	0.00055	10/05/20 14:57	
Cobalt	mg/L	ND	0.0050	0.00038	10/05/20 14:57	
Lead	mg/L	ND	0.0050	0.000036	10/05/20 14:57	
Lithium	mg/L	ND	0.030	0.00081	10/05/20 14:57	
Molybdenum	mg/L	ND	0.010	0.00069	10/05/20 14:57	
Selenium	mg/L	ND	0.010	0.0016	10/05/20 14:57	
Thallium	mg/L	ND	0.0010	0.00014	10/05/20 14:57	

LABORATORY CONTROL SAMPLE: 3020067

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	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	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	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.095	95	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020068 3020069

Parameter	Units	92497141019 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	0.096	0.098	96	98	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.094	0.097	94	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-R6 COMPLIANCE
Pace Project No.: 92504752

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020068 3020069

Parameter	Units	92497141019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.016	0.1	0.1	0.11	0.11	94	96	75-125	2	20	
Beryllium	mg/L	0.0020J	0.1	0.1	0.096	0.098	94	96	75-125	2	20	
Boron	mg/L	6.0	1	1	7.0	7.2	98	113	75-125	2	20	
Cadmium	mg/L	0.00014J	0.1	0.1	0.097	0.098	96	97	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.10	95	100	75-125	5	20	
Lead	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	
Lithium	mg/L	0.0025J	0.1	0.1	0.097	0.099	94	97	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Selenium	mg/L	0.046	0.1	0.1	0.14	0.15	99	100	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.093	0.096	93	96	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-R6 COMPLIANCE
Pace Project No.: 92504752

QC Batch: 569806
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: 92497146007, 92497146008

METHOD BLANK: 3018686 Matrix: Water
Associated Lab Samples: 92497146007, 92497146008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/29/20 18:54	

LABORATORY CONTROL SAMPLE: 3018687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	402	100	84-108	

SAMPLE DUPLICATE: 3018688

Parameter	Units	92497721002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	386	353	9	10	

SAMPLE DUPLICATE: 3018689

Parameter	Units	92497141012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	74.0	7	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 COMPLIANCE
Pace Project No.: 92504752

QC Batch: 569876
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: 92497146009

METHOD BLANK: 3018866 Matrix: Water
Associated Lab Samples: 92497146009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/30/20 09:30	

LABORATORY CONTROL SAMPLE: 3018867

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	403	101	84-108	

SAMPLE DUPLICATE: 3018868

Parameter	Units	92497125003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	124	118	5	10	

SAMPLE DUPLICATE: 3018869

Parameter	Units	92497149013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	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 COMPLIANCE
Pace Project No.: 92504752

QC Batch: 569922
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: 92497146007, 92497146008, 92497146009

METHOD BLANK: 3019036 Matrix: Water
Associated Lab Samples: 92497146007, 92497146008, 92497146009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/20 11:24	
Fluoride	mg/L	ND	0.10	0.050	09/30/20 11:24	
Sulfate	mg/L	ND	1.0	0.50	09/30/20 11:24	

LABORATORY CONTROL SAMPLE: 3019037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.4	95	90-110	
Sulfate	mg/L	50	50.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3019038 3019039

Parameter	Units	92497713005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	25.7	50	50	75.8	77.8	100	104	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.9	92	116	90-110	23	10	M1,R1
Sulfate	mg/L	1.3	50	50	53.1	55.8	104	109	90-110	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3019040 3019041

Parameter	Units	92497146005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.5	50	50	59.7	61.3	104	108	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	1.8	2.0	71	81	90-110	13	10	M1,R1
Sulfate	mg/L	7.2	50	50	59.9	61.2	105	108	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

QUALIFIERS

Project: YATES AMA-R6 COMPLIANCE
Pace Project No.: 92504752

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.
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 COMPLIANCE
Pace Project No.: 92504752

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497146007	**YGWC-49 (09242020)**				
92497146008	**YGWA-39 (09242020)**				
92497146009	**YGWA-40 (09242020)**				
92497146007	**YGWC-49 (09242020)**	EPA 3010A	570091	EPA 6010D	570131
92497146008	**YGWA-39 (09242020)**	EPA 3010A	570091	EPA 6010D	570131
92497146009	**YGWA-40 (09242020)**	EPA 3010A	570091	EPA 6010D	570131
92497146007	**YGWC-49 (09242020)**	EPA 3005A	570092	EPA 6020B	570132
92497146008	**YGWA-39 (09242020)**	EPA 3005A	570092	EPA 6020B	570132
92497146009	**YGWA-40 (09242020)**	EPA 3005A	570092	EPA 6020B	570132
92497146007	**YGWC-49 (09242020)**	SM 2450C-2011	569806		
92497146008	**YGWA-39 (09242020)**	SM 2450C-2011	569806		
92497146009	**YGWA-40 (09242020)**	SM 2450C-2011	569876		
92497146007	**YGWC-49 (09242020)**	EPA 300.0 Rev 2.1 1993	569922		
92497146008	**YGWA-39 (09242020)**	EPA 300.0 Rev 2.1 1993	569922		
92497146009	**YGWA-40 (09242020)**	EPA 300.0 Rev 2.1 1993	569922		

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

WO#: 92497146

92497146

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

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no

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

Thermometer Used 230 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.4 C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/23/2004

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical

Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
Document No.: F-CAR-CS-043-Rev.00	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 bottle

Project # **WO# : 92497146**

PM: KLH1 Due Date: 10/07/20
CLIENT: GA-GA Power

Matrix	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 (NH2)2SO4 (9.3-9.7)	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)
	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	Lo

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 C
Out of hold, incorrect preservative, out of temp, incorrect containers.

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 : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Canton, GA 30114
Email:
Phone: (770)354-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates AP1 AWA/RVP
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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	92467146
1	YGWC-49(092420)		G			9/24/20	9:55		5	/		/												pH: 5.62 001
2	YGWA-39(092420)		G			9/24/20	10:02		5	/		/												pH: 5.70 002
3	YGWA-40(092420)		G			9/24/20	11:37		5	/		/												pH: 5.43 003
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MATRIX: 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
		9/25/20	8:03		9/25/20	8:03	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Pypkiewicz
SIGNATURE of SAMPLER: DATE Signed: 9/24/2020

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 14, 2020

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

RE: Project: YATES AMA
Pace Project No.: 92497141

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between September 23, 2020 and September 25, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
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.: 92497141

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
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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

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

SAMPLE SUMMARY

Project: YATES AMA
Pace Project No.: 92497141

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92497141001	**DUP-01 (092220)**	Water	09/22/20 00:00	09/23/20 17:40
92497141002	**YGWA-4I (092220)**	Water	09/22/20 11:20	09/23/20 17:40
92497141003	**YGWA-5I (092220)**	Water	09/22/20 13:05	09/23/20 17:40
92497141004	**YGWA-5D (092220)**	Water	09/22/20 15:40	09/23/20 17:40
92497141005	**FIELD BLANK-01 (092220)**	Water	09/22/20 16:15	09/23/20 17:40
92497141006	**YGWA-17S (092320)**	Water	09/23/20 09:20	09/23/20 17:40
92497141007	**EQUIPMENT BLANK-01 (092320)**	Water	09/23/20 09:50	09/23/20 17:40
92497141008	**YGWA-18S (092320)**	Water	09/23/20 13:40	09/23/20 17:40
92497141009	**YGWC-24SA (092320)**	Water	09/23/20 14:05	09/23/20 17:40
92497141010	**DUP-02 (092320)**	Water	09/23/20 00:00	09/23/20 17:40
92497141011	**YGWA-18I**	Water	09/23/20 15:40	09/25/20 18:03
92497141012	**YGWA-20S**	Water	09/24/20 09:15	09/25/20 18:03
92497141013	**YGWA-21I**	Water	09/24/20 11:45	09/25/20 18:03
92497141014	**YGWC-42**	Water	09/24/20 14:20	09/25/20 18:03
92497141015	**YGWC-23S**	Water	09/24/20 17:05	09/25/20 18:03
92497141016	**FIELD BLANK-02**	Water	09/25/20 09:10	09/25/20 18:03
92497141017	**YGWC-38**	Water	09/25/20 09:40	09/25/20 18:03
92497141018	**YGWC-43**	Water	09/25/20 11:55	09/25/20 18:03
92497141019	**YGWC-41**	Water	09/25/20 13:35	09/25/20 18:03
92497141020	**EQUIPMENT BLANK-02**	Water	09/25/20 13:50	09/25/20 18:03

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

SAMPLE ANALYTE COUNT

Project: YATES AMA
Pace Project No.: 92497141

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92497141001	**DUP-01 (092220)**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141002	**YGWA-4I (092220)**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141003	**YGWA-5I (092220)**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141004	**YGWA-5D (092220)**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141005	**FIELD BLANK-01 (092220)**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141006	**YGWA-17S (092320)**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141007	**EQUIPMENT BLANK-01 (092320)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141008	**YGWA-18S (092320)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141009	**YGWC-24SA (092320)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141010	**DUP-02 (092320)**	EPA 6010D	DRB	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
Pace Project No.: 92497141

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497141011	**YGWA-18I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141012	**YGWA-20S**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141013	**YGWA-21I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141014	**YGWC-42**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141015	**YGWC-23S**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141016	**FIELD BLANK-02**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141017	**YGWC-38**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141018	**YGWC-43**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141019	**YGWC-41**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13

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

SAMPLE ANALYTE COUNT

Project: YATES AMA
Pace Project No.: 92497141

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497141020	**EQUIPMENT BLANK-02**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2450C-2011	AW1	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

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

SUMMARY OF DETECTION

Project: YATES AMA
Pace Project No.: 92497141

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497141001	**DUP-01 (092220)**					
EPA 6010D	Calcium	2.6	mg/L	1.0	09/28/20 21:11	
EPA 6020B	Barium	0.018	mg/L	0.010	09/30/20 18:56	
EPA 6020B	Lead	0.000037J	mg/L	0.0050	09/30/20 18:56	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	09/30/20 18:56	
SM 2450C-2011	Total Dissolved Solids	47.0	mg/L	10.0	09/25/20 17:59	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	09/26/20 18:55	
EPA 300.0 Rev 2.1 1993	Sulfate	2.1	mg/L	1.0	09/26/20 18:55	
92497141002	**YGWA-4I (092220)**					
	pH	5.80	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	9.6	mg/L	1.0	09/28/20 21:15	
EPA 6020B	Barium	0.013	mg/L	0.010	09/30/20 19:01	
EPA 6020B	Lithium	0.013J	mg/L	0.030	09/30/20 19:01	
SM 2450C-2011	Total Dissolved Solids	83.0	mg/L	10.0	09/25/20 17:59	
EPA 300.0 Rev 2.1 1993	Chloride	4.5	mg/L	1.0	09/26/20 19:10	
EPA 300.0 Rev 2.1 1993	Sulfate	8.2	mg/L	1.0	09/26/20 19:10	
92497141003	**YGWA-5I (092220)**					
	pH	5.99	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	2.6	mg/L	1.0	09/28/20 21:20	
EPA 6020B	Barium	0.019	mg/L	0.010	09/30/20 19:07	
EPA 6020B	Boron	0.0053J	mg/L	0.10	09/30/20 19:07	
EPA 6020B	Lead	0.000042J	mg/L	0.0050	09/30/20 19:07	
EPA 6020B	Lithium	0.0034J	mg/L	0.030	09/30/20 19:07	
SM 2450C-2011	Total Dissolved Solids	75.0	mg/L	10.0	09/25/20 18:00	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	09/26/20 19:24	
EPA 300.0 Rev 2.1 1993	Sulfate	2.1	mg/L	1.0	09/26/20 19:24	
92497141004	**YGWA-5D (092220)**					
	pH	7.19	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	27.2	mg/L	1.0	09/28/20 21:24	
EPA 6020B	Arsenic	0.0010J	mg/L	0.0050	09/30/20 19:13	
EPA 6020B	Barium	0.0076J	mg/L	0.010	09/30/20 19:13	
EPA 6020B	Boron	0.0079J	mg/L	0.10	09/30/20 19:13	
EPA 6020B	Chromium	0.0011J	mg/L	0.010	09/30/20 19:13	
EPA 6020B	Lead	0.000045J	mg/L	0.0050	09/30/20 19:13	
EPA 6020B	Lithium	0.0066J	mg/L	0.030	09/30/20 19:13	
EPA 6020B	Molybdenum	0.00099J	mg/L	0.010	09/30/20 19:13	
SM 2450C-2011	Total Dissolved Solids	104	mg/L	10.0	09/25/20 18:00	
EPA 300.0 Rev 2.1 1993	Chloride	3.6	mg/L	1.0	09/26/20 19:39	
EPA 300.0 Rev 2.1 1993	Fluoride	0.056J	mg/L	0.10	09/26/20 19:39	
EPA 300.0 Rev 2.1 1993	Sulfate	5.5	mg/L	1.0	09/26/20 19:39	
92497141006	**YGWA-17S (092320)**					
	pH	5.58	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	2.6	mg/L	1.0	09/28/20 21:33	
EPA 6020B	Barium	0.015	mg/L	0.010	09/30/20 19:24	
EPA 6020B	Beryllium	0.000081J	mg/L	0.0030	09/30/20 19:24	
EPA 6020B	Boron	0.0066J	mg/L	0.10	09/30/20 19:24	

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.: 92497141

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497141006	**YGWA-17S (092320)**					
EPA 6020B	Chromium	0.00098J	mg/L	0.010	09/30/20 19:24	
EPA 6020B	Lead	0.000041J	mg/L	0.0050	09/30/20 19:24	
SM 2450C-2011	Total Dissolved Solids	99.0	mg/L	10.0	09/28/20 14:27	
EPA 300.0 Rev 2.1 1993	Chloride	6.6	mg/L	1.0	09/26/20 20:37	
EPA 300.0 Rev 2.1 1993	Sulfate	5.1	mg/L	1.0	09/26/20 20:37	
92497141007	**EQUIPMENT BLANK-01 (092320)**					
SM 2450C-2011	Total Dissolved Solids	10.0	mg/L	10.0	09/28/20 14:41	
92497141008	**YGWA-18S (092320)**					
	pH	5.29	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	0.91J	mg/L	1.0	09/30/20 18:58	
EPA 6020B	Barium	0.016	mg/L	0.010	09/30/20 19:47	
EPA 6020B	Beryllium	0.000088J	mg/L	0.0030	09/30/20 19:47	
EPA 6020B	Boron	0.0060J	mg/L	0.10	09/30/20 19:47	
EPA 6020B	Chromium	0.0012J	mg/L	0.010	09/30/20 19:47	
EPA 6020B	Lead	0.000097J	mg/L	0.0050	09/30/20 19:47	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	09/30/20 19:47	
SM 2450C-2011	Total Dissolved Solids	81.0	mg/L	10.0	09/28/20 14:41	D6
EPA 300.0 Rev 2.1 1993	Chloride	7.2	mg/L	1.0	09/26/20 21:05	
EPA 300.0 Rev 2.1 1993	Sulfate	1.1	mg/L	1.0	09/26/20 21:05	
92497141009	**YGWC-24SA (092320)**					
	pH	5.64	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	2.4	mg/L	1.0	09/30/20 19:16	
EPA 6020B	Barium	0.026	mg/L	0.010	09/30/20 19:53	
EPA 6020B	Beryllium	0.000061J	mg/L	0.0030	09/30/20 19:53	
SM 2450C-2011	Total Dissolved Solids	87.0	mg/L	10.0	09/28/20 14:42	
EPA 300.0 Rev 2.1 1993	Chloride	9.3	mg/L	1.0	09/26/20 21:20	M1
92497141010	**DUP-02 (092320)**					
EPA 6010D	Calcium	2.4	mg/L	1.0	09/30/20 19:20	
EPA 6020B	Barium	0.024	mg/L	0.010	09/30/20 19:59	
EPA 6020B	Beryllium	0.000060J	mg/L	0.0030	09/30/20 19:59	
SM 2450C-2011	Total Dissolved Solids	73.0	mg/L	10.0	09/28/20 14:42	
EPA 300.0 Rev 2.1 1993	Chloride	9.3	mg/L	1.0	09/26/20 22:03	
92497141011	**YGWA-18I**					
	Performed by	CUSTOMER			10/08/20 08:17	
	pH	6.01	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	5.2	mg/L	1.0	10/01/20 21:15	
EPA 6020B	Barium	0.021	mg/L	0.010	10/03/20 19:28	
EPA 6020B	Boron	0.021J	mg/L	0.10	10/03/20 19:28	
EPA 6020B	Chromium	0.00092J	mg/L	0.010	10/03/20 19:28	
EPA 6020B	Lead	0.000060J	mg/L	0.0050	10/03/20 19:28	
EPA 6020B	Lithium	0.0030J	mg/L	0.030	10/03/20 19:28	
SM 2450C-2011	Total Dissolved Solids	103	mg/L	10.0	09/28/20 17:31	
EPA 300.0 Rev 2.1 1993	Chloride	7.2	mg/L	1.0	09/30/20 23:32	

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.: 92497141

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497141011	**YGWA-18I**					
EPA 300.0 Rev 2.1 1993	Sulfate	0.53J	mg/L	1.0	09/30/20 23:32	
92497141012	**YGWA-20S**					
	Performed by	CUSTOMER			10/08/20 08:17	
	pH	5.80	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	2.6	mg/L	1.0	10/01/20 21:20	
EPA 6020B	Barium	0.015	mg/L	0.010	10/03/20 19:34	
EPA 6020B	Beryllium	0.000083J	mg/L	0.0030	10/03/20 19:34	
EPA 6020B	Boron	0.0094J	mg/L	0.10	10/03/20 19:34	
EPA 6020B	Chromium	0.00076J	mg/L	0.010	10/03/20 19:34	
EPA 6020B	Lead	0.000092J	mg/L	0.0050	10/03/20 19:34	
SM 2450C-2011	Total Dissolved Solids	69.0	mg/L	10.0	09/29/20 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	09/30/20 23:47	
92497141013	**YGWA-21I**					
	Performed by	CUSTOMER			10/08/20 08:17	
	pH	6.70	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	7.8	mg/L	1.0	10/01/20 21:24	
EPA 6020B	Antimony	0.0047	mg/L	0.0030	10/03/20 19:40	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	10/03/20 19:40	
EPA 6020B	Barium	0.010	mg/L	0.010	10/03/20 19:40	
EPA 6020B	Boron	0.013J	mg/L	0.10	10/03/20 19:40	
EPA 6020B	Cobalt	0.0079	mg/L	0.0050	10/03/20 19:40	
EPA 6020B	Lead	0.000046J	mg/L	0.0050	10/03/20 19:40	
EPA 6020B	Lithium	0.0069J	mg/L	0.030	10/03/20 19:40	
SM 2450C-2011	Total Dissolved Solids	113	mg/L	10.0	09/29/20 19:25	
EPA 300.0 Rev 2.1 1993	Chloride	2.0	mg/L	1.0	10/01/20 00:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.079J	mg/L	0.10	10/01/20 00:01	
EPA 300.0 Rev 2.1 1993	Sulfate	3.6	mg/L	1.0	10/01/20 00:01	
92497141014	**YGWC-42**					
	Performed by	CUSTOMER			10/08/20 08:17	
	pH	5.55	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	84.3	mg/L	1.0	10/01/20 21:50	M1
EPA 6020B	Barium	0.026	mg/L	0.010	10/03/20 19:57	
EPA 6020B	Beryllium	0.000067J	mg/L	0.0030	10/03/20 19:57	
EPA 6020B	Boron	15.2	mg/L	1.0	10/06/20 13:04	
EPA 6020B	Cadmium	0.00014J	mg/L	0.0025	10/03/20 19:57	
EPA 6020B	Cobalt	0.0017J	mg/L	0.0050	10/03/20 19:57	
EPA 6020B	Lithium	0.050	mg/L	0.030	10/03/20 19:57	
EPA 6020B	Molybdenum	0.00091J	mg/L	0.010	10/03/20 19:57	
EPA 6020B	Selenium	0.046	mg/L	0.010	10/03/20 19:57	
SM 2450C-2011	Total Dissolved Solids	1060	mg/L	20.0	09/29/20 19:25	
EPA 300.0 Rev 2.1 1993	Chloride	3.3	mg/L	1.0	10/01/20 00:16	
EPA 300.0 Rev 2.1 1993	Sulfate	579	mg/L	12.0	10/01/20 05:34	

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.: 92497141

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497141015	**YGWC-23S**					
	Performed by	CUSTOMER			10/08/20 08:17	
	pH	5.51	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	7.9	mg/L	1.0	10/01/20 22:07	
EPA 6020B	Antimony	0.00085J	mg/L	0.0030	10/03/20 20:03	
EPA 6020B	Barium	0.035	mg/L	0.010	10/03/20 20:03	
EPA 6020B	Beryllium	0.00015J	mg/L	0.0030	10/03/20 20:03	
EPA 6020B	Boron	1.1	mg/L	0.10	10/03/20 20:03	
EPA 6020B	Chromium	0.0011J	mg/L	0.010	10/03/20 20:03	
EPA 6020B	Lead	0.000046J	mg/L	0.0050	10/03/20 20:03	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	10/03/20 20:03	
EPA 6020B	Selenium	0.031	mg/L	0.010	10/03/20 20:03	
SM 2450C-2011	Total Dissolved Solids	129	mg/L	10.0	09/29/20 19:26	
EPA 300.0 Rev 2.1 1993	Chloride	2.0	mg/L	1.0	10/01/20 00:30	
EPA 300.0 Rev 2.1 1993	Sulfate	52.5	mg/L	1.0	10/01/20 00:30	
92497141016	**FIELD BLANK-02**					
EPA 6020B	Boron	0.022J	mg/L	0.10	10/03/20 20:09	
92497141017	**YGWC-38**					
	Performed by	CUSTOMER			10/08/20 08:17	
	pH	4.90	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	93.7	mg/L	1.0	10/01/20 22:16	
EPA 6020B	Antimony	0.00061J	mg/L	0.0030	10/03/20 20:14	
EPA 6020B	Barium	0.015	mg/L	0.010	10/03/20 20:14	
EPA 6020B	Beryllium	0.0033	mg/L	0.0030	10/03/20 20:14	
EPA 6020B	Boron	8.0	mg/L	0.10	10/03/20 20:14	
EPA 6020B	Cadmium	0.0015J	mg/L	0.0025	10/03/20 20:14	
EPA 6020B	Lithium	0.0069J	mg/L	0.030	10/03/20 20:14	
EPA 6020B	Selenium	0.076	mg/L	0.010	10/03/20 20:14	
SM 2450C-2011	Total Dissolved Solids	664	mg/L	20.0	10/01/20 15:22	
EPA 300.0 Rev 2.1 1993	Chloride	4.0	mg/L	1.0	10/01/20 01:57	
EPA 300.0 Rev 2.1 1993	Sulfate	414	mg/L	9.0	10/01/20 05:49	
92497141018	**YGWC-43**					
	Performed by	CUSTOMER			10/08/20 08:17	
	pH	5.75	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	19.8	mg/L	1.0	10/01/20 22:20	
EPA 6020B	Barium	0.046	mg/L	0.010	10/03/20 20:20	
EPA 6020B	Beryllium	0.00054J	mg/L	0.0030	10/03/20 20:20	
EPA 6020B	Boron	3.9	mg/L	0.10	10/03/20 20:20	
EPA 6020B	Chromium	0.00071J	mg/L	0.010	10/03/20 20:20	
EPA 6020B	Cobalt	0.0018J	mg/L	0.0050	10/03/20 20:20	
EPA 6020B	Lithium	0.018J	mg/L	0.030	10/03/20 20:20	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	10/03/20 20:20	
SM 2450C-2011	Total Dissolved Solids	494	mg/L	10.0	10/01/20 15:22	
EPA 300.0 Rev 2.1 1993	Chloride	2.3	mg/L	1.0	10/01/20 02:11	

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.: 92497141

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497141018	**YGWC-43**					
EPA 300.0 Rev 2.1 1993	Sulfate	281	mg/L	6.0	10/01/20 06:03	
92497141019	**YGWC-41**					
	Performed by	CUSTOMER			10/08/20 08:17	
	pH	4.95	Std. Units		10/08/20 08:17	
EPA 6010D	Calcium	20.5	mg/L	1.0	10/01/20 22:24	
EPA 6020B	Barium	0.016	mg/L	0.010	10/05/20 15:09	
EPA 6020B	Beryllium	0.0020J	mg/L	0.0030	10/05/20 15:09	
EPA 6020B	Boron	6.0	mg/L	0.10	10/05/20 15:09	
EPA 6020B	Cadmium	0.00014J	mg/L	0.0025	10/05/20 15:09	
EPA 6020B	Lithium	0.0025J	mg/L	0.030	10/05/20 15:09	
EPA 6020B	Selenium	0.046	mg/L	0.010	10/05/20 15:09	
SM 2450C-2011	Total Dissolved Solids	307	mg/L	10.0	10/01/20 15:23	
EPA 300.0 Rev 2.1 1993	Chloride	3.0	mg/L	1.0	10/01/20 02:26	
EPA 300.0 Rev 2.1 1993	Sulfate	175	mg/L	4.0	10/01/20 06:17	
92497141020	**EQUIPMENT BLANK-02**					
EPA 6020B	Antimony	0.0017J	mg/L	0.0030	10/05/20 15:32	
EPA 6020B	Beryllium	0.000060J	mg/L	0.0030	10/05/20 15:32	
EPA 6020B	Boron	0.048J	mg/L	0.10	10/05/20 15:32	
EPA 6020B	Lead	0.000067J	mg/L	0.0050	10/05/20 15:32	

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92497141

Sample: DUP-01 (092220) **Lab ID: 92497141001** Collected: 09/22/20 00:00 Received: 09/23/20 17:40 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	**2.6**	mg/L	1.0	0.070	1	09/25/20 15:02	09/28/20 21:11	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	0.00028	1	09/29/20 18:28	09/30/20 18:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 18:56	7440-38-2	
Barium	**0.018**	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 18:56	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 18:56	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 18:56	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 18:56	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 18:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 18:56	7440-48-4	
Lead	**0.000037J**	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 18:56	7439-92-1	
Lithium	**0.0031J**	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 18:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 18:56	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 18:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 18:56	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**47.0**	mg/L	10.0	10.0	1		09/25/20 17:59		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.2**	mg/L	1.0	0.60	1		09/26/20 18:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 18:55	16984-48-8	
Sulfate	**2.1**	mg/L	1.0	0.50	1		09/26/20 18:55	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.: 92497141

Sample: YGWA-4I (092220) **Lab ID: 92497141002** Collected: 09/22/20 11:20 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.80**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**9.6**	mg/L	1.0	0.070	1	09/25/20 15:02	09/28/20 21:15	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	0.00028	1	09/29/20 18:28	09/30/20 19:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:01	7440-38-2	
Barium	**0.013**	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:01	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:01	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:01	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:01	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:01	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:01	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:01	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:01	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**83.0**	mg/L	10.0	10.0	1		09/25/20 17:59		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.5**	mg/L	1.0	0.60	1		09/26/20 19:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 19:10	16984-48-8	
Sulfate	**8.2**	mg/L	1.0	0.50	1		09/26/20 19:10	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.: 92497141

Sample: YGWA-5I (092220) **Lab ID: 92497141003** Collected: 09/22/20 13:05 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.99**	Std. Units			1		10/08/20 08:17		
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	09/25/20 15:02	09/28/20 21:20	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	09/29/20 18:28	09/30/20 19:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:07	7440-38-2	
Barium	**0.019**	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:07	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:07	7440-41-7	
Boron	**0.0053J**	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:07	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:07	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:07	7440-48-4	
Lead	**0.000042J**	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:07	7439-92-1	
Lithium	**0.0034J**	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:07	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:07	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**75.0**	mg/L	10.0	10.0	1		09/25/20 18:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.2**	mg/L	1.0	0.60	1		09/26/20 19:24	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 19:24	16984-48-8	
Sulfate	**2.1**	mg/L	1.0	0.50	1		09/26/20 19:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92497141

Sample: YGWA-5D (092220) **Lab ID: 92497141004** Collected: 09/22/20 15:40 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**7.19**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**27.2**	mg/L	1.0	0.070	1	09/25/20 15:02	09/28/20 21:24	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	09/29/20 18:28	09/30/20 19:13	7440-36-0	
Arsenic	**0.0010J**	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:13	7440-38-2	
Barium	**0.0076J**	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:13	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:13	7440-41-7	
Boron	**0.0079J**	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:13	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:13	7440-43-9	
Chromium	**0.0011J**	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:13	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:13	7440-48-4	
Lead	**0.000045J**	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:13	7439-92-1	
Lithium	**0.0066J**	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:13	7439-93-2	
Molybdenum	**0.00099J**	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:13	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:13	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**104**	mg/L	10.0	10.0	1		09/25/20 18:00		
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		09/26/20 19:39	16887-00-6	
Fluoride	**0.056J**	mg/L	0.10	0.050	1		09/26/20 19:39	16984-48-8	
Sulfate	**5.5**	mg/L	1.0	0.50	1		09/26/20 19:39	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
Pace Project No.: 92497141

Sample: FIELD BLANK-01 (092220) **Lab ID: 92497141005** Collected: 09/22/20 16:15 Received: 09/23/20 17:40 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	0.070	1	09/25/20 15:02	09/28/20 21:28	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	09/29/20 18:28	09/30/20 19:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:19	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:19	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:19	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:19	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:19	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:19	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:19	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:19	7440-28-0	
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		09/25/20 21:59		
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		09/26/20 20:22	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 20:22	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/26/20 20:22	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.: 92497141

Sample: YGWA-17S (092320) **Lab ID: 92497141006** Collected: 09/23/20 09:20 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.58**	Std. Units			1		10/08/20 08:17		
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	09/25/20 15:02	09/28/20 21:33	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/29/20 18:28	09/30/20 19:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:24	7440-38-2	
Barium	**0.015**	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:24	7440-39-3	
Beryllium	**0.000081J**	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:24	7440-41-7	
Boron	**0.0066J**	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:24	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:24	7440-43-9	
Chromium	**0.00098J**	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:24	7440-48-4	
Lead	**0.000041J**	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:24	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:24	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:24	7440-28-0	
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		09/28/20 14:27		
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		09/26/20 20:37	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 20:37	16984-48-8	
Sulfate	**5.1**	mg/L	1.0	0.50	1		09/26/20 20:37	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.: 92497141

Sample: EQUIPMENT BLANK-01 (092320) **Lab ID: 92497141007** Collected: 09/23/20 09:50 Received: 09/23/20 17:40 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	0.070	1	09/28/20 15:08	09/30/20 18:46	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	09/29/20 18:28	09/30/20 19:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:30	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:30	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:30	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:30	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:30	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:30	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:30	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:30	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**10.0**	mg/L	10.0	10.0	1		09/28/20 14:41		
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		09/26/20 20:51	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 20:51	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/26/20 20:51	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
Pace Project No.: 92497141

Sample: YGWA-18S (092320) **Lab ID: 92497141008** Collected: 09/23/20 13:40 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.29**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**0.91J**	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 18:58	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	0.00028	1	09/29/20 18:28	09/30/20 19:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:47	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:47	7440-39-3	
Beryllium	**0.000088J**	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:47	7440-41-7	
Boron	**0.0060J**	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:47	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:47	7440-43-9	
Chromium	**0.0012J**	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:47	7440-48-4	
Lead	**0.000097J**	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:47	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:47	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:47	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**81.0**	mg/L	10.0	10.0	1		09/28/20 14:41		D6
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		09/26/20 21:05	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 21:05	16984-48-8	
Sulfate	**1.1**	mg/L	1.0	0.50	1		09/26/20 21:05	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 AMA
Pace Project No.: 92497141

Sample: YGWC-24SA (092320) **Lab ID: 92497141009** Collected: 09/23/20 14:05 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.64**	Std. Units			1		10/08/20 08:17		
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	09/28/20 15:08	09/30/20 19:16	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	0.00028	1	09/29/20 18:28	09/30/20 19:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:53	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:53	7440-39-3	
Beryllium	**0.000061J**	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:53	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:53	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:53	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:53	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:53	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:53	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**87.0**	mg/L	10.0	10.0	1		09/28/20 14:42		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.3**	mg/L	1.0	0.60	1		09/26/20 21:20	16887-00-6	M1
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 21:20	16984-48-8	M1
Sulfate	ND	mg/L	1.0	0.50	1		09/26/20 21:20	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 AMA
Pace Project No.: 92497141

Sample: DUP-02 (092320) **Lab ID: 92497141010** Collected: 09/23/20 00:00 Received: 09/23/20 17:40 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	**2.4**	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 19:20	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	09/29/20 18:28	09/30/20 19:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:28	09/30/20 19:59	7440-38-2	
Barium	**0.024**	mg/L	0.010	0.00071	1	09/29/20 18:28	09/30/20 19:59	7440-39-3	
Beryllium	**0.000060J**	mg/L	0.0030	0.000046	1	09/29/20 18:28	09/30/20 19:59	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/29/20 18:28	09/30/20 19:59	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:28	09/30/20 19:59	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:28	09/30/20 19:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:28	09/30/20 19:59	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:28	09/30/20 19:59	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/29/20 18:28	09/30/20 19:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/29/20 18:28	09/30/20 19:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:28	09/30/20 19:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:28	09/30/20 19:59	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**73.0**	mg/L	10.0	10.0	1		09/28/20 14:42		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.3**	mg/L	1.0	0.60	1		09/26/20 22:03	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/26/20 22:03	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/26/20 22:03	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 AMA
Pace Project No.: 92497141

Sample: YGWA-18I **Lab ID: 92497141011** Collected: 09/23/20 15:40 Received: 09/25/20 18:03 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		10/08/20 08:17		
pH	**6.01**	Std. Units			1		10/08/20 08:17		
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	09/30/20 14:57	10/01/20 21:15	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	0.00028	1	09/30/20 17:48	10/03/20 19:28	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 17:48	10/03/20 19:28	7440-38-2	
Barium	**0.021**	mg/L	0.010	0.00071	1	09/30/20 17:48	10/03/20 19:28	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/30/20 17:48	10/03/20 19:28	7440-41-7	
Boron	**0.021J**	mg/L	0.10	0.0052	1	09/30/20 17:48	10/03/20 19:28	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 17:48	10/03/20 19:28	7440-43-9	
Chromium	**0.00092J**	mg/L	0.010	0.00055	1	09/30/20 17:48	10/03/20 19:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 17:48	10/03/20 19:28	7440-48-4	
Lead	**0.000060J**	mg/L	0.0050	0.000036	1	09/30/20 17:48	10/03/20 19:28	7439-92-1	
Lithium	**0.0030J**	mg/L	0.030	0.00081	1	09/30/20 17:48	10/03/20 19:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 17:48	10/03/20 19:28	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 17:48	10/03/20 19:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 17:48	10/03/20 19:28	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**103**	mg/L	10.0	10.0	1		09/28/20 17:31		
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		09/30/20 23:32	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/20 23:32	16984-48-8	
Sulfate	**0.53J**	mg/L	1.0	0.50	1		09/30/20 23:32	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 AMA
Pace Project No.: 92497141

Sample: YGWA-20S **Lab ID: 92497141012** Collected: 09/24/20 09:15 Received: 09/25/20 18:03 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		10/08/20 08:17		
pH	**5.80**	Std. Units			1		10/08/20 08:17		
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	09/30/20 14:57	10/01/20 21:20	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	09/30/20 17:48	10/03/20 19:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 17:48	10/03/20 19:34	7440-38-2	
Barium	**0.015**	mg/L	0.010	0.00071	1	09/30/20 17:48	10/03/20 19:34	7440-39-3	
Beryllium	**0.000083J**	mg/L	0.0030	0.000046	1	09/30/20 17:48	10/03/20 19:34	7440-41-7	
Boron	**0.0094J**	mg/L	0.10	0.0052	1	09/30/20 17:48	10/03/20 19:34	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 17:48	10/03/20 19:34	7440-43-9	
Chromium	**0.00076J**	mg/L	0.010	0.00055	1	09/30/20 17:48	10/03/20 19:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 17:48	10/03/20 19:34	7440-48-4	
Lead	**0.000092J**	mg/L	0.0050	0.000036	1	09/30/20 17:48	10/03/20 19:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/30/20 17:48	10/03/20 19:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 17:48	10/03/20 19:34	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 17:48	10/03/20 19:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 17:48	10/03/20 19:34	7440-28-0	
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		09/29/20 19:24		
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		09/30/20 23:47	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/20 23:47	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/30/20 23:47	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.: 92497141

Sample: YGWA-21I **Lab ID: 92497141013** Collected: 09/24/20 11:45 Received: 09/25/20 18:03 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		10/08/20 08:17		
pH	**6.70**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**7.8**	mg/L	1.0	0.070	1	09/30/20 14:57	10/01/20 21:24	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0047**	mg/L	0.0030	0.00028	1	09/30/20 17:48	10/03/20 19:40	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.00078	1	09/30/20 17:48	10/03/20 19:40	7440-38-2	
Barium	**0.010**	mg/L	0.010	0.00071	1	09/30/20 17:48	10/03/20 19:40	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/30/20 17:48	10/03/20 19:40	7440-41-7	
Boron	**0.013J**	mg/L	0.10	0.0052	1	09/30/20 17:48	10/03/20 19:40	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 17:48	10/03/20 19:40	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 17:48	10/03/20 19:40	7440-47-3	
Cobalt	**0.0079**	mg/L	0.0050	0.00038	1	09/30/20 17:48	10/03/20 19:40	7440-48-4	
Lead	**0.000046J**	mg/L	0.0050	0.000036	1	09/30/20 17:48	10/03/20 19:40	7439-92-1	
Lithium	**0.0069J**	mg/L	0.030	0.00081	1	09/30/20 17:48	10/03/20 19:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 17:48	10/03/20 19:40	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 17:48	10/03/20 19:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 17:48	10/03/20 19:40	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**113**	mg/L	10.0	10.0	1		09/29/20 19:25		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.0**	mg/L	1.0	0.60	1		10/01/20 00:01	16887-00-6	
Fluoride	**0.079J**	mg/L	0.10	0.050	1		10/01/20 00:01	16984-48-8	
Sulfate	**3.6**	mg/L	1.0	0.50	1		10/01/20 00:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92497141

Sample: YGWC-42 **Lab ID: 92497141014** Collected: 09/24/20 14:20 Received: 09/25/20 18:03 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		10/08/20 08:17		
pH	**5.55**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**84.3**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 21:50	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	0.00028	1	09/30/20 17:48	10/03/20 19:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 17:48	10/03/20 19:57	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00071	1	09/30/20 17:48	10/03/20 19:57	7440-39-3	
Beryllium	**0.000067J**	mg/L	0.0030	0.000046	1	09/30/20 17:48	10/03/20 19:57	7440-41-7	
Boron	**15.2**	mg/L	1.0	0.052	10	09/30/20 17:48	10/06/20 13:04	7440-42-8	
Cadmium	**0.00014J**	mg/L	0.0025	0.00012	1	09/30/20 17:48	10/03/20 19:57	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 17:48	10/03/20 19:57	7440-47-3	
Cobalt	**0.0017J**	mg/L	0.0050	0.00038	1	09/30/20 17:48	10/03/20 19:57	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 17:48	10/03/20 19:57	7439-92-1	
Lithium	**0.050**	mg/L	0.030	0.00081	1	09/30/20 17:48	10/03/20 19:57	7439-93-2	
Molybdenum	**0.00091J**	mg/L	0.010	0.00069	1	09/30/20 17:48	10/03/20 19:57	7439-98-7	
Selenium	**0.046**	mg/L	0.010	0.0016	1	09/30/20 17:48	10/03/20 19:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 17:48	10/03/20 19:57	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1060**	mg/L	20.0	20.0	1		09/29/20 19:25		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.3**	mg/L	1.0	0.60	1		10/01/20 00:16	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 00:16	16984-48-8	
Sulfate	**579**	mg/L	12.0	6.0	12		10/01/20 05:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92497141

Sample: YGWC-23S **Lab ID: 92497141015** Collected: 09/24/20 17:05 Received: 09/25/20 18:03 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		10/08/20 08:17		
pH	**5.51**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**7.9**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:07	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00085J**	mg/L	0.0030	0.00028	1	09/30/20 17:48	10/03/20 20:03	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 17:48	10/03/20 20:03	7440-38-2	
Barium	**0.035**	mg/L	0.010	0.00071	1	09/30/20 17:48	10/03/20 20:03	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.0030	0.000046	1	09/30/20 17:48	10/03/20 20:03	7440-41-7	
Boron	**1.1**	mg/L	0.10	0.0052	1	09/30/20 17:48	10/03/20 20:03	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 17:48	10/03/20 20:03	7440-43-9	
Chromium	**0.0011J**	mg/L	0.010	0.00055	1	09/30/20 17:48	10/03/20 20:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 17:48	10/03/20 20:03	7440-48-4	
Lead	**0.000046J**	mg/L	0.0050	0.000036	1	09/30/20 17:48	10/03/20 20:03	7439-92-1	
Lithium	**0.0035J**	mg/L	0.030	0.00081	1	09/30/20 17:48	10/03/20 20:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 17:48	10/03/20 20:03	7439-98-7	
Selenium	**0.031**	mg/L	0.010	0.0016	1	09/30/20 17:48	10/03/20 20:03	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 17:48	10/03/20 20:03	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**129**	mg/L	10.0	10.0	1		09/29/20 19:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.0**	mg/L	1.0	0.60	1		10/01/20 00:30	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 00:30	16984-48-8	
Sulfate	**52.5**	mg/L	1.0	0.50	1		10/01/20 00:30	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92497141

Sample: FIELD BLANK-02 **Lab ID: 92497141016** Collected: 09/25/20 09:10 Received: 09/25/20 18:03 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	09/30/20 20:44	10/01/20 22:11	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	0.00028	1	09/30/20 17:48	10/03/20 20:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 17:48	10/03/20 20:09	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	09/30/20 17:48	10/03/20 20:09	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/30/20 17:48	10/03/20 20:09	7440-41-7	
Boron	**0.022J**	mg/L	0.10	0.0052	1	09/30/20 17:48	10/03/20 20:09	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 17:48	10/03/20 20:09	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 17:48	10/03/20 20:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 17:48	10/03/20 20:09	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 17:48	10/03/20 20:09	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/30/20 17:48	10/03/20 20:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 17:48	10/03/20 20:09	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 17:48	10/03/20 20:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 17:48	10/03/20 20:09	7440-28-0	
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		10/01/20 15:22		
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		10/01/20 00:45	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 00:45	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/01/20 00:45	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92497141

Sample: YGWC-38 **Lab ID: 92497141017** Collected: 09/25/20 09:40 Received: 09/25/20 18:03 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		10/08/20 08:17		
pH	**4.90**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**93.7**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:16	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00061J**	mg/L	0.0030	0.00028	1	09/30/20 17:48	10/03/20 20:14	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 17:48	10/03/20 20:14	7440-38-2	
Barium	**0.015**	mg/L	0.010	0.00071	1	09/30/20 17:48	10/03/20 20:14	7440-39-3	
Beryllium	**0.0033**	mg/L	0.0030	0.000046	1	09/30/20 17:48	10/03/20 20:14	7440-41-7	
Boron	**8.0**	mg/L	0.10	0.0052	1	09/30/20 17:48	10/03/20 20:14	7440-42-8	
Cadmium	**0.0015J**	mg/L	0.0025	0.00012	1	09/30/20 17:48	10/03/20 20:14	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 17:48	10/03/20 20:14	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 17:48	10/03/20 20:14	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 17:48	10/03/20 20:14	7439-92-1	
Lithium	**0.0069J**	mg/L	0.030	0.00081	1	09/30/20 17:48	10/03/20 20:14	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 17:48	10/03/20 20:14	7439-98-7	
Selenium	**0.076**	mg/L	0.010	0.0016	1	09/30/20 17:48	10/03/20 20:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 17:48	10/03/20 20:14	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**664**	mg/L	20.0	20.0	1		10/01/20 15:22		
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		10/01/20 01:57	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 01:57	16984-48-8	
Sulfate	**414**	mg/L	9.0	4.5	9		10/01/20 05:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92497141

Sample: YGWC-43 **Lab ID: 92497141018** Collected: 09/25/20 11:55 Received: 09/25/20 18:03 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		10/08/20 08:17		
pH	**5.75**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**19.8**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:20	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/30/20 17:48	10/03/20 20:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 17:48	10/03/20 20:20	7440-38-2	
Barium	**0.046**	mg/L	0.010	0.00071	1	09/30/20 17:48	10/03/20 20:20	7440-39-3	
Beryllium	**0.00054J**	mg/L	0.0030	0.000046	1	09/30/20 17:48	10/03/20 20:20	7440-41-7	
Boron	**3.9**	mg/L	0.10	0.0052	1	09/30/20 17:48	10/03/20 20:20	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 17:48	10/03/20 20:20	7440-43-9	
Chromium	**0.00071J**	mg/L	0.010	0.00055	1	09/30/20 17:48	10/03/20 20:20	7440-47-3	
Cobalt	**0.0018J**	mg/L	0.0050	0.00038	1	09/30/20 17:48	10/03/20 20:20	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 17:48	10/03/20 20:20	7439-92-1	
Lithium	**0.018J**	mg/L	0.030	0.00081	1	09/30/20 17:48	10/03/20 20:20	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00069	1	09/30/20 17:48	10/03/20 20:20	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 17:48	10/03/20 20:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 17:48	10/03/20 20:20	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**494**	mg/L	10.0	10.0	1		10/01/20 15:22		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.3**	mg/L	1.0	0.60	1		10/01/20 02:11	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 02:11	16984-48-8	
Sulfate	**281**	mg/L	6.0	3.0	6		10/01/20 06:03	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 AMA
Pace Project No.: 92497141

Sample: YGWC-41 **Lab ID: 92497141019** Collected: 09/25/20 13:35 Received: 09/25/20 18:03 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		10/08/20 08:17		
pH	**4.95**	Std. Units			1		10/08/20 08:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**20.5**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:24	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	09/30/20 20:47	10/05/20 15:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 15:09	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 15:09	7440-39-3	
Beryllium	**0.0020J**	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 15:09	7440-41-7	
Boron	**6.0**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 15:09	7440-42-8	
Cadmium	**0.00014J**	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 15:09	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 15:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 15:09	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 15:09	7439-92-1	
Lithium	**0.0025J**	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 15:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 15:09	7439-98-7	
Selenium	**0.046**	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 15:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 15:09	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**307**	mg/L	10.0	10.0	1		10/01/20 15:23		
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		10/01/20 02:26	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 02:26	16984-48-8	
Sulfate	**175**	mg/L	4.0	2.0	4		10/01/20 06:17	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.: 92497141

Sample: EQUIPMENT BLANK-02 **Lab ID: 92497141020** Collected: 09/25/20 13:50 Received: 09/25/20 18:03 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	09/30/20 20:44	10/01/20 22:28	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0017J**	mg/L	0.0030	0.00028	1	09/30/20 20:47	10/05/20 15:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 15:32	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 15:32	7440-39-3	
Beryllium	**0.000060J**	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 15:32	7440-41-7	
Boron	**0.048J**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 15:32	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 15:32	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 15:32	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 15:32	7440-48-4	
Lead	**0.000067J**	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 15:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 15:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 15:32	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 15:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 15:32	7440-28-0	
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		10/01/20 15:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/01/20 02:40	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 02:40	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/01/20 02:40	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.: 92497141

QC Batch: 569036 | Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A | Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497141001, 92497141002, 92497141003, 92497141004, 92497141005, 92497141006

METHOD BLANK: 3014892 Matrix: Water
Associated Lab Samples: 92497141001, 92497141002, 92497141003, 92497141004, 92497141005, 92497141006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	09/28/20 19:33	

LABORATORY CONTROL SAMPLE: 3014893

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3014894 3014895

Parameter	Units	92496941003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	54.7	1	1	57.3	56.8	256	203	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 AMA
Pace Project No.: 92497141

QC Batch: 569429
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497141007, 92497141008, 92497141009, 92497141010

METHOD BLANK: 3017011 Matrix: Water
Associated Lab Samples: 92497141007, 92497141008, 92497141009, 92497141010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	09/30/20 18:37	

LABORATORY CONTROL SAMPLE: 3017012

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: 3017068 3017069

Parameter	Units	92497141008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	0.91J	1	1	1.9	2.0	102	106	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92497141

QC Batch: 570008
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497141011, 92497141012, 92497141013

METHOD BLANK: 3019452 Matrix: Water
Associated Lab Samples: 92497141011, 92497141012, 92497141013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	10/01/20 19:24	

LABORATORY CONTROL SAMPLE: 3019453

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.96J	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3019454 3019455

Parameter	Units	92496941020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	53.1	1	1	55.5	54.3	237	115	75-125	2	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92497141

QC Batch: 570091 — Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A — Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497141014, 92497141015, 92497141016, 92497141017, 92497141018, 92497141019, 92497141020

METHOD BLANK: 3020059 — Matrix: Water
Associated Lab Samples: 92497141014, 92497141015, 92497141016, 92497141017, 92497141018, 92497141019, 92497141020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	10/01/20 21:32	

LABORATORY CONTROL SAMPLE: 3020060

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.95J	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020061 3020062

Parameter	Units	92497141014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	84.3	1	1	87.0	87.6	271	337	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 AMA
Pace Project No.: 92497141

QC Batch: 569772
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497141001, 92497141002, 92497141003, 92497141004, 92497141005, 92497141006, 92497141007, 92497141008, 92497141009, 92497141010

METHOD BLANK: 3018362 Matrix: Water
Associated Lab Samples: 92497141001, 92497141002, 92497141003, 92497141004, 92497141005, 92497141006, 92497141007, 92497141008, 92497141009, 92497141010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	09/30/20 17:36	
Arsenic	mg/L	ND	0.0050	0.00078	09/30/20 17:36	
Barium	mg/L	ND	0.010	0.00071	09/30/20 17:36	
Beryllium	mg/L	ND	0.0030	0.000046	09/30/20 17:36	
Boron	mg/L	ND	0.10	0.0052	09/30/20 17:36	
Cadmium	mg/L	ND	0.0025	0.00012	09/30/20 17:36	
Chromium	mg/L	ND	0.010	0.00055	09/30/20 17:36	
Cobalt	mg/L	ND	0.0050	0.00038	09/30/20 17:36	
Lead	mg/L	ND	0.0050	0.000036	09/30/20 17:36	
Lithium	mg/L	ND	0.030	0.00081	09/30/20 17:36	
Molybdenum	mg/L	ND	0.010	0.00069	09/30/20 17:36	
Selenium	mg/L	ND	0.010	0.0016	09/30/20 17:36	
Thallium	mg/L	ND	0.0010	0.00014	09/30/20 17:36	

LABORATORY CONTROL SAMPLE: 3018363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.095	95	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.10	104	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.11	106	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3018364 3018365

Parameter	Units	92496941005 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	0.096	0.099	96	99	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.: 92497141

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3018364 3018365

Parameter	Units	92496941005 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	0.098	0.099	98	99	75-125	1	20	
Barium	mg/L	0.036	0.1	0.1	0.13	0.14	93	99	75-125	5	20	
Beryllium	mg/L	0.00017J	0.1	0.1	0.093	0.094	93	94	75-125	1	20	
Boron	mg/L	4.2	1	1	5.1	5.2	93	101	75-125	2	20	
Cadmium	mg/L	0.00017J	0.1	0.1	0.098	0.097	97	97	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.097	0.10	97	101	75-125	5	20	
Cobalt	mg/L	0.013	0.1	0.1	0.11	0.11	92	98	75-125	5	20	
Lead	mg/L	0.00011J	0.1	0.1	0.096	0.097	95	97	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.095	0.095	94	95	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.097	95	96	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92497141

QC Batch: 570089
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497141011, 92497141012, 92497141013, 92497141014, 92497141015, 92497141016, 92497141017, 92497141018

METHOD BLANK: 3020046 Matrix: Water
Associated Lab Samples: 92497141011, 92497141012, 92497141013, 92497141014, 92497141015, 92497141016, 92497141017, 92497141018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	10/03/20 17:40	
Arsenic	mg/L	ND	0.0050	0.00078	10/03/20 17:40	
Barium	mg/L	ND	0.010	0.00071	10/03/20 17:40	
Beryllium	mg/L	ND	0.0030	0.000046	10/03/20 17:40	
Boron	mg/L	ND	0.10	0.0052	10/03/20 17:40	
Cadmium	mg/L	ND	0.0025	0.00012	10/03/20 17:40	
Chromium	mg/L	ND	0.010	0.00055	10/03/20 17:40	
Cobalt	mg/L	ND	0.0050	0.00038	10/03/20 17:40	
Lead	mg/L	ND	0.0050	0.000036	10/03/20 17:40	
Lithium	mg/L	ND	0.030	0.00081	10/03/20 17:40	
Molybdenum	mg/L	ND	0.010	0.00069	10/03/20 17:40	
Selenium	mg/L	ND	0.010	0.0016	10/03/20 17:40	
Thallium	mg/L	ND	0.0010	0.00014	10/03/20 17:40	

LABORATORY CONTROL SAMPLE: 3020047

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.092	92	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.97	97	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.099	99	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	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020048 3020049

Parameter	Units	92496941025 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	0.095	0.10	95	100	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 AMA
Pace Project No.: 92497141

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020048 3020049

Parameter	Units	92496941025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.00088J	0.1	0.1	0.095	0.095	94	94	75-125	1	20	
Barium	mg/L	0.032	0.1	0.1	0.13	0.13	95	98	75-125	3	20	
Beryllium	mg/L	0.00070J	0.1	0.1	0.099	0.097	98	97	75-125	1	20	
Boron	mg/L	0.84	1	1	2.0	1.9	112	107	75-125	3	20	
Cadmium	mg/L	0.00028J	0.1	0.1	0.097	0.097	97	97	75-125	0	20	
Chromium	mg/L	0.0028J	0.1	0.1	0.10	0.10	100	100	75-125	1	20	
Cobalt	mg/L	0.027	0.1	0.1	0.13	0.13	99	98	75-125	1	20	
Lead	mg/L	0.00022J	0.1	0.1	0.087	0.094	86	93	75-125	8	20	
Lithium	mg/L	0.0012J	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.10	98	102	75-125	4	20	
Selenium	mg/L	0.012	0.1	0.1	0.11	0.11	96	95	75-125	1	20	
Thallium	mg/L	0.00034J	0.1	0.1	0.093	0.094	93	94	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.: 92497141

QC Batch: 570092
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497141019, 92497141020

METHOD BLANK: 3020066 Matrix: Water
Associated Lab Samples: 92497141019, 92497141020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	10/05/20 14:57	
Arsenic	mg/L	ND	0.0050	0.00078	10/05/20 14:57	
Barium	mg/L	ND	0.010	0.00071	10/05/20 14:57	
Beryllium	mg/L	ND	0.0030	0.000046	10/05/20 14:57	
Boron	mg/L	ND	0.10	0.0052	10/05/20 14:57	
Cadmium	mg/L	ND	0.0025	0.00012	10/05/20 14:57	
Chromium	mg/L	ND	0.010	0.00055	10/05/20 14:57	
Cobalt	mg/L	ND	0.0050	0.00038	10/05/20 14:57	
Lead	mg/L	ND	0.0050	0.000036	10/05/20 14:57	
Lithium	mg/L	ND	0.030	0.00081	10/05/20 14:57	
Molybdenum	mg/L	ND	0.010	0.00069	10/05/20 14:57	
Selenium	mg/L	ND	0.010	0.0016	10/05/20 14:57	
Thallium	mg/L	ND	0.0010	0.00014	10/05/20 14:57	

LABORATORY CONTROL SAMPLE: 3020067

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	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	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	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.095	95	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020068 3020069

Parameter	Units	92497141019 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	0.096	0.098	96	98	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.094	0.097	94	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.: 92497141

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020068 3020069

Parameter	Units	92497141019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.016	0.1	0.1	0.11	0.11	94	96	75-125	2	20	
Beryllium	mg/L	0.0020J	0.1	0.1	0.096	0.098	94	96	75-125	2	20	
Boron	mg/L	6.0	1	1	7.0	7.2	98	113	75-125	2	20	
Cadmium	mg/L	0.00014J	0.1	0.1	0.097	0.098	96	97	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.10	95	100	75-125	5	20	
Lead	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	
Lithium	mg/L	0.0025J	0.1	0.1	0.097	0.099	94	97	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Selenium	mg/L	0.046	0.1	0.1	0.14	0.15	99	100	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.093	0.096	93	96	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.: 92497141

QC Batch: 569139 | 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: 92497141001, 92497141002, 92497141003, 92497141004

METHOD BLANK: 3015723 Matrix: Water
Associated Lab Samples: 92497141001, 92497141002, 92497141003, 92497141004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/25/20 17:57	

LABORATORY CONTROL SAMPLE: 3015724

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

SAMPLE DUPLICATE: 3015725

Parameter	Units	92497336001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 3015726

Parameter	Units	92497151001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	394	400	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.: 92497141

QC Batch: 569144
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: 92497141005

METHOD BLANK: 3015749 Matrix: Water
Associated Lab Samples: 92497141005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/25/20 21:57	

LABORATORY CONTROL SAMPLE: 3015750

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

SAMPLE DUPLICATE: 3015751

Parameter	Units	92496941005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	338	338	0	10	

SAMPLE DUPLICATE: 3015752

Parameter	Units	92497141005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	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
Pace Project No.: 92497141

QC Batch: 569386 | 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: 92497141006, 92497141007, 92497141008, 92497141009, 92497141010

METHOD BLANK: 3016890 Matrix: Water
Associated Lab Samples: 92497141006, 92497141007, 92497141008, 92497141009, 92497141010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/28/20 14:18	

LABORATORY CONTROL SAMPLE: 3016891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	429	107	84-108	

SAMPLE DUPLICATE: 3016892

Parameter	Units	92497125001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	260	295	13	10	D6

SAMPLE DUPLICATE: 3016893

Parameter	Units	92497141008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	81.0	59.0	31	10	D6

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92497141

QC Batch: 569431
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: 92497141011

METHOD BLANK: 3017032 Matrix: Water
Associated Lab Samples: 92497141011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0	10.0	10.0	09/28/20 17:06	

LABORATORY CONTROL SAMPLE: 3017033

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	84-108	

SAMPLE DUPLICATE: 3017034

Parameter	Units	92497149002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	108	116	7	10	

SAMPLE DUPLICATE: 3017035

Parameter	Units	92497149005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	157	163	4	10	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92497141

QC Batch: 569806 | 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: 92497141012, 92497141013, 92497141014, 92497141015

METHOD BLANK: 3018686 Matrix: Water
Associated Lab Samples: 92497141012, 92497141013, 92497141014, 92497141015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/29/20 18:54	

LABORATORY CONTROL SAMPLE: 3018687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	402	100	84-108	

SAMPLE DUPLICATE: 3018688

Parameter	Units	92497721002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	386	353	9	10	

SAMPLE DUPLICATE: 3018689

Parameter	Units	92497141012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	74.0	7	10	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92497141

QC Batch: 570219 | 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: 92497141016, 92497141017, 92497141018, 92497141019, 92497141020

METHOD BLANK: 3020458 Matrix: Water
Associated Lab Samples: 92497141016, 92497141017, 92497141018, 92497141019, 92497141020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	10/01/20 15:22	

LABORATORY CONTROL SAMPLE: 3020459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	84-108	

SAMPLE DUPLICATE: 3020460

Parameter	Units	92497125005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	134	142	6	10	

SAMPLE DUPLICATE: 3020461

Parameter	Units	92497146006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	878	918	4	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.: 92497141

QC Batch: 569219
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: 92497141001, 92497141002, 92497141003, 92497141004, 92497141005, 92497141006, 92497141007, 92497141008, 92497141009, 92497141010

METHOD BLANK: 3015975 Matrix: Water
Associated Lab Samples: 92497141001, 92497141002, 92497141003, 92497141004, 92497141005, 92497141006, 92497141007, 92497141008, 92497141009, 92497141010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/26/20 17:29	
Fluoride	mg/L	ND	0.10	0.050	09/26/20 17:29	
Sulfate	mg/L	ND	1.0	0.50	09/26/20 17:29	

LABORATORY CONTROL SAMPLE: 3015976

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.8	108	90-110	
Fluoride	mg/L	2.5	2.7	110	90-110	
Sulfate	mg/L	50	53.8	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3015977 3015978

Parameter	Units	92497568001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	208	50	50	258	258	101	99	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	3.0	2.9	118	116	90-110	1	10	M1
Sulfate	mg/L	1.7	50	50	59.4	59.5	116	116	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3015979 3015980

Parameter	Units	92497141009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.3	50	50	68.1	67.4	118	116	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.0	2.9	119	117	90-110	1	10	M1
Sulfate	mg/L	ND	50	50	58.7	58.0	117	115	90-110	1	10	M1

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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.: 92497141

QC Batch: 569832
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: 92497141011, 92497141012, 92497141013, 92497141014, 92497141015, 92497141016, 92497141017, 92497141018, 92497141019, 92497141020

METHOD BLANK: 3018769 Matrix: Water
Associated Lab Samples: 92497141011, 92497141012, 92497141013, 92497141014, 92497141015, 92497141016, 92497141017, 92497141018, 92497141019, 92497141020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/20 20:24	
Fluoride	mg/L	ND	0.10	0.050	09/30/20 20:24	
Sulfate	mg/L	ND	1.0	0.50	09/30/20 20:24	

LABORATORY CONTROL SAMPLE: 3018770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.0	102	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	49.8	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3018771 3018772

Parameter	Units	92497125004 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	51.9	51.4	104	103	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	105	103	90-110	2	10	
Sulfate	mg/L	ND	50	50	50.5	50.0	101	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3018773 3018774

Parameter	Units	92497141016 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	51.8	51.5	104	103	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.5	105	100	90-110	4	10	
Sulfate	mg/L	ND	50	50	50.5	50.1	101	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.: 92497141

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 AMA
Pace Project No.: 92497141

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497141002	**YGWA-4I (092220)**				
92497141003	**YGWA-5I (092220)**				
92497141004	**YGWA-5D (092220)**				
92497141006	**YGWA-17S (092320)**				
92497141008	**YGWA-18S (092320)**				
92497141009	**YGWC-24SA (092320)**				
92497141011	**YGWA-18I**				
92497141012	**YGWA-20S**				
92497141013	**YGWA-21I**				
92497141014	**YGWC-42**				
92497141015	**YGWC-23S**				
92497141017	**YGWC-38**				
92497141018	**YGWC-43**				
92497141019	**YGWC-41**				
92497141001	**DUP-01 (092220)**	EPA 3010A	569036	EPA 6010D	569131
92497141002	**YGWA-4I (092220)**	EPA 3010A	569036	EPA 6010D	569131
92497141003	**YGWA-5I (092220)**	EPA 3010A	569036	EPA 6010D	569131
92497141004	**YGWA-5D (092220)**	EPA 3010A	569036	EPA 6010D	569131
92497141005	**FIELD BLANK-01 (092220)**	EPA 3010A	569036	EPA 6010D	569131
92497141006	**YGWA-17S (092320)**	EPA 3010A	569036	EPA 6010D	569131
92497141007	**EQUIPMENT BLANK-01 (092320)**	EPA 3010A	569429	EPA 6010D	569491
92497141008	**YGWA-18S (092320)**	EPA 3010A	569429	EPA 6010D	569491
92497141009	**YGWC-24SA (092320)**	EPA 3010A	569429	EPA 6010D	569491
92497141010	**DUP-02 (092320)**	EPA 3010A	569429	EPA 6010D	569491
92497141011	**YGWA-18I**	EPA 3010A	570008	EPA 6010D	570053
92497141012	**YGWA-20S**	EPA 3010A	570008	EPA 6010D	570053
92497141013	**YGWA-21I**	EPA 3010A	570008	EPA 6010D	570053
92497141014	**YGWC-42**	EPA 3010A	570091	EPA 6010D	570131
92497141015	**YGWC-23S**	EPA 3010A	570091	EPA 6010D	570131
92497141016	**FIELD BLANK-02**	EPA 3010A	570091	EPA 6010D	570131
92497141017	**YGWC-38**	EPA 3010A	570091	EPA 6010D	570131
92497141018	**YGWC-43**	EPA 3010A	570091	EPA 6010D	570131
92497141019	**YGWC-41**	EPA 3010A	570091	EPA 6010D	570131
92497141020	**EQUIPMENT BLANK-02**	EPA 3010A	570091	EPA 6010D	570131
92497141001	**DUP-01 (092220)**	EPA 3005A	569772	EPA 6020B	569809
92497141002	**YGWA-4I (092220)**	EPA 3005A	569772	EPA 6020B	569809
92497141003	**YGWA-5I (092220)**	EPA 3005A	569772	EPA 6020B	569809
92497141004	**YGWA-5D (092220)**	EPA 3005A	569772	EPA 6020B	569809
92497141005	**FIELD BLANK-01 (092220)**	EPA 3005A	569772	EPA 6020B	569809
92497141006	**YGWA-17S (092320)**	EPA 3005A	569772	EPA 6020B	569809
92497141007	**EQUIPMENT BLANK-01 (092320)**	EPA 3005A	569772	EPA 6020B	569809
92497141008	**YGWA-18S (092320)**	EPA 3005A	569772	EPA 6020B	569809
92497141009	**YGWC-24SA (092320)**	EPA 3005A	569772	EPA 6020B	569809
92497141010	**DUP-02 (092320)**	EPA 3005A	569772	EPA 6020B	569809
92497141011	**YGWA-18I**	EPA 3005A	570089	EPA 6020B	570110
92497141012	**YGWA-20S**	EPA 3005A	570089	EPA 6020B	570110

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
Pace Project No.: 92497141

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497141013	YGWA-21I	EPA 3005A	570089	EPA 6020B	570110
92497141014	YGWC-42	EPA 3005A	570089	EPA 6020B	570110
92497141015	YGWC-23S	EPA 3005A	570089	EPA 6020B	570110
92497141016	FIELD BLANK-02	EPA 3005A	570089	EPA 6020B	570110
92497141017	YGWC-38	EPA 3005A	570089	EPA 6020B	570110
92497141018	YGWC-43	EPA 3005A	570089	EPA 6020B	570110
92497141019	YGWC-41	EPA 3005A	570092	EPA 6020B	570132
92497141020	EQUIPMENT BLANK-02	EPA 3005A	570092	EPA 6020B	570132
92497141001	DUP-01 (092220)	SM 2450C-2011	569139		
92497141002	YGWA-4I (092220)	SM 2450C-2011	569139		
92497141003	YGWA-5I (092220)	SM 2450C-2011	569139		
92497141004	YGWA-5D (092220)	SM 2450C-2011	569139		
92497141005	FIELD BLANK-01 (092220)	SM 2450C-2011	569144		
92497141006	YGWA-17S (092320)	SM 2450C-2011	569386		
92497141007	EQUIPMENT BLANK-01 (092320)	SM 2450C-2011	569386		
92497141008	YGWA-18S (092320)	SM 2450C-2011	569386		
92497141009	YGWC-24SA (092320)	SM 2450C-2011	569386		
92497141010	DUP-02 (092320)	SM 2450C-2011	569386		
92497141011	YGWA-18I	SM 2450C-2011	569431		
92497141012	YGWA-20S	SM 2450C-2011	569806		
92497141013	YGWA-21I	SM 2450C-2011	569806		
92497141014	YGWC-42	SM 2450C-2011	569806		
92497141015	YGWC-23S	SM 2450C-2011	569806		
92497141016	FIELD BLANK-02	SM 2450C-2011	570219		
92497141017	YGWC-38	SM 2450C-2011	570219		
92497141018	YGWC-43	SM 2450C-2011	570219		
92497141019	YGWC-41	SM 2450C-2011	570219		
92497141020	EQUIPMENT BLANK-02	SM 2450C-2011	570219		
92497141001	DUP-01 (092220)	EPA 300.0 Rev 2.1 1993	569219		
92497141002	YGWA-4I (092220)	EPA 300.0 Rev 2.1 1993	569219		
92497141003	YGWA-5I (092220)	EPA 300.0 Rev 2.1 1993	569219		
92497141004	YGWA-5D (092220)	EPA 300.0 Rev 2.1 1993	569219		
92497141005	FIELD BLANK-01 (092220)	EPA 300.0 Rev 2.1 1993	569219		
92497141006	YGWA-17S (092320)	EPA 300.0 Rev 2.1 1993	569219		
92497141007	EQUIPMENT BLANK-01 (092320)	EPA 300.0 Rev 2.1 1993	569219		
92497141008	YGWA-18S (092320)	EPA 300.0 Rev 2.1 1993	569219		
92497141009	YGWC-24SA (092320)	EPA 300.0 Rev 2.1 1993	569219		
92497141010	DUP-02 (092320)	EPA 300.0 Rev 2.1 1993	569219		
92497141011	YGWA-18I	EPA 300.0 Rev 2.1 1993	569832		
92497141012	YGWA-20S	EPA 300.0 Rev 2.1 1993	569832		
92497141013	YGWA-21I	EPA 300.0 Rev 2.1 1993	569832		
92497141014	YGWC-42	EPA 300.0 Rev 2.1 1993	569832		
92497141015	YGWC-23S	EPA 300.0 Rev 2.1 1993	569832		
92497141016	FIELD BLANK-02	EPA 300.0 Rev 2.1 1993	569832		

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.: 92497141

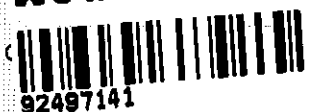
Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497141017	**YGWC-38**	EPA 300.0 Rev 2.1 1993	569832		
92497141018	**YGWC-43**	EPA 300.0 Rev 2.1 1993	569832		
92497141019	**YGWC-41**	EPA 300.0 Rev 2.1 1993	569832		
92497141020	**EQUIPMENT BLANK-02**	EPA 300.0 Rev 2.1 1993	569832		

Sample Condition Upon Receipt

Pace Analytical

Client Name: G-A Power

WO#: 92497141



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

Tracking #: _____

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

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

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

Cooler Temperature 3.4°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/23/2008

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2008

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	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 bottle

Project **WO#: 92497141**

PM: KLH1 Due Date: 10/07/20

CLIENT: GA-GA Power

Matrix	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)	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)
	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	Lo

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 O
Out of hold, incorrect preservative, out of temp, incorrect containers.

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 : 1 Of 1

Section A — Required Client Information:

Company: Georgia Power
Address: 1070 Bridge Mill Ave
Suite, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B — Required Project Information:

Report To: Becky Sleever
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

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	Anions	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	92447141
1	DUP-01 (092220)	W		9/22/20	—				5	/		/						/	/	/	/		—
2	YGWA-4I (092220)	W		9/22	1120				5	/		/						/	/	/	/		pH 5.80
3	YGWA-5I (092220)	W		9/22	1305				5	/		/						/	/	/	/		pH 5.99
4	YGWA-5D (092220)	W		9/22	1540				5	/		/						/	/	/	/		pH 7.19
5	FIELD BLANK-01 (092220)	W		9/22	1615				5	/		/						/	/	/	/		—
6	YGWA-17S (092320)	W		9/23	0930				5	/		/						/	/	/	/		pH: 5.58
7	EQUIPMENT BLANK-01 (092320)	W		9/23	0930				5	/		/						/	/	/	/		—
8	YGWA-18S (092320)	W		9/23	1340				5	/		/						/	/	/	/		pH: 5.29
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		9/23/20	1525		9/23/20	1525	
		9/23/20	1740		9/23/20	1740	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Guy

SIGNATURE of SAMPLER:

DATE Signed: 9/23/20

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

Pace Analytical
www.metlabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 2 Of 2

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Hiton, GA 30114
Mail:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Pb AMP
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10640

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App III & IV Metals	App III & IV + Hg	RAD 9315/9320	Residual Chlorine (Y/N)	92497141
13	~~Dup~~	WT																	X	X		X	X		
14	YGWC-24SA(09232020)		G			9-23-20	1405		5	1		1													pH: 5.64
15	DUP-02(09232020)		G			9-23-20	—		5	1		1													
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									

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
	Katie Pupkiewicz/GA-P	9-23-20	17:45		9/23/20	1740	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Pupkiewicz
SIGNATURE of SAMPLER: DATE Signed: 9/23/2020

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 : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marion, GA 30114
Mail:
Phone: (770)384-6526 Fax
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates BS AMA
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10640

Site Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YGWA-18I			9/23/20	1540				5	/		/							/	/	/	/		9246 7141
2	YGWA-20S			9/24	0915				5	/		/							/	/	/	/		pH: 6.01 011
3	YGWA-21I			9/24	1145				5	/		/							/	/	/	/		pH: 5.80 012
4	YGWC-42			9/24	1430				5	/		/							/	/	/	/		pH: 6.70 013
5	YGWC-23S			9/24	1705				5	/		/							/	/	/	/		pH: 5.55 014
6	FIELD BLANK-02			9/25	0910				5	/		/							/	/	/	/		pH: 5.51 015
7	YGWC-38			9/25	0940				5	/		/							/	/	/	/		016
8	YGWC-43			9/25	1155				5	/		/							/	/	/	/		pH: 4.90 017
9	YGWC-41			9/25	1335				5	/		/							/	/	/	/		pH: 5.75 018
10	EQUIPMENT BLANK-02			9/25	1350				5	/		/							/	/	/	/		pH: 4.95 019
11																									020
12																									

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Arundis	9/25/20	1620		9/25/20	1620
	9/25/20	1803		9/25/20	1803

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Guy

SIGNATURE of SAMPLER:

DATE Signed: 9/23/20

SAMPLE CONDITIONS

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 29, 2020

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

RE: Project: YATES AMA RADS
Pace Project No.: 92497114

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between September 23, 2020 and September 25, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

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 AMA RADS
Pace Project No.: 92497114

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 AMA RADS
Pace Project No.: 92497114

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92497114001	**DUP-01 (092220)**	Water	09/22/20 00:00	09/23/20 17:40
92497114002	**YGWA-4I (092220)**	Water	09/22/20 11:20	09/23/20 17:40
92497114003	**YGWA-5I (092220)**	Water	09/22/20 13:05	09/23/20 17:40
92497114004	**YGWA-5D (092220)**	Water	09/22/20 15:40	09/23/20 17:40
92497114005	**FIELD BLANK-01 (092220)**	Water	09/22/20 16:15	09/23/20 17:40
92497114006	**YGWA-17S (092320)**	Water	09/23/20 09:20	09/23/20 17:40
92497114007	**EQUPMENT BLANK-01 (092320)**	Water	09/23/20 09:50	09/23/20 17:40
92497114008	**YGWA-18S (092320)**	Water	09/23/20 13:40	09/23/20 17:40
92497114009	**YGWC-24SA (092320)**	Water	09/23/20 14:05	09/23/20 17:40
92497114010	**DUP-02 (092320)**	Water	09/23/20 00:00	09/23/20 17:40
92497114011	**YGWA-18I**	Water	09/23/20 15:40	09/25/20 18:03
92497114012	**YGWA-20S**	Water	09/24/20 09:15	09/25/20 18:03
92497114013	**YGWA-21I**	Water	09/24/20 11:45	09/25/20 18:03
92497114014	**YGWC-42**	Water	09/24/20 14:20	09/25/20 18:03
92497114015	**YGWC-23S**	Water	09/24/20 17:05	09/25/20 18:03
92497114016	**FIELD BLANK-02**	Water	09/25/20 09:10	09/25/20 18:03
92497114017	**YGWC-38**	Water	09/25/20 09:40	09/25/20 18:03
92497114018	**YGWC-43**	Water	09/25/20 11:55	09/25/20 18:03
92497114019	**YGWC-41**	Water	09/25/20 13:35	09/25/20 18:03
92497114020	**EQUIPMENT BLANK-02**	Water	09/25/20 13:50	09/25/20 18:03

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SAMPLE ANALYTE COUNT

Project: YATES AMA RADS
Pace Project No.: 92497114

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92497114001	**DUP-01 (092220)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114002	**YGWA-4I (092220)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114003	**YGWA-5I (092220)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114004	**YGWA-5D (092220)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114005	**FIELD BLANK-01 (092220)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114006	**YGWA-17S (092320)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114007	**EQUPMENT BLANK-01 (092320)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114008	**YGWA-18S (092320)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114009	**YGWC-24SA (092320)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114010	**DUP-02 (092320)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114011	**YGWA-18I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114012	**YGWA-20S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114013	**YGWA-21I**	EPA 9315	LAL	1	PASI-PA

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110 Technology Parkway
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SAMPLE ANALYTE COUNT

Project: YATES AMA RADS
Pace Project No.: 92497114

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114014	**YGWC-42**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114015	**YGWC-23S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114016	**FIELD BLANK-02**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114017	**YGWC-38**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114018	**YGWC-43**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114019	**YGWC-41**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497114020	**EQUIPMENT BLANK-02**	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 AMA RADS
Pace Project No.: 92497114

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497114001	**DUP-01 (092220)**					
EPA 9315	Radium-226	0.142 ± 0.265 (0.607) C:80% T:NA	pCi/L		10/14/20 06:25	
EPA 9320	Radium-228	0.291 ± 0.395 (0.846) C:79% T:79%	pCi/L		10/15/20 14:15	
Total Radium Calculation	Total Radium	0.433 ± 0.660 (1.45)	pCi/L		10/22/20 12:35	
92497114002	**YGWA-4I (092220)**					
EPA 9315	Radium-226	0.549 ± 0.315 (0.456) C:87% T:NA	pCi/L		10/14/20 06:25	
EPA 9320	Radium-228	0.246 ± 0.387 (0.838) C:82% T:83%	pCi/L		10/15/20 14:15	
Total Radium Calculation	Total Radium	0.795 ± 0.702 (1.29)	pCi/L		10/22/20 12:35	
92497114003	**YGWA-5I (092220)**					
EPA 9315	Radium-226	0.0387 ± 0.202 (0.521) C:84% T:NA	pCi/L		10/14/20 06:24	
EPA 9320	Radium-228	0.389 ± 0.366 (0.747) C:68% T:87%	pCi/L		10/15/20 14:31	
Total Radium Calculation	Total Radium	0.428 ± 0.568 (1.27)	pCi/L		10/22/20 12:35	
92497114004	**YGWA-5D (092220)**					
EPA 9315	Radium-226	2.63 ± 0.724 (0.599) C:84% T:NA	pCi/L		10/14/20 06:24	
EPA 9320	Radium-228	0.345 ± 0.328 (0.662) C:70% T:80%	pCi/L		10/15/20 14:31	
Total Radium Calculation	Total Radium	2.98 ± 1.05 (1.26)	pCi/L		10/22/20 12:35	

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.: 92497114

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497114005	**FIELD BLANK-01 (092220)**					
EPA 9315	Radium-226	0.265 ± 0.252 (0.480) C:91% T:NA	pCi/L		10/14/20 06:25	
EPA 9320	Radium-228	0.230 ± 0.398 (0.869) C:81% T:76%	pCi/L		10/15/20 14:14	
Total Radium Calculation	Total Radium	0.495 ± 0.650 (1.35)	pCi/L		10/22/20 12:35	
92497114006	**YGWA-17S (092320)**					
EPA 9315	Radium-226	0.150 ± 0.215 (0.463) C:87% T:NA	pCi/L		10/14/20 06:25	
EPA 9320	Radium-228	0.316 ± 0.368 (0.775) C:82% T:80%	pCi/L		10/15/20 14:14	
Total Radium Calculation	Total Radium	0.466 ± 0.583 (1.24)	pCi/L		10/22/20 12:35	
92497114007	**EQUPMENT BLANK-01 (092320)**					
EPA 9315	Radium-226	0.280 ± 0.236 (0.422) C:92% T:NA	pCi/L		10/14/20 06:33	
EPA 9320	Radium-228	0.129 ± 0.418 (0.942) C:79% T:78%	pCi/L		10/15/20 14:15	
Total Radium Calculation	Total Radium	0.409 ± 0.654 (1.36)	pCi/L		10/23/20 13:58	
92497114008	**YGWA-18S (092320)**					
EPA 9315	Radium-226	0.338 ± 0.276 (0.501) C:89% T:NA	pCi/L		10/14/20 06:33	
EPA 9320	Radium-228	0.0919 ± 0.442 (1.00) C:76% T:76%	pCi/L		10/15/20 14:15	
Total Radium Calculation	Total Radium	0.430 ± 0.718 (1.50)	pCi/L		10/23/20 13:58	

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.: 92497114

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497114009	**YGWC-24SA (092320)**					
EPA 9315	Radium-226	-0.0240 ± 0.146 (0.438) C:87% T:NA	pCi/L		10/14/20 06:33	
EPA 9320	Radium-228	0.786 ± 0.514 (0.977) C:78% T:75%	pCi/L		10/15/20 14:15	
Total Radium Calculation	Total Radium	0.786 ± 0.660 (1.42)	pCi/L		10/23/20 13:58	
92497114010	**DUP-02 (092320)**					
EPA 9315	Radium-226	-0.00575 ± 0.196 (0.536) C:86% T:NA	pCi/L		10/14/20 06:33	
EPA 9320	Radium-228	0.225 ± 0.376 (0.819) C:80% T:89%	pCi/L		10/15/20 14:15	
Total Radium Calculation	Total Radium	0.225 ± 0.572 (1.36)	pCi/L		10/23/20 13:58	
92497114011	**YGWA-18I**					
EPA 9315	Radium-226	-0.0356 ± 0.199 (0.559) C:89% T:NA	pCi/L		10/28/20 07:38	
EPA 9320	Radium-228	0.887 ± 0.552 (1.05) C:69% T:77%	pCi/L		10/28/20 15:11	
Total Radium Calculation	Total Radium	0.887 ± 0.751 (1.61)	pCi/L		10/29/20 12:49	
92497114012	**YGWA-20S**					
EPA 9315	Radium-226	0.151 ± 0.203 (0.431) C:96% T:NA	pCi/L		10/28/20 07:38	
EPA 9320	Radium-228	0.460 ± 0.487 (1.02) C:70% T:80%	pCi/L		10/28/20 15:11	
Total Radium Calculation	Total Radium	0.611 ± 0.690 (1.45)	pCi/L		10/29/20 12:49	

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 RADS
Pace Project No.: 92497114

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497114013	**YGWA-21I**					
EPA 9315	Radium-226	0.576 ± 0.300 (0.367) C:90% T:NA	pCi/L		10/28/20 07:38	
EPA 9320	Radium-228	1.22 ± 0.692 (1.26) C:62% T:64%	pCi/L		10/28/20 15:11	
Total Radium Calculation	Total Radium	1.80 ± 0.992 (1.63)	pCi/L		10/29/20 12:49	
92497114014	**YGWC-42**					
EPA 9315	Radium-226	0.514 ± 0.305 (0.452) C:87% T:NA	pCi/L		10/28/20 07:38	
EPA 9320	Radium-228	0.237 ± 0.432 (0.946) C:70% T:81%	pCi/L		10/28/20 15:11	
Total Radium Calculation	Total Radium	0.751 ± 0.737 (1.40)	pCi/L		10/29/20 12:49	
92497114015	**YGWC-23S**					
EPA 9315	Radium-226	0.415 ± 0.287 (0.463) C:84% T:NA	pCi/L		10/28/20 07:38	
EPA 9320	Radium-228	0.373 ± 0.494 (1.05) C:66% T:75%	pCi/L		10/28/20 15:11	
Total Radium Calculation	Total Radium	0.788 ± 0.781 (1.51)	pCi/L		10/29/20 12:49	
92497114016	**FIELD BLANK-02**					
EPA 9315	Radium-226	-0.0487 ± 0.208 (0.585) C:90% T:NA	pCi/L		10/28/20 07:38	
EPA 9320	Radium-228	0.930 ± 0.512 (0.933) C:74% T:76%	pCi/L		10/28/20 15:12	
Total Radium Calculation	Total Radium	0.930 ± 0.720 (1.52)	pCi/L		10/29/20 12:49	

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 RADS
Pace Project No.: 92497114

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497114017	**YGWC-38**					
EPA 9315	Radium-226	0.246 ± 0.224 (0.397) C:88% T:NA	pCi/L		10/28/20 07:40	
EPA 9320	Radium-228	-0.788 ± 0.377 (1.03) C:69% T:68%	pCi/L		10/28/20 15:12	
Total Radium Calculation	Total Radium	0.246 ± 0.601 (1.43)	pCi/L		10/29/20 12:49	
92497114018	**YGWC-43**					
EPA 9315	Radium-226	4.14 ± 0.947 (0.429) C:86% T:NA	pCi/L		10/28/20 08:46	
EPA 9320	Radium-228	0.612 ± 0.490 (0.978) C:65% T:80%	pCi/L		10/28/20 15:12	
Total Radium Calculation	Total Radium	4.75 ± 1.44 (1.41)	pCi/L		10/29/20 12:49	
92497114019	**YGWC-41**					
EPA 9315	Radium-226	0.0313 ± 0.193 (0.502) C:89% T:NA	pCi/L		10/28/20 07:40	
EPA 9320	Radium-228	0.738 ± 0.534 (1.06) C:70% T:82%	pCi/L		10/28/20 15:12	
Total Radium Calculation	Total Radium	0.769 ± 0.727 (1.56)	pCi/L		10/29/20 12:49	
92497114020	**EQUIPMENT BLANK-02**					
EPA 9315	Radium-226	-0.0720 ± 0.137 (0.466) C:87% T:NA	pCi/L		10/28/20 07:40	
EPA 9320	Radium-228	0.369 ± 0.455 (0.965) C:69% T:78%	pCi/L		10/28/20 15:12	
Total Radium Calculation	Total Radium	0.369 ± 0.592 (1.43)	pCi/L		10/29/20 13:50	

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.: 92497114

Sample: DUP-01 (092220) **Lab ID: 92497114001** Collected: 09/22/20 00:00 Received: 09/23/20 17:40 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	**0.142 ± 0.265 (0.607) C:80% T:NA**	pCi/L	10/14/20 06:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.291 ± 0.395 (0.846) C:79% T:79%**	pCi/L	10/15/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.433 ± 0.660 (1.45)**	pCi/L	10/22/20 12:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWA-4I (092220) **Lab ID: 92497114002** Collected: 09/22/20 11:20 Received: 09/23/20 17:40 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	**0.549 ± 0.315 (0.456) C:87% T:NA**	pCi/L	10/14/20 06:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.246 ± 0.387 (0.838) C:82% T:83%**	pCi/L	10/15/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.795 ± 0.702 (1.29)**	pCi/L	10/22/20 12:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWA-5I (092220) **Lab ID: 92497114003** Collected: 09/22/20 13:05 Received: 09/23/20 17:40 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	**0.0387 ± 0.202 (0.521) C:84% T:NA**	pCi/L	10/14/20 06:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.389 ± 0.366 (0.747) C:68% T:87%**	pCi/L	10/15/20 14:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.428 ± 0.568 (1.27)**	pCi/L	10/22/20 12:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWA-5D (092220) **Lab ID: 92497114004** Collected: 09/22/20 15:40 Received: 09/23/20 17:40 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	**2.63 ± 0.724 (0.599) C:84% T:NA**	pCi/L	10/14/20 06:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.345 ± 0.328 (0.662) C:70% T:80%**	pCi/L	10/15/20 14:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.98 ± 1.05 (1.26)**	pCi/L	10/22/20 12:35	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: FIELD BLANK-01 (092220) **Lab ID: 92497114005** Collected: 09/22/20 16:15 Received: 09/23/20 17:40 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	**0.265 ± 0.252 (0.480) C:91% T:NA**	pCi/L	10/14/20 06:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.230 ± 0.398 (0.869) C:81% T:76%**	pCi/L	10/15/20 14:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.495 ± 0.650 (1.35)**	pCi/L	10/22/20 12:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWA-17S (092320) **Lab ID: 92497114006** Collected: 09/23/20 09:20 Received: 09/23/20 17:40 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	**0.150 ± 0.215 (0.463) C:87% T:NA**	pCi/L	10/14/20 06:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.316 ± 0.368 (0.775) C:82% T:80%**	pCi/L	10/15/20 14:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.466 ± 0.583 (1.24)**	pCi/L	10/22/20 12:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: EQUPMENT BLANK-01 (092320) **Lab ID: 92497114007** Collected: 09/23/20 09:50 Received: 09/23/20 17:40 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	**0.280 ± 0.236 (0.422) C:92% T:NA**	pCi/L	10/14/20 06:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.129 ± 0.418 (0.942) C:79% T:78%**	pCi/L	10/15/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.409 ± 0.654 (1.36)**	pCi/L	10/23/20 13:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWA-18S (092320) **Lab ID: 92497114008** Collected: 09/23/20 13:40 Received: 09/23/20 17:40 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	**0.338 ± 0.276 (0.501) C:89% T:NA**	pCi/L	10/14/20 06:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0919 ± 0.442 (1.00) C:76% T:76%**	pCi/L	10/15/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.430 ± 0.718 (1.50)**	pCi/L	10/23/20 13:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWC-24SA (092320) **Lab ID: 92497114009** Collected: 09/23/20 14:05 Received: 09/23/20 17:40 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	**-0.0240 ± 0.146 (0.438) C:87% T:NA**	pCi/L	10/14/20 06:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.786 ± 0.514 (0.977) C:78% T:75%**	pCi/L	10/15/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.786 ± 0.660 (1.42)**	pCi/L	10/23/20 13:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: DUP-02 (092320) **Lab ID: 92497114010** Collected: 09/23/20 00:00 Received: 09/23/20 17:40 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	**-0.00575 ± 0.196 (0.536) C:86% T:NA**	pCi/L	10/14/20 06:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.225 ± 0.376 (0.819) C:80% T:89%**	pCi/L	10/15/20 14:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.225 ± 0.572 (1.36)**	pCi/L	10/23/20 13:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWA-18I **Lab ID: 92497114011** Collected: 09/23/20 15:40 Received: 09/25/20 18:03 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	**-0.0356 ± 0.199 (0.559) C:89% T:NA**	pCi/L	10/28/20 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.887 ± 0.552 (1.05) C:69% T:77%**	pCi/L	10/28/20 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.887 ± 0.751 (1.61)**	pCi/L	10/29/20 12:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWA-20S **Lab ID: 92497114012** Collected: 09/24/20 09:15 Received: 09/25/20 18:03 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	**0.151 ± 0.203 (0.431) C:96% T:NA**	pCi/L	10/28/20 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.460 ± 0.487 (1.02) C:70% T:80%**	pCi/L	10/28/20 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.611 ± 0.690 (1.45)**	pCi/L	10/29/20 12:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWA-21I **Lab ID: 92497114013** Collected: 09/24/20 11:45 Received: 09/25/20 18:03 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	**0.576 ± 0.300 (0.367) C:90% T:NA**	pCi/L	10/28/20 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.22 ± 0.692 (1.26) C:62% T:64%**	pCi/L	10/28/20 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.80 ± 0.992 (1.63)**	pCi/L	10/29/20 12:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWC-42 **Lab ID: 92497114014** Collected: 09/24/20 14:20 Received: 09/25/20 18:03 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	**0.514 ± 0.305 (0.452) C:87% T:NA**	pCi/L	10/28/20 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.237 ± 0.432 (0.946) C:70% T:81%**	pCi/L	10/28/20 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.751 ± 0.737 (1.40)**	pCi/L	10/29/20 12:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWC-23S **Lab ID: 92497114015** Collected: 09/24/20 17:05 Received: 09/25/20 18:03 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	**0.415 ± 0.287 (0.463) C:84% T:NA**	pCi/L	10/28/20 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.373 ± 0.494 (1.05) C:66% T:75%**	pCi/L	10/28/20 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.788 ± 0.781 (1.51)**	pCi/L	10/29/20 12:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: FIELD BLANK-02 **Lab ID: 92497114016** Collected: 09/25/20 09:10 Received: 09/25/20 18:03 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	**-0.0487 ± 0.208 (0.585) C:90% T:NA**	pCi/L	10/28/20 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.930 ± 0.512 (0.933) C:74% T:76%**	pCi/L	10/28/20 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.930 ± 0.720 (1.52)**	pCi/L	10/29/20 12:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWC-38 **Lab ID: 92497114017** Collected: 09/25/20 09:40 Received: 09/25/20 18:03 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	**0.246 ± 0.224 (0.397) C:88% T:NA**	pCi/L	10/28/20 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.788 ± 0.377 (1.03) C:69% T:68%**	pCi/L	10/28/20 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.246 ± 0.601 (1.43)**	pCi/L	10/29/20 12:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWC-43 **Lab ID: 92497114018** Collected: 09/25/20 11:55 Received: 09/25/20 18:03 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	**4.14 ± 0.947 (0.429) C:86% T:NA**	pCi/L	10/28/20 08:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.612 ± 0.490 (0.978) C:65% T:80%**	pCi/L	10/28/20 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**4.75 ± 1.44 (1.41)**	pCi/L	10/29/20 12:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: YGWC-41 **Lab ID: 92497114019** Collected: 09/25/20 13:35 Received: 09/25/20 18:03 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	**0.0313 ± 0.193 (0.502) C:89% T:NA**	pCi/L	10/28/20 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.738 ± 0.534 (1.06) C:70% T:82%**	pCi/L	10/28/20 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.769 ± 0.727 (1.56)**	pCi/L	10/29/20 12:49	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

Sample: EQUIPMENT BLANK-02 **Lab ID: 92497114020** Collected: 09/25/20 13:50 Received: 09/25/20 18:03 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	**-0.0720 ± 0.137 (0.466) C:87% T:NA**	pCi/L	10/28/20 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.369 ± 0.455 (0.965) C:69% T:78%**	pCi/L	10/28/20 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.369 ± 0.592 (1.43)**	pCi/L	10/29/20 13:50	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

QC Batch: 419079
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497114011, 92497114012, 92497114013, 92497114014, 92497114015, 92497114016, 92497114017, 92497114018, 92497114019, 92497114020

METHOD BLANK: 2026038
Matrix: Water
Associated Lab Samples: 92497114011, 92497114012, 92497114013, 92497114014, 92497114015, 92497114016, 92497114017, 92497114018, 92497114019, 92497114020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00248 ± 0.179 (0.490) C:89% T:NA	pCi/L	10/28/20 07:37	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

QC Batch: 417131
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497114003, 92497114004

METHOD BLANK: 2016812
Matrix: Water
Associated Lab Samples: 92497114003, 92497114004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.888 ± 0.380 (0.600) C:70% T:99%	pCi/L	10/15/20 11:15	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

QC Batch: 417133
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497114001, 92497114002, 92497114005, 92497114006, 92497114007, 92497114008, 92497114009, 92497114010

METHOD BLANK: 2016815 Matrix: Water
Associated Lab Samples: 92497114001, 92497114002, 92497114005, 92497114006, 92497114007, 92497114008, 92497114009, 92497114010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.00961 ± 0.301 (0.708) C:79% T:84%	pCi/L	10/15/20 14:13	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

QC Batch: 417130
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497114003, 92497114004

METHOD BLANK: 2016810 Matrix: Water
Associated Lab Samples: 92497114003, 92497114004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00529 ± 0.135 (0.392) C:94% T:NA	pCi/L	10/14/20 07:09	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

QC Batch: 417132
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497114001, 92497114002, 92497114005, 92497114006, 92497114007, 92497114008, 92497114009, 92497114010

METHOD BLANK: 2016814 Matrix: Water
Associated Lab Samples: 92497114001, 92497114002, 92497114005, 92497114006, 92497114007, 92497114008, 92497114009, 92497114010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0977 ± 0.149 (0.503) C:90% T:NA	pCi/L	10/14/20 06:25	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92497114

QC Batch: 419080
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497114011, 92497114012, 92497114013, 92497114014, 92497114015, 92497114016, 92497114017, 92497114018, 92497114019, 92497114020

METHOD BLANK: 2026039
Matrix: Water
Associated Lab Samples: 92497114011, 92497114012, 92497114013, 92497114014, 92497114015, 92497114016, 92497114017, 92497114018, 92497114019, 92497114020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.762 ± 0.491 (0.943) C:71% T:74%	pCi/L	10/28/20 11:52	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: YATES AMA RADS
Pace Project No.: 92497114

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 RADS
Pace Project No.: 92497114

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497114001	DUP-01 (092220)	EPA 9315	417132		
92497114002	YGWA-4I (092220)	EPA 9315	417132		
92497114003	YGWA-5I (092220)	EPA 9315	417130		
92497114004	YGWA-5D (092220)	EPA 9315	417130		
92497114005	FIELD BLANK-01 (092220)	EPA 9315	417132		
92497114006	YGWA-17S (092320)	EPA 9315	417132		
92497114007	EQUPMENT BLANK-01 (092320)	EPA 9315	417132		
92497114008	YGWA-18S (092320)	EPA 9315	417132		
92497114009	YGWC-24SA (092320)	EPA 9315	417132		
92497114010	DUP-02 (092320)	EPA 9315	417132		
92497114011	YGWA-18I	EPA 9315	419079		
92497114012	YGWA-20S	EPA 9315	419079		
92497114013	YGWA-21I	EPA 9315	419079		
92497114014	YGWC-42	EPA 9315	419079		
92497114015	YGWC-23S	EPA 9315	419079		
92497114016	FIELD BLANK-02	EPA 9315	419079		
92497114017	YGWC-38	EPA 9315	419079		
92497114018	YGWC-43	EPA 9315	419079		
92497114019	YGWC-41	EPA 9315	419079		
92497114020	EQUIPMENT BLANK-02	EPA 9315	419079		
92497114001	DUP-01 (092220)	EPA 9320	417133		
92497114002	YGWA-4I (092220)	EPA 9320	417133		
92497114003	YGWA-5I (092220)	EPA 9320	417131		
92497114004	YGWA-5D (092220)	EPA 9320	417131		
92497114005	FIELD BLANK-01 (092220)	EPA 9320	417133		
92497114006	YGWA-17S (092320)	EPA 9320	417133		
92497114007	EQUPMENT BLANK-01 (092320)	EPA 9320	417133		
92497114008	YGWA-18S (092320)	EPA 9320	417133		
92497114009	YGWC-24SA (092320)	EPA 9320	417133		
92497114010	DUP-02 (092320)	EPA 9320	417133		
92497114011	YGWA-18I	EPA 9320	419080		
92497114012	YGWA-20S	EPA 9320	419080		
92497114013	YGWA-21I	EPA 9320	419080		
92497114014	YGWC-42	EPA 9320	419080		
92497114015	YGWC-23S	EPA 9320	419080		
92497114016	FIELD BLANK-02	EPA 9320	419080		
92497114017	YGWC-38	EPA 9320	419080		
92497114018	YGWC-43	EPA 9320	419080		
92497114019	YGWC-41	EPA 9320	419080		
92497114020	EQUIPMENT BLANK-02	EPA 9320	419080		
92497114001	DUP-01 (092220)	Total Radium Calculation	419770		
92497114002	YGWA-4I (092220)	Total Radium Calculation	419770		
92497114003	YGWA-5I (092220)	Total Radium Calculation	419770		
92497114004	YGWA-5D (092220)	Total Radium Calculation	419770		
92497114005	FIELD BLANK-01 (092220)	Total Radium Calculation	419770		

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 RADS
Pace Project No.: 92497114

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497114006	**YGWA-17S (092320)**	Total Radium Calculation	419770		
92497114007	**EQUPMENT BLANK-01 (092320)**	Total Radium Calculation	420044		
92497114008	**YGWA-18S (092320)**	Total Radium Calculation	420044		
92497114009	**YGWC-24SA (092320)**	Total Radium Calculation	420044		
92497114010	**DUP-02 (092320)**	Total Radium Calculation	420044		
92497114011	**YGWA-18I**	Total Radium Calculation	420824		
92497114012	**YGWA-20S**	Total Radium Calculation	420824		
92497114013	**YGWA-21I**	Total Radium Calculation	420824		
92497114014	**YGWC-42**	Total Radium Calculation	420824		
92497114015	**YGWC-23S**	Total Radium Calculation	420824		
92497114016	**FIELD BLANK-02**	Total Radium Calculation	420824		
92497114017	**YGWC-38**	Total Radium Calculation	420824		
92497114018	**YGWC-43**	Total Radium Calculation	420824		
92497114019	**YGWC-41**	Total Radium Calculation	420824		
92497114020	**EQUIPMENT BLANK-02**	Total Radium Calculation	420843		

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

WO#: 92497114

92497114

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

Tracking #: _____

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

Proj. Name:

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

Thermometer Used 230 Type of Ice: (Wet) Blue None ☐ Samples on Ice, cooling process has begun

Cooler Temperature 3.4°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/23/2004

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	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 bottle

Project # **WO# : 92497114**

PM: KLH1 Due Date: 10/14/20

CLIENT: GA-GA Power

Matrix	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)	BP3N-250 mL Plastic ZN Acetate & NaOH (>9)	BP4Z-125 mL Plastic NaOH (pH > 12) (Cl-)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG3U-250 mL Amber H2SO4 (pH < 2)	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)	VOAX (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)	BP3N-250 mL Plastic (NH2)2SO4 (9.3-9.7)	BP3A-250 mL Plastic (NH2)2SO4 (N/A)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation 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	Lo

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 (
Out of hold, incorrect preservative, out of temp, incorrect containers.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marion, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Sleever
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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: TDS	Anions	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	G24497114
1	DUP-01 (092270)	W		9/22/20	—				5	/		/							/	/	/	/		—
2	YGWA-4I (092220)	W		9/22	1120				5	/		/							/	/	/	/		pH 5.80
3	YGWA-5I (092220)	W		9/22	1305				5	/		/							/	/	/	/		pH 5.99
4	YGWA-5D (092220)	W		9/22	1540				5	/		/							/	/	/	/		pH 7.19
5	FIELD BLANK-01 (092220)	W		9/22	1615				5	/		/							/	/	/	/		—
6	YGWA-17S (092320)	W		9/23	0920				5	/		/							/	/	/	/		pH: 5.58
7	EQUIPMENT BLANK-01 (092320)	W		9/23	0950				5	/		/							/	/	/	/		—
8	YGWA-18S (092320)	W		9/23	1340				5	/		/							/	/	/	/		pH: 5.29
9																								
10																								
11																								
12																								

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		9/23/20	1525		9/23/20	1525	
		9/23/20	1740		9/23/20	1740	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Mitchell Guy
SIGNATURE of SAMPLER:
DATE Signed: 9/23/20

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 2 Of 2

Section A — Required Client Information:

Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B — Required Project Information:

Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates plt AMM
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 (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App III & IV Metals	App III & IV + Hg	RAD 9315/9320	Residual Chlorine (Y/N)	92497114
13	[illegible]	WT																	X	X		X	X		
14	YEPWC-24SA(09232020)		G			9-23-20	1405		5	1		1													pH-5.64
15	DUP-02(09232020)		G			9-23-20	—		5	1		1													
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									

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
	Katie Pupkiewicz/KP	9-23-20	17:45	[signature]	9/23/20	1740	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Pupkiewicz

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/23/2020

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 10/13/2020
Worklist: 56587
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2016810
MB concentration:	-0.005
M/B Counting Uncertainty:	0.135
MB MDC:	0.392
MB Numerical Performance Indicator:	-0.08
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS56587	LCSD56587
Count Date:	10/14/2020	10/14/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.044	24.044
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.512
Target Conc. (pCi/L, g, F):	4.732	4.697
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	4.419	4.459
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.793	0.781
Numerical Performance Indicator:	-0.77	-0.59
Percent Recovery:	93.40%	94.94%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS56587	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD56587	
Sample Result (pCi/L, g, F):	4.419	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.793	
Sample Duplicate Result (pCi/L, g, F):	4.459	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.781	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.071	92497113001
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.64%	92497113001DUP
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

Comments:

CMW 10/14/2020

LAM 10/14/2020

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/13/2020
Worklist:	56587
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2016810
MB concentration:	-0.005
M/B Counting Uncertainty:	0.135
MB MDC:	0.392
MB Numerical Performance Indicator:	-0.08
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS56587	LCSD56587
Count Date:	10/14/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.044	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.508	
Target Conc. (pCi/L, g, F):	4.732	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.419	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.793	
Numerical Performance Indicator:	-0.77	
Percent Recovery:	93.40%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	92497113001	
Duplicate Sample I.D.	92497113001DUP	
Sample Result (pCi/L, g, F):	0.393	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.257	
Sample Duplicate Result (pCi/L, g, F):	0.393	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.369	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.003	92497113001
Duplicate RPD:	0.20%	92497113001DUP
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

Comments:

10/14/2020

LAM 10/14/2020

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/13/2020
Worklist:	56589
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2016814
MB concentration:	-0.098
M/B Counting Uncertainty:	0.148
MB MDC:	0.503
MB Numerical Performance Indicator:	-1.30
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS56589	LCSD56589
Count Date:	10/14/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.044	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.508	
Target Conc. (pCi/L, g, F):	4.736	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.957	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.812	
Numerical Performance Indicator:	0.53	
Percent Recovery:	104.66%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92497114005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92497114005DUP	
Sample Result (pCi/L, g, F):	0.265	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.249	
Sample Duplicate Result (pCi/L, g, F):	-0.086	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.079	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	2.633	92497114005
Duplicate RPD:	390.92%	92497114005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 10/14/2020

LAM 10/14/2020

Qu 10-15-20

Quality Control Sample Performance Assessment

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	LAL
Date:	10/13/2020
Worklist:	56589
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2016814
MB concentration:	-0.098
M/B Counting Uncertainty:	0.148
MB MDC:	0.503
MB Numerical Performance Indicator:	-1.30
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS56589	LCSD56589
Count Date:	10/14/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.044	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.508	
Target Conc. (pCi/L, g, F):	4.736	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.957	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.812	
Numerical Performance Indicator:	0.53	
Percent Recovery:	104.66%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92497118006	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92497118006DUP	
Sample Result (pCi/L, g, F):	0.280	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.271	
Sample Duplicate Result (pCi/L, g, F):	0.399	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.250	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.631	92497118006
Duplicate RPD:	34.99%	92497118006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 10/14/2020

LAM 10/14/2020

10.15.20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 10/27/2020
Worklist: 56830
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2026038
MB concentration:	0.002
M/B Counting Uncertainty:	0.179
MB MDC:	0.490
MB Numerical Performance Indicator:	0.03
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS56830	LCSD56830
Count Date:	10/28/2020	10/28/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.043	24.043
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.506
Target Conc. (pCi/L, g, F):	4.785	4.751
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.399	4.248
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.719	0.714
Numerical Performance Indicator:	-1.05	-1.38
Percent Recovery:	91.94%	89.40%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS56830	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD56830	
Sample Result (pCi/L, g, F):	4.399	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.719	
Sample Duplicate Result (pCi/L, g, F):	4.248	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.714	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.292	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.79%	
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

Comments:

10/28/2020

10/28/2020

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 10/27/2020
Worklist: 56830
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2026038
MB concentration:	0.002
M/B Counting Uncertainty:	0.179
MB MDC:	0.490
MB Numerical Performance Indicator:	0.03
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS56830	LCSD56830
Count Date:	10/28/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.043	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.503	
Target Conc. (pCi/L, g, F):	4.785	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.399	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.719	
Numerical Performance Indicator:	-1.05	
Percent Recovery:	91.94%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92497111017	Enter Duplicate
Duplicate Sample I.D.	92497111017DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.114	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.191	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.155	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.276	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.242	92497111017
Duplicate RPD:	30.83%	92497111017DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A
LAM 10/28/2020

10/28/2020

LAM 10/28/2020

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-228
Analyst:	VAL
Date:	10/13/2020
Worklist:	56588
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2016812
MB concentration:	0.888
M/B 2 Sigma CSU:	0.380
MB MDC:	0.600
MB Numerical Performance Indicator:	4.58
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS56588	LCSD56588
Count Date:	10/15/2020	10/15/2020
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	38.018	38.018
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.810
Target Conc. (pCi/L, g, F):	4.654	4.695
Uncertainty (Calculated):	0.228	0.230
Result (pCi/L, g, F):	5.189	5.370
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.207	1.191
Numerical Performance Indicator:	0.85	1.09
Percent Recovery:	111.49%	114.37%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS56588	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD56588	
Sample Result (pCi/L, g, F):	5.189	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.207	
Sample Duplicate Result (pCi/L, g, F):	5.370	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.191	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.210	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.55%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

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

10/16/2020

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-228
Analyst:	VAL
Date:	10/13/2020
Worklist:	56590
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2016815
MB concentration:	-0.010
M/B 2 Sigma CSU:	0.301
MB MDC:	0.708
MB Numerical Performance Indicator:	-0.06
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS56590	LCSD56590
Count Date:	10/15/2020	
Spike I.D.:	20-030	
Decay Corrected Spike Concentration (pCi/mL):	38.016	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.815	
Target Conc. (pCi/L, g, F):	4.665	
Uncertainty (Calculated):	0.229	
Result (pCi/L, g, F):	3.340	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.875	
Numerical Performance Indicator:	-2.87	
Percent Recovery:	71.58%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

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

Duplicate Sample Assessment		
Sample I.D.:	92497118006	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92497118006DUP	
Sample Result (pCi/L, g, F):	0.746	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.424	
Sample Duplicate Result (pCi/L, g, F):	0.204	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.426	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	1.767	92497118006
Duplicate RPD:	114.06%	92497118006DUP
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Fail**	
% RPD Limit:	36%	

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

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

Comments:

10/16/2020

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-228
Analyst:	VAL
Date:	10/26/2020
Worklist:	56831
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2026039
MB concentration:	0.762
M/B 2 Sigma CSU:	0.491
MB MDC:	0.943
MB Numerical Performance Indicator:	3.04
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS56831	LCSD56831
Count Date:	10/28/2020	10/28/2020
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	37.855	37.855
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.810	0.815
Target Conc. (pCi/L, g, F):	4.671	4.643
Uncertainty (Calculated):	0.229	0.228
Result (pCi/L, g, F):	4.950	5.280
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.141	1.178
Numerical Performance Indicator:	0.47	1.04
Percent Recovery:	105.97%	113.72%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS56831	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD56831	
Sample Result (pCi/L, g, F):	4.950	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.141	
Sample Duplicate Result (pCi/L, g, F):	5.280	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.178	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.395	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.05%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

10/29/20

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

Comments:
*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.

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

November 09, 2020

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

RE: Project: YATES AMA-R6 COMPLIANCE RADS
Pace Project No.: 92504753

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 25, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

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 AMA-R6 COMPLIANCE RADS
Pace Project No.: 92504753

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 COMPLIANCE RADS
Pace Project No.: 92504753

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92497108007	**YGWC-49 (09242020)**	Water	09/24/20 08:55	09/25/20 18:03
92497108008	**YGWA-39 (09242020)**	Water	09/24/20 10:02	09/25/20 18:03
92497108009	**YGWA-40 (09242020)**	Water	09/24/20 11:37	09/25/20 18:03

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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA-R6 COMPLIANCE RADS
Pace Project No.: 92504753

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92497108007	**YGWC-49 (09242020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497108008	**YGWA-39 (09242020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497108009	**YGWA-40 (09242020)**	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

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

SUMMARY OF DETECTION

Project: YATES AMA-R6 COMPLIANCE RADS
Pace Project No.: 92504753

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497108007	**YGWC-49 (09242020)**					
EPA 9315	Radium-226	0.506 ± 0.346 (0.598) C:81% T:NA	pCi/L		10/28/20 09:09	
EPA 9320	Radium-228	1.06 ± 0.616 (1.14) C:69% T:74%	pCi/L		11/04/20 12:27	
Total Radium Calculation	Total Radium	1.57 ± 0.962 (1.74)	pCi/L		11/05/20 09:25	
92497108008	**YGWA-39 (09242020)**					
EPA 9315	Radium-226	0.295 ± 0.224 (0.357) C:90% T:NA	pCi/L		10/28/20 09:10	
EPA 9320	Radium-228	0.273 ± 0.540 (1.19) C:66% T:74%	pCi/L		11/04/20 12:27	
Total Radium Calculation	Total Radium	0.568 ± 0.764 (1.55)	pCi/L		11/05/20 09:25	
92497108009	**YGWA-40 (09242020)**					
EPA 9315	Radium-226	0.265 ± 0.236 (0.431) C:90% T:NA	pCi/L		10/28/20 09:11	
EPA 9320	Radium-228	0.369 ± 0.553 (1.19) C:62% T:77%	pCi/L		11/04/20 12:27	
Total Radium Calculation	Total Radium	0.634 ± 0.789 (1.62)	pCi/L		11/05/20 09:25	

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 COMPLIANCE RADS
Pace Project No.: 92504753

Sample: YGWC-49 (09242020) **Lab ID: 92497108007** Collected: 09/24/20 08:55 Received: 09/25/20 18:03 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	**0.506 ± 0.346 (0.598) C:81% T:NA**	pCi/L	10/28/20 09:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.06 ± 0.616 (1.14) C:69% T:74%**	pCi/L	11/04/20 12:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.57 ± 0.962 (1.74)**	pCi/L	11/05/20 09:25	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 COMPLIANCE RADS
Pace Project No.: 92504753

Sample: YGWA-39 (09242020) **Lab ID: 92497108008** Collected: 09/24/20 10:02 Received: 09/25/20 18:03 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	**0.295 ± 0.224 (0.357) C:90% T:NA**	pCi/L	10/28/20 09:10	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.273 ± 0.540 (1.19) C:66% T:74%**	pCi/L	11/04/20 12:27	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.568 ± 0.764 (1.55)**	pCi/L	11/05/20 09:25	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 COMPLIANCE RADS
Pace Project No.: 92504753

Sample: YGWA-40 (09242020) **Lab ID: 92497108009** Collected: 09/24/20 11:37 Received: 09/25/20 18:03 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	**0.265 ± 0.236 (0.431) C:90% T:NA**	pCi/L	10/28/20 09:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.369 ± 0.553 (1.19) C:62% T:77%**	pCi/L	11/04/20 12:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.634 ± 0.789 (1.62)**	pCi/L	11/05/20 09:25	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 COMPLIANCE RADS
Pace Project No.: 92504753

QC Batch: 415887
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2010984 Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.452 ± 0.429 (0.882) C:72% T:83%	pCi/L	10/12/20 11:46	

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 COMPLIANCE RADS
Pace Project No.: 92504753

QC Batch: 419077
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497108007, 92497108008, 92497108009

METHOD BLANK: 2026036 Matrix: Water
Associated Lab Samples: 92497108007, 92497108008, 92497108009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0334 ± 0.189 (0.489) C:93% T:NA	pCi/L	10/28/20 09:04	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 COMPLIANCE RADS
Pace Project No.: 92504753

QC Batch: 415889
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2010986 Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.196 ± 0.238 (0.495) C:89% T:NA	pCi/L	10/08/20 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 AMA-R6 COMPLIANCE RADS
Pace Project No.: 92504753

QC Batch: 419078
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497108007, 92497108008, 92497108009

METHOD BLANK: 2026037 Matrix: Water
Associated Lab Samples: 92497108007, 92497108008, 92497108009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.576 ± 0.425 (0.831) C:71% T:86%	pCi/L	11/04/20 12:27	

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 COMPLIANCE RADS
Pace Project No.: 92504753

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 AMA-R6 COMPLIANCE RADS
Pace Project No.: 92504753

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497108007	**YGWC-49 (09242020)**	EPA 9315	419077		
92497108008	**YGWA-39 (09242020)**	EPA 9315	419077		
92497108009	**YGWA-40 (09242020)**	EPA 9315	419077		
92497108007	**YGWC-49 (09242020)**	EPA 9320	419078		
92497108008	**YGWA-39 (09242020)**	EPA 9320	419078		
92497108009	**YGWA-40 (09242020)**	EPA 9320	419078		
92497108007	**YGWC-49 (09242020)**	Total Radium Calculation	421737		
92497108008	**YGWA-39 (09242020)**	Total Radium Calculation	421737		
92497108009	**YGWA-40 (09242020)**	Total Radium Calculation	421737		

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

WO#: 92497146

92497146

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

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no

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

Thermometer Used 230 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.4 C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/23/2004

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical

Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
Document No.: F-CAR-CS-043-Rev.00	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 bottle

Project # **WO# : 92497146**

PM: KLH1 Due Date: 10/07/20
CLIENT: GA-GA Power

Matrix	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 (2)	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)
	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	Lo

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 C
Out of hold, incorrect preservative, out of temp, incorrect containers.

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 : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)354-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates ~~CCR~~ AWA/Rule VP
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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	92467146
1	YGWC-49(092420)		G			9/24/20	9:55		5	/		/												pH: 5.62 001
2	YGWA-39(092420)		G			9/24/20	10:02		5	/		/												pH: 5.70 002
3	YGWA-40(092420)		G			9/24/20	11:37		5	/		/												pH: 5.43 003
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MATRIX: 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
		9/25/20	8:03		9/25/20	8:03	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Pypkiewicz
SIGNATURE of SAMPLER: DATE Signed: 9/24/2020

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 09, 2020

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

RE: Project: YATES AMA-R6
Pace Project No.: 92497146

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between September 23, 2020 and September 25, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Tyler Forney for
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

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.: 92497146

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
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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

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

Project: YATES AMA-R6
Pace Project No.: 92497146

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92497146001	**YAMW-2 (09/23/2020)**	Water	09/23/20 14:00	09/23/20 17:40
92497146002	**YAMW-4 (09232020)**	Water	09/23/20 16:35	09/25/20 18:03
92497146003	**YAMW-5 (09242020)**	Water	09/24/20 10:15	09/25/20 18:03
92497146004	**YAMW-1 (09242020)**	Water	09/24/20 12:05	09/25/20 18:03
92497146005	**PZ-35 (09242020)**	Water	09/24/20 13:05	09/25/20 18:03
92497146006	**PZ-37 (09252020)**	Water	09/25/20 13:05	09/25/20 18:03

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SAMPLE ANALYTE COUNT

Project: YATES AMA-R6
Pace Project No.: 92497146

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92497146001	**YAMW-2 (09/23/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497146002	**YAMW-4 (09232020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497146003	**YAMW-5 (09242020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497146004	**YAMW-1 (09242020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92497146005	**PZ-35 (09242020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497146006	**PZ-37 (09252020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	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.: 92497146

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497146001	**YAMW-2 (09/23/2020)**					
	pH	5.66	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	1.7	mg/L	1.0	09/30/20 20:07	
EPA 6020B	Barium	0.0092J	mg/L	0.010	09/29/20 20:44	
EPA 6020B	Boron	0.026J	mg/L	0.10	09/29/20 20:44	
EPA 6020B	Chromium	0.00071J	mg/L	0.010	09/29/20 20:44	
EPA 6020B	Cobalt	0.0025J	mg/L	0.0050	09/29/20 20:44	
SM 2450C-2011	Total Dissolved Solids	62.0	mg/L	10.0	09/28/20 14:50	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	09/29/20 04:12	
EPA 300.0 Rev 2.1 1993	Sulfate	9.1	mg/L	1.0	09/29/20 04:12	
92497146002	**YAMW-4 (09232020)**					
	Performed by	CUSTOMER			10/08/20 08:23	
	pH	5.89	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	10.5	mg/L	1.0	10/01/20 22:41	
EPA 6020B	Antimony	0.00065J	mg/L	0.0030	10/05/20 15:37	
EPA 6020B	Barium	0.0063J	mg/L	0.010	10/05/20 15:37	
EPA 6020B	Boron	2.5	mg/L	0.10	10/05/20 15:37	
EPA 6020B	Cobalt	0.00052J	mg/L	0.0050	10/05/20 15:37	
EPA 6020B	Lead	0.00028J	mg/L	0.0050	10/05/20 15:37	
EPA 6020B	Lithium	0.030J	mg/L	0.030	10/05/20 15:37	
EPA 6020B	Molybdenum	0.0068J	mg/L	0.010	10/05/20 15:37	
EPA 6020B	Selenium	0.016	mg/L	0.010	10/05/20 15:37	
SM 2450C-2011	Total Dissolved Solids	329	mg/L	10.0	09/28/20 17:40	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	10/01/20 02:55	
EPA 300.0 Rev 2.1 1993	Sulfate	152	mg/L	3.0	10/01/20 06:32	
92497146003	**YAMW-5 (09242020)**					
	Performed by	CUSTOMER			10/08/20 08:23	
	pH	5.38	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	61.3	mg/L	1.0	10/01/20 22:45	
EPA 6020B	Antimony	0.00033J	mg/L	0.0030	10/05/20 15:43	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	10/05/20 15:43	
EPA 6020B	Barium	0.057	mg/L	0.010	10/05/20 15:43	
EPA 6020B	Beryllium	0.000086J	mg/L	0.0030	10/05/20 15:43	
EPA 6020B	Boron	8.7	mg/L	0.10	10/05/20 15:43	
EPA 6020B	Cadmium	0.00018J	mg/L	0.0025	10/05/20 15:43	
EPA 6020B	Cobalt	0.00077J	mg/L	0.0050	10/05/20 15:43	
EPA 6020B	Lead	0.00011J	mg/L	0.0050	10/05/20 15:43	
EPA 6020B	Lithium	0.013J	mg/L	0.030	10/05/20 15:43	
EPA 6020B	Selenium	0.026	mg/L	0.010	10/05/20 15:43	
SM 2450C-2011	Total Dissolved Solids	788	mg/L	20.0	09/29/20 19:38	
EPA 300.0 Rev 2.1 1993	Chloride	3.7	mg/L	1.0	10/01/20 03:09	
EPA 300.0 Rev 2.1 1993	Sulfate	438	mg/L	10.0	10/01/20 06:46	
92497146004	**YAMW-1 (09242020)**					
	Performed by	CUSTOMER			10/08/20 08:23	

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.: 92497146

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497146004	**YAMW-1 (09242020)**					
	pH	6.00	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	4.8	mg/L	1.0	10/01/20 22:50	
EPA 6020B	Barium	0.028	mg/L	0.010	10/05/20 15:49	
EPA 6020B	Beryllium	0.000058J	mg/L	0.0030	10/05/20 15:49	
EPA 6020B	Boron	0.076J	mg/L	0.10	10/05/20 15:49	
EPA 6020B	Cadmium	0.00017J	mg/L	0.0025	10/05/20 15:49	
EPA 6020B	Chromium	0.00074J	mg/L	0.010	10/05/20 15:49	
EPA 6020B	Cobalt	0.010	mg/L	0.0050	10/05/20 15:49	
EPA 6020B	Lithium	0.011J	mg/L	0.030	10/05/20 15:49	
EPA 6020B	Molybdenum	0.0022J	mg/L	0.010	10/05/20 15:49	
SM 2450C-2011	Total Dissolved Solids	106	mg/L	10.0	09/29/20 19:38	
EPA 300.0 Rev 2.1 1993	Chloride	6.6	mg/L	1.0	10/01/20 03:23	
EPA 300.0 Rev 2.1 1993	Sulfate	13.1	mg/L	1.0	10/01/20 03:23	
92497146005	**PZ-35 (09242020)**					
	Performed by	CUSTOMER			10/08/20 08:23	
	pH	5.52	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	3.6	mg/L	1.0	10/01/20 22:54	
EPA 6020B	Barium	0.034	mg/L	0.010	10/05/20 16:24	
EPA 6020B	Beryllium	0.00033J	mg/L	0.0030	10/05/20 16:24	
EPA 6020B	Boron	0.017J	mg/L	0.10	10/05/20 16:24	
EPA 6020B	Chromium	0.00061J	mg/L	0.010	10/05/20 16:24	
EPA 6020B	Lithium	0.0010J	mg/L	0.030	10/05/20 16:24	
SM 2450C-2011	Total Dissolved Solids	100	mg/L	10.0	09/29/20 19:38	
EPA 300.0 Rev 2.1 1993	Chloride	7.5	mg/L	1.0	09/30/20 15:57	
EPA 300.0 Rev 2.1 1993	Sulfate	7.2	mg/L	1.0	09/30/20 15:57	
92497146006	**PZ-37 (09252020)**					
	Performed by	CUSTOMER			10/08/20 08:23	
	pH	5.46	Std. Units		10/08/20 08:23	
EPA 6010D	Calcium	108	mg/L	1.0	10/01/20 22:58	
EPA 6020B	Antimony	0.0014J	mg/L	0.0030	10/05/20 16:30	
EPA 6020B	Barium	0.034	mg/L	0.010	10/05/20 16:30	
EPA 6020B	Beryllium	0.00031J	mg/L	0.0030	10/05/20 16:30	
EPA 6020B	Boron	14.1	mg/L	1.0	10/06/20 12:58	
EPA 6020B	Cadmium	0.00039J	mg/L	0.0025	10/05/20 16:30	
EPA 6020B	Cobalt	0.0023J	mg/L	0.0050	10/05/20 16:30	
EPA 6020B	Lead	0.000085J	mg/L	0.0050	10/05/20 16:30	
EPA 6020B	Lithium	0.028J	mg/L	0.030	10/05/20 16:30	
EPA 6020B	Molybdenum	0.0016J	mg/L	0.010	10/05/20 16:30	
EPA 6020B	Selenium	0.32	mg/L	0.010	10/05/20 16:30	
SM 2450C-2011	Total Dissolved Solids	878	mg/L	20.0	10/01/20 15:23	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	09/30/20 16:40	
EPA 300.0 Rev 2.1 1993	Sulfate	563	mg/L	11.0	09/30/20 21:55	

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.: 92497146

Sample: YAMW-2 (09/23/2020) **Lab ID: 92497146001** Collected: 09/23/20 14:00 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.66**	Std. Units			1		10/08/20 08:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.7**	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 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	09/28/20 15:08	09/29/20 20:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/28/20 15:08	09/29/20 20:44	7440-38-2	
Barium	**0.0092J**	mg/L	0.010	0.00071	1	09/28/20 15:08	09/29/20 20:44	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/28/20 15:08	09/29/20 20:44	7440-41-7	
Boron	**0.026J**	mg/L	0.10	0.0052	1	09/28/20 15:08	09/29/20 20:44	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/28/20 15:08	09/29/20 20:44	7440-43-9	
Chromium	**0.00071J**	mg/L	0.010	0.00055	1	09/28/20 15:08	09/29/20 20:44	7440-47-3	
Cobalt	**0.0025J**	mg/L	0.0050	0.00038	1	09/28/20 15:08	09/29/20 20:44	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/28/20 15:08	09/29/20 20:44	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/28/20 15:08	09/29/20 20:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/28/20 15:08	09/29/20 20:44	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/28/20 15:08	09/29/20 20:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/28/20 15:08	09/29/20 20:44	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	09/28/20 11:50	09/29/20 13:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**62.0**	mg/L	10.0	10.0	1		09/28/20 14:50		
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		09/29/20 04:12	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 04:12	16984-48-8	
Sulfate	**9.1**	mg/L	1.0	0.50	1		09/29/20 04:12	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 AMA-R6
Pace Project No.: 92497146

Sample: YAMW-4 (09232020) **Lab ID: 92497146002** Collected: 09/23/20 16:35 Received: 09/25/20 18:03 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		10/08/20 08:23		
pH	**5.89**	Std. Units			1		10/08/20 08:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**10.5**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:41	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00065J**	mg/L	0.0030	0.00028	1	09/30/20 20:47	10/05/20 15:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 15:37	7440-38-2	
Barium	**0.0063J**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 15:37	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 15:37	7440-41-7	
Boron	**2.5**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 15:37	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 15:37	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 15:37	7440-47-3	
Cobalt	**0.00052J**	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 15:37	7440-48-4	
Lead	**0.00028J**	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 15:37	7439-92-1	
Lithium	**0.030J**	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 15:37	7439-93-2	
Molybdenum	**0.0068J**	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 15:37	7439-98-7	
Selenium	**0.016**	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 15:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 15:37	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/29/20 13:30	09/30/20 13:39	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**329**	mg/L	10.0	10.0	1		09/28/20 17:40		
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		10/01/20 02:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 02:55	16984-48-8	
Sulfate	**152**	mg/L	3.0	1.5	3		10/01/20 06:32	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 AMA-R6
Pace Project No.: 92497146

Sample: YAMW-5 (09242020) **Lab ID: 92497146003** Collected: 09/24/20 10:15 Received: 09/25/20 18:03 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		10/08/20 08:23		
pH	**5.38**	Std. Units			1		10/08/20 08:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**61.3**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:45	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00033J**	mg/L	0.0030	0.00028	1	09/30/20 20:47	10/05/20 15:43	7440-36-0	
Arsenic	**0.0015J**	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 15:43	7440-38-2	
Barium	**0.057**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 15:43	7440-39-3	
Beryllium	**0.000086J**	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 15:43	7440-41-7	
Boron	**8.7**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 15:43	7440-42-8	
Cadmium	**0.00018J**	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 15:43	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 15:43	7440-47-3	
Cobalt	**0.00077J**	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 15:43	7440-48-4	
Lead	**0.00011J**	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 15:43	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 15:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 15:43	7439-98-7	
Selenium	**0.026**	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 15:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 15:43	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	09/29/20 13:30	09/30/20 13:42	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**788**	mg/L	20.0	20.0	1		09/29/20 19:38		
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		10/01/20 03:09	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 03:09	16984-48-8	
Sulfate	**438**	mg/L	10.0	5.0	10		10/01/20 06:46	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 AMA-R6
Pace Project No.: 92497146

Sample: YAMW-1 (09242020) **Lab ID: 92497146004** Collected: 09/24/20 12:05 Received: 09/25/20 18:03 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		10/08/20 08:23		
pH	**6.00**	Std. Units			1		10/08/20 08:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**4.8**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:50	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	09/30/20 20:47	10/05/20 15:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 15:49	7440-38-2	
Barium	**0.028**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 15:49	7440-39-3	
Beryllium	**0.000058J**	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 15:49	7440-41-7	
Boron	**0.076J**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 15:49	7440-42-8	
Cadmium	**0.00017J**	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 15:49	7440-43-9	
Chromium	**0.00074J**	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 15:49	7440-47-3	
Cobalt	**0.010**	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 15:49	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 15:49	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 15:49	7439-93-2	
Molybdenum	**0.0022J**	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 15:49	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 15:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 15:49	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	09/29/20 13:30	09/30/20 13:44	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**106**	mg/L	10.0	10.0	1		09/29/20 19:38		
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		10/01/20 03:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/20 03:23	16984-48-8	
Sulfate	**13.1**	mg/L	1.0	0.50	1		10/01/20 03:23	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.: 92497146

Sample: PZ-35 (09242020) **Lab ID: 92497146005** Collected: 09/24/20 13:05 Received: 09/25/20 18:03 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		10/08/20 08:23		
pH	**5.52**	Std. Units			1		10/08/20 08:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**3.6**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:54	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/30/20 20:47	10/05/20 16:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 16:24	7440-38-2	
Barium	**0.034**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 16:24	7440-39-3	
Beryllium	**0.00033J**	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 16:24	7440-41-7	
Boron	**0.017J**	mg/L	0.10	0.0052	1	09/30/20 20:47	10/05/20 16:24	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 16:24	7440-43-9	
Chromium	**0.00061J**	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 16:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 16:24	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 16:24	7439-92-1	
Lithium	**0.0010J**	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 16:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 16:24	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 16:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 16:24	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	09/29/20 13:30	09/30/20 13:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**100**	mg/L	10.0	10.0	1		09/29/20 19:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.5**	mg/L	1.0	0.60	1		09/30/20 15:57	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/20 15:57	16984-48-8	M1,R1
Sulfate	**7.2**	mg/L	1.0	0.50	1		09/30/20 15:57	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.: 92497146

Sample: PZ-37 (09252020) **Lab ID: 92497146006** Collected: 09/25/20 13:05 Received: 09/25/20 18:03 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		10/08/20 08:23		
pH	**5.46**	Std. Units			1		10/08/20 08:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**108**	mg/L	1.0	0.070	1	09/30/20 20:44	10/01/20 22:58	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	09/30/20 20:47	10/05/20 16:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/30/20 20:47	10/05/20 16:30	7440-38-2	
Barium	**0.034**	mg/L	0.010	0.00071	1	09/30/20 20:47	10/05/20 16:30	7440-39-3	
Beryllium	**0.00031J**	mg/L	0.0030	0.000046	1	09/30/20 20:47	10/05/20 16:30	7440-41-7	
Boron	**14.1**	mg/L	1.0	0.052	10	09/30/20 20:47	10/06/20 12:58	7440-42-8	
Cadmium	**0.00039J**	mg/L	0.0025	0.00012	1	09/30/20 20:47	10/05/20 16:30	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/30/20 20:47	10/05/20 16:30	7440-47-3	
Cobalt	**0.0023J**	mg/L	0.0050	0.00038	1	09/30/20 20:47	10/05/20 16:30	7440-48-4	
Lead	**0.000085J**	mg/L	0.0050	0.000036	1	09/30/20 20:47	10/05/20 16:30	7439-92-1	
Lithium	**0.028J**	mg/L	0.030	0.00081	1	09/30/20 20:47	10/05/20 16:30	7439-93-2	
Molybdenum	**0.0016J**	mg/L	0.010	0.00069	1	09/30/20 20:47	10/05/20 16:30	7439-98-7	
Selenium	**0.32**	mg/L	0.010	0.0016	1	09/30/20 20:47	10/05/20 16:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/30/20 20:47	10/05/20 16:30	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	09/29/20 13:30	09/30/20 13:49	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**878**	mg/L	20.0	20.0	1		10/01/20 15:23		
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		09/30/20 16:40	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/20 16:40	16984-48-8	
Sulfate	**563**	mg/L	11.0	5.5	11		09/30/20 21:55	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: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 569429
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92497146001

METHOD BLANK: 3017011 Matrix: Water
Associated Lab Samples: 92497146001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	09/30/20 18:37	

LABORATORY CONTROL SAMPLE: 3017012

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: 3017068 3017069

Parameter	Units	92497141008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	0.91J	1	1	1.9	2.0	102	106	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 570091 | Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A | Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497146002, 92497146003, 92497146004, 92497146005, 92497146006

METHOD BLANK: 3020059 Matrix: Water
Associated Lab Samples: 92497146002, 92497146003, 92497146004, 92497146005, 92497146006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	10/01/20 21:32	

LABORATORY CONTROL SAMPLE: 3020060

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.95J	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020061 3020062

Parameter	Units	92497141014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	84.3	1	1	87.0	87.6	271	337	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 AMA-R6
Pace Project No.: 92497146

QC Batch: 569382
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92497146001

METHOD BLANK: 3016873 Matrix: Water
Associated Lab Samples: 92497146001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	09/29/20 18:03	
Arsenic	mg/L	ND	0.0050	0.00078	09/29/20 18:03	
Barium	mg/L	ND	0.010	0.00071	09/29/20 18:03	
Beryllium	mg/L	ND	0.0030	0.000046	09/29/20 18:03	
Boron	mg/L	ND	0.10	0.0052	09/29/20 18:03	
Cadmium	mg/L	ND	0.0025	0.00012	09/29/20 18:03	
Chromium	mg/L	ND	0.010	0.00055	09/29/20 18:03	
Cobalt	mg/L	ND	0.0050	0.00038	09/29/20 18:03	
Lead	mg/L	ND	0.0050	0.000036	09/29/20 18:03	
Lithium	mg/L	ND	0.030	0.00081	09/29/20 18:03	
Molybdenum	mg/L	ND	0.010	0.00069	09/29/20 18:03	
Selenium	mg/L	ND	0.010	0.0016	09/29/20 18:03	
Thallium	mg/L	ND	0.0010	0.00014	09/29/20 18:03	

LABORATORY CONTROL SAMPLE: 3016874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.094	94	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.091	91	80-120	
Molybdenum	mg/L	0.1	0.095	95	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: 3016875 3016876

Parameter	Units	92495870024 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	0.099	101	99	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.097	0.094	97	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 AMA-R6
Pace Project No.: 92497146

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3016875 3016876

Parameter	Units	92495870024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.013	0.1	0.1	0.11	0.11	98	95	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.096	0.094	96	94	75-125	1	20	
Boron	mg/L	ND	1	1	0.97	0.93	96	93	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.095	98	95	75-125	3	20	
Chromium	mg/L	0.00089J	0.1	0.1	0.098	0.095	98	94	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.097	0.094	97	94	75-125	3	20	
Lead	mg/L	0.000075J	0.1	0.1	0.095	0.094	95	94	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.094	0.092	94	92	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.099	0.096	98	96	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.092	0.093	91	91	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.096	96	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 AMA-R6
Pace Project No.: 92497146

QC Batch: 570092
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497146002, 92497146003, 92497146004, 92497146005, 92497146006

METHOD BLANK: 3020066 Matrix: Water
Associated Lab Samples: 92497146002, 92497146003, 92497146004, 92497146005, 92497146006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	10/05/20 14:57	
Arsenic	mg/L	ND	0.0050	0.00078	10/05/20 14:57	
Barium	mg/L	ND	0.010	0.00071	10/05/20 14:57	
Beryllium	mg/L	ND	0.0030	0.000046	10/05/20 14:57	
Boron	mg/L	ND	0.10	0.0052	10/05/20 14:57	
Cadmium	mg/L	ND	0.0025	0.00012	10/05/20 14:57	
Chromium	mg/L	ND	0.010	0.00055	10/05/20 14:57	
Cobalt	mg/L	ND	0.0050	0.00038	10/05/20 14:57	
Lead	mg/L	ND	0.0050	0.000036	10/05/20 14:57	
Lithium	mg/L	ND	0.030	0.00081	10/05/20 14:57	
Molybdenum	mg/L	ND	0.010	0.00069	10/05/20 14:57	
Selenium	mg/L	ND	0.010	0.0016	10/05/20 14:57	
Thallium	mg/L	ND	0.0010	0.00014	10/05/20 14:57	

LABORATORY CONTROL SAMPLE: 3020067

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	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	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	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.095	95	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020068 3020069

Parameter	Units	92497141019 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	0.096	0.098	96	98	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.094	0.097	94	97	75-125	3	20	

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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 AMA-R6
Pace Project No.: 92497146

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3020068 3020069

Parameter	Units	92497141019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.016	0.1	0.1	0.11	0.11	94	96	75-125	2	20	
Beryllium	mg/L	0.0020J	0.1	0.1	0.096	0.098	94	96	75-125	2	20	
Boron	mg/L	6.0	1	1	7.0	7.2	98	113	75-125	2	20	
Cadmium	mg/L	0.00014J	0.1	0.1	0.097	0.098	96	97	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.10	95	100	75-125	5	20	
Lead	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	
Lithium	mg/L	0.0025J	0.1	0.1	0.097	0.099	94	97	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Selenium	mg/L	0.046	0.1	0.1	0.14	0.15	99	100	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.093	0.096	93	96	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 569306
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497146001

METHOD BLANK: 3016285 Matrix: Water
Associated Lab Samples: 92497146001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	09/29/20 12:00	

LABORATORY CONTROL SAMPLE: 3016286

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3016287 3016288

Parameter	Units	92496941001 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	0.0025	100	99	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 AMA-R6
Pace Project No.: 92497146

QC Batch: 569684 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497146002, 92497146003, 92497146004, 92497146005, 92497146006

METHOD BLANK: 3017929 Matrix: Water
Associated Lab Samples: 92497146002, 92497146003, 92497146004, 92497146005, 92497146006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.000087J	0.00050	0.000078	09/30/20 13:06	

LABORATORY CONTROL SAMPLE: 3017930

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: 3017931 3017932

Parameter	Units	92496941020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.000081J	0.0025	0.0025	0.0025	0.0026	99	99	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 569386
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: 92497146001

METHOD BLANK: 3016890 Matrix: Water
Associated Lab Samples: 92497146001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/28/20 14:18	

LABORATORY CONTROL SAMPLE: 3016891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	429	107	84-108	

SAMPLE DUPLICATE: 3016892

Parameter	Units	92497125001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	260	295	13	10	D6

SAMPLE DUPLICATE: 3016893

Parameter	Units	92497141008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	81.0	59.0	31	10	D6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 569431
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: 92497146002

METHOD BLANK: 3017032 Matrix: Water
Associated Lab Samples: 92497146002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0	10.0	10.0	09/28/20 17:06	

LABORATORY CONTROL SAMPLE: 3017033

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	84-108	

SAMPLE DUPLICATE: 3017034

Parameter	Units	92497149002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	108	116	7	10	

SAMPLE DUPLICATE: 3017035

Parameter	Units	92497149005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	157	163	4	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 569806 | 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: 92497146003, 92497146004, 92497146005

METHOD BLANK: 3018686 Matrix: Water
Associated Lab Samples: 92497146003, 92497146004, 92497146005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/29/20 18:54	

LABORATORY CONTROL SAMPLE: 3018687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	402	100	84-108	

SAMPLE DUPLICATE: 3018688

Parameter	Units	92497721002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	386	353	9	10	

SAMPLE DUPLICATE: 3018689

Parameter	Units	92497141012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	74.0	7	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 570219
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: 92497146006

METHOD BLANK: 3020458 Matrix: Water
Associated Lab Samples: 92497146006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	10/01/20 15:22	

LABORATORY CONTROL SAMPLE: 3020459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	84-108	

SAMPLE DUPLICATE: 3020460

Parameter	Units	92497125005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	134	142	6	10	

SAMPLE DUPLICATE: 3020461

Parameter	Units	92497146006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	878	918	4	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 569512
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: 92497146001

METHOD BLANK: 3017392 Matrix: Water
Associated Lab Samples: 92497146001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/29/20 01:37	
Fluoride	mg/L	ND	0.10	0.050	09/29/20 01:37	
Sulfate	mg/L	ND	1.0	0.50	09/29/20 01:37	

LABORATORY CONTROL SAMPLE: 3017393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.5	107	90-110	
Fluoride	mg/L	2.5	2.7	110	90-110	
Sulfate	mg/L	50	52.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3017394 3017395

Parameter	Units	92497151006 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	51.6	51.4	103	103	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	103	103	90-110	0	10	
Sulfate	mg/L	ND	50	50	50.5	50.3	101	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3017396 3017397

Parameter	Units	92497151007 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	57.6	51.5	115	103	90-110	11	10	M1,R1
Fluoride	mg/L	ND	2.5	2.5	2.9	2.6	117	104	90-110	12	10	M1,R1
Sulfate	mg/L	ND	50	50	58.0	50.3	116	101	90-110	14	10	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 569832
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: 92497146002, 92497146003, 92497146004

METHOD BLANK: 3018769 Matrix: Water
Associated Lab Samples: 92497146002, 92497146003, 92497146004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/20 20:24	
Fluoride	mg/L	ND	0.10	0.050	09/30/20 20:24	
Sulfate	mg/L	ND	1.0	0.50	09/30/20 20:24	

LABORATORY CONTROL SAMPLE: 3018770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.0	102	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	49.8	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3018771 3018772

Parameter	Units	92497125004 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	51.9	51.4	104	103	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	105	103	90-110	2	10	
Sulfate	mg/L	ND	50	50	50.5	50.0	101	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3018773 3018774

Parameter	Units	92497141016 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	51.8	51.5	104	103	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.5	105	100	90-110	4	10	
Sulfate	mg/L	ND	50	50	50.5	50.1	101	100	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92497146

QC Batch: 569922
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: 92497146005, 92497146006

METHOD BLANK: 3019036 Matrix: Water
Associated Lab Samples: 92497146005, 92497146006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/20 11:24	
Fluoride	mg/L	ND	0.10	0.050	09/30/20 11:24	
Sulfate	mg/L	ND	1.0	0.50	09/30/20 11:24	

LABORATORY CONTROL SAMPLE: 3019037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.4	95	90-110	
Sulfate	mg/L	50	50.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3019038 3019039

Parameter	Units	92497713005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	25.7	50	50	75.8	77.8	100	104	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.9	92	116	90-110	23	10	M1,R1
Sulfate	mg/L	1.3	50	50	53.1	55.8	104	109	90-110	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3019040 3019041

Parameter	Units	92497146005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.5	50	50	59.7	61.3	104	108	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	1.8	2.0	71	81	90-110	13	10	M1,R1
Sulfate	mg/L	7.2	50	50	59.9	61.2	105	108	90-110	2	10	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALIFIERS

Project: YATES AMA-R6
Pace Project No.: 92497146

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.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA-R6
Pace Project No.: 92497146

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497146001	**YAMW-2 (09/23/2020)**				
92497146002	**YAMW-4 (09232020)**				
92497146003	**YAMW-5 (09242020)**				
92497146004	**YAMW-1 (09242020)**				
92497146005	**PZ-35 (09242020)**				
92497146006	**PZ-37 (09252020)**				
92497146001	**YAMW-2 (09/23/2020)**	EPA 3010A	569429	EPA 6010D	569491
92497146002	**YAMW-4 (09232020)**	EPA 3010A	570091	EPA 6010D	570131
92497146003	**YAMW-5 (09242020)**	EPA 3010A	570091	EPA 6010D	570131
92497146004	**YAMW-1 (09242020)**	EPA 3010A	570091	EPA 6010D	570131
92497146005	**PZ-35 (09242020)**	EPA 3010A	570091	EPA 6010D	570131
92497146006	**PZ-37 (09252020)**	EPA 3010A	570091	EPA 6010D	570131
92497146001	**YAMW-2 (09/23/2020)**	EPA 3005A	569382	EPA 6020B	569504
92497146002	**YAMW-4 (09232020)**	EPA 3005A	570092	EPA 6020B	570132
92497146003	**YAMW-5 (09242020)**	EPA 3005A	570092	EPA 6020B	570132
92497146004	**YAMW-1 (09242020)**	EPA 3005A	570092	EPA 6020B	570132
92497146005	**PZ-35 (09242020)**	EPA 3005A	570092	EPA 6020B	570132
92497146006	**PZ-37 (09252020)**	EPA 3005A	570092	EPA 6020B	570132
92497146001	**YAMW-2 (09/23/2020)**	EPA 7470A	569306	EPA 7470A	569459
92497146002	**YAMW-4 (09232020)**	EPA 7470A	569684	EPA 7470A	569888
92497146003	**YAMW-5 (09242020)**	EPA 7470A	569684	EPA 7470A	569888
92497146004	**YAMW-1 (09242020)**	EPA 7470A	569684	EPA 7470A	569888
92497146005	**PZ-35 (09242020)**	EPA 7470A	569684	EPA 7470A	569888
92497146006	**PZ-37 (09252020)**	EPA 7470A	569684	EPA 7470A	569888
92497146001	**YAMW-2 (09/23/2020)**	SM 2450C-2011	569386		
92497146002	**YAMW-4 (09232020)**	SM 2450C-2011	569431		
92497146003	**YAMW-5 (09242020)**	SM 2450C-2011	569806		
92497146004	**YAMW-1 (09242020)**	SM 2450C-2011	569806		
92497146005	**PZ-35 (09242020)**	SM 2450C-2011	569806		
92497146006	**PZ-37 (09252020)**	SM 2450C-2011	570219		
92497146001	**YAMW-2 (09/23/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497146002	**YAMW-4 (09232020)**	EPA 300.0 Rev 2.1 1993	569832		
92497146003	**YAMW-5 (09242020)**	EPA 300.0 Rev 2.1 1993	569832		
92497146004	**YAMW-1 (09242020)**	EPA 300.0 Rev 2.1 1993	569832		
92497146005	**PZ-35 (09242020)**	EPA 300.0 Rev 2.1 1993	569922		
92497146006	**PZ-37 (09252020)**	EPA 300.0 Rev 2.1 1993	569922		

Pace Analytical

Sample Condition Upon Receipt

Client Name: GA Power

WO# : 92497108

92497108

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

Tracking #: _____

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

Proj. Name:

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

Thermometer Used 230 Type of Ice: (Wet) Blue None ☐ Samples on Ice, cooling process has begun

Cooler Temperature 3.4°C Biological Tissue is Frozen: Yes No

Date and initials of person examining contents: 9/23/2008

Temp should be above freezing to 6°C

Comments:

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	Issuing Authority:

WO# : 92497108

Project #

PM: KLH1 Due Date: 10/14/20

CLIENT: GA-GA Power

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

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

••Bottom half of box is to list number of bottle

Matrix	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)	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)	AGDU-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation 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	Lo

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 C
Out of hold, incorrect preservative, out of temp, incorrect containers.

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 : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #: JS
Project Name: Yates ~~Gypsum~~ AMA/RG
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

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	Anions	App III, IV & Hg	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YAMW-2(09232020)	WT	G	9/23	1400				5	✓		✓						✓	✓	✓	✓		Ph 5.66 002 TF 9/28
2	YAMW-4(09232020)	WT	G	9/23	1635				5	✓		✓						✓	✓	✓	✓		Ph 5.89 003
3	YAMW-5(09242020)	WT	G	9/24	1015				5	✓		✓						✓	✓	✓	✓		Ph 5.38 003
4	YAMW-1(09242020)	WT	G	9/24	1205				5	✓		✓						✓	✓	✓	✓		Ph 6.00 004
5	PZ-35(09242020)	WT	G	9/24	1305				5	✓		✓						✓	✓	✓	✓		Ph 5.52 005
6	PZ-37(09252020)	WT	G	9/25	1305				5	✓		✓						✓	-	✓	✓		Ph 5.46 006

Lot # of pH paper: 92467146

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	9/25/20	1620		9/25/20	1620	
	9/25/20	1803		9/25/20	1803	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 9/25/20

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 09, 2020

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

RE: Project: YATES AMA-R6 RADS
Pace Project No.: 92497108

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between September 23, 2020 and September 25, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

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 AMA-R6 RADS
Pace Project No.: 92497108

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 RADS
Pace Project No.: 92497108

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92497108001	**YAMW-2 (09/23/2020)**	Water	09/23/20 14:00	09/23/20 17:40
92497108002	**YAMW-4 (09232020)**	Water	09/23/20 16:35	09/25/20 18:03
92497108003	**YAMW-5 (09242020)**	Water	09/24/20 10:15	09/25/20 18:03
92497108004	**YAMW-1 (09242020)**	Water	09/24/20 12:05	09/25/20 18:03
92497108005	**PZ-35 (09242020)**	Water	09/24/20 13:05	09/25/20 18:03
92497108006	**PZ-37 (09252020)**	Water	09/25/20 13:05	09/25/20 18:03

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110 Technology Parkway
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SAMPLE ANALYTE COUNT

Project: YATES AMA-R6 RADS
Pace Project No.: 92497108

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92497108001	**YAMW-2 (09/23/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92497108002	**YAMW-4 (09232020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497108003	**YAMW-5 (09242020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497108004	**YAMW-1 (09242020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497108005	**PZ-35 (09242020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497108006	**PZ-37 (09252020)**	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

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.: 92497108

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497108001	**YAMW-2 (09/23/2020)**					
EPA 9315	Radium-226	0.0813 ± 0.179 (0.423) C:82% T:NA	pCi/L		10/08/20 08:28	
EPA 9320	Radium-228	-0.190 ± 0.740 (1.73) C:65% T:80%	pCi/L		10/12/20 14:45	
Total Radium Calculation	Total Radium	0.0813 ± 0.919 (2.15)	pCi/L		10/14/20 09:21	
92497108002	**YAMW-4 (09232020)**					
EPA 9315	Radium-226	0.146 ± 0.233 (0.520) C:90% T:NA	pCi/L		10/28/20 09:05	
EPA 9320	Radium-228	1.05 ± 0.658 (1.25) C:70% T:65%	pCi/L		11/04/20 12:27	
Total Radium Calculation	Total Radium	1.20 ± 0.891 (1.77)	pCi/L		11/05/20 09:25	
92497108003	**YAMW-5 (09242020)**					
EPA 9315	Radium-226	0.462 ± 0.300 (0.483) C:88% T:NA	pCi/L		10/28/20 09:08	
EPA 9320	Radium-228	0.206 ± 1.33 (3.03) C:67% T:67%	pCi/L		11/04/20 12:27	
Total Radium Calculation	Total Radium	0.668 ± 1.63 (3.51)	pCi/L		11/05/20 09:25	
92497108004	**YAMW-1 (09242020)**					
EPA 9315	Radium-226	0.0228 ± 0.156 (0.413) C:89% T:NA	pCi/L		10/28/20 09:08	
EPA 9320	Radium-228	0.524 ± 0.512 (1.06) C:65% T:86%	pCi/L		11/04/20 12:27	
Total Radium Calculation	Total Radium	0.547 ± 0.668 (1.47)	pCi/L		11/05/20 09:25	

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.: 92497108

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497108005	**PZ-35 (09242020)**					
EPA 9315	Radium-226	0.0446 ± 0.198 (0.502) C:88% T:NA	pCi/L		10/28/20 09:28	
EPA 9320	Radium-228	1.03 ± 0.532 (0.955) C:69% T:87%	pCi/L		11/04/20 12:27	
Total Radium Calculation	Total Radium	1.07 ± 0.730 (1.46)	pCi/L		11/05/20 09:25	
92497108006	**PZ-37 (09252020)**					
EPA 9315	Radium-226	0.442 ± 0.276 (0.410) C:91% T:NA	pCi/L		10/28/20 09:08	
EPA 9320	Radium-228	1.24 ± 0.700 (1.28) C:65% T:66%	pCi/L		11/04/20 12:27	
Total Radium Calculation	Total Radium	1.68 ± 0.976 (1.69)	pCi/L		11/05/20 09:25	

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.: 92497108

Sample: YAMW-2 (09/23/2020) **Lab ID: 92497108001** Collected: 09/23/20 14:00 Received: 09/23/20 17:40 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	**0.0813 ± 0.179 (0.423) C:82% T:NA**	pCi/L	10/08/20 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.190 ± 0.740 (1.73) C:65% T:80%**	pCi/L	10/12/20 14:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0813 ± 0.919 (2.15)**	pCi/L	10/14/20 09:21	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.: 92497108

Sample: YAMW-4 (09232020) **Lab ID: 92497108002** Collected: 09/23/20 16:35 Received: 09/25/20 18:03 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	**0.146 ± 0.233 (0.520) C:90% T:NA**	pCi/L	10/28/20 09:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.05 ± 0.658 (1.25) C:70% T:65%**	pCi/L	11/04/20 12:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.20 ± 0.891 (1.77)**	pCi/L	11/05/20 09:25	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.: 92497108

Sample: YAMW-5 (09242020) **Lab ID: 92497108003** Collected: 09/24/20 10:15 Received: 09/25/20 18:03 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	**0.462 ± 0.300 (0.483) C:88% T:NA**	pCi/L	10/28/20 09:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.206 ± 1.33 (3.03) C:67% T:67%**	pCi/L	11/04/20 12:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.668 ± 1.63 (3.51)**	pCi/L	11/05/20 09:25	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.: 92497108

Sample: YAMW-1 (09242020) **Lab ID: 92497108004** Collected: 09/24/20 12:05 Received: 09/25/20 18:03 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	**0.0228 ± 0.156 (0.413) C:89% T:NA**	pCi/L	10/28/20 09:08	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.524 ± 0.512 (1.06) C:65% T:86%**	pCi/L	11/04/20 12:27	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.547 ± 0.668 (1.47)**	pCi/L	11/05/20 09:25	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.: 92497108

Sample: PZ-35 (09242020) **Lab ID: 92497108005** Collected: 09/24/20 13:05 Received: 09/25/20 18:03 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	**0.0446 ± 0.198 (0.502) C:88% T:NA**	pCi/L	10/28/20 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.03 ± 0.532 (0.955) C:69% T:87%**	pCi/L	11/04/20 12:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.07 ± 0.730 (1.46)**	pCi/L	11/05/20 09:25	7440-14-4	

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.: 92497108

Sample: PZ-37 (09252020) **Lab ID: 92497108006** Collected: 09/25/20 13:05 Received: 09/25/20 18:03 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	**0.442 ± 0.276 (0.410) C:91% T:NA**	pCi/L	10/28/20 09:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.24 ± 0.700 (1.28) C:65% T:66%**	pCi/L	11/04/20 12:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.68 ± 0.976 (1.69)**	pCi/L	11/05/20 09:25	7440-14-4	

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.: 92497108

QC Batch: 415887
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497108001

METHOD BLANK: 2010984 Matrix: Water
Associated Lab Samples: 92497108001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.452 ± 0.429 (0.882) C:72% T:83%	pCi/L	10/12/20 11:46	

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.: 92497108

QC Batch: 419077
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497108002, 92497108003, 92497108004, 92497108005, 92497108006

METHOD BLANK: 2026036
Matrix: Water
Associated Lab Samples: 92497108002, 92497108003, 92497108004, 92497108005, 92497108006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0334 ± 0.189 (0.489) C:93% T:NA	pCi/L	10/28/20 09:04	

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

REPORT OF LABORATORY ANALYSIS

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.: 92497108

QC Batch: 415889
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497108001

METHOD BLANK: 2010986 Matrix: Water
Associated Lab Samples: 92497108001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.196 ± 0.238 (0.495) C:89% T:NA	pCi/L	10/08/20 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 AMA-R6 RADS
Pace Project No.: 92497108

QC Batch: 419078
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497108002, 92497108003, 92497108004, 92497108005, 92497108006

METHOD BLANK: 2026037 Matrix: Water
Associated Lab Samples: 92497108002, 92497108003, 92497108004, 92497108005, 92497108006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.576 ± 0.425 (0.831) C:71% T:86%	pCi/L	11/04/20 12:27	

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.: 92497108

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 AMA-R6 RADS
Pace Project No.: 92497108

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497108001	**YAMW-2 (09/23/2020)**	EPA 9315	415889		
92497108002	**YAMW-4 (09232020)**	EPA 9315	419077		
92497108003	**YAMW-5 (09242020)**	EPA 9315	419077		
92497108004	**YAMW-1 (09242020)**	EPA 9315	419077		
92497108005	**PZ-35 (09242020)**	EPA 9315	419077		
92497108006	**PZ-37 (09252020)**	EPA 9315	419077		
92497108001	**YAMW-2 (09/23/2020)**	EPA 9320	415887		
92497108002	**YAMW-4 (09232020)**	EPA 9320	419078		
92497108003	**YAMW-5 (09242020)**	EPA 9320	419078		
92497108004	**YAMW-1 (09242020)**	EPA 9320	419078		
92497108005	**PZ-35 (09242020)**	EPA 9320	419078		
92497108006	**PZ-37 (09252020)**	EPA 9320	419078		
92497108001	**YAMW-2 (09/23/2020)**	Total Radium Calculation	418329		
92497108002	**YAMW-4 (09232020)**	Total Radium Calculation	421737		
92497108003	**YAMW-5 (09242020)**	Total Radium Calculation	421737		
92497108004	**YAMW-1 (09242020)**	Total Radium Calculation	421737		
92497108005	**PZ-35 (09242020)**	Total Radium Calculation	421737		
92497108006	**PZ-37 (09252020)**	Total Radium Calculation	421737		

Pace Analytical

Sample Condition Upon Receipt

Client Name: GA Power

WO# : 92497108

92497108

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

Tracking #: _____

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

Proj. Name:

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

Thermometer Used 230 Type of Ice: (Wet) Blue None ☐ Samples on Ice, cooling process has begun

Cooler Temperature 3.4°C Biological Tissue is Frozen: Yes No

Date and initials of person examining contents: 9/23/2008

Temp should be above freezing to 6°C

Comments:

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	Issuing Authority:

WO# : 92497108

Project #

PM: KLH1 Due Date: 10/14/20

CLIENT: GA-GA Power

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

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

••Bottom half of box is to list number of bottle

Matrix	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)	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)	AGDU-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation 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	Lo

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 C
Out of hold, incorrect preservative, out of temp, incorrect containers.

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 : 1 Of 1

Section A
Required Client Information:

Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:

Report To: Becky Steever
Copy To:
Purchase Order #: JS
Project Name: Yates ~~Gypsum~~ AMA/RG
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

Requested Analysis Filtered (Y/N):

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N)	TDS	Anions	App III, IV & Hg	RAD 9315/9320	Residual Chlorine (Y/N)	
	YAMW-2(09232020)	WT	G	9/23	1400				5	✓		✓							✓	✓	✓	✓		92467146
	YAMW-4(09232020)	WT	G	9/23	1635				5	✓		✓							✓	✓	✓	✓		Ph 5.66 002 TF 9/28
	YAMW-5(09242020)	WT	G	9/24	1015				5	✓		✓							✓	✓	✓	✓		Ph 5.89 003
	YAMW-1(09242020)	WT	G	9/24	1205				5	✓		✓							✓	✓	✓	✓		Ph 5.38 004
	PZ-35(09242020)	WT	G	9/24	1305				5	✓		✓							✓	✓	✓	✓		Ph 6.00 005
	PZ-37(09252020)	WT	G	9/25	1305				6	✓		✓							✓	✓	✓	✓		Ph 5.92 006
																			✓	-	✓	✓		Ph 5.46 007

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
	9/25/20	1620		9/25/20	1620	
	9/25/20	1803		9/25/20	1803	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER:

DATE Signed: 9/25/20

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

Sample Receipt Form

Pace Analytical Services, LLC
Pittsburgh

Login Summary

Workorder:	30384350	Client Work ID:	92497108 Georgia Power
Report Version:	RAD	Client:	PACE ANALYTICAL SERVICES LLC-Huntersville, NC
Min Sample Due:	11/03/2020 17:00	Profile:	12914
Max Sample Due:	11/05/2020 17:00	Profile Desc:	W-Rad

Lab ID	Sample ID	Collected	Received	Matrix	Report Properties	Location	Due Date
92497108001	**YAMW-2 (09/23/2020)**	09/23/20 14:00	09/25/20 10:30	WT	J2F	GA	11/03/20
92497108002	**YAMW-4 (09232020)**	09/23/20 16:35	09/29/20 10:40	WT	J2F	GA	11/05/20
Sample Comments:	*IR PAPERWORK REC 10/7 FOR ADD-ON'S*						
92497108003	**YAMW-5 (09242020)**	09/24/20 10:15	09/29/20 10:40	WT	J2F	GA	11/05/20
92497108004	**YAMW-1 (09242020)**	09/24/20 12:05	09/29/20 10:40	WT	J2F	GA	11/05/20
92497108005	**PZ-35 (09242020)**	09/24/20 13:05	09/29/20 10:40	WT	J2F	GA	11/05/20
92497108006	**PZ-37 (09252020)**	09/25/20 13:05	09/29/20 10:40	WT	J2F	GA	11/05/20
92497108007	**YGWC-49 (09242020)**	09/24/20 08:55	09/29/20 10:40	WT	J2F	GA	11/05/20
92497108008	**YGWA-39 (09242020)**	09/24/20 10:02	09/29/20 10:40	WT	J2F	GA	11/05/20
92497108009	**YGWA-40 (09242020)**	09/24/20 11:37	09/29/20 10:40	WT	J2F	GA	11/05/20

Sample Receipt Form

Pace Analytical Services, LLC
Pittsburgh

Charge Summary

Workorder: 30384350
Client PO:
A/R Acct: 30-365883
Tax Status: Nonexempt, Sales Tax May Apply

Bill To: Mr. Kevin Herring
Pace Analytical Charlotte
9800 Kincey Ave.
Suite 100
Huntersville, NC 28078

Invoice CC:
Text to appear on Invoice:

Qty	Unit	Description	Cmps	Method	Matrix	Price	Total
9	Ea	9315 Total Radium	1	EPA 9315	Water	$52.00	$468.00
9	Ea	9320 Radium 228	1	EPA 9320	Water	$52.00	$468.00
1	Ea	HOLD Acode	0		Water	$0.01	$0.01
9	Ea	Ra226+Ra228	1	Total Radium	Water	$0.01	$0.09

Total before Taxes:	$936.10
Estimated Tax (0.00%):	$0.00
Grand Total:	$936.10

Sample Receipt Form

Pace Analytical Services, LLC
Pittsburgh

Sample Acknowledgement Recipients:

Pace Analytical Atlanta
Ms Nikita Kuruganty
110 Technology Parkway
Peachtree Corners, GA 30092
Phone: (770)734-4200
Email: nikita.kuruganty@pacelabs.com

Bill to:

Pace Analytical Charlotte
Mr. Kevin Herring
9800 Kincey Ave.
Suite 100
Huntersville, NC 28078
Email: kevin.herring@pacelabs.com

Final Report Recipients:

Georgia Power
Mr. Joju Abraham (Primary)
2480 Maner Road
Atlanta, GA 30339
Email: kevin.herring@pacelabs.com

Line Item Descriptions:
[1] W-226/228 9315/9320

Client P O No:		Lab Project No:	30384350
Phone:	(724)850-5612	Project Deliverables Type:	Standard Report
Project Manager:	Jacquelyn Collins	Project Report Due Date:	11/05/20
Client Project ID:	92497108 Georgia Power	Profile:	12914

Automated EDD

EDD #:	Georgia Power (Total Radium) (1121)
Publish or Review?:	Publish (P)
Email Client?:	Yes (Y)
Include FR?:	Yes (Y)
Auto Invoice:	Summary Level w/Sample Info (SS)
Email Invoice?:	No, do not auto email (N)
Print Final Invoice?:	No, do not print invoice (N)
Multiple EDD #2:	FR Only no EDD (0)
Multiple EDD #3:	FR Only no EDD (0)
Multiple EDD #4:	FR Only no EDD (0)
Multiple EDD #5:	FR Only no EDD (0)

Lab Smp ID: 92497108001 **Client Smp ID: YAMW-2 (09/23/2020)** Collected: 09/23/20 14:00
Proj Smp No: 1 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/25/20 10:30
Location: GA

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/22/21 23:59	$52.00			

COMPOUND	MDL	ID	PQL	ID	UNITS
Radium-226					

Compound Count: 1

9320 W - 9320 Radium 228	EPA 9320	03/22/21 23:59	$52.00
Compound Count: 1			
HOLD - HOLD Acode			$0.01
Ra226Ra228 - Ra226+Ra228	Total Radium	03/22/21 23:59	$0.01
Compound Count: 1			

Sub Total - Sample 2010479 $104.02

Lab Smp ID: 92497108002 **Client Smp ID: YAMW-4 (09232020)** Collected: 09/23/20 16:35
Proj Smp No: 2 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/29/20 10:40
Location: GA
Comments: [1] IR PAPERWORK REC 10/7 FOR ADD-ON'S

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/22/21 23:59	$52.00			
COMPOUND / MDL / ID / PQL / ID / UNITS						
Radium-226						
Compound Count: 1						
9320 W - 9320 Radium 228	EPA 9320	03/22/21 23:59	$52.00			
Compound Count: 1						
Ra226Ra228 - Ra226+Ra228	Total Radium	03/22/21 23:59	$0.01			
Compound Count: 1						

Sub Total - Sample 2021746 $104.01

Lab Smp ID: 92497108003 **Client Smp ID: YAMW-5 (09242020)** Collected: 09/24/20 10:15
Proj Smp No: 3 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/29/20 10:40
Location: GA

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/23/21 23:59	$52.00			
COMPOUND / MDL / ID / PQL / ID / UNITS						
Radium-226						
Compound Count: 1						
9320 W - 9320 Radium 228	EPA 9320	03/23/21 23:59	$52.00			
Compound Count: 1						
Ra226Ra228 - Ra226+Ra228	Total Radium	03/23/21 23:59	$0.01			
Compound Count: 1						

Sub Total - Sample 2021747 $104.01

Lab Smp ID: 92497108004 **Client Smp ID: YAMW-1 (09242020)** Collected: 09/24/20 12:05
Proj Smp No: 4 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/29/20 10:40
Location: GA

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/23/21 23:59	$52.00			
COMPOUND / MDL / ID / PQL / ID / UNITS						
Radium-226						
Compound Count: 1						
9320 W - 9320 Radium 228	EPA 9320	03/23/21 23:59	$52.00			
Compound Count: 1						
Ra226Ra228 - Ra226+Ra228	Total Radium	03/23/21 23:59	$0.01			
Compound Count: 1						

Sub Total - Sample 2021748 $104.01

Lab Smp ID: 92497108005 **Client Smp ID: PZ-35 (09242020)** Collected: 09/24/20 13:05
Proj Smp No: 5 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/29/20 10:40
Location: GA

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/23/21 23:59	$52.00			
COMPOUND / MDL / ID / PQL / ID / UNITS						
Radium-226						

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
Compound Count: 1						
9320 W - 9320 Radium 228	EPA 9320	03/23/21 23:59	$52.00			
Compound Count: 1						
Ra226Ra228 - Ra226+Ra228	Total Radium	03/23/21 23:59	$0.01			
Compound Count: 1						

Sub Total - Sample 2021749 $104.01

Lab Smp ID: 92497108006 **Client Smp ID: PZ-37 (09252020)** Collected: 09/25/20 13:05
Proj Smp No: 6 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/29/20 10:40
Location: GA

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/24/21 23:59	$52.00			

COMPOUND	MDL	ID	PQL	ID	UNITS
Radium-226					

Compound Count: 1					
9320 W - 9320 Radium 228	EPA 9320	03/24/21 23:59	$52.00		
Compound Count: 1					
Ra226Ra228 - Ra226+Ra228	Total Radium	03/24/21 23:59	$0.01		
Compound Count: 1					

Sub Total - Sample 2021750 $104.01

Lab Smp ID: 92497108007 **Client Smp ID: YGWC-49 (09242020)** Collected: 09/24/20 08:55
Proj Smp No: 7 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/29/20 10:40
Location: GA

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/23/21 23:59	$52.00			

COMPOUND	MDL	ID	PQL	ID	UNITS
Radium-226					

Compound Count: 1					
9320 W - 9320 Radium 228	EPA 9320	03/23/21 23:59	$52.00		
Compound Count: 1					
Ra226Ra228 - Ra226+Ra228	Total Radium	03/23/21 23:59	$0.01		
Compound Count: 1					

Sub Total - Sample 2021751 $104.01

Lab Smp ID: 92497108008 **Client Smp ID: YGWA-39 (09242020)** Collected: 09/24/20 10:02
Proj Smp No: 8 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/29/20 10:40
Location: GA

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/23/21 23:59	$52.00			

COMPOUND	MDL	ID	PQL	ID	UNITS
Radium-226					

Compound Count: 1					
9320 W - 9320 Radium 228	EPA 9320	03/23/21 23:59	$52.00		
Compound Count: 1					

Sample Receipt Form

Pace Analytical Services, LLC
Pittsburgh

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
Ra226Ra228 - Ra226+Ra228	Total Radium	03/23/21 23:59	$0.01			
Compound Count: 1						

Sub Total - Sample 2021752 $104.01

Lab Smp ID: **92497108009** **Client Smp ID:** **YGWA-40 (09242020)** Collected: 09/24/20 11:37
Proj Smp No: 9 Matrix: Water Type: PS Line Item: 1 Lab: 92 Received: 09/29/20 10:40
Location: GA

PARAMETER	METHOD	EARLIEST HOLD	UNIT PRICE	WR	SPL	%
9315 W - 9315 Total Radium	EPA 9315	03/23/21 23:59	$52.00			

COMPOUND	MDL	ID	PQL	ID	UNITS
Radium-226					

Compound Count: 1

9320 W - 9320 Radium 228	EPA 9320	03/23/21 23:59	$52.00			
Compound Count: 1						
Ra226Ra228 - Ra226+Ra228	Total Radium	03/23/21 23:59	$0.01			
Compound Count: 1						

Sub Total - Sample 2021753 $104.01

Total Before Taxes - Project 30384350 $936.10
Estimated Tax (0.00%) $0.00

Unit Pricing above does not reflect associated shipping, bottle, sample disposal and other miscellaneous charges. Prices are subject to change without notice. Contact your Project Manager for further information.

Sample Receipt Form

Pace Analytical Services, LLC
Pittsburgh

Containers

Lab ID	Container ID	Type	Location	Utilization
92497108001	92497108001 BP1N1/2	BP1N		9315 W
	92497108001 BP1N2/2	BP1N		9320 W,HOLD
	92497108001 NONE1/1	NONE		Ra226Ra228
92497108002	92497108002 BP1N1/2	BP1N		9315 W
	92497108002 BP1N2/2	BP1N		9320 W,Ra226Ra228
92497108003	92497108003 BP1N1/2	BP1N		9315 W
	92497108003 BP1N2/2	BP1N		9320 W,Ra226Ra228
92497108004	92497108004 BP1N1/2	BP1N		9315 W
	92497108004 BP1N2/2	BP1N		9320 W,Ra226Ra228
92497108005	92497108005 BP1N1/2	BP1N		9315 W
	92497108005 BP1N2/2	BP1N		9320 W,Ra226Ra228
92497108006	92497108006 BP1N1/2	BP1N		9315 W
	92497108006 BP1N2/2	BP1N		9320 W,Ra226Ra228
92497108007	92497108007 BP1N1/2	BP1N		9315 W
	92497108007 BP1N2/2	BP1N		9320 W,Ra226Ra228
92497108008	92497108008 BP1N1/2	BP1N		9315 W
	92497108008 BP1N2/2	BP1N		9320 W,Ra226Ra228
92497108009	92497108009 BP1N1/2	BP1N		9315 W
	92497108009 BP1N2/2	BP1N		9320 W,Ra226Ra228

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

October 15, 2020

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

RE: Project: YATES
Pace Project No.: 92499365

Dear Ms. Petty:

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

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

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

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

Sincerely,

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
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.: 92499365

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
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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

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

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92499365

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92499365001	**YGWC-36A (100720)**	Water	10/07/20 15:10	10/07/20 17:43

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.: 92499365

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92499365001	**YGWC-36A (100720)**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	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
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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92499365

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92499365001	**YGWC-36A (100720)**					
	Performed by	CUSTOMER			10/08/20 13:51	
	pH	5.86	Std. Units		10/08/20 13:51	
EPA 6010D	Calcium	9.9	mg/L	1.0	10/09/20 19:34	
EPA 6020B	Barium	0.040	mg/L	0.010	10/12/20 18:21	
EPA 6020B	Beryllium	0.00014J	mg/L	0.0030	10/12/20 18:21	
EPA 6020B	Boron	0.018J	mg/L	0.10	10/12/20 18:21	
EPA 6020B	Cadmium	0.00012J	mg/L	0.0025	10/12/20 18:21	
EPA 6020B	Chromium	0.0013J	mg/L	0.010	10/12/20 18:21	
EPA 6020B	Cobalt	0.00086J	mg/L	0.0050	10/12/20 18:21	
EPA 6020B	Lead	0.00077J	mg/L	0.0050	10/12/20 18:21	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	10/12/20 18:21	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	10/12/20 18:21	
SM 2450C-2011	Total Dissolved Solids	137	mg/L	10.0	10/08/20 16:06	
EPA 300.0 Rev 2.1 1993	Chloride	8.7	mg/L	1.0	10/11/20 05:51	
EPA 300.0 Rev 2.1 1993	Sulfate	18.2	mg/L	1.0	10/11/20 05:51	

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110 Technology Parkway
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92499365

Sample: YGWC-36A (100720) **Lab ID: 92499365001** Collected: 10/07/20 15:10 Received: 10/07/20 17:43 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		10/08/20 13:51		
pH	**5.86**	Std. Units			1		10/08/20 13:51		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**9.9**	mg/L	1.0	0.070	1	10/09/20 11:20	10/09/20 19:34	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	10/09/20 14:00	10/12/20 18:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	10/09/20 14:00	10/12/20 18:21	7440-38-2	
Barium	**0.040**	mg/L	0.010	0.00071	1	10/09/20 14:00	10/12/20 18:21	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.0030	0.000046	1	10/09/20 14:00	10/12/20 18:21	7440-41-7	
Boron	**0.018J**	mg/L	0.10	0.0052	1	10/09/20 14:00	10/12/20 18:21	7440-42-8	
Cadmium	**0.00012J**	mg/L	0.0025	0.00012	1	10/09/20 14:00	10/12/20 18:21	7440-43-9	
Chromium	**0.0013J**	mg/L	0.010	0.00055	1	10/09/20 14:00	10/12/20 18:21	7440-47-3	
Cobalt	**0.00086J**	mg/L	0.0050	0.00038	1	10/09/20 14:00	10/12/20 18:21	7440-48-4	
Lead	**0.00077J**	mg/L	0.0050	0.000036	1	10/09/20 14:00	10/12/20 18:21	7439-92-1	
Lithium	**0.0014J**	mg/L	0.030	0.00081	1	10/09/20 14:00	10/12/20 18:21	7439-93-2	
Molybdenum	**0.0015J**	mg/L	0.010	0.00069	1	10/09/20 14:00	10/12/20 18:21	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	10/09/20 14:00	10/12/20 18:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	10/09/20 14:00	10/12/20 18:21	7440-28-0	
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		10/08/20 16:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.7**	mg/L	1.0	0.60	1		10/11/20 05:51	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/11/20 05:51	16984-48-8	
Sulfate	**18.2**	mg/L	1.0	0.50	1		10/11/20 05:51	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.: 92499365

QC Batch: 572126
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92499365001

METHOD BLANK: 3030150 Matrix: Water
Associated Lab Samples: 92499365001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	10/09/20 18:09	

LABORATORY CONTROL SAMPLE: 3030151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.96J	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3030152 3030153

Parameter	Units	92499650004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1330 ug/L	1	1	2.2	2.3	90	96	75-125	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3030154 3030155

Parameter	Units	92499466005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1660 ug/L	1	1	10.4	10.3	875	860	75-125	2	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
Pace Project No.: 92499365

QC Batch: 572214
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92499365001

METHOD BLANK: 3030726 Matrix: Water
Associated Lab Samples: 92499365001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00040J	0.0030	0.00028	10/12/20 16:10	
Arsenic	mg/L	ND	0.0050	0.00078	10/12/20 16:10	
Barium	mg/L	ND	0.010	0.00071	10/12/20 16:10	
Beryllium	mg/L	ND	0.0030	0.000046	10/12/20 16:10	
Boron	mg/L	ND	0.10	0.0052	10/12/20 16:10	
Cadmium	mg/L	ND	0.0025	0.00012	10/12/20 16:10	
Chromium	mg/L	ND	0.010	0.00055	10/12/20 16:10	
Cobalt	mg/L	ND	0.0050	0.00038	10/12/20 16:10	
Lead	mg/L	ND	0.0050	0.000036	10/12/20 16:10	
Lithium	mg/L	ND	0.030	0.00081	10/12/20 16:10	
Molybdenum	mg/L	ND	0.010	0.00069	10/12/20 16:10	
Selenium	mg/L	ND	0.010	0.0016	10/12/20 16:10	
Thallium	mg/L	ND	0.0010	0.00014	10/12/20 16:10	

LABORATORY CONTROL SAMPLE: 3030727

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	0.093	93	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	102	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.095	95	80-120	
Cobalt	mg/L	0.1	0.093	93	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.093	93	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3030728 3030729

Parameter	Units	92499073004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	110	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.093	0.096	93	96	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.: 92499365

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3030728 3030729

Parameter	Units	92499073004 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	96	98	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.091	0.091	91	91	75-125	0	20	
Boron	mg/L	0.015J	1	1	0.94	0.94	92	92	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Chromium	mg/L	0.00072J	0.1	0.1	0.095	0.097	94	96	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.092	0.094	92	94	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.091	0.091	91	91	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.092	0.092	92	92	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	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.: 92499365

QC Batch: 571887
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: 92499365001

METHOD BLANK: 3029110 Matrix: Water
Associated Lab Samples: 92499365001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	10/08/20 16:05	

LABORATORY CONTROL SAMPLE: 3029111

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	422	106	84-108	

SAMPLE DUPLICATE: 3029112

Parameter	Units	92499390001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	402	438	9	10	

SAMPLE DUPLICATE: 3029113

Parameter	Units	92499073014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	492	495	1	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.: 92499365

QC Batch: 572380
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: 92499365001

METHOD BLANK: 3031544 Matrix: Water
Associated Lab Samples: 92499365001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	10/11/20 00:03	
Fluoride	mg/L	ND	0.10	0.050	10/11/20 00:03	
Sulfate	mg/L	ND	1.0	0.50	10/11/20 00:03	

LABORATORY CONTROL SAMPLE: 3031545

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	49.1	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3031546 3031547

Parameter	Units	92499810001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.2	50	50	62.9	62.6	105	105	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	101	103	90-110	2	10	
Sulfate	mg/L	5.4	50	50	56.9	57.3	103	104	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3031548 3031549

Parameter	Units	92499831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.6	50	50	58.5	59.1	104	105	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	100	102	90-110	2	10	
Sulfate	mg/L	9.7	50	50	61.1	61.6	103	104	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
Pace Project No.: 92499365

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
Pace Project No.: 92499365

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92499365001	**YGWC-36A (100720)**				
92499365001	**YGWC-36A (100720)**	EPA 3010A	572126	EPA 6010D	572182
92499365001	**YGWC-36A (100720)**	EPA 3005A	572214	EPA 6020B	572248
92499365001	**YGWC-36A (100720)**	SM 2450C-2011	571887		
92499365001	**YGWC-36A (100720)**	EPA 300.0 Rev 2.1 1993	572380		

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

WO# : 92499365

92499365

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

Tracking #: _____

Proj. Name:

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

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

Thermometer Used THR238 Type of Ice: ~~Wet~~ Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.1 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: KRW 10/8/20

Temp should be above freezing to 6°C

Comments:

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	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 bottle

Project # **WO#: 92499365**

PM: KLH1 Due Date: 10/21/20

CLIENT: GA-GA Power

Matrix	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)	AG8A(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)	X BPIU - RAA	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)
	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 O
Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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

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: Becky Sleever
Copy To:
Purchase Order #:
Project Name: Yates
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

Requested Analysis Filtered (Y/N)

ITEM #	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	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	92449365
1	YGWC-36 A (100726)	WT		10/7	15:16													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			
	B Steven Arcadis	10/7		Charles Yates	10/7/20	1743	3.1	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Becky Steven
SIGNATURE of SAMPLER:
DATE Signed: 10/07/20

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 29, 2020

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

RE: Project: YATES RADS
Pace Project No.: 92499362

Dear Ms. Petty:

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

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

- Pace Analytical Services - 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
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.: 92499362

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.: 92499362

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92499362001	**YGWC-36A (100720)**	Water	10/07/20 15:10	10/07/20 17:43

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.: 92499362

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92499362001	**YGWC-36A (100720)**	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

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

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92499362

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92499362001	**YGWC-36A (100720)**					
EPA 9315	Radium-226	0.461 ± 0.157 (0.191) C:91% T:NA	pCi/L		10/19/20 18:23	
EPA 9320	Radium-228	1.12 ± 0.451 (0.685) C:76% T:83%	pCi/L		10/27/20 12:25	
Total Radium Calculation	Total Radium	1.58 ± 0.608 (0.876)	pCi/L		10/28/20 15:13	

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.: 92499362

Sample: YGWC-36A (100720) **Lab ID: 92499362001** Collected: 10/07/20 15:10 Received: 10/07/20 17:43 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	**0.461 ± 0.157 (0.191) C:91% T:NA**	pCi/L	10/19/20 18:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.12 ± 0.451 (0.685) C:76% T:83%**	pCi/L	10/27/20 12:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.58 ± 0.608 (0.876)**	pCi/L	10/28/20 15:13	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.: 92499362

QC Batch: 418550
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92499362001

METHOD BLANK: 2023109 Matrix: Water
Associated Lab Samples: 92499362001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0638 ± 0.107 (0.209) C:94% T:NA	pCi/L	10/19/20 18:23	

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.: 92499362

QC Batch: 418553
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92499362001

METHOD BLANK: 2023116
Matrix: Water
Associated Lab Samples: 92499362001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.454 ± 0.339 (0.661) C:71% T:93%	pCi/L	10/27/20 11:52	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES RADS
Pace Project No.: 92499362

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.: 92499362

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92499362001	**YGWC-36A (100720)**	EPA 9315	418550		
92499362001	**YGWC-36A (100720)**	EPA 9320	418553		
92499362001	**YGWC-36A (100720)**	Total Radium Calculation	420676		

Pace Analytical

Sample Condition Upon Recei

Client Name: GA Power

WO# : 92499362

92499362

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

Tracking #:

Proj. Due Date:
Proj. Name:

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

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

Thermometer Used THR230 Type of Ice: ~~Wet~~ Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.1 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KRW 10/8/20

Comments:

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

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

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:**

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	Issuing Authority: Pace Carolinas Quality Office

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

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

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

Project # **WO#: 92499362**

PM: KLH1 Due Date: 10/28/20

CLIENT: GA-GA Power

Matrix	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)
	1		—	—			—																		2 BPN - RAA		
	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 O
Out of hold, incorrect preservative, out of temp, incorrect containers

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Arcadis (GA Power)	Report To:	Becky Sleever	Attention:	
Address:	2839 Paces Ferry Rd	Copy To:		Company Name:	
	te 900, Atlanta, GA 30339			Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates	Pace Project Manager:	kevin.herring@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 Analysis Filtered (Y/N): TDS	Cl, F, SO4	App III & IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	17449362
1	YGWC-36A (100720)	WT		10/7	1516														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: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	B Steven Brooks	10/7		Charles Hanks	10/7/20	1743	3.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Beck Steven

SIGNATURE of SAMPLER:

DATE Signed: 10/07/20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/19/2020
Worklist:	56785
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2023109
MB concentration:	0.064
M/B Counting Uncertainty:	0.107
MB MDC:	0.209
MB Numerical Performance Indicator:	1.17
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS56785	LCSD56785
Count Date:	10/19/2020	10/19/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.043	24.043
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.501
Target Conc. (pCi/L, g, F):	4.778	4.800
Uncertainty (Calculated):	0.057	0.058
Result (pCi/L, g, F):	4.258	4.127
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.347	0.379
Numerical Performance Indicator:	-2.90	-3.44
Percent Recovery:	89.12%	85.99%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS56785	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD56785	
Sample Result (pCi/L, g, F):	4.258	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.347	
Sample Duplicate Result (pCi/L, g, F):	4.127	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.379	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.500	92499068016
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.58%	92499068016DUP
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.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

Comments:

QA 10/20/2020

LAM 10/20/2020

Quality Control Sample Performance Assessment

Pace Analytical
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Test: Ra-226
Analyst: LAL
Date: 10/19/2020
Worklist: 56785
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2023109
MB concentration:	0.064
M/B Counting Uncertainty:	0.107
MB MDC:	0.209
MB Numerical Performance Indicator:	1.17
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS56785	LCSD56785
Count Date:	10/19/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.043	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.503	
Target Conc. (pCi/L, g, F):	4.778	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.258	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.347	
Numerical Performance Indicator:	-2.90	
Percent Recovery:	89.12%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92499068016	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92499068016DUP	
Sample Result (pCi/L, g, F):	0.374	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.138	
Sample Duplicate Result (pCi/L, g, F):	0.488	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.176	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.000	92499068016
Duplicate RPD:	26.54%	92499068016DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A
LAM 10/20/2020

10/20/2020
LAM 10/20/2020

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	10/21/2020
Worklist:	56787
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2023116
MB concentration:	0.454
M/B 2 Sigma CSU:	0.339
MB MDC:	0.661
MB Numerical Performance Indicator:	2.62
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS56787	LCSD56787
Count Date:	10/27/2020	
Spike I.D.:	20-030	
Decay Corrected Spike Concentration (pCi/mL):	37.867	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.810	
Target Conc. (pCi/L, g, F):	4.675	
Uncertainty (Calculated):	0.229	
Result (pCi/L, g, F):	4.038	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.957	
Numerical Performance Indicator:	-1.27	
Percent Recovery:	86.38%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

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

Duplicate Sample Assessment		
Sample I.D.:	92499068018	Enter Duplicate
Duplicate Sample I.D.	92499068018DUP	sample IDs if
Sample Result (pCi/L, g, F):	-0.013	other than
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.311	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.279	the space below.
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.332	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.256	92499068018
Duplicate RPD:	219.02%	92499068018DUP
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	36%	

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

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

Comments:

APPENDIX E

Historical Groundwater Analytical Data

Analyte		Units	PZ-35	PZ-35	PZ-35	PZ-35	PZ-35	PZ-37	PZ-37	PZ-37	PZ-37	PZ-37
			PZ-35 (083018)	PZ-35 (101618)	PZ-35 (092619)	PZ-35 (032520)	PZ-35 (092420)	PZ-37 (101217)	PZ-37 (112117)	PZ-37 (011118)	PZ-37 (022018)	PZ-37 (040318)
			8/30/2018	10/16/2018	9/26/2019	3/25/2020	9/24/2020	10/12/2017	11/21/2017	1/11/2018	2/20/2018	4/3/2018
Appendix III	Boron	mg/l	**0.04**	**0.031 J**	< 0.04	**0.071 J**	**0.017 J**	**15.4**	**17.2**	**15.8**	**19.5**	**17.5**
	Calcium	mg/l	NA	**6.5**	**4.7**	**7.9**	**3.6**	**122**	**118**	**119**	**124**	**114**
	Chloride	mg/l	NA	NA	NA	**6.8**	**7.5**	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	< 0.050	< 0.050	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	**34.2**	**14.3**	NA	**7.2**	**650**	**700**	**590**	**677**	**615**
	Total Dissolved Solids	mg/l	NA	**123**	NA	**84.0**	**100**	**1060**	**1100**	**1020**	**1050**	**1080**
Appendix IV	Antimony	mg/l	NA	NA	< 0.005	< 0.00027	< 0.00028	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	NA	**0.00069 J**	< 0.0025	< 0.00035	< 0.00078	**0.0014 J**	**0.0008 J**	**0.0006 J**	< 0.005	**0.0012 J**
	Barium	mg/l	NA	**0.063**	**0.039**	**0.039**	**0.034**	**0.064**	**0.0579**	**0.0549**	**0.0593**	**0.051**
	Beryllium	mg/l	**0.00052 J**	**0.00036 J**	< 0.001	< 0.000074	**0.00033 J**	**0.0004 J**	**0.0004 J**	**0.0003 J**	< 0.015	< 0.003
	Cadmium	mg/l	NA	< 0.001	< 0.0005	**0.00016 J**	< 0.00012	**0.0002 J**	**0.0002 J**	**0.0004 J**	< 0.001	< 0.001
	Chromium	mg/l	NA	NA	NA	**0.0012 J**	**0.00061 J**	**0.0019 J**	**0.0017 J**	**0.001 J**	< 0.01	< 0.01
	Cobalt	mg/l	NA	< 0.01	< 0.005	**0.0059**	< 0.00038	**0.0078 J**	**0.0097 J**	**0.0131**	**0.0162**	**0.015**
	Lead	mg/l	NA	NA	< 0.0015	< 0.000046	< 0.000036	**0.0002 J**	**0.0002 J**	**0.0001 J**	< 0.005	< 0.005
	Lithium	mg/l	NA	**0.0011 J**	< 0.03	**0.011 J**	**0.0010 J**	**0.0271 J**	**0.0255 J**	**0.0271 J**	< 0.25	**0.027 J**
	Mercury	mg/l	NA	NA	NA	NA	< 0.000078	< 0.0005	**0.00006 J**	< 0.0005	< 0.0002	< 0.0005
	Molybdenum	mg/l	NA	NA	NA	**0.0019 J**	< 0.00069	**0.0022 J**	**0.0016 J**	**0.0015 J**	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	NA	0.363 U	NA	0.197 U	1.07 U	**1.83**	**1.33**	**1.53**	**2.75**	**1.47**
	Selenium	mg/l	NA	< 0.01	< 0.0025	< 0.0013	< 0.0016	**0.234**	**0.225**	**0.168**	**0.315**	**0.28**
	Thallium	mg/l	NA	NA	< 0.001	< 0.000052	< 0.00014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	NA	NA	NA	NA	78.62	1289	1285.4	1202.4	1220.2	1188.2
	Dissolved Oxygen	mg/l	NA	NA	NA	NA	4.8	0.25	0.29	0.14	0.37	0.22
	Iron (Ferrous)	mg/l	NA	NA	NA	0	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	NA	NA	168.5	9.6	15.3	-32.5	57.9	120.3
	pH	SU	NA	NA	NA	5.65	5.52	5.57	5.49	5.87	5.9	5.66
	Temperature	C	NA	NA	NA	NA	18.7	21.54	18.22	16.78	18.26	18.24
	Turbidity	ntu	NA	NA	NA	NA	1.2	1.51	3.05	4.45	2.57	4.31
Supplemental	Alkalinity	mg/l	NA	NA	NA	**28.5**	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	**13.5**	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	**13.5**	**28.5**	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	< 1	< 5.0	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	< 0.1	< 0.032	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	**8.5**	**7.5**	NA	NA	**5.4**	**6.5**	**5**	**5.2**	**4.8**
	Fluoride (F-, Anion)	mg/l	NA	< 0.3	<0.1	NA	NA	< 0.3	**0.26 J**	< 0.3	**0.45**	**0.31**
	Iron (Ferric)	mg/l	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	0	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	**2.57**	**4.6**	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	**0.0164**	**0.024 J**	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	**2.1**	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	< 0.02	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	**1.02 J**	**8.8**	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	**10.7**	**13.9**	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	< 1	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	PZ-37	PZ-37	PZ-37	PZ-37	YAMW-1	YAMW-1	YAMW-1	YAMW-1	YAMW-1	YAMW-2
			PZ-37 (062918)	PZ-37 (080618)	PZ-37 (092418)	PZ-37 (09252020)	YAMW-1 (101618)	YAMW-1 (092619)	YAMW-1 (010320)	YAMW-1 (032520)	YAMW-1 (09242020)	YAMW-2 (011520)
			6/29/2018	8/6/2018	9/24/2018	9/25/2020	10/16/2018	9/26/2019	1/3/2020	3/25/2020	9/24/2020	1/15/2020
Appendix III	Boron	mg/l	**20.6**	**15.9**	**16.5**	**14.1**	**0.2**	**0.092**	NA	**0.018 J**	**0.076 J**	**0.031 J**
	Calcium	mg/l	**129**	**114**	**115**	**108**	**14.5 J**	**9.3**	NA	**4.5**	**4.8**	NA
	Chloride	mg/l	NA	NA	NA	**4.3**	NA	NA	NA	**7.7**	**6.6**	NA
	Fluoride	mg/l	NA	NA	NA	< 0.050	NA	NA	NA	< 0.050	< 0.050	NA
	Sulfate	mg/l	**634**	**623**	**674**	**563**	**83.7**	**46.6**	NA	NA	**13.1**	NA
	Total Dissolved Solids	mg/l	**979**	**1020**	**1090**	**878**	**209**	NA	NA	**139**	**106**	NA
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	**0.0014 J**	NA	< 0.005	NA	< 0.00027	< 0.00028	NA
	Arsenic	mg/l	**0.0011 J**	< 0.005	**0.00094 J**	< 0.00078	< 0.005	< 0.0025	NA	< 0.00035	< 0.00078	NA
	Barium	mg/l	**0.054**	**0.048**	**0.047**	**0.034**	**0.048**	**0.047**	NA	**0.040**	**0.028**	NA
	Beryllium	mg/l	**0.00033 J**	**0.0002 J**	**0.00029 J**	**0.00031 J**	< 0.003	< 0.001	NA	**0.00037 J**	**0.000058 J**	NA
	Cadmium	mg/l	**0.00099 J**	**0.00063 J**	**0.00069 J**	**0.00039 J**	**0.00014 J**	< 0.0005	NA	< 0.00011	**0.00017 J**	NA
	Chromium	mg/l	< 0.01	< 0.01	< 0.01	< 0.00055	NA	NA	NA	**0.00058 J**	**0.00074 J**	NA
	Cobalt	mg/l	**0.013**	**0.0053 J**	**0.0071 J**	**0.0023 J**	**0.032**	**0.015**	< 0.00030	< 0.00030	**0.010**	NA
	Lead	mg/l	< 0.005	< 0.005	< 0.005	**0.000085 J**	NA	< 0.0015	NA	< 0.000046	< 0.000036	NA
	Lithium	mg/l	**0.032 J**	**0.033 J**	**0.028 J**	**0.028 J**	**0.0052 J**	< 0.03	NA	**0.0011 J**	**0.011 J**	NA
	Mercury	mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.000078	NA	NA	NA	NA	< 0.000078	NA
	Molybdenum	mg/l	**0.0021 J**	< 0.01	< 0.01	**0.0016 J**	NA	NA	NA	< 0.00095	**0.0022 J**	NA
	Combined Radium - 226/228	pci/l	**1.69**	**1.69**	**2.26**	< 1.68 U	0.384 U	NA	NA	0.525 U	< 0.547 U	NA
	Selenium	mg/l	**0.26**	**0.21**	**0.33**	**0.32**	**0.0019 J**	< 0.0025	NA	< 0.0013	< 0.0016	< 0.0013
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.00014	NA	< 0.001	NA	< 0.000052	< 0.00014	NA
Field	Conductivity	µS/cm	1264.7	1193.5	1209.7	1183.2	NA	NA	190	NA	136.26	94
	Dissolved Oxygen	mg/l	0.31	0.22	0.42	0.3	NA	NA	2.5	NA	3.1	1.1
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	0	NA	NA
	Oxidation Reduction Potential	mV	73.1	105.3	228.4	201.9	NA	NA	136.9	NA	214.8	-3.7
	pH	SU	5.49	5.52	5.37	5.46	NA	NA	5.78	6.13	6.00	6.25
	Temperature	C	19.53	21	20.66	21.3	NA	NA	18.9	NA	19.0	17.4
	Turbidity	ntu	1.01	2.16	1.32	1.9	NA	NA	2.4	NA	1.2	3.6
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	**13.1**	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	**53**	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	**53**	NA	**13.1**	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	< 20	NA	< 5.0	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	< 0.1	NA	< 0.032	NA	NA
	Chloride	mg/l	**5.7**	**4.8**	**4.9**	NA	**12.1**	**6.4**	NA	NA	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	**0.23 J**	< 0.3	NA	< 0.3	< 0.1	NA	NA	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	0	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	**6.13**	NA	**2.2**	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	**0.41**	NA	**0.012 J**	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	**0.66**	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	< 0.02	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	**23.3**	NA	**0.94**	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	**20.2**	NA	**10.8**	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	< 1	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YAMW-2	YAMW-3	YAMW-3	YAMW-4	YAMW-4	YAMW-5	YAMW-5	YAMW-5	YGWA-17S	YGWA-17S
			YAMW-2 (09232020)	YAMW-3 (011620)	YAMW-3 (021120)	YAMW-4 (011620)	YAMW-4 (09232020)	YAMW-5 (011520)	YAMW-5 (021120)	YAMW-5 (09242020)	YGWA-17S (060716)	YGWA-17S (072716)
			9/23/2020	1/16/2020	2/11/2020	1/16/2020	9/23/2020	1/15/2020	2/11/2020	9/24/2020	6/7/2016	7/27/2016
Appendix III	Boron	mg/l	**0.026 J**	**6.8**	**4.5 M1**	**1.9**	**2.5**	**8.7**	**7.8**	**8.7**	< 0.05 o	**0.008 J**
	Calcium	mg/l	**1.7**	NA	NA	NA	**10.5**	NA	NA	**61.3**	**2.2**	**2**
	Chloride	mg/l	**2.7**	NA	NA	NA	**1.8**	NA	NA	**3.7**	NA	NA
	Fluoride	mg/l	< 0.050	NA	NA	NA	< 0.050	NA	NA	< 0.050	NA	NA
	Sulfate	mg/l	**9.1**	NA	NA	NA	**152**	NA	NA	**438**	**4.4**	**4.7**
	Total Dissolved Solids	mg/l	**62.0**	NA	NA	NA	**329**	NA	NA	**788**	**28**	**74**
Appendix IV	Antimony	mg/l	< 0.00028	NA	NA	NA	**0.00065 J**	NA	NA	**0.00033 J**	< 0.0025	< 0.003
	Arsenic	mg/l	< 0.00078	NA	NA	NA	< 0.00078	NA	NA	**0.0015 J**	< 0.0013	< 0.005
	Barium	mg/l	**0.0092 J**	NA	NA	NA	**0.0063 J**	NA	NA	**0.057**	**0.012**	**0.0126**
	Beryllium	mg/l	< 0.000046	NA	NA	NA	< 0.000046	**0.00017 J**	NA	**0.000086 J**	< 0.0025	< 0.003
	Cadmium	mg/l	< 0.00012	NA	NA	NA	< 0.00012	NA	NA	**0.00018 J**	< 0.0025	< 0.001
	Chromium	mg/l	**0.00071 J**	NA	NA	NA	< 0.00055	NA	NA	< 0.00055	< 0.0025	**0.0008 J**
	Cobalt	mg/l	**0.0025 J**	NA	NA	NA	**0.00052 J**	NA	NA	**0.00077 J**	< 0.0025	< 0.01
	Lead	mg/l	< 0.000036	NA	NA	NA	**0.00028 J**	NA	NA	**0.00011 J**	< 0.0013	< 0.005
	Lithium	mg/l	< 0.00081	NA	NA	NA	**0.030 J**	NA	NA	**0.013 J**	< 0.005	< 0.05
	Mercury	mg/l	< 0.000078	NA	NA	NA	< 0.000078	NA	NA	< 0.000078	**0.000095 J**	< 0.0005
	Molybdenum	mg/l	< 0.00069	NA	NA	NA	**0.0068 J**	NA	NA	< 0.00069	< 0.015	< 0.01
	Combined Radium - 226/228	pci/l	< 0.0813 U	NA	NA	NA	< 1.20 U	NA	NA	< 0.668 U	0.158 U	0.0354 U
	Selenium	mg/l	< 0.0016	< 0.0013	NA	**0.0018 J**	**0.016**	**0.045**	NA	**0.026**	**0.001 J**	**0.0012 J**
	Thallium	mg/l	< 0.00014	NA	NA	NA	< 0.00014	NA	NA	< 0.00014	< 0.0005	< 0.001
Field	Conductivity	µS/cm	82.27	940	NA	398	517.15	1080	NA	947.18	65.2	65.4
	Dissolved Oxygen	mg/l	4.1	0.25	NA	0.31	1.2	0.72	NA	1.8	1.13	1.33
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	338.8	-28.9	NA	4.8	-142.4	37	NA	219.0	118.6	56
	pH	SU	5.66	6.67	6.62	6.47	5.89	5.64	5.37	5.38	5.62	5.59
	Temperature	C	19.4	16.4	NA	20.9	21.2	17.8	NA	17.3	19.32	21.45
	Turbidity	ntu	2.2	6.8	NA	4.8	2.3	3.2	NA	1.2	0	1.69
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**4.5**	**4.5**
	Fluoride (F-, Anion)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S
			YGWA-17S (091616)	YGWA-17S (110316)	YGWA-17S (011117)	YGWA-17S (030217)	YGWA-17S (050217)	YGWA-17S (062917)	YGWA-17S (100417)	YGWA-17S (032818)	YGWA-17S (061118)	YGWA-17S (092518)
			9/16/2016	11/3/2016	1/11/2017	3/2/2017	5/2/2017	6/29/2017	10/4/2017	3/28/2018	6/11/2018	9/25/2018
Appendix III	Boron	mg/l	**0.0086 J**	**0.0077 J**	**0.0092 J**	**0.0095 J**	< 0.04 o	**0.0074 J**	**0.0077 J**	NA	**0.01 J**	**0.0096 J**
	Calcium	mg/l	**1.97**	**1.99**	**2.28**	**2.15**	**1.95**	**2.02**	**2.03**	NA	**2.1**	**2.1**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**4.8**	**5.3**	**5.2**	**5**	**5**	**5.2**	**5.3**	NA	**5.2**	**6.1**
	Total Dissolved Solids	mg/l	**67**	**41**	**104**	**77**	**142**	**53**	**61**	NA	**70**	**86**
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA	NA
	Arsenic	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005	< 0.005	< 0.005
	Barium	mg/l	**0.0127**	**0.0128**	**0.0142**	**0.0155**	**0.0138**	**0.0128**	NA	**0.014**	**0.013**	**0.014**
	Beryllium	mg/l	< 0.003	< 0.003	< 0.003	**0.00008 J**	< 0.003	< 0.003	NA	< 0.003	**0.00009 J**	**0.000089 J**
	Cadmium	mg/l	< 0.001	< 0.001	**0.0001 J**	< 0.001	< 0.001	< 0.001	NA	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	< 0.01	< 0.01	< 0.01	**0.001 J**	**0.0007 J**	**0.0006 J**	NA	< 0.01	NA	NA
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01
	Lead	mg/l	< 0.005	< 0.005	< 0.005	**0.00008 J**	< 0.005	**0.00008 J**	NA	< 0.005	NA	NA
	Lithium	mg/l	< 0.05	< 0.05	**0.0035 J**	< 0.05	< 0.05	< 0.05	NA	< 0.05	< 0.05	< 0.05
	Mercury	mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	NA	< 0.0005	NA	< 0.0005
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	NA
	Combined Radium - 226/228	pci/l	**1.04**	0.314 U	0.34 U	0.746 U	0.111 U	0.576 U	NA	0.438 U	0.901 U	0.68 U
	Selenium	mg/l	**0.0015 J**	**0.0015 J**	**0.0014 J**	**0.0017 J**	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001	NA	NA
Field	Conductivity	µS/cm	68.08	73	78.7	73.6	75.9	72.7	NA	77.82	NA	NA
	Dissolved Oxygen	mg/l	1.15	1.25	0.99	1.03	1.17	1.29	NA	1.71	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	53.74	185.6	128.4	86.9	83.6	81.3	NA	105	NA	NA
	pH	SU	5.58	5.59	5.59	5.54	5.47	5.56	5.57	5.59	5.58	5.59
	Temperature	C	18.61	19.26	17.27	17.14	16.79	19.24	NA	18.94	NA	NA
	Turbidity	ntu	1.02	3.01	2.9	4.9	2.3	3.38	NA	4.78	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**4.5**	**5.4**	**4.7**	**4.8**	**4.6**	**4.5**	**4.7**	NA	**4.9**	**5.6**
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	< 0.3	< 0.3 *	< 0.3	< 0.3 *	< 0.3	< 0.3	< 0.3	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-18I	YGWA-18I	YGWA-18I
			YGWA-17S (030519)	YGWA-17S (040219)	YGWA-17S (092519)	YGWA-17S (101019)	YGWA-17S (021120)	YGWA-17S (032420)	YGWA-17S (092320)	YGWA-18I (060616)	YGWA-18I (072716)	YGWA-18I (091916)
			3/5/2019	4/2/2019	9/25/2019	10/10/2019	2/11/2020	3/24/2020	9/23/2020	6/6/2016	7/27/2016	9/19/2016
Appendix III	Boron	mg/l	NA	**0.0066 J**	**0.0081 J**	NA	NA	**0.0092 J**	**0.0066 J**	< 0.05	< 0.1	< 0.1
	Calcium	mg/l	NA	**2.5**	**2.6**	NA	NA	**2.7**	**2.6**	**6.2**	**4.73**	**4.76**
	Chloride	mg/l	NA	NA	NA	NA	NA	**5.0**	**6.6**	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	< 0.050	< 0.050	< 0.050	NA	NA	NA
	Sulfate	mg/l	NA	**5.1**	**5.5**	NA	NA	NA	**5.1**	**1.2**	**1.7**	**1.8**
	Total Dissolved Solids	mg/l	NA	**72**	**81**	NA	NA	**71.0**	**99.0**	**120**	**94**	**92**
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	NA	< 0.00027	< 0.00027	< 0.00028	< 0.0025	**0.0005 J**	< 0.003
	Arsenic	mg/l	< 0.005	< 0.005	< 0.005	NA	**0.0022 JB**	< 0.00035	< 0.00078	< 0.0013	< 0.005	< 0.005
	Barium	mg/l	**0.015**	**0.016**	**0.015**	NA	**0.015**	**0.015**	**0.015**	**0.028**	**0.0294**	**0.0247**
	Beryllium	mg/l	**0.000091 J**	**0.00009 J**	**0.000081 J**	NA	**0.000078 J**	**0.000080 J**	**0.000081 J**	< 0.0025	< 0.003	< 0.003
	Cadmium	mg/l	< 0.001	< 0.001	<-0.0025	NA	< 0.00011	< 0.00011	< 0.00012	< 0.0025	< 0.001	< 0.001
	Chromium	mg/l	< 0.01	NA	NA	NA	**0.00087 J**	**0.00087 J**	**0.00098 J**	**0.0012 J**	**0.0007 J**	< 0.01
	Cobalt	mg/l	< 0.01	< 0.01	< 0.005	NA	< 0.00030	< 0.00030	< 0.00038	< 0.0025	< 0.01	< 0.01
	Lead	mg/l	< 0.005	< 0.005	< 0.005	NA	< 0.000046	**0.000064 J**	**0.000041 J**	< 0.0013	< 0.005	< 0.005
	Lithium	mg/l	< 0.05	< 0.05	< 0.03	NA	< 0.00078	**0.0034 J**	< 0.00081	**0.0088**	**0.0087 J**	**0.0043 J**
	Mercury	mg/l	< 0.0005	NA	NA	NA	< 0.00014	NA	NA	< 0.0002 *	< 0.0005	< 0.0005
	Molybdenum	mg/l	< 0.01	NA	NA	NA	< 0.00095	< 0.00095	< 0.00069	< 0.015	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	0.272 U	0.847 U	0.412 U	NA	0.461 U	0.534 U	< 0.466 U	0.0804 U	0.206 U	**1.58**
	Selenium	mg/l	< 0.01	< 0.01	< 0.01	NA	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.01	< 0.01
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	NA	< 0.000052	< 0.000052	< 0.00014	< 0.0005	< 0.001	< 0.001
Field	Conductivity	µS/cm	82	81.1	79.2	NA	NA	NA	NA	123.08	120.8	117.13
	Dissolved Oxygen	mg/l	1.49	1.49	1.01	NA	NA	NA	NA	2.52	1.95	3.34
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	129.4	185.2	187.6	NA	NA	NA	NA	103.2	115.2	40.84
	pH	SU	5.48	5.74	5.49	NA	5.58	5.57	5.58	6.17	6.14	6.04
	Temperature	C	15.71	17.36	21.02	NA	NA	NA	NA	18.48	22.18	18.08
	Turbidity	ntu	4.4	4.81	3.52	NA	NA	NA	NA	4.44	1.71	0.68
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	**16**	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	**16**	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	< 1	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	**0.04 J**	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	**4.8**	**5.7**	NA	NA	NA	NA	**6.8**	**6.7**	**7**
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	< 0.3	NA	NA	NA	NA	< 0.2	< 0.3	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	0	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	**0.85**	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	**0.0085 J**	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	**1.6**	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	< 0.02	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	**0.38**	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	**11.7**	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	**0.62 J**	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-18I YGWA-18I (110316) 11/3/2016	YGWA-18I YGWA-18I (011117) 1/11/2017	YGWA-18I YGWA-18I (030117) 3/1/2017	YGWA-18I YGWA-18I (042617) 4/26/2017	YGWA-18I YGWA-18I (062817) 6/28/2017	YGWA-18I YGWA-18I (100517) 10/5/2017	YGWA-18I YGWA-18I (032818) 3/28/2018	YGWA-18I YGWA-18I (060718) 6/7/2018	YGWA-18I YGWA-18I (092518) 9/25/2018	YGWA-18I YGWA-18I (030619) 3/6/2019
Appendix III	Boron	mg/l	< 0.1	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	NA	< 0.04	**0.0046 J**	NA
	Calcium	mg/l	**5.25**	**4.74**	**5.37**	**4.28**	**4.95**	**5.28**	NA	**4.8**	**4.6**	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**0.69 J**	< 1 *	**1.8**	**1.6**	< 1.7 *	**1.6**	NA	**0.68 J**	**1**	NA
	Total Dissolved Solids	mg/l	**104**	**133**	**119**	**162**	**98**	**104**	NA	**68**	**109**	NA
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA	NA	< 0.003
	Arsenic	mg/l	< 0.005	< 0.005	< 0.005	< 0.005 *	< 0.005	NA	< 0.005	**0.00066 J**	< 0.005	< 0.005
	Barium	mg/l	**0.0248**	**0.0266**	**0.0275**	**0.024**	**0.0237**	NA	**0.024**	**0.023**	**0.023**	**0.024**
	Beryllium	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003	< 0.003	< 0.003	< 0.003
	Cadmium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	< 0.01	< 0.01	**0.0012 J**	**0.0005 J**	**0.0006 J**	NA	< 0.01	NA	NA	< 0.01
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01
	Lead	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005	NA	NA	< 0.005
	Lithium	mg/l	< 0.05	**0.0052 J**	**0.0053 J**	**0.0041 J**	**0.0039 J**	NA	**0.0041 J**	**0.0032 J**	**0.0036 J**	**0.0033 J**
	Mercury	mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	NA	< 0.0005	NA	< 0.0005	< 0.0005
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	NA	< 0.01
	Combined Radium - 226/228	pci/l	0.342 U	0.365 U	0.395 U	0.507 U	**0.892**	NA	0.92 U	0.668 U	0.141 U	0.714 U
	Selenium	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001	NA	NA	< 0.001
Field	Conductivity	µS/cm	114.9	122.9	116.9	119.6	121	NA	129.77	NA	NA	90.2
	Dissolved Oxygen	mg/l	2.67	2.96	3.03	2.78	2.92	NA	3.07	NA	NA	4.38
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	95.5	88.2	140.4	103	83.2	NA	116.7	NA	NA	99.1
	pH	SU	5.97	6.05	5.94	5.99	6	6.11	6.1	5.98	5.81	5.99
	Temperature	C	18.43	16.28	17.99	17.74	17.73	NA	17.28	NA	NA	14.36
	Turbidity	ntu	4.56	1.92	2.64	1.41	2.06	NA	4.51	NA	NA	1.9
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**7.5**	**6.5**	**6.9**	**7**	**7**	**7**	NA	**6.8**	**7.9 o**	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	< 0.3 *	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S
			YGWA-18I (040319)	YGWA-18I (092619)	YGWA-18I (021120)	YGWA-18I (032420)	YGWA-18I (092320)	YGWA-18S (060616)	YGWA-18S (072716)	YGWA-18S (091616)	YGWA-18S (091916)	YGWA-18S (110316)
			4/3/2019	9/26/2019	2/11/2020	3/24/2020	9/23/2020	6/6/2016	7/27/2016	9/16/2016	9/19/2016	11/3/2016
Appendix III	Boron	mg/l	< 0.04	**0.0062 J**	NA	**0.0054 J**	**0.021 J**	< 0.05 o	**0.0059 J**	**0.0079 J**	NA	**0.0082 J**
	Calcium	mg/l	**5.3**	**4.9**	NA	**5.3**	**5.2**	**1.4**	**1.19**	**1.5**	NA	**1.31**
	Chloride	mg/l	NA	NA	NA	**7.0**	**7.2**	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	< 0.050	< 0.050	< 0.050	NA	NA	NA	NA	NA
	Sulfate	mg/l	**0.82 J**	**0.64 J**	NA	NA	**0.53 J**	**1.8**	**1.9**	**1.7**	NA	**1.9**
	Total Dissolved Solids	mg/l	**89**	**126**	NA	**91.0**	**103**	**58**	**35**	**35**	NA	**48**
Appendix IV	Antimony	mg/l	< 0.003	**0.00056 J**	< 0.00027	< 0.00027	< 0.00028	< 0.0025	< 0.003	< 0.003	NA	< 0.003
	Arsenic	mg/l	< 0.005	< 0.005	**0.0014 JB**	< 0.00035	< 0.00078	< 0.0013	< 0.005	< 0.005	NA	< 0.005
	Barium	mg/l	**0.025**	**0.021**	**0.022**	**0.021**	**0.021**	**0.019**	**0.0167**	**0.0168**	NA	**0.0159**
	Beryllium	mg/l	< 0.003	< 0.003	< 0.000074	< 0.000074	< 0.000046	< 0.0025	< 0.003	< 0.003	NA	< 0.003
	Cadmium	mg/l	< 0.001	< 0.0025	< 0.00011	< 0.00011	< 0.00012	< 0.0025	< 0.001	< 0.001	NA	< 0.001
	Chromium	mg/l	NA	NA	**0.0010 J**	**0.00095 J**	**0.00092 J**	< 0.0025	**0.0006 J**	< 0.01	NA	< 0.01
	Cobalt	mg/l	< 0.01	< 0.005	< 0.00030	< 0.00030	< 0.00038	**0.00061 J**	**0.0004 J**	**0.0008 J**	NA	< 0.01
	Lead	mg/l	< 0.005	< 0.005	< 0.000046	**0.000071 J**	**0.000060 J**	< 0.0013	< 0.005	< 0.005	NA	< 0.005
	Lithium	mg/l	**0.0035 J**	**0.0032 J**	**0.0033 J**	**0.0033 J**	**0.0030 J**	**0.015**	**0.0049 J**	**0.0031 J**	NA	**0.0021 J**
	Mercury	mg/l	NA	NA	< 0.00014	NA	NA	< 0.0002 *	< 0.0005	< 0.0005	NA	< 0.0005
	Molybdenum	mg/l	NA	NA	< 0.00095	< 0.00095	< 0.00069	< 0.015	< 0.01	< 0.01	NA	< 0.01
	Combined Radium - 226/228	pci/l	0.385 U	0.386 U	**1.48**	0.632 U	< 0.887 U	0.301 U	0.196 U	0.915 U	NA	0.928 U
	Selenium	mg/l	< 0.01	< 0.01	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.01	< 0.01	NA	< 0.01
	Thallium	mg/l	< 0.001	< 0.001	< 0.000052	< 0.000052	< 0.00014	< 0.0005	< 0.001	< 0.001	NA	< 0.001
Field	Conductivity	µS/cm	119.2	108.9	NA	NA	NA	68.85	60	NA	65.82	61.4
	Dissolved Oxygen	mg/l	3.5	3.2	NA	NA	NA	1.89	1.35	NA	0.65	0.89
	Iron (Ferrous)	mg/l	NA	NA	NA	0	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	163.1	120.9	NA	NA	NA	128.4	167	NA	36.38	96
	pH	SU	6.29	6.04	6.07	5.98	6.01	5.71	5.46	NA	5.59	5.39
	Temperature	C	16.16	18.84	NA	NA	NA	19.47	21.5	NA	18.66	19.06
	Turbidity	ntu	4.87	3.75	NA	NA	NA	3.12	3.28	NA	2.92	2.46
Supplemental	Alkalinity	mg/l	NA	NA	NA	**34.4**	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	**33**	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	**33**	NA	**34.4**	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	< 20	NA	< 5.0	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	**0.05 J**	NA	**0.085 J**	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**6.9**	**7**	NA	NA	NA	**6.4**	**6.2**	**6.1**	NA	**7.4**
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	NA	NA	NA	< 0.2	< 0.3	< 0.3	NA	< 0.3
	Iron (Ferric)	mg/l	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	0	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	**3**	NA	**3.1**	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	**0.0188**	NA	**0.039 J**	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	**2.5**	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	< 0.02	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	**1.01 J**	NA	**0.95**	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	**12.5**	NA	**12.2**	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	< 1	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S
			YGWA-18S (011117)	YGWA-18S (030117)	YGWA-18S (042617)	YGWA-18S (062817)	YGWA-18S (100417)	YGWA-18S (032818)	YGWA-18S (061118)	YGWA-18S (092518)	YGWA-18S (030519)	YGWA-18S (040319)
			1/11/2017	3/1/2017	4/26/2017	6/28/2017	10/4/2017	3/28/2018	6/11/2018	9/25/2018	3/5/2019	4/3/2019
Appendix III	Boron	mg/l	**0.0096 J**	< 0.04 o	**0.0091 J**	**0.0079 J**	**0.009 J**	NA	**0.0093 J**	**0.007 J**	NA	**0.0053 J**
	Calcium	mg/l	**1.25**	**1.26**	**1.05**	**1.06**	**1.1**	NA	**1.4**	**1**	NA	**1.2**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**1.7**	< 1.6 *	**1.9**	< 1.5 *	**1.7**	NA	**0.95 J**	**1.5**	NA	**1.3**
	Total Dissolved Solids	mg/l	**95**	**79**	**36**	**45**	**45**	NA	**74**	**63**	NA	**63**
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA	NA	< 0.003	< 0.003
	Arsenic	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	NA	**0.00061 J**	< 0.005	< 0.005	< 0.005	< 0.005
	Barium	mg/l	**0.0162**	**0.0195**	**0.0182**	**0.018**	NA	**0.021**	**0.019**	**0.019**	**0.02**	**0.017**
	Beryllium	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003	**0.000057 J**	**0.000082 J**	**0.000079 J**	**0.000075 J**
	Cadmium	mg/l	**0.0001 J**	< 0.001	< 0.001	< 0.001	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	< 0.01	< 0.01	**0.0003 J**	< 0.01	NA	< 0.01	NA	NA	< 0.01	NA
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Lead	mg/l	< 0.005	< 0.005 *	< 0.005 *	**0.0001 J**	NA	< 0.005	NA	NA	< 0.005	< 0.005
	Lithium	mg/l	**0.0025 J**	**0.0029 J**	**0.0019 J**	**0.0016 J**	NA	**0.0024 J**	**0.0014 J**	**0.0016 J**	**0.0031 J**	**0.0028 J**
	Mercury	mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.0005	NA	< 0.0005	NA	< 0.0005	< 0.0005	NA
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	NA	< 0.01	NA
	Combined Radium - 226/228	pci/l	0.502 U	0.202 U	0.264 U	0.636 U	NA	0.56 U	0.649 U	0.574 U	0.474 U	0.429 U
	Selenium	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001	NA	NA	< 0.001	< 0.001
Field	Conductivity	µS/cm	64	62.2	57.4	57	NA	62.67	NA	NA	61.6	60.7
	Dissolved Oxygen	mg/l	0.89	0.83	1.72	1.79	NA	2.35	NA	NA	3.37	4.01
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	129.7	133.8	160.5	99.8	NA	107.5	NA	NA	128.1	215.4
	pH	SU	5.48	5.41	5.4	5.36	5.32	5.34	5.28	4.86	5.26	5.47
	Temperature	C	16.29	18.79	19.54	19.64	NA	17.9	NA	NA	15.2	14.35
	Turbidity	ntu	1.51	4.26	4.8	7.18	NA	8.45	NA	NA	9.3	3.58
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**6.1**	**6**	**6.5**	**6.4**	**6.8**	NA	**6.8**	**7.8**	NA	**6.3**
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3 *	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S
			YGWA-18S (092619)	YGWA-18S (021120)	YGWA-18S (032420)	YGWA-18S (092320)	YGWA-20S (060716)	YGWA-20S (072716)	YGWA-20S (091916)	YGWA-20S (110216)	YGWA-20S (011317)	YGWA-20S (030617)
			9/26/2019	2/11/2020	3/24/2020	9/23/2020	6/7/2016	7/27/2016	9/19/2016	11/2/2016	1/13/2017	3/6/2017
Appendix III	Boron	mg/l	**0.0072 J**	NA	**0.010 J**	**0.0060 J**	< 0.05	< 0.1	< 0.1	< 0.1	< 0.04	< 0.04
	Calcium	mg/l	**1.1**	NA	**1.0**	**0.91 J**	**2.3**	**2.08**	**1.97**	**2.13**	**2.45**	**2.48**
	Chloride	mg/l	NA	NA	**6.8**	**7.2**	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	< 0.050	< 0.050	< 0.050	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**1**	NA	NA	**1.1**	< 1	**0.08 J**	**0.08 J**	**0.1 J**	< 1 *	< 1
	Total Dissolved Solids	mg/l	**72**	NA	**59.0**	**81.0 D6**	**38**	**74**	**45**	**53**	**46**	**164**
Appendix IV	Antimony	mg/l	< 0.003	< 0.00027	< 0.00027	< 0.00028	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	< 0.005	**0.0026 JB**	< 0.00035	< 0.00078	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Barium	mg/l	**0.017**	**0.019**	**0.017**	**0.016**	**0.014**	**0.0141**	**0.0155**	**0.0157**	**0.0158**	**0.0163**
	Beryllium	mg/l	**0.000084 J**	**0.000076 J**	**0.000089 J**	**0.000088 J**	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Cadmium	mg/l	< 0.0025	< 0.00011	< 0.00011	< 0.00012	< 0.0025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	NA	**0.00088 J**	**0.0011 J**	**0.0012 J**	< 0.0025	**0.0005 J**	< 0.01	< 0.01	< 0.01	< 0.01 *
	Cobalt	mg/l	< 0.005	< 0.00030	< 0.00030	< 0.00038	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Lead	mg/l	< 0.005	< 0.000046	**0.000054 J**	**0.000097 J**	< 0.0013	< 0.005	< 0.005	**0.0013 J**	< 0.005	< 0.005
	Lithium	mg/l	**0.0029 J**	**0.0050 J**	**0.0035 J**	**0.0022 J**	< 0.005	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
	Mercury	mg/l	NA	< 0.00014	NA	NA	**0.000096 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005 *
	Molybdenum	mg/l	NA	< 0.00095	< 0.00095	< 0.00069	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	0.222 U	0.597 U	0.262 U	< 0.430 U	0.0191 U	0.541 U	0.826 U	0.791 U	0.296 U	0.518 U
	Selenium	mg/l	< 0.01	< 0.0013	< 0.0013	< 0.0016	< 0.0013	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	< 0.001	< 0.000052	< 0.000052	< 0.00014	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	60.6	NA	NA	NA	51.5	50.9	50.15	53.5	59.3	57
	Dissolved Oxygen	mg/l	1.21	NA	NA	NA	5.26	5.23	5.29	5.29	5.83	6.11
	Iron (Ferrous)	mg/l	NA	NA	0	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	145.8	NA	NA	NA	116.9	60.1	53.3	82.2	109.1	139.6
	pH	SU	5.2	5.30	5.33	5.29	5.77	5.79	5.73	5.67	5.79	5.63
	Temperature	C	18.46	NA	NA	NA	17.9	23.48	19.04	19.14	19.59	17.05
	Turbidity	ntu	4.87	NA	NA	NA	4.44	1.95	1.91	4.66	4.04	4.28
Supplemental	Alkalinity	mg/l	NA	NA	**6.7**	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	**7**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	**7**	NA	**6.7**	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	< 1	NA	< 5.0	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	**0.0648 J**	NA	**0.29**	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**7.1**	NA	NA	NA	**1.9**	**1.9**	**1.9**	**2.6**	**2.3**	**1.9**
	Fluoride (F-, Anion)	mg/l	< 0.3	NA	NA	NA	< 0.2	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3 *
	Iron (Ferric)	mg/l	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	**1.25**	NA	**1.2**	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	**0.0122**	NA	**0.0095 J**	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	**1.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	< 0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	< 5	NA	**0.55**	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	**8.24**	NA	**8.3**	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	**0.55 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S
			YGWA-20S (042617)	YGWA-20S (062917)	YGWA-20S (100417)	YGWA-20S (032918)	YGWA-20S (060618)	YGWA-20S (092518)	YGWA-20S (030519)	YGWA-20S (040319)	YGWA-20S (092519)	YGWA-20S (101019)
			4/26/2017	6/29/2017	10/4/2017	3/29/2018	6/6/2018	9/25/2018	3/5/2019	4/3/2019	9/25/2019	10/10/2019
Appendix III	Boron	mg/l	< 0.04	< 0.04	< 0.04	NA	**0.0049 J**	< 0.04	NA	< 0.04	< 0.04	NA
	Calcium	mg/l	**2.3**	**2.54**	**2.25**	NA	**2.3**	**2.3**	NA	**2.9**	**2.4**	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	< 1	< 1 *	< 1 *	NA	**0.049 J**	**0.13 J**	NA	**0.12 J**	< 1	NA
	Total Dissolved Solids	mg/l	**34**	**68**	**54**	NA	**79**	**73**	NA	**57**	**75**	NA
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	NA	< 0.003	NA	NA	< 0.003	< 0.003	< 0.003	NA
	Arsenic	mg/l	< 0.005	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA
	Barium	mg/l	**0.0177**	**0.017**	NA	**0.014**	**0.015**	**0.015**	**0.016**	**0.018**	**0.014**	NA
	Beryllium	mg/l	< 0.003	< 0.003	NA	< 0.003	**0.00008 J**	**0.000061 J**	**0.00011 J**	**0.000064 J**	< 0.003	NA
	Cadmium	mg/l	< 0.001	< 0.001	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA
	Chromium	mg/l	**0.0007 J**	**0.0005 J**	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA
	Cobalt	mg/l	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA
	Lead	mg/l	< 0.005	< 0.005	NA	< 0.005	NA	NA	< 0.005	< 0.005	< 0.005	NA
	Lithium	mg/l	< 0.05	< 0.05	NA	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NA
	Mercury	mg/l	< 0.0005	< 0.0005 *	NA	< 0.0005	NA	< 0.0005	< 0.0005	NA	NA	NA
	Molybdenum	mg/l	< 0.01	< 0.01	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA
	Combined Radium - 226/228	pci/l	0.282 U	**1.12**	NA	**1.73**	0.694 U	0.772 U	0.84 U	**1.01**	1.18 U	NA
	Selenium	mg/l	< 0.01	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA
	Thallium	mg/l	< 0.001	< 0.001	NA	< 0.001	NA	NA	< 0.001	< 0.001	< 0.001	NA
Field	Conductivity	µS/cm	57.2	59.2	NA	55.1	NA	NA	62.6	62.2	56.3	NA
	Dissolved Oxygen	mg/l	6.16	6.8	NA	5.63	NA	NA	5.21	5.74	6.55	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	68	100	NA	82.4	NA	NA	92.4	223.4	249.5	NA
	pH	SU	5.66	5.85	5.83	5.93	5.86	5.84	6.07	5.71	5.86	NA
	Temperature	C	17.23	19.28	NA	17.58	NA	NA	15.48	17.29	19.15	NA
	Turbidity	ntu	3.71	4.76	NA	4.86	NA	NA	4.5	4.85	4.77	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**22**
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**22**
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 20
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.065 J**
	Chloride	mg/l	**2**	**2.6**	**2.6**	NA	**2.7**	**3.6**	NA	**3.1**	**2.8**	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3 *	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.62**
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.04
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.76**
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.59**
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.3**
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1

Notes can be found on last page.

Analyte		Units	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I
			YGWA-20S (021220)	YGWA-20S (032420)	YGWA-20S (092420)	YGWA-21I (060716)	YGWA-21I (072816)	YGWA-21I (091916)	YGWA-21I (110316)	YGWA-21I (011317)	YGWA-21I (030617)	YGWA-21I (042617)
			2/12/2020	3/24/2020	9/24/2020	6/7/2016	7/28/2016	9/19/2016	11/3/2016	1/13/2017	3/6/2017	4/26/2017
Appendix III	Boron	mg/l	NA	< 0.0049	**0.0094 J**	< 0.05	< 0.1 *	< 0.1	< 0.1	< 0.04	< 0.04	< 0.04
	Calcium	mg/l	NA	**2.6**	**2.6**	**3.7**	**3.15**	**3.17**	**3.4**	**4.98**	**6.28**	**6.65**
	Chloride	mg/l	NA	**2.7**	**2.7**	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	< 0.050M1	< 0.050	< 0.050	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	NA	< 0.50	**5.2**	**5.1**	**4.8**	**5**	**4.3**	**4.5**	**4.9**
	Total Dissolved Solids	mg/l	NA	**76.0**	**69.0**	**60**	**81**	**68**	**61**	**76**	**167**	**50**
Appendix IV	Antimony	mg/l	< 0.00027	< 0.00027	< 0.00028	< 0.0025	< 0.003	**0.001 J**	< 0.003	< 0.003	**0.0005 J**	< 0.003
	Arsenic	mg/l	< 0.00035	< 0.00035	< 0.00078	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	**0.0017 J**	< 0.005 *
	Barium	mg/l	**0.014**	**0.015**	**0.015**	**0.0058**	**0.0068 J**	**0.0071 J**	**0.0092 J**	**0.0105**	**0.0105**	**0.011**
	Beryllium	mg/l	**0.000078 J**	**0.000076 J**	**0.000083 J**	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00012	< 0.0025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	**0.00045 J**	**0.00077 J**	**0.00076 J**	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 *	< 0.01
	Cobalt	mg/l	< 0.00030	< 0.00030	< 0.00038	**0.0056**	**0.0032 J**	**0.0047 J**	**0.013**	**0.011**	**0.011**	**0.009 J**
	Lead	mg/l	< 0.000046	**0.00011 J**	**0.000092 J**	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Lithium	mg/l	< 0.00078	< 0.00078	< 0.00081	**0.0055**	**0.0045 J**	**0.0054 J**	< 0.05 o	**0.0062 J**	**0.0059 J**	**0.0054 J**
	Mercury	mg/l	< 0.00014	NA	NA	**0.000096 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005 *	< 0.0005
	Molybdenum	mg/l	< 0.00095	< 0.00095	< 0.00069	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01	**0.0007 J**	**0.0008 J**
	Combined Radium - 226/228	pci/l	1.11 U	**1.88**	< 0.611 U	**0.347**	0.815 U	0.862 U	0.797 U	0.72 U	0.518 U	1.13 U
	Selenium	mg/l	< 0.0013	< 0.0013	< 0.0016	**0.00048 J**	< 0.01	**0.0014 J**	< 0.01	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	< 0.000052	< 0.000052	< 0.00014	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	NA	NA	NA	94.7	91.9	89.32	94.8	132.1	130.9	134.7
	Dissolved Oxygen	mg/l	NA	NA	NA	1.69	1.68	1.22	0.77	0.19	0.33	0.24
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	NA	87.7	44.7	8.51	45.3	-12.8	12.3	33.1
	pH	SU	6.0	5.86	5.80	6.1	6.12	6.12	6.07	6.41	6.34	6.32
	Temperature	C	NA	NA	NA	20.91	19.27	20.73	18.73	18.88	19	19.48
	Turbidity	ntu	NA	NA	NA	1.24	0.3	1.61	0.92	1.45	1.91	0.76
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	NA	NA	**2.8**	**2.6**	**2.4**	**2.9**	**2.5**	**2.1**	**2.1**
	Fluoride (F-, Anion)	mg/l	NA	NA	NA	< 0.2	**0.02 J**	**0.02 J**	< 0.3 *	< 0.3	< 0.3 *	**0.04 J**
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I
			YGWA-21I (062917)	YGWA-21I (100317)	YGWA-21I (032918)	YGWA-21I (060518)	YGWA-21I (092518)	YGWA-21I (030519)	YGWA-21I (040219)	YGWA-21I (092419)	YGWA-21I (101019)	YGWA-21I (021220)
			6/29/2017	10/3/2017	3/29/2018	6/5/2018	9/25/2018	3/5/2019	4/2/2019	9/24/2019	10/10/2019	2/12/2020
Appendix III	Boron	mg/l	< 0.04	< 0.04	NA	**0.0092 J**	**0.0054 J**	NA	**0.011 J**	**0.018 J**	NA	NA
	Calcium	mg/l	**6.04**	**8.28**	NA	**9.1**	**10.4 J**	NA	**8.8**	**7.7**	NA	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.10 J**
	Sulfate	mg/l	**5.5**	**5.8**	NA	**6.1**	**7**	NA	**3.8**	**1**	NA	NA
	Total Dissolved Solids	mg/l	**94**	**149**	NA	**109**	**122**	NA	**134**	**157**	NA	NA
Appendix IV	Antimony	mg/l	< 0.003	NA	< 0.003	NA	NA	**0.0011 J**	**0.0011 J**	**0.0035**	NA	**0.0015 J**
	Arsenic	mg/l	< 0.005 *	NA	**0.0015 J**	**0.0013 J**	**0.0022 J**	**0.0013 J**	**0.00096 J**	**0.0026 J**	NA	**0.0025 J**
	Barium	mg/l	**0.0109**	NA	< 0.01	**0.011**	**0.011**	**0.011**	**0.011**	**0.011**	NA	**0.011**
	Beryllium	mg/l	< 0.003	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.000074
	Cadmium	mg/l	< 0.001	NA	< 0.001	< 0.001	**0.000096 J**	< 0.001	< 0.001	< 0.0025	NA	< 0.00011
	Chromium	mg/l	< 0.01	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA	< 0.00039
	Cobalt	mg/l	**0.0093 J**	NA	< 0.01	**0.0041 J**	**0.0044 J**	**0.0039 J**	**0.0039 J**	**0.0032 J**	NA	**0.0081**
	Lead	mg/l	< 0.005	NA	< 0.005	NA	NA	< 0.005	< 0.005	< 0.005	NA	< 0.000046
	Lithium	mg/l	**0.0047 J**	NA	**0.0062 J**	**0.0061 J**	**0.0062 J**	**0.0053 J**	**0.0051 J**	**0.0068 J**	NA	**0.0065 J**
	Mercury	mg/l	< 0.0005	NA	< 0.0005	NA	< 0.0005	< 0.0005	NA	NA	NA	< 0.00014
	Molybdenum	mg/l	< 0.01	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA	< 0.00095
	Combined Radium - 226/228	pci/l	0.841 U	NA	**1.91**	**1.39**	**1.62**	0.985 U	**1.42**	**1.35**	NA	**1.61**
	Selenium	mg/l	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.0013
	Thallium	mg/l	< 0.001	NA	< 0.001	NA	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.000052
Field	Conductivity	µS/cm	148.6	NA	150.3	NA	NA	221.7	202.7	196.9	NA	NA
	Dissolved Oxygen	mg/l	0.25	NA	0.26	NA	NA	0.18	0.25	0.34	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	-16.7	NA	-5.7	NA	NA	-140.9	-97.7	-59.9	NA	NA
	pH	SU	6.47	6.56	6.75	6.09	6.67	7.22	6.94	6.87	NA	7.13
	Temperature	C	22.53	NA	17.52	NA	NA	13.76	17.64	23.37	NA	NA
	Turbidity	ntu	2.53	NA	0.94	NA	NA	0.56	0.5	1.29	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**62**	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**62**	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 20	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.1	NA
	Chloride	mg/l	**2.8**	**2.2**	NA	**1.7**	**2.2**	NA	**2.5**	**3.1**	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3 *	< 0.3 *	< 0.3	**0.13 J**	0 J	**0.32**	**0.12 J**	**0.15 J**	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**0.6**	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**1**	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**3.3**	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**0.34**	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**0.048 J**	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**2.9**	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**17.1**	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**2.2**	NA

Notes can be found on last page.

Analyte		Units	YGWA-21I	YGWA-21I	YGWA-39	YGWA-39	YGWA-39	YGWA-39	YGWA-39	YGWA-39	YGWA-39	YGWA-39
			YGWA-21I (032420)	YGWA-21I (092420)	YGWA-39 (101117)	YGWA-39 (112017)	YGWA-39 (011118)	YGWA-39 (022018)	YGWA-39 (040318)	YGWA-39 (062818)	YGWA-39 (080718)	YGWA-39 (092418)
			3/24/2020	9/24/2020	10/11/2017	11/20/2017	1/11/2018	2/20/2018	4/3/2018	6/28/2018	8/7/2018	9/24/2018
Appendix III	Boron	mg/l	**0.016 J**	**0.013 J**	**0.0135 J**	**0.0251 J**	**0.0255 J**	< 0.04	**0.033 J**	**0.053**	**0.024 J**	**0.028 J**
	Calcium	mg/l	**6.0**	**7.8**	**2.74**	**1.81**	**1.54**	**1.71**	**1.4**	**1.4**	**1.2**	**1.1**
	Chloride	mg/l	**2.8**	**2.0**	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	**0.081 J**	**0.079 J**	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	**3.6**	**20**	**24**	**23**	**20.6**	**24.5**	**22**	**20.7**	**21.2**
	Total Dissolved Solids	mg/l	**117**	**113**	**68**	**139**	**153**	**87**	**85**	**88**	**89**	**82**
Appendix IV	Antimony	mg/l	**0.0017 J**	**0.0047**	**0.0006 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	**0.0013 J**	**0.0014 J**	**0.0009 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Barium	mg/l	**0.011**	**0.010**	**0.0092 J**	**0.0081 J**	**0.0077 J**	< 0.01	< 0.01	**0.0078 J**	**0.0078 J**	**0.0071 J**
	Beryllium	mg/l	< 0.000074	< 0.000046	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Cadmium	mg/l	< 0.00011	< 0.00012	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	< 0.00039	< 0.00055	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Cobalt	mg/l	**0.0061**	**0.0079**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Lead	mg/l	< 0.000046	**0.000046 J**	**0.0001 J**	< 0.005	**0.0002 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Lithium	mg/l	**0.0064 J**	**0.0069 J**	**0.0018 J**	**0.0018 J**	**0.0019 J**	< 0.05 o	**0.0022 J**	**0.0026 J**	**0.0024 J**	**0.0022 J**
	Mercury	mg/l	NA	NA	< 0.0005	**0.00007 J**	< 0.0005	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	Molybdenum	mg/l	< 0.00095	< 0.00069	**0.0094 J**	**0.0081 J**	**0.0074 J**	< 0.01	**0.006 J**	**0.005 J**	**0.0045 J**	**0.0035 J**
	Combined Radium - 226/228	pci/l	1.24 U	**1.80**	0.586 U	0.816 U	0.841 U	**1.58**	0.385 U	0.283 U	0.332 U	0.767 U
	Selenium	mg/l	< 0.0013	< 0.0016	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0015 J**
	Thallium	mg/l	< 0.000052	< 0.00014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	NA	NA	107.9	96.2	97.8	87.7	89.9	79.1	73.4	80.4
	Dissolved Oxygen	mg/l	NA	NA	0.2	2.69	3.93	0.98	4.7	4.22	3.94	3.93
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	184.4	74.9	-1.4	94.5	107.7	163.9	127.8	105.1
	pH	SU	6.35	6.70	6.4	6.33	6.29	7.22	6.87	6.18	6.08	5.81
	Temperature	C	NA	NA	24.83	18.12	16.78	17.77	18.52	20.7	19.75	18.74
	Turbidity	ntu	NA	NA	4.07	4.32	1.96	3.33	4.87	1.8	1.24	1.88
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	NA	**2.4**	**1.8**	**1.6**	**2**	**3.3**	**2.1**	**1.2**	**1.3**
	Fluoride (F-, Anion)	mg/l	NA	NA	< 0.3	< 0.3	< 0.3	**0.23**	< 0.3	< 0.3	**0.048 J**	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-39	YGWA-39	YGWA-39	YGWA-39	YGWA-39	YGWA-39	YGWA-39	YGWA-40	YGWA-40	YGWA-40
			YGWA-39 (032719)	YGWA-39 (082119)	YGWA-39 (100819)	YGWA-39 (100919)	YGWA-39 (021220)	YGWA-39 (032520)	YGWA-39 (09242020)	YGWA-40 (101217)	YGWA-40 (112017)	YGWA-40 (011018)
			3/27/2019	8/21/2019	10/8/2019	10/9/2019	2/12/2020	3/25/2020	9/24/2020	10/12/2017	11/20/2017	1/10/2018
Appendix III	Boron	mg/l	**0.017 J**	NA	NA	**0.017 J**	NA	**0.043 J**	**0.037 J**	**0.0401**	**0.156**	**0.15**
	Calcium	mg/l	**1.5**	NA	NA	**2.4**	NA	**2.7**	**3.7**	**2.9**	**10.4**	**10.2**
	Chloride	mg/l	NA	NA	NA	NA	NA	**1.9**	**2.7**	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	< 0.050	< 0.050	< 0.050	NA	NA	NA
	Sulfate	mg/l	**17.7**	NA	NA	**15**	NA	NA	**11.7**	**17**	**71**	**66**
	Total Dissolved Solids	mg/l	**75**	NA	NA	**119**	NA	**158**	**170**	**74**	**179**	**140**
Appendix IV	Antimony	mg/l	NA	< 0.003	NA	NA	< 0.00027	**0.0014 J**	< 0.00028	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	NA	**0.00058 J**	NA	**0.00063 J**	**0.00058 J**	**0.0012 J**	< 0.00078	< 0.005	< 0.005	< 0.005
	Barium	mg/l	NA	**0.015**	NA	**0.013**	**0.011**	**0.014**	**0.016**	**0.0328**	**0.0671**	**0.0656**
	Beryllium	mg/l	NA	< 0.003	NA	< 0.003	< 0.000074	< 0.000074	< 0.000046	**0.0002 J**	**0.0003 J**	**0.0003 J**
	Cadmium	mg/l	NA	< 0.0025	NA	< 0.0025	< 0.00011	< 0.00011	< 0.00012	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	NA	< 0.01	NA	< 0.01	< 0.00039	< 0.00039	< 0.00055	< 0.01	< 0.01	< 0.01
	Cobalt	mg/l	NA	**0.00034 J**	NA	< 0.005	**0.00034 J**	**0.00034 J**	**0.00053 J**	< 0.01	< 0.01	< 0.01
	Lead	mg/l	NA	< 0.005	NA	< 0.005	< 0.000046	**0.000051 J**	< 0.000036	**0.00009 J**	< 0.005	< 0.005
	Lithium	mg/l	NA	**0.0035 J**	NA	**0.0036 J**	**0.0041 J**	**0.0049 J**	**0.0054 J**	< 0.05	< 0.05	< 0.05
	Mercury	mg/l	NA	< 0.0005	NA	NA	< 0.00014	NA	NA	< 0.0005	**0.00008 J**	< 0.0005
	Molybdenum	mg/l	NA	**0.0021 J**	NA	**0.0018 J**	**0.0025 J**	**0.0020 J**	**0.0016 J**	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	NA	1.01 U	1.02 U	NA	0.450 U	0.377 U	< 0.568 U	**1.49**	0.918 U	**1.05**
	Selenium	mg/l	NA	< 0.01	NA	< 0.01	< 0.0013	< 0.0013	< 0.0016	< 0.01	**0.0042 J**	**0.0043 J**
	Thallium	mg/l	NA	< 0.001	NA	NA	< 0.000052	< 0.000052	< 0.00014	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	80.9	105.1	NA	109.4	NA	NA	NA	73	195.6	202.5
	Dissolved Oxygen	mg/l	2.17	0.16	NA	0.1	NA	NA	NA	3.85	5.77	5.85
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	110.8	70.9	NA	56	NA	NA	NA	17.2	146.9	108.3
	pH	SU	5.84	5.96	NA	5.81	5.97	5.78	5.70	5.43	5.1	4.97
	Temperature	C	17.71	20.42	NA	20.33	NA	NA	NA	22.91	16.7	17.38
	Turbidity	ntu	1.1	1.22	NA	1.52	NA	NA	NA	0.9	0.55	0.38
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**1.4**	NA	NA	**2.1**	NA	NA	NA	**3.8**	**4.4**	**4.6**
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	NA	< 0.3	NA	NA	NA	< 0.3	< 0.3	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-40	YGWA-40	YGWA-40	YGWA-40	YGWA-40	YGWA-40	YGWA-40	YGWA-40	YGWA-40	YGWA-40
			YGWA-40 (021918)	YGWA-40 (040318)	YGWA-40 (062818)	YGWA-40 (080718)	YGWA-40 (092418)	YGWA-40 (032619)	YGWA-40 (082119)	YGWA-40 (100819)	YGWA-40 (100919)	YGWA-40 (021220)
			2/19/2018	4/3/2018	6/28/2018	8/7/2018	9/24/2018	3/26/2019	8/21/2019	10/8/2019	10/9/2019	2/12/2020
Appendix III	Boron	mg/l	**0.146**	**0.12**	**0.16**	**0.12**	**0.099**	**0.096**	NA	NA	**0.079**	NA
	Calcium	mg/l	< 25	**6.3**	**6.7**	**6.3**	**5.7**	**5.6**	NA	NA	**4.9**	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.050
	Sulfate	mg/l	**57.2**	**49.4**	**43.8**	**40.5**	**39.7**	**34.3**	NA	NA	**27.9**	NA
	Total Dissolved Solids	mg/l	**119**	**106**	**112**	**103**	**107**	**90**	NA	NA	**98**	NA
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA	NA	< 0.00027
	Arsenic	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005	NA	< 0.005	**0.0034 JB**
	Barium	mg/l	**0.0598**	**0.045**	**0.047**	**0.048**	**0.042**	NA	**0.035**	NA	**0.036**	**0.035**
	Beryllium	mg/l	< 0.003	< 0.003	**0.00029 J**	**0.00024 J**	**0.00019 J**	NA	**0.0002 J**	NA	**0.0002 J**	**0.00018 J**
	Cadmium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.0025	NA	< 0.0025	< 0.00011
	Chromium	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	**0.00053 J**	NA	**0.0012 J**	**0.00065 J**
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.005	NA	< 0.005	< 0.00030
	Lead	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005	NA	< 0.005	< 0.000046
	Lithium	mg/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NA	< 0.03	NA	< 0.03	< 0.00078
	Mercury	mg/l	< 0.0002	< 0.0005	**0.000036 J**	< 0.0005	< 0.0005	NA	< 0.0005	NA	NA	< 0.00014
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	< 0.01	< 0.00095
	Combined Radium - 226/228	pci/l	**2.05**	< 0.68 U	**1.28**	**1.16**	0.965 U	NA	1.24 U	0.866 U	NA	**1.83**
	Selenium	mg/l	< 0.01	< 0.01	**0.0032 J**	**0.0031 J**	**0.0026 J**	NA	**0.0024 J**	NA	**0.0026 J**	**0.0020 J**
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001	NA	NA	< 0.000052
Field	Conductivity	µS/cm	168.7	149.5	143.6	126.1	131.1	117.5	107.3	NA	110.6	NA
	Dissolved Oxygen	mg/l	5.55	5.31	5.6	5.23	5.64	5.21	5.14	NA	5.61	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	135.7	130	78.1	168.2	145.8	187	102	NA	79.6	NA
	pH	SU	5.6	5.84	5.24	5.18	5.14	5.3	5.26	NA	5.22	5.30
	Temperature	C	19.82	19.23	20.25	19.36	18.15	17.23	28.01	NA	18.25	NA
	Turbidity	ntu	2.25	1.5	0.38	0.77	0.78	0.25	0.55	NA	1.28	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**4.6**	**5.9**	**5**	**4.3**	**4.9**	**4.4**	NA	NA	**5.1**	NA
	Fluoride (F-, Anion)	mg/l	< 0.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	< 0.3	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-40	YGWA-40	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I
			YGWA-40 (032420)	YGWA-40 (09242020)	YGWA-4I (060216)	YGWA-4I (072616)	YGWA-4I (091416)	YGWA-4I (110216)	YGWA-4I (011317)	YGWA-4I (030617)	YGWA-4I (050117)	YGWA-4I (062917)
			3/24/2020	9/24/2020	6/2/2016	7/26/2016	9/14/2016	11/2/2016	1/13/2017	3/6/2017	5/1/2017	6/29/2017
Appendix III	Boron	mg/l	**0.088 J**	**0.087 J**	< 0.05	**0.0047 J**	< 0.1	< 0.1	< 0.04	< 0.04	< 0.04	< 0.04
	Calcium	mg/l	**4.8**	**4.4**	**8.8**	**7.69**	**8.49**	**7.83**	**8.08**	**8.64**	**13.4**	**8.81**
	Chloride	mg/l	**4.7**	**5.0**	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	< 0.050	< 0.050	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	**22.9**	**8**	**7.7**	**7.5**	**8.2**	**8.1**	**8**	**8.4**	**9.2**
	Total Dissolved Solids	mg/l	**84.0**	**77.0**	**96**	**92**	**102**	**115**	**67**	**159**	**107**	**79**
Appendix IV	Antimony	mg/l	< 0.00027	< 0.00028	< 0.0025	**0.0003 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	< 0.00035	< 0.00078	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Barium	mg/l	**0.033**	**0.028**	**0.013**	**0.0158**	**0.0143**	**0.0148**	**0.0146**	**0.0141**	**0.0149**	**0.0154**
	Beryllium	mg/l	**0.00022 J**	**0.00020 J**	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Cadmium	mg/l	< 0.00011	< 0.00012	< 0.0025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	**0.00055 J**	< 0.00055	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Cobalt	mg/l	< 0.00030	< 0.00038	**0.00082 J**	**0.0012 J**	**0.0006 J**	< 0.01	**0.0029 J**	**0.0006 J**	< 0.01	**0.0005 J**
	Lead	mg/l	< 0.000046	**0.000038 J**	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Lithium	mg/l	< 0.00078	< 0.00081	**0.013**	**0.0123 J**	**0.0137 J**	**0.0136 J**	**0.0121 J**	**0.0143 J**	**0.0132 J**	**0.0145 J**
	Mercury	mg/l	NA	NA	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005 *	< 0.0005	< 0.0005
	Molybdenum	mg/l	< 0.00095	< 0.00069	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	1.27 U	< 0.634 U	**0.721**	**1.26**	0.901 U	1.09 U	**1.19**	0.669 U	0.803 U	**1.35**
	Selenium	mg/l	**0.0020 J**	**0.0016 J**	< 0.0013	**0.0009 J**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	< 0.000052	< 0.00014	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	NA	NA	139.97	135.7	148.12	148.3	163.6	150.5	138.8	152.4
	Dissolved Oxygen	mg/l	NA	NA	3.93	1.45	1	0.74	0.91	0.97	1.03	1.43
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	95.8	48.2	50.98	56.4	68.4	81	69.2	78.9
	pH	SU	5.29	5.43	6.36	6.22	6.23	6.08	6.19	6.2	6.21	6.21
	Temperature	C	NA	NA	19.1	18.12	18.42	17.6	16.51	17.09	17.19	19.01
	Turbidity	ntu	NA	NA	2.72	2.86	1.22	0.6	0.62	0.95	0.4	2.8
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	NA	**3.7**	**3.6**	**3.4**	**4.5**	**4.2**	**3.6**	**4.3**	**4.2**
	Fluoride (F-, Anion)	mg/l	NA	NA	< 0.2	< 0.3	< 0.3	< 0.3 *	< 0.3	< 0.3 *	< 0.3	< 0.3 *
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I
			YGWA-4I (100517)	YGWA-4I (032918)	YGWA-4I (060718)	YGWA-4I (092618)	YGWA-4I (030419)	YGWA-4I (040319)	YGWA-4I (092519)	YGWA-4I (101019)	YGWA-4I (021220)	YGWA-4I (032520)
			10/5/2017	3/29/2018	6/7/2018	9/26/2018	3/4/2019	4/3/2019	9/25/2019	10/10/2019	2/12/2020	3/25/2020
Appendix III	Boron	mg/l	< 0.04	NA	**0.0045 J**	**0.005 J**	NA	**0.0055 J**	< 0.04	NA	NA	**0.011 J**
	Calcium	mg/l	**9.29**	NA	**8.2**	**9.5 J**	NA	**8.4**	**9.5**	NA	NA	**10.5**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.9**
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.050	< 0.050
	Sulfate	mg/l	**9.6**	NA	**8.5**	**10.2**	NA	**8.5**	**8.5**	NA	NA	NA
	Total Dissolved Solids	mg/l	**95**	NA	**90**	**116**	NA	**111**	**117**	NA	NA	**146**
Appendix IV	Antimony	mg/l	NA	< 0.003	NA	NA	< 0.003	< 0.003	< 0.003	NA	< 0.00027	< 0.00027
	Arsenic	mg/l	NA	< 0.005	**0.00059 J**	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.00035	< 0.00035
	Barium	mg/l	NA	**0.014**	**0.014**	**0.02**	**0.016**	**0.017**	**0.015**	NA	**0.012**	**0.016**
	Beryllium	mg/l	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.000074	< 0.000074
	Cadmium	mg/l	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	NA	< 0.00011	< 0.00011
	Chromium	mg/l	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA	< 0.00039	**0.00058 J**
	Cobalt	mg/l	NA	< 0.01	**0.00058 J**	< 0.01	< 0.01	**0.00083 J**	< 0.005	NA	< 0.00030	**0.00056 J**
	Lead	mg/l	NA	< 0.005	NA	NA	< 0.005	< 0.005	< 0.005	NA	< 0.000046	< 0.000046
	Lithium	mg/l	NA	**0.014 J**	**0.013 J**	**0.014 J**	**0.015 J**	**0.014 J**	**0.014 J**	NA	**0.011 J**	**0.014 J**
	Mercury	mg/l	NA	< 0.0005	NA	< 0.0005	< 0.0005	NA	NA	NA	< 0.00014	NA
	Molybdenum	mg/l	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA	< 0.00095	< 0.00095
	Combined Radium - 226/228	pci/l	NA	0.703 U	0.628 U	0.756 U	1.21 U	1.07 U	**1.86**	NA	**1.25**	0.766 U
	Selenium	mg/l	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.0013	< 0.0013
	Thallium	mg/l	NA	< 0.001	NA	NA	< 0.001	< 0.001	< 0.001	NA	< 0.000052	< 0.000052
Field	Conductivity	µS/cm	NA	153.97	NA	NA	131.4	162.5	150	NA	NA	NA
	Dissolved Oxygen	mg/l	NA	0.94	NA	NA	1.36	1.3	1.48	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	73.6	NA	NA	77.1	136.8	144.3	NA	NA	NA
	pH	SU	6.16	6.09	6.12	5.84	6.18	6.43	6.2	NA	6.15	6.26
	Temperature	C	NA	18.17	NA	NA	12.9	17.76	19.9	NA	NA	NA
	Turbidity	ntu	NA	1.59	NA	NA	0.7	4.64	1.97	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	**64**	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	**64**	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	< 20	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	< 0.1	NA	NA
	Chloride	mg/l	**4.7**	NA	**4.4**	**4.8**	NA	**4.3**	**4.5**	NA	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	0	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	**5.7**	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	**0.0089 J**	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	**0.72**	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	< 0.02	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	**4.1**	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	**9.5**	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	**0.55 J**	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-4I	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D
			YGWA-4I (092220)	YGWA-5D (060216)	YGWA-5D (072616)	YGWA-5D (091416)	YGWA-5D (110216)	YGWA-5D (011217)	YGWA-5D (030717)	YGWA-5D (050117)	YGWA-5D (062717)	YGWA-5D (100317)
			9/22/2020	6/2/2016	7/26/2016	9/14/2016	11/2/2016	1/12/2017	3/7/2017	5/1/2017	6/27/2017	10/3/2017
Appendix III	Boron	mg/l	< 0.0052	< 0.05 o	**0.0052 J**	**0.0071 J**	< 0.1 o	**0.0076 J**	**0.0089 J**	**0.0061 J**	**0.0079 J**	**0.0094 J**
	Calcium	mg/l	**9.6**	**33**	**32.3**	**31**	**30.9**	**35.7**	**32.7**	**37**	**36.5**	**30.9**
	Chloride	mg/l	**4.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	< 0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**8.2**	**20**	**20**	**19**	**20**	**19**	**20**	**20**	**18**	**16**
	Total Dissolved Solids	mg/l	**83.0**	**160**	**177**	**187**	**181**	**202**	**257**	**165**	**189**	**170**
Appendix IV	Antimony	mg/l	< 0.00028	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA
	Arsenic	mg/l	< 0.00078	**0.00071 J**	**0.001 J**	< 0.005	< 0.005	< 0.005	**0.0012 J**	< 0.005 *	**0.0019 J**	NA
	Barium	mg/l	**0.013**	**0.0084**	**0.01**	**0.0085 J**	**0.0091 J**	**0.0089 J**	**0.009 J**	**0.0083 J**	**0.0074 J**	NA
	Beryllium	mg/l	< 0.000046	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA
	Cadmium	mg/l	< 0.00012	< 0.0025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA
	Chromium	mg/l	< 0.00055	< 0.0025	< 0.01 *	< 0.01	< 0.01	< 0.01	< 0.01 *	**0.0004 J**	< 0.01	NA
	Cobalt	mg/l	< 0.00038	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA
	Lead	mg/l	< 0.000036	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	**0.0001 J**	< 0.005	< 0.005	NA
	Lithium	mg/l	**0.013 J**	**0.0049 J**	**0.0063 J**	**0.0058 J**	**0.0053 J**	**0.0054 J**	**0.0056 J**	**0.0031 J**	**0.0018 J**	NA
	Mercury	mg/l	NA	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005 *	< 0.0005	< 0.0005	NA
	Molybdenum	mg/l	< 0.00069	**0.0035 J**	**0.0042 J**	**0.0041 J**	**0.0039 J**	**0.0041 J**	**0.0047 J**	**0.0045 J**	**0.004 J**	NA
	Combined Radium - 226/228	pci/l	< 0.795 U	**5.11**	**6.92**	**3.96**	**4.53**	**4.43**	**4.8**	**4.16**	**2.8**	NA
	Selenium	mg/l	< 0.0016	< 0.0013	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA
	Thallium	mg/l	< 0.00014	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA
Field	Conductivity	µS/cm	NA	265.1	272.2	281.56	283.9	304.5	296	265	283.9	NA
	Dissolved Oxygen	mg/l	NA	1.56	0.9	0.43	0.29	0.08	0.15	0.16	0.15	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	-113.6	-132.1	-98.26	-86.6	-131.7	-89.2	30.8	-50.8	NA
	pH	SU	5.80	7.67	7.66	7.6	7.35	7.49	7.43	7.22	7.32	7.48
	Temperature	C	NA	18.87	20.75	19.15	17.36	17.27	16.69	17.23	19.5	NA
	Turbidity	ntu	NA	NA	1.61	0.22	0.79	0.75	4.12	1	0.75	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	**7.2**	**6.6**	**6.6**	**7.6**	**6.8**	**6.8**	**7.2**	**7**	**6.5**
	Fluoride (F-, Anion)	mg/l	NA	**0.11 J**	**0.05 J**	**0.04 J**	< 0.3 *	**0.04 J**	< 0.3 *	< 0.3 *	< 0.3 *	< 0.3 *
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D
			YGWA-5D (032918)	YGWA-5D (060618)	YGWA-5D (092618)	YGWA-5D (030419)	YGWA-5D (040319)	YGWA-5D (092419)	YGWA-5D (101019)	YGWA-5D (021220)	YGWA-5D (032420)	YGWA-5D (092220)
			3/29/2018	6/6/2018	9/26/2018	3/4/2019	4/3/2019	9/24/2019	10/10/2019	2/12/2020	3/24/2020	9/22/2020
Appendix III	Boron	mg/l	NA	**0.0098 J**	**0.01 J**	NA	**0.0076 J**	**0.01 J**	NA	NA	**0.011 J**	**0.0079 J**
	Calcium	mg/l	NA	**26.2**	**25.8**	NA	**24.7 J**	**25.8**	NA	NA	**26.1**	**27.2**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**3.5**	**3.6**
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	< 0.050	< 0.050	**0.056 J**
	Sulfate	mg/l	NA	**8.3**	**7.9**	NA	**7**	**5.5**	NA	NA	NA	**5.5**
	Total Dissolved Solids	mg/l	NA	**151**	**144**	NA	**142**	**129**	NA	NA	**139**	**104**
Appendix IV	Antimony	mg/l	< 0.003	NA	NA	< 0.003	< 0.003	< 0.003	NA	< 0.00027	< 0.00027	< 0.00028
	Arsenic	mg/l	**0.0006 J**	**0.0013 J**	**0.0014 J**	< 0.005	< 0.005	**0.00043 J**	NA	**0.0046 JB**	**0.00065 J**	**0.0010 J**
	Barium	mg/l	< 0.01	**0.008 J**	**0.0075 J**	**0.0077 J**	**0.0087 J**	**0.0075 J**	NA	**0.0079 J**	**0.0076 J**	**0.0076 J**
	Beryllium	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.000074	< 0.000074	< 0.000046
	Cadmium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.00011	< 0.00011	< 0.00012
	Chromium	mg/l	< 0.01	NA	NA	< 0.01	NA	NA	NA	< 0.00039	< 0.00039	**0.0011 J**
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	**0.00037 J**	**0.00035 J**	< 0.00038
	Lead	mg/l	< 0.005	NA	NA	< 0.005	< 0.005	< 0.005	NA	< 0.000046	**0.000054 J**	**0.000045 J**
	Lithium	mg/l	**0.0058 J**	**0.0068 J**	**0.0065 J**	**0.0065 J**	**0.007 J**	**0.0065 J**	NA	**0.0066 J**	**0.0064 J**	**0.0066 J**
	Mercury	mg/l	< 0.0005	NA	< 0.0005	< 0.0005	NA	NA	NA	< 0.00014	NA	NA
	Molybdenum	mg/l	< 0.01 o	NA	NA	< 0.01	NA	NA	NA	**0.0011 J**	**0.0011 J**	**0.00099 J**
	Combined Radium - 226/228	pci/l	**3.42**	**3.99**	**2.73**	**4.43**	**4.79**	**4.06**	NA	**4.02**	**3.52**	**2.98**
	Selenium	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.0013	< 0.0013	< 0.0016
	Thallium	mg/l	< 0.001	NA	NA	< 0.001	< 0.001	< 0.001	NA	< 0.000052	< 0.000052	< 0.00014
Field	Conductivity	µS/cm	241.43	NA	NA	182.1	222.1	208.1	NA	NA	NA	NA
	Dissolved Oxygen	mg/l	0.15	NA	NA	0.09	0.24	0.09	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	37.2	NA	NA	-117.6	-110	-58	NA	NA	NA	NA
	pH	SU	7.02	7.43	7.13	7.46	7.11	6.93	NA	7.52	7.34	7.19
	Temperature	C	16.82	NA	NA	12.57	16.96	19.21	NA	NA	NA	NA
	Turbidity	ntu	1.22	NA	NA	0.5	3	1.06	NA	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	**95**	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	**95**	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	< 20	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	< 0.1	NA	NA	NA
	Chloride	mg/l	NA	**4.7**	**4.8**	NA	**4**	**3.7**	NA	NA	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	**0.15 J**	< 0.3	**0.19 J**	**0.047 J**	**0.05 J**	NA	NA	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	0	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	**4.3**	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	**0.52**	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	**0.01 J**	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	**0.041**	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	**3.5**	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	**8.5**	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	**0.62 J**	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I
			YGWA-5I (060216)	YGWA-5I (072616)	YGWA-5I (091416)	YGWA-5I (110416)	YGWA-5I (011217)	YGWA-5I (030717)	YGWA-5I (050217)	YGWA-5I (062717)	YGWA-5I (100317)	YGWA-5I (032918)
			6/2/2016	7/26/2016	9/14/2016	11/4/2016	1/12/2017	3/7/2017	5/2/2017	6/27/2017	10/3/2017	3/29/2018
Appendix III	Boron	mg/l	< 0.05	< 0.1	**0.01 J**	< 0.1	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	NA
	Calcium	mg/l	**2.4**	**2.12**	**2.18**	**2.17 J**	**2.37**	**2.34**	**2.17**	**2.13**	**2.15**	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**1.9**	**1.8**	**1.8**	**2**	**1.9**	**2.1**	**2**	**2.1**	**2.3**	NA
	Total Dissolved Solids	mg/l	**66**	**78**	**73**	**75**	**86**	**108**	**103**	**73**	**89**	NA
Appendix IV	Antimony	mg/l	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003
	Arsenic	mg/l	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 *	< 0.005	NA	< 0.005
	Barium	mg/l	**0.019**	**0.0179**	**0.0181**	**0.0165**	**0.0199**	**0.0196**	**0.0202**	**0.0184**	NA	**0.021**
	Beryllium	mg/l	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003
	Cadmium	mg/l	< 0.0025	< 0.001	< 0.001	< 0.001	**0.00009 J**	< 0.001	< 0.001	< 0.001	NA	< 0.001
	Chromium	mg/l	< 0.0025	< 0.01 *	< 0.01	< 0.01	< 0.01	< 0.01 *	< 0.01	< 0.01	NA	< 0.01
	Cobalt	mg/l	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01
	Lead	mg/l	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	**0.00007 J**	< 0.005	< 0.005	NA	< 0.005
	Lithium	mg/l	< 0.005 o	**0.0027 J**	**0.0029 J**	< 0.05 o	**0.0032 J**	**0.0035 J**	**0.0031 J**	**0.0029 J**	NA	**0.0034 J**
	Mercury	mg/l	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005 *	< 0.0005	< 0.0005	NA	< 0.0005
	Molybdenum	mg/l	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01
	Combined Radium - 226/228	pci/l	**0.614**	**1.47**	**1.27**	0.434 U	0.202 U	0.0674 U	0.444 U	0.77 U	NA	0.648 U
	Selenium	mg/l	< 0.0013	**0.0009 J**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01
	Thallium	mg/l	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001
Field	Conductivity	µS/cm	79.6	76.9	82.31	80.5	91.1	92.7	89.8	88.4	NA	92.02
	Dissolved Oxygen	mg/l	6.05	5.62	6.32	5.96	6.46	6.48	6.52	5.97	NA	6.28
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	113.6	170.9	77.67	96.8	111.2	112.2	109.8	109.4	NA	46.3
	pH	SU	5.75	5.72	5.74	5.61	5.71	5.66	5.65	5.7	5.79	5.63
	Temperature	C	19.5	23.48	19.68	17.32	17.54	16.68	16.5	20.44	NA	16.83
	Turbidity	ntu	3.53	2.75	4.1	2.4	7.3	4.85	147	0.84	NA	4.21
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**4.3**	**4.4**	**3.8**	**4.8**	**3.8**	**4.5**	**4.6**	**4.3**	**4.2**	NA
	Fluoride (F-, Anion)	mg/l	< 0.2	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3 *	< 0.3	< 0.3	< 0.3	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-5I YGWA-5I (060718) 6/7/2018	YGWA-5I YGWA-5I (092618) 9/26/2018	YGWA-5I YGWA-5I (030419) 3/4/2019	YGWA-5I YGWA-5I (040319) 4/3/2019	YGWA-5I YGWA-5I (092419) 9/24/2019	YGWA-5I YGWA-5I (101019) 10/10/2019	YGWA-5I YGWA-5I (021220) 2/12/2020	YGWA-5I YGWA-5I (032420) 3/24/2020	YGWA-5I YGWA-5I (092220) 9/22/2020
Appendix III	Boron	mg/l	< 0.04	**0.0057 J**	NA	**0.0044 J**	**0.0049 J**	NA	NA	**0.0068 J**	0.0053 J
	Calcium	mg/l	**2.3**	**2.3**	NA	**2.8**	**2.5**	NA	NA	**2.5**	**2.6**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	**4.3**	**4.2**
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	< 0.050 (< 0.050)	< 0.050	< 0.050
	Sulfate	mg/l	**2**	**2.3**	NA	**2.1**	**2.4**	NA	NA	NA	**2.1**
	Total Dissolved Solids	mg/l	**142**	**86**	NA	**83**	**79**	NA	NA	**68**	**75**
Appendix IV	Antimony	mg/l	NA	NA	< 0.003	< 0.003	< 0.003	NA	< 0.00027	< 0.00027	< 0.00028
	Arsenic	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	**0.0020 JB**	< 0.00035	< 0.00078
	Barium	mg/l	**0.019**	**0.019**	**0.019**	**0.023**	**0.019**	NA	**0.021**	**0.021**	**0.019**
	Beryllium	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.000074	< 0.000074	< 0.000046
	Cadmium	mg/l	< 0.001	< 0	< 0.001	< 0.001	< 0.0025	NA	< 0.00011	< 0.00011	< 0.00012
	Chromium	mg/l	NA	NA	< 0.01	NA	NA	NA	**0.00043 J**	**0.0014 J**	< 0.00055
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.005	NA	< 0.00030	< 0.00030	< 0.00038
	Lead	mg/l	NA	NA	< 0.005	< 0.005	**0.00009 J**	NA	< 0.000046	**0.000068 J**	**0.000042 J**
	Lithium	mg/l	**0.0032 J**	**0.0032 J**	**0.0032 J**	**0.0035 J**	**0.0031 J**	NA	**0.0032 J**	**0.0033 J**	**0.0034 J**
	Mercury	mg/l	NA	< 0.0005	< 0.0005	NA	NA	NA	< 0.00014	NA	NA
	Molybdenum	mg/l	NA	NA	< 0.01	NA	NA	NA	< 0.00095	< 0.00095	< 0.00069
	Combined Radium - 226/228	pci/l	0.745 U	0.377 U	1 U	0.43 U	0.699 U	NA	0.913 U	1.37	< 0.428 U
	Selenium	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.0013	< 0.0013	< 0.0016
	Thallium	mg/l	NA	NA	< 0.001	< 0.001	< 0.001	NA	< 0.000052	< 0.000052	< 0.00014
Field	Conductivity	µS/cm	NA	NA	75.1	91	84.6	NA	NA	NA	NA
	Dissolved Oxygen	mg/l	NA	NA	6.43	6.1	5.76	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	108	123	77.3	NA	NA	NA	NA
	pH	SU	5.63	5.63	5.75	5.63	5.6	NA	5.83	5.81	5.99
	Temperature	C	NA	NA	14.36	16.87	18.32	NA	NA	NA	NA
	Turbidity	ntu	NA	NA	0.9	4.1	4.77	NA	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	**26**	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	**26**	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	< 20	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	**0.062 J**	NA	NA	NA
	Chloride	mg/l	**4.5**	**5.1**	NA	**4.2**	**4.5**	NA	NA	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	NA	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	0	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	**2.5**	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	< 0.04	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	**1.6**	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	< 0.02	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	**1.5**	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	**9.8**	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	< 1	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-6I	YGWA-6I	YGWA-6I	YGWA-6I	YGWA-6I	YGWA-6I	YGWA-6I	YGWA-6I	YGWA-6S	YGWA-6S
			YGWA-6I (060616)	YGWA-6I (072716)	YGWA-6I (091516)	YGWA-6I (110216)	YGWA-6I (011317)	YGWA-6I (030217)	YGWA-6I (050117)	YGWA-6I (062917)	YGWA-6S (060316)	YGWA-6S (072716)
			6/6/2016	7/27/2016	9/15/2016	11/2/2016	1/13/2017	3/2/2017	5/1/2017	6/29/2017	6/3/2016	7/27/2016
Appendix III	Boron	mg/l	< 0.05 *	**0.0533 J**	**0.062 J**	**0.0569 J**	**0.0624**	**0.0614**	**0.0538**	**0.0612**	**0.032 J**	**0.0378 J**
	Calcium	mg/l	**9.7**	**7.79**	**8.23**	**8.49**	**9.2**	**9.27**	**13.1**	**8.92**	**3.4**	**2.85**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**53**	**55**	**53**	**55**	**54**	**51**	**54**	**65**	**18**	**17**
	Total Dissolved Solids	mg/l	**170**	**194**	**156**	**142**	**163**	**165**	**172**	**169**	**70**	**75**
Appendix IV	Antimony	mg/l	< 0.0025	**0.001 J**	**0.001 J**	< 0.003	< 0.003	< 0.003	**0.0004 J**	< 0.003	< 0.0025	< 0.003
	Arsenic	mg/l	**0.00086 J**	**0.001 J**	< 0.005	< 0.005	< 0.005	**0.001 J**	< 0.005 *	< 0.005 *	< 0.0013	< 0.005
	Barium	mg/l	**0.025**	**0.0254**	**0.0215**	**0.0244**	**0.0259**	**0.0284**	**0.0225**	**0.0246**	**0.011**	**0.0107**
	Beryllium	mg/l	**0.00095 J**	< 0.003	< 0.003	< 0.003	< 0.003	**0.0001 J**	< 0.003	< 0.003	< 0.0025	< 0.003
	Cadmium	mg/l	< 0.0025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.001
	Chromium	mg/l	< 0.0025	**0.0011 J**	< 0.01	< 0.01	< 0.01	**0.0006 J**	< 0.01	**0.0006 J**	**0.0011 J**	**0.0015 J**
	Cobalt	mg/l	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0025	< 0.01
	Lead	mg/l	< 0.0013	< 0.005	**0.0001 J**	**0.0002 J**	**0.0001 J**	**0.0004 J**	**0.0002 J**	**0.0003 J**	< 0.0013	< 0.005
	Lithium	mg/l	**0.0068**	**0.0072 J**	**0.0075 J**	**0.0076 J**	**0.0081 J**	**0.0079 J**	**0.0077 J**	**0.0081 J**	< 0.005	< 0.05
	Mercury	mg/l	< 0.0002 *	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0002	< 0.0005
	Molybdenum	mg/l	< 0.015	**0.0009 J**	< 0.01	< 0.01	< 0.01	**0.001 J**	< 0.01	< 0.01	< 0.015	< 0.01
	Combined Radium - 226/228	pci/l	**2.11**	**1.61**	**2.42**	**1.56**	**1.89**	**1.4**	**1.74**	**1.46**	0.241 U	0.559 U
	Selenium	mg/l	**0.0014**	**0.002 J**	**0.001 J**	**0.001 J**	**0.0016 J**	**0.0018 J**	**0.0015 J**	< 0.01	< 0.0013	< 0.01
	Thallium	mg/l	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001
Field	Conductivity	µS/cm	219	233.2	236.03	234.4	241.3	233.3	234.8	233.3	85.33	86.2
	Dissolved Oxygen	mg/l	4.44	3.84	1.61	1.72	1	1.44	4.88	2.89	7.02	6.49
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	104.8	50.7	23.79	178.5	96	93.7	12.7	64.7	105.1	78.4
	pH	SU	6.5	6.4	6.43	6.4	6.34	6.32	6.22	6.3	6	5.9
	Temperature	C	19.41	19.99	21.51	21.55	20.34	18.85	21.19	21.11	18.61	20.83
	Turbidity	ntu	0.92	2.75	4.22	7.56	4.76	14	4.94	9.93	0.9	1.31
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**6.6**	**6.1**	**6.3**	**7.5**	**7.5**	**6.6**	**7.6**	**7.8**	**2.1**	**2**
	Fluoride (F-, Anion)	mg/l	< 0.2	< 0.3	< 0.3	< 0.3 *	**0.05 J**	< 0.3 *	< 0.3	< 0.3 *	< 0.2	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWA-6S	YGWA-6S	YGWA-6S	YGWA-6S	YGWA-6S	YGWA-6S	YGWC-19S	YGWC-19S	YGWC-19S	YGWC-19S
			YGWA-6S (091516)	YGWA-6S (110316)	YGWA-6S (011317)	YGWA-6S (030317)	YGWA-6S (050117)	YGWA-6S (062917)	YGWC-19S (060716)	YGWC-19S (072816)	YGWC-19S (091916)	YGWC-19S (110916)
			9/15/2016	11/3/2016	1/13/2017	3/3/2017	5/1/2017	6/29/2017	6/7/2016	7/28/2016	9/19/2016	11/9/2016
Appendix III	Boron	mg/l	**0.0482 J**	**0.0568 J**	**0.0554**	**0.0589**	**0.0478**	**0.0538**	< 0.05 *	< 0.1	**0.0066 J**	< 0.04 *
	Calcium	mg/l	**3.79**	**4.9**	**6.45**	**5.67**	**9.82**	**5.86**	**1.1**	**0.988**	**1.03**	**1.07**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**22**	**28**	**32**	**29**	**30**	**31**	< 1	< 1 *	**0.4 J**	< 1 *
	Total Dissolved Solids	mg/l	**86**	**70**	**100**	**97**	**121**	**102**	**26**	**18 J**	**29**	**40**
Appendix IV	Antimony	mg/l	< 0.003	**0.0016 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.0025	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0013	< 0.005	< 0.005	< 0.005
	Barium	mg/l	**0.0142**	**0.0161**	**0.0211**	**0.0212**	**0.019**	**0.0201**	**0.007**	**0.0078 J**	**0.0077 J**	**0.0074 J**
	Beryllium	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.0025	< 0.003	< 0.003	< 0.003
	Cadmium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	**0.0021 J**	**0.0034 J**	**0.0056 J**	**0.007 J**	**0.0056 J**	**0.0071 J**	< 0.0025	< 0.01	< 0.01	< 0.01
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0025	< 0.01	< 0.01	< 0.01
	Lead	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0013	< 0.005	**0.0006 J**	< 0.005
	Lithium	mg/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.005	< 0.05	< 0.05	< 0.05
	Mercury	mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0002	< 0.0005	< 0.0005	< 0.0005
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	**0.0004 J**	< 0.01	< 0.01	< 0.015	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	**1.56**	0.0934 U	0.749 U	0.463 U	0.355 U	**0.978**	0.162 U	0.916 U	0.262 U	0.0543 U
	Selenium	mg/l	**0.0011 J**	**0.0013 J**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0013	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	104.92	136.1	152.7	146	137.3	141.7	41.4	42.1	40.36	43.7
	Dissolved Oxygen	mg/l	6.26	6.3	7.01	7.04	6.89	6.83	4.16	4.61	4.01	3.9
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	78.63	162.6	105.9	104.3	31.2	83.5	99.8	129.9	58.33	115.7
	pH	SU	5.92	5.85	5.93	5.87	5.86	5.91	5.61	5.64	5.65	5.56
	Temperature	C	18.71	17.45	19.18	14.87	20.26	20.41	19.42	18.97	19.66	17.59
	Turbidity	ntu	1.35	2.26	0.96	0.91	0.72	1.71	4.19	0.64	3.07	1.46
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**2.1**	**3**	**2.9**	**2.7**	**2.9**	**3**	**2.6**	**2.6**	**2.6**	**3**
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3 *	< 0.3	< 0.3 *	< 0.3	**0.07 J**	< 0.2	< 0.3	< 0.3	< 0.3 *
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-19S	YGWC-19S	YGWC-19S	YGWC-19S	YGWC-19S	YGWC-22S	YGWC-22S	YGWC-22S	YGWC-22S	YGWC-22S
			YGWC-19S (011617)	YGWC-19S (030917)	YGWC-19S (050217)	YGWC-19S (071017)	YGWC-19S (101017)	YGWC-22S (060716)	YGWC-22S (072816)	YGWC-22S (091916)	YGWC-22S (110916)	YGWC-22S (011617)
			1/16/2017	3/9/2017	5/2/2017	7/10/2017	10/10/2017	6/7/2016	7/28/2016	9/19/2016	11/9/2016	1/16/2017
Appendix III	Boron	mg/l	< 0.04	< 0.04	< 0.04	< 0.04 *	< 0.04	**5.2**	**4.3**	**5.22**	**5.11**	**5.9**
	Calcium	mg/l	**0.943**	**0.936**	**0.923**	**0.964**	**0.895**	**55**	**45.8**	**50.4**	**47.5**	**52**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	< 1 *	**0.25 J**	**0.19 J**	< 1 *	< 1 *	**310**	**290**	**300**	**320**	**310**
	Total Dissolved Solids	mg/l	**47**	**306**	**106**	**24 J**	< 25	**470**	**497**	**504**	**505**	**507**
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.0025	< 0.003	**0.0017 J**	< 0.003	< 0.003
	Arsenic	mg/l	< 0.005	**0.0005 J**	< 0.005 *	< 0.005	NA	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005
	Barium	mg/l	**0.0082 J**	**0.0066 J**	**0.0072 J**	**0.0088 J**	NA	**0.017**	**0.0191**	**0.0192**	**0.0182**	**0.0188**
	Beryllium	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	NA	**0.00064 J**	**0.0007 J**	**0.0007 J**	**0.0007 J**	**0.0007 J**
	Cadmium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.0025	**0.0001 J**	**0.0001 J**	< 0.001	**0.0001 J**
	Chromium	mg/l	< 0.01	< 0.01 *	< 0.01	< 0.01	NA	< 0.0025	**0.0005 J**	< 0.01	< 0.01	< 0.01
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	NA	**0.0011 J**	**0.0012 J**	**0.0012 J**	**0.0012 J**	**0.0011 J**
	Lead	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.0013	**0.0001 J**	< 0.005	< 0.005	< 0.005
	Lithium	mg/l	< 0.05	< 0.05	< 0.05	< 0.05	NA	< 0.005	**0.0015 J**	< 0.05	< 0.05	< 0.05
	Mercury	mg/l	< 0.0005	< 0.0005 *	< 0.0005	< 0.0005	NA	**0.00017 J**	< 0.0005	< 0.0005	**0.00007 J**	**0.000055 J**
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	0.511 U	0.279 U	0.414 U	0.76 U	NA	0.042 U	0.991 U	**3.87**	0.0765 U	0.468 U
	Selenium	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	NA	**0.025**	**0.0224**	**0.0237**	**0.0209**	**0.0172**
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	42.6	42.1	43.2	42.2	NA	554.8	670.7	671.41	699.4	683.7
	Dissolved Oxygen	mg/l	3.1	6.39	5.31	3.94	NA	3.06	0.52	0.19	0.14	0.16
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	112.8	145.2	86.1	132.1	NA	224.7	295	279.53	222	180.4
	pH	SU	5.56	5.63	5.46	5.55	5.6	4.98	4.94	4.95	4.87	4.93
	Temperature	C	18.21	19.9	18.53	19.55	NA	22.92	21.43	22.36	20.88	19.87
	Turbidity	ntu	0.96	3.4	1.45	1.32	NA	0.31	0.92	0.72	0.93	0.32
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**2.5**	**2.4**	**2.4**	**2.7**	**2.8**	**25**	**24**	**25**	**25**	**25**
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3 *	< 0.3	< 0.3	< 0.3	< 0.2	**0.02 J**	**0.31**	< 0.3 *	**0.04 J**
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-22S	YGWC-22S	YGWC-22S	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-23S
			YGWC-22S (030817)	YGWC-22S (050217)	YGWC-22S (070517)	YGWC-23S (060716)	YGWC-23S (072816)	YGWC-23S (092016)	YGWC-23S (110816)	YGWC-23S (011617)	YGWC-23S (030917)	YGWC-23S (050217)
			3/8/2017	5/2/2017	7/5/2017	6/7/2016	7/28/2016	9/20/2016	11/8/2016	1/16/2017	3/9/2017	5/2/2017
Appendix III	Boron	mg/l	**6.57**	**4.02**	**5.98**	**0.99**	**1.09**	**1.35**	**1.5**	**1.67**	**1.44**	**1.2**
	Calcium	mg/l	**51.7**	**56.1**	**54.4**	**9.6**	**7.87**	**9.28**	**8.6**	**8.85**	**8.4**	**12.9**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**310**	**300**	**320**	**56**	**57**	**68**	**79**	**72**	**69**	**60**
	Total Dissolved Solids	mg/l	**676**	**476**	**459**	**130**	**119**	**132**	**146**	**194**	**288**	**221**
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	**0.0007 J**	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	**0.0005 J**	< 0.005 *	< 0.005	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 *
	Barium	mg/l	**0.0183**	**0.0189**	**0.0188**	**0.045**	**0.0511**	**0.0561**	**0.054**	**0.0528**	**0.0469**	**0.0427**
	Beryllium	mg/l	**0.0008 J**	**0.0006 J**	**0.0007 J**	< 0.0025	< 0.003	**0.0001 J**	< 0.003 *	**0.0001 J**	**0.0001 J**	**0.00009 J**
	Cadmium	mg/l	**0.00009 J**	**0.0001 J**	< 0.001	< 0.0025	< 0.001	< 0.001	**0.00007 J**	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	< 0.01 *	< 0.01	< 0.01	< 0.0025	**0.0008 J**	< 0.01	< 0.01	< 0.01	< 0.01 *	**0.0007 J**
	Cobalt	mg/l	**0.0013 J**	**0.0011 J**	**0.0011 J**	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Lead	mg/l	**0.0001 J**	**0.0001 J**	**0.0001 J**	**0.00044 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Lithium	mg/l	**0.0017 J**	**0.0015 J**	**0.0016 J**	< 0.005 o	**0.0019 J**	**0.0021 J**	**0.0024 J**	**0.0022 J**	**0.0025 J**	**0.0019 J**
	Mercury	mg/l	< 0.0005 *	**0.00008 J**	< 0.0005	**0.000098 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005 *	< 0.0005
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	0.156 U	0.163 U	0.685 U	0.303 U	0.386 U	**1.47**	0.22 U	0.147 U	0.0892 U	0.149 U
	Selenium	mg/l	**0.0171**	**0.0149**	**0.0147**	**0.037**	**0.0385**	**0.0464**	**0.0521**	**0.0469**	**0.0437**	**0.0395**
	Thallium	mg/l	**0.00004 J**	< 0.001	**0.00006 J**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	699.1	688.8	678.8	183.96	200.1	199.66	219.2	208.6	208.7	179.4
	Dissolved Oxygen	mg/l	0.68	0.14	0.11	5.87	6.17	6.84	7.02	7.52	7.91	8.15
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	239.7	231.5	285.1	122.1	55.8	68.32	113.3	124.8	132.9	180.9
	pH	SU	4.89	4.83	4.88	5.57	5.6	5.53	5.53	5.59	5.56	5.61
	Temperature	C	19.38	19.95	21.15	19.99	24.11	18.99	18.67	19.28	17.64	18.75
	Turbidity	ntu	2.8	0.64	1.06	4.86	2.76	0.69	4.16	2.34	2.89	1.54
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**24**	**26**	**25**	**2.9**	**3.5**	**2.4**	**2.8**	**1.8**	**1.7**	**1.8**
	Fluoride (F-, Anion)	mg/l	< 0.3 *	< 0.3 *	< 0.3	< 0.2	**0.03 J**	< 0.3	< 0.3	< 0.3	< 0.3 *	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-23S YGWC-23S (071017) 7/10/2017	YGWC-23S YGWC-23S (101117) 10/11/2017	YGWC-23S YGWC-23S (033018) 3/30/2018	YGWC-23S YGWC-23S (061218) 6/12/2018	YGWC-23S YGWC-23S (092718) 9/27/2018	YGWC-23S YGWC-23S (030619) 3/6/2019	YGWC-23S YGWC-23S (040419) 4/4/2019	YGWC-23S YGWC-23S (092719) 9/27/2019	YGWC-23S YGWC-23S (101019) 10/10/2019	YGWC-23S YGWC-23S (021720) 2/17/2020
Appendix III	Boron	mg/l	**1.12**	**1.09**	NA	**0.9**	**0.71**	NA	**0.6**	**0.58**	NA	NA
	Calcium	mg/l	**8.09**	**6.36**	NA	**4.7**	**4.1**	NA	**3.7**	**3.7**	NA	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.050
	Sulfate	mg/l	**57**	**52**	NA	**41.4**	**39.6**	NA	**27.9**	**30.3**	NA	NA
	Total Dissolved Solids	mg/l	**123**	**100**	NA	**115**	**105**	NA	**85**	**96**	NA	NA
Appendix IV	Antimony	mg/l	< 0.003	NA	< 0.003	NA	NA	< 0.003	< 0.003	**0.00029 J**	NA	< 0.00027
	Arsenic	mg/l	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	**0.0019 J**
	Barium	mg/l	**0.0395**	NA	**0.03**	**0.024**	**0.022**	**0.019**	**0.019**	**0.018**	NA	**0.024**
	Beryllium	mg/l	< 0.003	NA	< 0.003	**0.000081 J**	**0.00009 J**	**0.000066 J**	**0.000072 J**	**0.000077 J**	NA	**0.000081 J**
	Cadmium	mg/l	< 0.001	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	NA	< 0.00011
	Chromium	mg/l	< 0.01 *	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA	**0.00087 J**
	Cobalt	mg/l	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.005	NA	< 0.00030
	Lead	mg/l	< 0.005	NA	< 0.005	NA	NA	< 0.005	< 0.005	**0.00013 J**	NA	< 0.000046
	Lithium	mg/l	**0.0018 J**	NA	**0.0039 J**	**0.0017 J**	**0.0017 J**	**0.0025 J**	**0.0018 J**	**0.0017 J**	NA	**0.0021 J**
	Mercury	mg/l	< 0.0005	NA	< 0.0005	NA	< 0.0005	< 0.0005	NA	NA	NA	< 0.00014
	Molybdenum	mg/l	< 0.01	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA	< 0.00095
	Combined Radium - 226/228	pci/l	0.815 U	NA	0.659 U	1.03 U	1.06 U	0.736 U	0.474 U	0.684 U	NA	**1.46**
	Selenium	mg/l	**0.0386**	NA	**0.028**	**0.026**	**0.023**	**0.019**	**0.017**	**0.018**	NA	**0.020**
	Thallium	mg/l	< 0.001	NA	< 0.001	NA	NA	< 0.001	< 0.001	< 0.001	NA	< 0.000052
Field	Conductivity	µS/cm	160.5	NA	142.1	NA	NA	74.6	87.9	100.87	NA	NA
	Dissolved Oxygen	mg/l	7.65	NA	8.43	NA	NA	8.68	8.23	8.6	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	63.9	NA	91.8	NA	NA	122.4	146.9	105.5	NA	NA
	pH	SU	5.68	5.46	5.73	5.63	5.47	5.84	5.64	5.77	NA	5.84
	Temperature	C	19.34	NA	16.53	NA	NA	16.96	18.07	19.03	NA	NA
	Turbidity	ntu	1.79	NA	2.12	NA	NA	NA	4.8	2.01	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**7**	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**7**	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 1	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**0.078 J**	NA
	Chloride	mg/l	**1.9**	**2.4**	NA	**1.8**	**2**	NA	**1.7**	**1.7**	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3 *	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	**0.049 J**	**0.12 J**	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	0	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**3.1**	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.04	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**0.081**	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**0.72**	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**7**	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 1	NA

Notes can be found on last page.

Analyte		Units	YGWC-23S	YGWC-23S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S
			YGWC-23S (032620)	YGWC-23S (092420)	YGWC-24S (060816)	YGWC-24S (080116)	YGWC-24S (092016)	YGWC-24S (110816)	YGWC-24S (011717)	YGWC-24S (030817)	YGWC-24S (050217)	YGWC-24S (070717)
			3/26/2020	9/24/2020	6/8/2016	8/1/2016	9/20/2016	11/8/2016	1/17/2017	3/8/2017	5/2/2017	7/7/2017
Appendix III	Boron	mg/l	**0.94**	**1.1**	< 0.05	< 0.1 *	< 0.1 *	< 0.04 *	< 0.04 *	< 0.04	**0.0099 J**	**0.0076 J**
	Calcium	mg/l	**5.6**	**7.9**	**1.9**	**1.83**	**1.78**	**1.77**	**1.7**	**1.77**	**1.57**	**1.8**
	Chloride	mg/l	**1.6**	**2.0**	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	< 0.050	< 0.050	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	**52.5**	< 1	**1.1**	**0.38 J**	**0.39 J**	< 1 *	**0.29 J**	**0.29 J**	**0.37 J**
	Total Dissolved Solids	mg/l	**110**	**129**	**66**	**56**	**53**	**58**	**56**	**192**	**113**	**46**
Appendix IV	Antimony	mg/l	< 0.00027	**0.00085 J**	< 0.0025	< 0.003	**0.0009 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	**0.0012 J**	< 0.00078	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 *	< 0.005
	Barium	mg/l	**0.027**	**0.035**	**0.02**	**0.02**	**0.0203**	**0.0191**	**0.0192**	**0.0189**	**0.019**	**0.019**
	Beryllium	mg/l	**0.000090 J**	**0.00015 J**	< 0.0025	**0.0001 J**	**0.0001 J**	< 0.003 *	**0.0001 J**	**0.0001 J**	**0.0001 J**	**0.0001 J**
	Cadmium	mg/l	< 0.00011	< 0.00012	< 0.0025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	**0.0019 J**	**0.0011 J**	< 0.0025 *	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 *	**0.0011 J**	< 0.01
	Cobalt	mg/l	< 0.00030	< 0.00038	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Lead	mg/l	< 0.000046	**0.000046 J**	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Lithium	mg/l	**0.0021 J**	**0.0035 J**	< 0.005	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
	Mercury	mg/l	NA	NA	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005 *	< 0.0005	< 0.0005
	Molybdenum	mg/l	< 0.00095	< 0.00069	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	0.281 U	< 0.788 U	**1.06**	0.467 U	0.853 U	0.433 U	0.0759 U	0.479 U	0.506 U	0.713 U
	Selenium	mg/l	**0.024**	**0.031**	< 0.0013	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	< 0.000052	< 0.00014	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	NA	NA	61.9	66.3	65.58	65.9	66.2	66.6	67.2	67.7
	Dissolved Oxygen	mg/l	NA	NA	6.57	5.65	6.19	5.44	5.79	5.86	6.01	6.33
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	139.8	82.6	57.14	111.5	110	135.3	86.3	121.1
	pH	SU	5.69	5.51	5.65	5.47	5.61	5.55	5.53	5.62	5.46	5.81
	Temperature	C	NA	NA	19.01	21.51	20.22	17.84	18.21	19.31	19.15	20.99
	Turbidity	ntu	NA	NA	2.42	0.9	3.45	0.3	0.15	0.46	0.53	0.45
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	NA	**5.9**	**5.3**	**5.5**	**6.4**	**5.5**	**5.4**	**5.7**	**5.7**
	Fluoride (F-, Anion)	mg/l	NA	NA	< 0.2	< 0.3	< 0.3	< 0.3 *	< 0.3	< 0.3 *	< 0.3	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-24S (100517) 10/5/2017	YGWC-24S (033018) 3/30/2018	YGWC-24S (061218) 6/12/2018	YGWC-24S (092618) 9/26/2018	YGWC-24S (030519) 3/5/2019	YGWC-24S (040419) 4/4/2019	YGWC-24S (040919) 4/9/2019	YGWC-24S (092619) 9/26/2019	YGWC-24S (101019) 10/10/2019	YGWC-24S (021320) 2/13/2020
Appendix III	Boron	mg/l	< 0.04	NA	**0.018 J**	**0.0055 J**	NA	< 0.04	NA	**0.0068 J**	NA	NA
	Calcium	mg/l	**1.7**	NA	**1.8**	**1.7**	NA	**1.9**	NA	**1.7**	NA	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.050
	Sulfate	mg/l	< 1 *	NA	**0.35 J**	**0.28 J**	NA	**0.29 J**	NA	**0.23 J**	NA	NA
	Total Dissolved Solids	mg/l	**48**	NA	**79**	**59**	NA	**63**	NA	**81**	NA	NA
Appendix IV	Antimony	mg/l	NA	< 0.003	NA	NA	< 0.003	< 0.003	NA	< 0.003	NA	< 0.00027
	Arsenic	mg/l	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005	NA	< 0.00035
	Barium	mg/l	NA	**0.02**	**0.018**	**0.019**	**0.019**	**0.02**	NA	**0.017**	NA	**0.016**
	Beryllium	mg/l	NA	< 0.003	**0.00012 J**	**0.00014 J**	**0.00016 J**	**0.00015 J**	NA	**0.00014 J**	NA	**0.00014 J**
	Cadmium	mg/l	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.0025	NA	< 0.00011
	Chromium	mg/l	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA	NA	< 0.00039
	Cobalt	mg/l	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.005	NA	< 0.00030
	Lead	mg/l	NA	< 0.005	NA	NA	< 0.005	< 0.005	NA	< 0.005	NA	< 0.000046
	Lithium	mg/l	NA	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NA	< 0.03	NA	< 0.00078
	Mercury	mg/l	NA	< 0.0005	NA	< 0.0005	< 0.0005	NA	NA	NA	NA	< 0.00014
	Molybdenum	mg/l	NA	< 0.01	NA	NA	< 0.01	NA	NA	NA	NA	< 0.00095
	Combined Radium - 226/228	pci/l	NA	0.409 U	0.728 U	**0.981**	0.837 U	NA	0.502 U	0.964 U	NA	0.474 U
	Selenium	mg/l	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	< 0.0013
	Thallium	mg/l	NA	< 0.001	NA	NA	< 0.001	< 0.001	NA	< 0.001	NA	< 0.000052
Field	Conductivity	µS/cm	NA	67.7	NA	NA	66.4	65.4	NA	60.1	NA	NA
	Dissolved Oxygen	mg/l	NA	6.39	NA	NA	6.15	6.37	NA	6.13	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	127.5	NA	NA	116.6	192.6	NA	142.7	NA	NA
	pH	SU	5.45	5.64	5.64	5.61	5.72	5.66	NA	5.52	NA	5.69
	Temperature	C	NA	17.23	NA	NA	16.06	17.98	NA	20.81	NA	NA
	Turbidity	ntu	NA	1.05	NA	NA	0.63	2.94	NA	0.36	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**13**	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**13**	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 1	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.1	NA
	Chloride	mg/l	**6**	NA	**6.2**	**6.9**	NA	**5.9**	NA	**6.5**	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	**0.033 J**	NA	**0.098 J**	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	0	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**1.3**	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.04	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**1.5**	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 0.02	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**0.61**	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**7.9**	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 1	NA

Notes can be found on last page.

Analyte		Units	YGWC-24S	YGWC-24SA	YGWC-32I	YGWC-32I	YGWC-32I	YGWC-32I	YGWC-32I	YGWC-32I	YGWC-32I
			YGWC-24S (032620)	YGWC-24SA (092320)	YGWC-32I (060816)	YGWC-32I (072916)	YGWC-32I (092116)	YGWC-32I (111016)	YGWC-32I (011717)	YGWC-32I (030117)	YGWC-32I (050317)
			3/26/2020	9/23/2020	6/8/2016	7/29/2016	9/21/2016	11/10/2016	1/17/2017	3/1/2017	5/3/2017
Appendix III	Boron	mg/l	**0.033 J**	< 0.0052 [< 0.0052]	**3.9**	**3.25**	**4**	**3.59**	**4.06**	**3.58**	**4.84**
	Calcium	mg/l	**1.7**	**2.4 [2.4]**	**100**	**82.3**	**93.4**	**90.1**	**97.9**	**96.7**	**99.8**
	Chloride	mg/l	**5.4**	**9.3 M1 [9.3]**	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	< 0.050	< 0.050 M1 [< 0.050]	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	< 0.50 M1 [< 0.50]	**500**	**500**	**410**	**480**	**490**	**480**	**490**
	Total Dissolved Solids	mg/l	**67.0**	**87.0 [73.0]**	**750**	**723**	**739**	**741**	**717**	**772**	**864**
Appendix IV	Antimony	mg/l	< 0.00027	< 0.00028 [< 0.00028]	< 0.0025	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	**0.0015 J**	< 0.00078 [< 0.00078]	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Barium	mg/l	**0.019**	**0.026 [0.024]**	**0.025**	**0.025**	**0.0257**	**0.0245**	**0.0247**	**0.0275**	**0.0257**
	Beryllium	mg/l	**0.00016 J**	**0.000061 J [0.000060 J]**	< 0.0025	**0.00009 J**	**0.0001 J**	< 0.003 *	**0.0001 J**	**0.0001 J**	**0.0001 J**
	Cadmium	mg/l	< 0.00011	< 0.00012 [< 0.00012]	**0.00078 J**	**0.0007 J**	**0.0007 J**	**0.0007 J**	**0.0008 J**	**0.0009 J**	**0.0007 J**
	Chromium	mg/l	**0.00094 J**	< 0.00055 [< 0.00055]	< 0.0025	**0.0036 J**	< 0.01	< 0.01	< 0.01	**0.0006 J**	< 0.01
	Cobalt	mg/l	< 0.00030	< 0.00038 [< 0.00038]	**0.0017 J**	**0.0016 J**	**0.0016 J**	**0.0015 J**	**0.0015 J**	**0.0016 J**	**0.0016 J**
	Lead	mg/l	**0.000053 J**	< 0.000036 [< 0.000036]	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 *	< 0.005
	Lithium	mg/l	< 0.00078	< 0.00081 [< 0.00081]	**0.0039 J**	**0.003 J**	**0.0033 J**	**0.0033 J**	**0.0032 J**	**0.0036 J**	**0.0034 J**
	Mercury	mg/l	NA	NA	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	Molybdenum	mg/l	< 0.00095	< 0.00069 [< 0.00069]	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	0.511 U	< 0.786 U [< 0.225 U]	0.351 U	0.429 U	0.2 U	0.973 U	0.838 U	0.817 U	0.352 U
	Selenium	mg/l	< 0.0013	< 0.0016 [< 0.0016]	**0.00094 J**	**0.002 J**	**0.0026 J**	**0.0016 J**	**0.0027 J**	**0.0042 J**	**0.0022 J**
	Thallium	mg/l	< 0.000052	< 0.00014 [< 0.00014]	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	**0.00005 J**	< 0.001
Field	Conductivity	µS/cm	NA	NA	926.9	917.7	931.94	997.5	1044.3	959.5	980
	Dissolved Oxygen	mg/l	NA	NA	0.22	0.17	0.29	0.17	0.65	0.38	0.21
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	24.6	-7.9	244.9	424.4	204.1	420.3	377.3
	pH	SU	5.51	5.64 [NA]	5.41	5.39	5.4	5.32	5.37	5.26	5.29
	Temperature	C	NA	NA	22.44	21.66	22.29	19.22	20.39	22.45	21.55
	Turbidity	ntu	NA	NA	1.96	0.65	1.02	2.03	1.06	2.81	3.64
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	NA	**14**	**12**	**13**	**14**	**13**	**13**	**14**
	Fluoride (F-, Anion)	mg/l	NA	NA	< 0.2	**0.17 J**	< 0.3	< 0.3 *	< 0.3	< 0.3 *	**0.04 J**
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-32I	YGWC-32S	YGWC-32S	YGWC-32S	YGWC-32S	YGWC-32S	YGWC-32S	YGWC-32S	YGWC-32S	YGWC-33S
			YGWC-32I (071117)	YGWC-32S (060816)	YGWC-32S (072916)	YGWC-32S (092116)	YGWC-32S (110916)	YGWC-32S (011717)	YGWC-32S (030117)	YGWC-32S (050317)	YGWC-32S (071117)	YGWC-33S (060816)
			7/11/2017	6/8/2016	7/29/2016	9/21/2016	11/9/2016	1/17/2017	3/1/2017	5/3/2017	7/11/2017	6/8/2016
Appendix III	Boron	mg/l	**3.6**	**3.8**	**3.34**	**4.29**	**2.14**	**4.58**	**3.41**	**4.99**	**3.92**	**12**
	Calcium	mg/l	**106**	**120**	**90.1**	**101**	**106**	**110**	**111**	**118**	**131**	**130**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**450**	**360**	**360**	< 1	**360**	**350**	**370**	**360**	**320**	**910**
	Total Dissolved Solids	mg/l	**723**	**500**	**518**	**531**	**552**	**552**	**561**	**713**	**588**	**1200**
Appendix IV	Antimony	mg/l	< 0.003	< 0.0025	**0.0003 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.0025
	Arsenic	mg/l	< 0.005	< 0.0013	< 0.005	< 0.005	< 0.005	< 0.005	**0.0008 J**	**0.0004 J**	**0.0007 J**	**0.0033**
	Barium	mg/l	**0.0258**	**0.021**	**0.0204**	**0.0225**	**0.023**	**0.0216**	**0.024**	**0.0208**	**0.023**	**0.029**
	Beryllium	mg/l	**0.0001 J**	**0.0029**	**0.0025 J**	**0.0025 J**	**0.0023 J**	**0.0026 J**	**0.0028 J**	**0.0026 J**	**0.0033**	**0.012**
	Cadmium	mg/l	**0.0008 J**	**0.00067 J**	**0.0006 J**	**0.0006 J**	**0.0005 J**	**0.0007 J**	**0.0006 J**	**0.0006 J**	**0.0007 J**	**0.00098 J**
	Chromium	mg/l	< 0.01	< 0.0025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0025 *
	Cobalt	mg/l	**0.0017 J**	**0.004**	**0.0036 J**	**0.0036 J**	**0.0044 J**	**0.0038 J**	**0.0038 J**	**0.0042 J**	**0.0043 J**	**0.037**
	Lead	mg/l	< 0.005	< 0.0013	**0.0001 J**	**0.0001 J**	< 0.005	< 0.005	< 0.005 *	< 0.005 *	**0.0001 J**	< 0.0013 *
	Lithium	mg/l	**0.0034 J**	< 0.005	< 0.05	< 0.05	< 0.05	< 0.05	**0.0012 J**	**0.0011 J**	< 0.05	**0.0099**
	Mercury	mg/l	< 0.0005	< 0.0002 *	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0002
	Molybdenum	mg/l	< 0.01	< 0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.00095 J**
	Combined Radium - 226/228	pci/l	**1.28**	0.212 U	**1.82**	0.962 U	0.0355 U	0.969 U	0.301 U	0.77 U	**0.931**	0.384 U
	Selenium	mg/l	**0.0046 J**	**0.032**	**0.0403**	**0.0458**	**0.0531**	**0.0635**	**0.0704**	**0.0716**	**0.0696**	**0.0011 J**
	Thallium	mg/l	< 0.001	< 0.0005	**0.0001 J**	< 0.001	< 0.001	< 0.001	**0.00006 J**	**0.00006 J**	**0.00005 J**	< 0.0005
Field	Conductivity	µS/cm	952.6	710.9	733.6	727.02	755	829	771.9	820.3	828.6	1401.9
	Dissolved Oxygen	mg/l	0.18	0.5	0.53	2.41	1.78	0.52	0.3	0.81	0.59	0.07
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	389.1	321.6	500.2	457.03	467.2	369.1	421.7	403.2	424.8	-36.9
	pH	SU	5.32	4.73	4.64	4.63	4.73	4.68	4.58	4.63	4.65	5.07
	Temperature	C	22.89	22.18	23.3	25.06	21.79	21.6	21.29	21.46	23.98	22.43
	Turbidity	ntu	2.17	2.61	1.66	4.22	2.37	4.49	3.84	4.85	4.73	4.71
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**14**	**15**	**15**	< 0.25 *	**16**	**15**	**15**	**18**	**19**	**7.6**
	Fluoride (F-, Anion)	mg/l	< 0.3 *	< 0.2	**0.32**	< 0.3	**0.4**	**0.24 J**	< 0.3 *	**0.36**	< 0.3 *	**0.34**
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S
			YGWC-33S (062816)	YGWC-33S (080116)	YGWC-33S (092116)	YGWC-33S (110816)	YGWC-33S (111016)	YGWC-33S (111416)	YGWC-33S (011717)	YGWC-33S (030117)	YGWC-33S (050317)	YGWC-33S (071017)
			6/28/2016	8/1/2016	9/21/2016	11/8/2016	11/10/2016	11/14/2016	1/17/2017	3/1/2017	5/3/2017	7/10/2017
Appendix III	Boron	mg/l	NA	**9.89**	**11.1**	NA	NA	**11**	**11.8**	**8.61**	**13.4**	**15.2**
	Calcium	mg/l	NA	**136**	**131**	NA	NA	**116**	**126**	**125**	**129**	**139**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	**830**	**840**	NA	NA	**750**	**790**	**850**	**800**	**810**
	Total Dissolved Solids	mg/l	NA	**1300**	**1220**	NA	NA	**1170**	**1150**	**1160**	**1280**	**1170**
Appendix IV	Antimony	mg/l	NA	< 0.003 *	< 0.003	NA	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	NA	**0.007**	**0.0054**	NA	NA	< 0.005	**0.0027 J**	**0.0041 J**	**0.0037 J**	**0.0044 J**
	Barium	mg/l	NA	**0.02**	**0.0183**	NA	NA	**0.0149**	< 0.0139 *	**0.0142**	**0.0151**	**0.0137**
	Beryllium	mg/l	NA	**0.0146**	**0.0149**	NA	NA	**0.0152**	**0.0142**	**0.015**	**0.0154**	**0.0143**
	Cadmium	mg/l	NA	**0.0014**	**0.0017**	NA	NA	**0.0027**	**0.0033**	**0.0031**	**0.0031**	**0.0029**
	Chromium	mg/l	NA	**0.0021 J**	**0.0021 J**	NA	NA	< 0.01 *	< 0.01	**0.0014 J**	**0.0009 J**	< 0.01 *
	Cobalt	mg/l	NA	**0.0297**	**0.0237**	NA	NA	**0.0144**	**0.0095 J**	**0.0125**	**0.0151**	**0.0121**
	Lead	mg/l	NA	**0.0005 J**	**0.0006 J**	NA	NA	**0.0012 J**	**0.002 J**	**0.002 J**	< 0.005 *	**0.0018 J**
	Lithium	mg/l	NA	**0.0142 J**	**0.0145 J**	NA	NA	**0.0253 J**	**0.0256 J**	**0.0219 J**	**0.0217 J**	**0.0214 J**
	Mercury	mg/l	NA	< 0.0005	< 0.0005	NA	NA	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	Molybdenum	mg/l	NA	**0.0005 J**	< 0.01	NA	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	NA	**1.55**	**2.36**	NA	NA	0.851 U	1.41 U	**1.13**	0.584 U	0.46 U
	Selenium	mg/l	NA	**0.0192**	**0.0147**	NA	NA	< 0.01	**0.0122**	**0.0151**	**0.012**	**0.0106**
	Thallium	mg/l	NA	**0.00006 J**	< 0.001	NA	NA	< 0.001	**0.0004 J**	**0.0003 J**	**0.0002 J**	**0.0002 J**
Field	Conductivity	µS/cm	1376.7	1394.2	1367.71	1424.9	1405.2	1420.5	1339.7	1349.7	1366.3	1321.7
	Dissolved Oxygen	mg/l	0.13	0.18	0.16	0.18	0.13	0.09	0.09	0.07	0.06	0.06
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	-4	3.5	11.69	97.7	125.1	152.4	121.9	222.4	205.3	228.5
	pH	SU	4.87	4.62	4.63	4.58	4.42	4.35	4.16	4.17	4.19	4.02
	Temperature	C	20.96	21.73	22.62	19.85	20.26	19.97	19.15	19.27	19.59	19.45
	Turbidity	ntu	1.12	2.61	3	38	32	8.43	4.51	4.68	5.34	3.45
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	**5.7**	**5.5**	NA	NA	**6.4**	**5.3**	**5.5**	**6.1**	**5.6**
	Fluoride (F-, Anion)	mg/l	NA	**0.24 J**	**0.22 J**	NA	NA	**0.35**	**0.22 J**	**0.33**	**0.2 J**	**0.57**
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-34I
			YGWC-33S (101117)	YGWC-33S (033018)	YGWC-33S (061218)	YGWC-33S (092618)	YGWC-33S (030619)	YGWC-33S (040419)	YGWC-33S (092619)	YGWC-33S (021420)	YGWC-33S (032520)	YGWC-34I (060816)
			10/11/2017	3/30/2018	6/12/2018	9/26/2018	3/6/2019	4/4/2019	9/26/2019	2/14/2020	3/25/2020	6/8/2016
Appendix III	Boron	mg/l	**11.4**	NA	**9.2**	**13.4**	NA	**15.4**	**9.6**	NA	**5.3**	**4.4**
	Calcium	mg/l	**125**	NA	**129**	**144**	NA	**163**	**117**	NA	**97.8**	**110**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**4.2**	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	**0.23 J**	**0.36**	NA
	Sulfate	mg/l	**730**	NA	**759**	**895**	NA	**847**	**532**	NA	NA	**370**
	Total Dissolved Solids	mg/l	**1110**	NA	**1150**	**1280**	NA	**1260**	**1070**	NA	**839**	**560**
Appendix IV	Antimony	mg/l	NA	< 0.003	NA	NA	< 0.003	< 0.003	< 0.003	**0.0013 J**	< 0.00027	< 0.0025
	Arsenic	mg/l	NA	**0.0049 J**	**0.002 J**	**0.0048 J**	**0.0022 J**	**0.0024 J**	**0.0025 J**	**0.0027 J**	**0.0030 J**	< 0.0013
	Barium	mg/l	NA	**0.012**	**0.012**	**0.012**	**0.012**	**0.014**	**0.01**	**0.013**	**0.012**	**0.027**
	Beryllium	mg/l	NA	**0.018**	**0.016**	**0.024 o**	**0.023**	**0.025**	**0.019**	**0.016**	**0.017**	**0.00061 J**
	Cadmium	mg/l	NA	**0.0028**	**0.0029**	**0.0028**	**0.003**	**0.0035**	**0.0023 J**	**0.0021 J**	**0.0020 J**	< 0.0025
	Chromium	mg/l	NA	< 0.01	NA	NA	< 0.01	NA	NA	**0.00078 J**	**0.0012 J**	< 0.0025
	Cobalt	mg/l	NA	**0.013**	**0.014**	**0.023**	**0.028**	**0.031**	**0.023**	**0.023**	**0.020**	**0.0043**
	Lead	mg/l	NA	< 0.025	NA	NA	**0.0012 J**	**0.0014 J**	**0.00087 J**	**0.0010 J**	**0.00083 J**	< 0.0013
	Lithium	mg/l	NA	**0.024 J**	**0.023 J**	**0.034 J**	**0.033 J**	**0.035 J**	**0.028 J**	**0.024 J**	**0.029 J**	< 0.005
	Mercury	mg/l	NA	< 0.0005	NA	< 0.0005	< 0.0005	NA	NA	< 0.00014	NA	< 0.0002
	Molybdenum	mg/l	NA	< 0.01	NA	NA	< 0.01	NA	NA	< 0.00095	< 0.00095	**0.026**
	Combined Radium - 226/228	pci/l	NA	0.607 U	0.633 U	**1.38**	0.97 U	**1.14**	1.08 U	1.01 U	**1.44**	0.191 U
	Selenium	mg/l	NA	**0.011**	**0.0057 J**	**0.016**	**0.013**	**0.012**	**0.011**	**0.015**	**0.022**	**0.06**
	Thallium	mg/l	NA	< 0.005	NA	NA	**0.00016 J**	**0.00018 J**	**0.00014 J**	**0.00019 J**	**0.00015 J**	**0.00019 J**
Field	Conductivity	µS/cm	NA	1326.3	NA	NA	1404.4	1354.3	1161.1	NA	NA	NA
	Dissolved Oxygen	mg/l	NA	0.15	NA	NA	0.56	0.17	0.41	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	0	NA
	Oxidation Reduction Potential	mV	NA	210.3	NA	NA	268.6	268.2	219.1	NA	NA	NA
	pH	SU	4.01	4.05	4.03	3.97	3.27	3.88	3.74	3.76	3.86	NA
	Temperature	C	NA	18.23	NA	NA	18.05	18.73	21.31	NA	NA	NA
	Turbidity	ntu	NA	4.85	NA	NA	1.39	4.9	1.27	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	< 5.0	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	< 20	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	< 20	NA	< 5.0	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	< 20	NA	< 5.0	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	**3.82**	NA	**3.6**	NA
	Chloride	mg/l	**5.8**	NA	**5.9**	**4.7**	NA	**5.8**	**4.5**	NA	NA	**16**
	Fluoride (F-, Anion)	mg/l	< 0.3 *	**1.4**	**0.18 J**	**0.07 J**	**0.49**	**0.57**	**0.48**	NA	NA	< 0.2
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	**0.5**	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	0	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	**52.4**	NA	**49.7**	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	**12.8**	NA	**10.3**	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	< 0.05	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	< 0.02	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	**3.58 J**	NA	**4.1**	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	**16.9**	NA	**17.6**	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	< 1	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-34I	YGWC-34I	YGWC-34I	YGWC-34I	YGWC-34I	YGWC-34I	YGWC-34I	YGWC-34I	YGWC-36	YGWC-36
			YGWC-34I (062816)	YGWC-34I (072816)	YGWC-34I (092116)	YGWC-34I (110916)	YGWC-34I (011717)	YGWC-34I (022817)	YGWC-34I (050217)	YGWC-34I (071017)	YGWC-36 (090216)	YGWC-36 (092216)
			6/28/2016	7/28/2016	9/21/2016	11/9/2016	1/17/2017	2/28/2017	5/2/2017	7/10/2017	9/2/2016	9/22/2016
Appendix III	Boron	mg/l	NA	**3.33**	**4.08**	**4.25**	**4.79**	**3.75**	**3.26**	**3.67**	**0.133**	NA
	Calcium	mg/l	NA	**87.6**	**97.3**	**92.7**	**93.3**	**98.2**	**92.8**	**93.9**	**11.2**	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	**340**	**340**	**170**	**330**	**330**	**300**	**320**	**72**	NA
	Total Dissolved Solids	mg/l	NA	**561**	**529**	**514**	**487**	**563**	**536**	**467**	**243**	NA
Appendix IV	Antimony	mg/l	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA
	Arsenic	mg/l	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA
	Barium	mg/l	NA	**0.0272**	**0.0229**	**0.023**	**0.0208**	**0.0235**	**0.02**	**0.0199**	**0.0409**	NA
	Beryllium	mg/l	NA	**0.0007 J**	**0.0007 J**	**0.0007 J**	**0.0006 J**	**0.0008 J**	**0.0006 J**	**0.0007 J**	**0.0003 J**	NA
	Cadmium	mg/l	NA	**0.0001 J**	**0.0002 J**	**0.0001 J**	**0.0001 J**	**0.0002 J**	**0.0002 J**	**0.0002 J**	< 0.001 o	NA
	Chromium	mg/l	NA	**0.0005 J**	< 0.01	< 0.01	< 0.01	**0.0005 J**	< 0.01	< 0.01	< 0.01	NA
	Cobalt	mg/l	NA	**0.005 J**	**0.0046 J**	**0.0049 J**	**0.0049 J**	**0.0055 J**	**0.0048 J**	**0.0051 J**	**0.0006 J**	NA
	Lead	mg/l	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 *	< 0.005	< 0.005	**0.0017 J**	NA
	Lithium	mg/l	NA	**0.0024 J**	**0.0025 J**	**0.0026 J**	**0.0027 J**	**0.0031 J**	**0.0027 J**	**0.0032 J**	**0.0029 J**	NA
	Mercury	mg/l	NA	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	NA
	Molybdenum	mg/l	NA	**0.0287**	**0.0271**	**0.0261**	**0.0279**	**0.0289**	**0.0255**	**0.024**	**0.0027 J**	NA
	Combined Radium - 226/228	pci/l	NA	0.942 U	0.462 U	0.218 U	0.163 U	0.431 U	0.314 U	0.589 U	0.873 U	0.667 U
	Selenium	mg/l	NA	**0.0748**	**0.0746**	**0.0814**	**0.0758**	**0.0827**	**0.0734**	**0.0773**	**0.0012 J**	NA
	Thallium	mg/l	NA	**0.0002 J**	< 0.001	**0.0002 J**	**0.0002 J**	**0.0002 J**	**0.0002 J**	**0.0002 J**	< 0.001	NA
Field	Conductivity	µS/cm	743.8	760.3	735.57	718.1	719.4	715.7	693	668.7	255.3	NA
	Dissolved Oxygen	mg/l	0.12	0.2	0.2	0.34	0.18	0.44	0.35	0.54	1.98	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	163.5	179.4	86.76	129.4	124.6	120.3	208.6	158.7	51.5	NA
	pH	SU	4.85	4.84	4.85	4.77	4.78	4.73	4.81	4.78	5.84	NA
	Temperature	C	19.48	21.37	22.36	19.62	19.86	18.89	19.96	20.43	19.82	NA
	Turbidity	ntu	0.09	0.26	0.1	0.11	0.1	0.21	0.41	0.38	19.8	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	**15**	**14**	**15**	**14**	**14**	**14**	**13**	**6.3**	NA
	Fluoride (F-, Anion)	mg/l	NA	**0.36**	**0.36**	**0.47**	**0.19 J**	< 0.3 *	**0.17 J**	**0.14 J**	**0.05 J**	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36
			YGWC-36 (092916)	YGWC-36 (100616)	YGWC-36 (111416)	YGWC-36 (022817)	YGWC-36 (050917)	YGWC-36 (071317)	YGWC-36 (092217)	YGWC-36 (092917)	YGWC-36 (100617)	YGWC-36 (101117)
			9/29/2016	10/6/2016	11/14/2016	2/28/2017	5/9/2017	7/13/2017	9/22/2017	9/29/2017	10/6/2017	10/11/2017
Appendix III	Boron	mg/l	NA	NA	**0.287**	**0.215**	**0.233**	**0.262**	**0.238**	**0.235**	**0.256**	**0.245**
	Calcium	mg/l	NA	NA	**7.79**	**8.37**	**13.9**	**16.6**	**18.4**	**16.1**	**16.6**	**18.1**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	NA	**110**	**110**	**130**	**140**	**160**	**160**	**160**	**150**
	Total Dissolved Solids	mg/l	NA	NA	**272**	**306**	**303**	**282**	**309**	**273**	**287**	**264**
Appendix IV	Antimony	mg/l	NA	NA	**0.0014 J**	**0.0004 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA
	Arsenic	mg/l	NA	NA	< 0.01	**0.0006 J**	**0.0006 J**	< 0.005	< 0.005	< 0.005	< 0.005	NA
	Barium	mg/l	NA	NA	**0.0182**	**0.023**	**0.0349**	**0.0484**	**0.0491**	**0.0452**	**0.0508**	NA
	Beryllium	mg/l	NA	NA	**0.00009 J**	**0.0001 J**	**0.0002 J**	**0.0003 J**	**0.0003 J**	**0.0003 J**	**0.0003 J**	NA
	Cadmium	mg/l	NA	NA	**0.00009 Jo**	**0.0001 Jo**	**0.0002 J**	**0.0002 J**	**0.0002 J**	**0.0002 J**	**0.0002 J**	NA
	Chromium	mg/l	NA	NA	**0.0035**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA
	Cobalt	mg/l	NA	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA
	Lead	mg/l	NA	NA	**0.0002 J**	**0.0003 J**	**0.0004 J**	**0.0004 J**	**0.0003 J**	**0.0002 J**	**0.0002 J**	NA
	Lithium	mg/l	NA	NA	**0.0044 J**	**0.0038 J**	**0.0057 J**	**0.007 J**	**0.0067 J**	**0.0064 J**	**0.0065 J**	NA
	Mercury	mg/l	NA	NA	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	NA
	Molybdenum	mg/l	NA	NA	**0.0071 J**	**0.0038 J**	**0.0025 J**	**0.0014 J**	< 0.01	< 0.01	< 0.01	NA
	Combined Radium - 226/228	pci/l	**1.63**	0.641 U	0.0451 U	1.34 U	0.309 U	0.618 U	NA	NA	NA	NA
	Selenium	mg/l	NA	NA	< 0.05	**0.0017 J**	**0.0018 J**	**0.0031 J**	**0.0024 J**	**0.002 J**	< 0.01	NA
	Thallium	mg/l	NA	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA
Field	Conductivity	µS/cm	NA	NA	439	NA	NA	NA	NA	NA	NA	NA
	Dissolved Oxygen	mg/l	NA	NA	0.24	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	60.9	NA	NA	NA	NA	NA	NA	NA
	pH	SU	NA	NA	6.28	5.99	6.3	5.57	5.5	5.58	5.51	5.47
	Temperature	C	NA	NA	19.11	NA	NA	NA	NA	NA	NA	NA
	Turbidity	ntu	NA	NA	4.75	NA	NA	NA	NA	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	NA	**6.7**	**5.4**	**5.7**	**5.4**	**6.9**	**5.5**	**5.5**	**6.4**
	Fluoride (F-, Anion)	mg/l	NA	NA	**0.18 J**	**0.09 J**	**0.009 J**	< 0.3	**0.09 J**	< 0.3	< 0.3	< 0.3 *
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36A
			YGWC-36 (033018)	YGWC-36 (061318)	YGWC-36 (092618)	YGWC-36 (030619)	YGWC-36 (040419)	YGWC-36 (092619)	YGWC-36 (101019)	YGWC-36 (021420)	YGWC-36 (032520)	YGWC-36A (100720)
			3/30/2018	6/13/2018	9/26/2018	3/6/2019	4/4/2019	9/26/2019	10/10/2019	2/14/2020	3/25/2020	10/7/2020
Appendix III	Boron	mg/l	NA	**0.25**	**0.24**	NA	**0.22**	**0.13**	NA	NA	**0.11**	**0.018 J**
	Calcium	mg/l	NA	**18.7 J**	**19.8 J**	NA	**16.9 J**	**11.7**	NA	NA	**10.6**	**9.9**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**6.6**	**8.7**
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	< 0.050	< 0.050	< 0.050
	Sulfate	mg/l	NA	**144**	**160**	NA	**119**	**84.8**	NA	NA	NA	**18.2**
	Total Dissolved Solids	mg/l	NA	**292**	**277**	NA	**240**	**198**	NA	NA	**164**	**137**
Appendix IV	Antimony	mg/l	< 0.003	NA	NA	**0.0011 J**	**0.0041**	**0.0065**	NA	**0.0027 J**	**0.0011 J**	< 0.00028
	Arsenic	mg/l	< 0.005	**0.00066 J**	< 0.005	< 0.005	< 0.005	< 0.005	NA	**0.0026 J**	< 0.00035	< 0.00078
	Barium	mg/l	**0.043**	**0.046**	**0.048**	**0.041**	**0.042**	**0.025**	NA	**0.026**	**0.025**	**0.040**
	Beryllium	mg/l	< 0.003 o	**0.00035 J**	**0.00032 J**	**0.00029 J**	**0.00033 J**	**0.00029 J**	NA	**0.00019 J**	**0.00022 J**	**0.00014 J**
	Cadmium	mg/l	< 0.001 o	**0.00019 J**	**0.00018 J**	**0.00015 J**	**0.00019 J**	**0.00017 J**	NA	**0.00017 J**	**0.00019 J**	**0.00012 J**
	Chromium	mg/l	< 0.01	NA	NA	< 0.01	NA	NA	NA	< 0.00039	**0.00074 J**	**0.0013 J**
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.00048 J**	NA	**0.00041 J**	**0.00038 J**	**0.00086 J**
	Lead	mg/l	< 0.005	NA	NA	< 0.005	**0.00037 J**	**0.00023 J**	NA	**0.00016 J**	**0.00010 J**	**0.00077 J**
	Lithium	mg/l	**0.0061 J**	**0.0065 J**	**0.0063 J**	**0.0057 J**	**0.0058 J**	**0.0041 J**	NA	**0.0024 J**	**0.0032 J**	**0.0014 J**
	Mercury	mg/l	< 0.0005	NA	< 0.0005	< 0.0005	NA	NA	NA	< 0.00014	NA	NA
	Molybdenum	mg/l	< 0.01	NA	NA	< 0.01	NA	NA	NA	< 0.00095	< 0.00095	**0.0015 J**
	Combined Radium - 226/228	pci/l	0.721 U	1.04 U	0.604 U	0.919 U	1.05 U	0.979 U	NA	**1.06 U**	**1.22 U**	**1.58**
	Selenium	mg/l	< 0.01	**0.0024 J**	**0.0037 J**	**0.0033 J**	**0.0029 J**	**0.0019 J**	NA	**0.0020 J**	**0.0024 J**	< 0.0016
	Thallium	mg/l	< 0.001	NA	NA	< 0.001	< 0.001	< 0.001	NA	**0.000057 J**	< 0.000052	< 0.00014
Field	Conductivity	µS/cm	412.3	NA	NA	355.6	354.5	255.6	NA	NA	NA	NA
	Dissolved Oxygen	mg/l	0.87	NA	NA	1.94	1.47	0.78	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	0 (NA)	NA
	Oxidation Reduction Potential	mV	139.5	NA	NA	125.3	164.3	138.3	NA	NA	NA	NA
	pH	SU	5.51	5.5	5.53	5.21	5.74	5.51	NA	5.71	5.49	5.86
	Temperature	C	17.72	NA	NA	17.06	18.89	20.82	NA	NA	NA	NA
	Turbidity	ntu	4.73	NA	NA	1.25	4.57	1.76	NA	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**10.9**	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	**12**	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	**12**	NA	**10.9**	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	< 1	NA	< 5.0	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	< 0.1	NA	< 0.032	NA
	Chloride	mg/l	NA	**5.6**	**6**	NA	**5.4**	**7.1**	NA	NA	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	< 0.3	< 0.3	< 0.3	**0.043 J**	**0.094 J**	NA	NA	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	0	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	**7.4**	NA	**6.1**	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	**0.062**	NA	**0.036 J**	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	**1.6**	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	< 0.02	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	**1.9**	NA	**1.9**	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	**18.2**	NA	**18**	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	< 1	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-38	YGWC-38	YGWC-38	YGWC-38	YGWC-38	YGWC-38	YGWC-38	YGWC-38	YGWC-38	YGWC-38
			YGWC-38 (101217)	YGWC-38 (112017)	YGWC-38 (011218)	YGWC-38 (022018)	YGWC-38 (040318)	YGWC-38 (062818)	YGWC-38 (080718)	YGWC-38 (092418)	YGWC-38 (032719)	YGWC-38 (082219)
			10/12/2017	11/20/2017	1/12/2018	2/20/2018	4/3/2018	6/28/2018	8/7/2018	9/24/2018	3/27/2019	8/22/2019
Appendix III	Boron	mg/l	**19.3**	**21.8**	**18.7**	**18.6**	**20.9**	**22.7**	**19.1**	**18.4**	**16.7**	NA
	Calcium	mg/l	**190**	**184**	**178**	**184**	**174**	**190**	**176**	**172**	**155**	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**940**	**980**	**880**	**905**	**872**	**869**	**879**	**872**	**851**	NA
	Total Dissolved Solids	mg/l	**1360**	**1390**	**1400**	**1300**	**1390**	**1310**	**1340**	**1400**	**1190**	NA
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	**0.0015 J**	< 0.003	NA	< 0.003
	Arsenic	mg/l	**0.0023 J**	**0.0008 J**	**0.001 J**	**0.00096 J**	**0.0015 J**	**0.0017 J**	**0.00072 J**	**0.0017 J**	NA	**0.00055 J**
	Barium	mg/l	**0.0269**	**0.0255**	**0.0236**	**0.0255**	**0.023**	**0.024**	**0.023**	**0.021**	NA	**0.019**
	Beryllium	mg/l	**0.0057**	**0.0053**	**0.0053**	**0.0053**	**0.0056**	**0.0059**	**0.0058**	**0.0051**	NA	**0.0049**
	Cadmium	mg/l	**0.003**	**0.0027**	**0.0029**	**0.0029**	**0.0027**	**0.0029**	**0.0027**	**0.0027**	NA	**0.0023 J**
	Chromium	mg/l	**0.0005 J**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01
	Cobalt	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.005
	Lead	mg/l	**0.0001 J**	**0.0001 J**	**0.0001 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005
	Lithium	mg/l	**0.0095 J**	**0.0083 J**	**0.0089 J**	**0.0082 J**	**0.0097 J**	**0.0093 J**	**0.0092 J**	**0.0083 J**	NA	**0.0082 J**
	Mercury	mg/l	< 0.0005	**0.00008 J**	< 0.0005	< 0.0002	< 0.0005	**0.000037 J**	< 0.0005	< 0.0005	NA	< 0.0005
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01
	Combined Radium - 226/228	pci/l	**1.24**	0.342 U	**1.04**	1.6 U	0.726 U	1.06 U	**1.21**	**1.52**	NA	**1.97**
	Selenium	mg/l	**0.265**	**0.246**	**0.249**	**0.253**	**0.23**	**0.23**	**0.2**	**0.2**	NA	**0.14**
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001
Field	Conductivity	µS/cm	1606.9	1581.7	1648	1512.2	1574.4	1548.1	1401.2	1517.2	1394.5	1300.7
	Dissolved Oxygen	mg/l	0.36	2.76	0.44	1.58	0.88	0.54	0.44	0.85	1.47	1.76
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	172.8	181.3	107.5	85.2	161.5	99.2	209.9	184.6	162.4	118.4
	pH	SU	4.85	4.87	4.78	5.1	4.76	4.75	4.72	4.67	4.79	4.81
	Temperature	C	20.16	18.45	15.98	18.98	17.48	26.11	20.13	21.51	16.74	19.92
	Turbidity	ntu	4.87	4.55	1.05	4.93	1.61	0.39	0.51	1.1	1.2	0.99
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**6**	**6.9**	**6.6**	**6.2**	**6.9**	**6.4**	**5.5**	**5.9**	**6.2**	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	**0.2 J**	**0.21 J**	< 0.1	**0.41**	**0.43**	< 0.3	**0.034 J**	**0.24 J**	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-38	YGWC-38	YGWC-38	YGWC-38	YGWC-38	YGWC-41	YGWC-41	YGWC-41	YGWC-41	YGWC-41
			YGWC-38 (100819)	YGWC-38 (100919)	YGWC-38 (021420)	YGWC-38 (032520)	YGWC-38 (092520)	YGWC-41 (101217)	YGWC-41 (112117)	YGWC-41 (011118)	YGWC-41 (021918)	YGWC-41 (040318)
			10/8/2019	10/9/2019	2/14/2020	3/25/2020	9/25/2020	10/12/2017	11/21/2017	1/11/2018	2/19/2018	4/3/2018
Appendix III	Boron	mg/l	NA	**13.5**	NA	**9.3**	**8.0**	**12**	**12.1**	**12.8**	**15.2**	**14.5**
	Calcium	mg/l	NA	**133**	NA	**124**	**93.7**	**44.5**	**44.4**	**43.9**	**45.3**	**42.7**
	Chloride	mg/l	NA	NA	NA	**4.0**	**4.0**	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	< 0.050M1	< 0.050	< 0.050	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	**708**	NA	NA	**414**	**400**	**430**	**390**	**414**	**406**
	Total Dissolved Solids	mg/l	NA	**1100**	NA	**883**	**664**	**636**	**706**	**701**	**630**	**660**
Appendix IV	Antimony	mg/l	NA	NA	**0.00031 J**	**0.00063 J**	**0.00061 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	NA	**0.00057 J**	**0.0021 J**	**0.00068 J**	< 0.00078	**0.0011 J**	< 0.005	< 0.005	< 0.005	**0.00072 J**
	Barium	mg/l	NA	**0.019**	**0.019**	**0.018**	**0.015**	**0.0394**	**0.032**	**0.03**	**0.0308**	**0.03**
	Beryllium	mg/l	NA	**0.0046**	**0.0042**	**0.0038**	**0.0033**	**0.0036**	**0.0036**	**0.0037**	**0.0039**	**0.0037**
	Cadmium	mg/l	NA	**0.0021 J**	**0.0021 J**	**0.0018 J**	**0.0015 J**	**0.0002 J**	**0.0003 J**	**0.0002 J**	< 0.001	< 0.001
	Chromium	mg/l	NA	< 0.01	**0.0023 J**	**0.00065 J**	< 0.00055	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Cobalt	mg/l	NA	< 0.005	< 0.00030	< 0.00030	< 0.00038	**0.0011 J**	**0.0003 J**	**0.0003 J**	< 0.01	< 0.01
	Lead	mg/l	NA	< 0.005	< 0.000046	< 0.000046	< 0.000036	< 0.005	< 0.005	**0.00007 J**	< 0.005	< 0.005
	Lithium	mg/l	NA	**0.0081 J**	**0.0076 J**	**0.0081 J**	**0.0069 J**	**0.004 J**	**0.0043 J**	**0.0044 J**	< 0.05 o	**0.0047 J**
	Mercury	mg/l	NA	NA	< 0.00014	NA	NA	< 0.0005	**0.00006 J**	< 0.0005	< 0.0002	< 0.0005
	Molybdenum	mg/l	NA	< 0.01	< 0.00095	< 0.00095	< 0.00069	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	0.751 U	NA	1.12 U	0.321 U	< 0.246 U	0.641 U	**2.01**	0.919 U	**1.82**	0.911 U
	Selenium	mg/l	NA	**0.12**	**0.11**	**0.099**	**0.076**	**0.0191**	**0.0687**	**0.069**	**0.071**	**0.067**
	Thallium	mg/l	NA	NA	< 0.000052	< 0.000052	< 0.00014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	NA	1260.4	NA	NA	NA	845.7	858.7	896.9	804.6	840.8
	Dissolved Oxygen	mg/l	NA	2.09	NA	NA	NA	0.19	1.1	1.2	1.17	3.79
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	101.8	NA	NA	NA	49	105.8	73.7	130.9	156.5
	pH	SU	NA	4.8	4.84	4.89	4.90	4.94	4.69	4.73	4.96	5.31
	Temperature	C	NA	18.29	NA	NA	NA	22.87	19.59	16.9	19.19	18.85
	Turbidity	ntu	NA	1.22	NA	NA	NA	3.13	1.95	0.78	2.45	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	**5**	NA	NA	NA	**3.1**	**4.2**	**3.8**	**3.5**	**4.4**
	Fluoride (F-, Anion)	mg/l	NA	<-0.3	NA	NA	NA	< 0.3	< 0.3	< 0.3	< 0.1	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-41	YGWC-41	YGWC-41	YGWC-41	YGWC-41	YGWC-41	YGWC-41	YGWC-41	YGWC-41	YGWC-41
			YGWC-41 (062718)	YGWC-41 (080718)	YGWC-41 (092418)	YGWC-41 (032819)	YGWC-41 (082219)	YGWC-41 (100819)	YGWC-41 (100919)	YGWC-41 (021420)	YGWC-41 (032520)	YGWC-41 (092520)
			6/27/2018	8/7/2018	9/24/2018	3/28/2019	8/22/2019	10/8/2019	10/9/2019	2/14/2020	3/25/2020	9/25/2020
Appendix III	Boron	mg/l	**14.1**	**11.9**	**12.2**	**7.1**	NA	NA	**8.6**	NA	**7.9**	**6.0**
	Calcium	mg/l	**42.2**	**40.7**	**38.5**	**26**	NA	NA	**27.6**	NA	**29.6**	**20.5**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**2.7**	**3.0**
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	< 0.050	< 0.050	< 0.050
	Sulfate	mg/l	**357**	**346**	**358**	**258**	NA	NA	**263**	NA	NA	**175**
	Total Dissolved Solids	mg/l	**575**	**574**	**588**	**372**	NA	NA	**440**	NA	**428**	**307**
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA	NA	< 0.00027	< 0.00027	< 0.00028
	Arsenic	mg/l	**0.00062 J**	< 0.005	**0.001 J**	NA	**0.00036 J**	NA	**0.00052 J**	**0.0014 J**	**0.0010 J**	< 0.00078
	Barium	mg/l	**0.028**	**0.027**	**0.026**	NA	**0.021**	NA	**0.021**	**0.024**	**0.021**	**0.016**
	Beryllium	mg/l	**0.0038**	**0.0037**	**0.0032**	NA	**0.0026 J**	NA	**0.0026 J**	**0.0026 J**	**0.0026 J**	**0.0020 J**
	Cadmium	mg/l	**0.00025 J**	**0.00024 J**	**0.00021 J**	NA	**0.00015 J**	NA	**0.00017 J**	**0.00020 J**	**0.00018 J**	**0.00014 J**
	Chromium	mg/l	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	< 0.01	< 0.00039	**0.00039 J**	< 0.00055
	Cobalt	mg/l	**0.00069 J**	< 0.01	< 0.01	NA	< 0.005	NA	< 0.005	< 0.00030	< 0.00030	< 0.00038
	Lead	mg/l	**0.0011 J**	< 0.005	< 0.005	NA	**0.000067 J**	NA	**0.00012 J**	< 0.000046	< 0.000046	< 0.000036
	Lithium	mg/l	**0.0042 J**	**0.0038 J**	**0.0037 J**	NA	**0.0035 J**	NA	**0.0032 J**	**0.0029 J**	**0.0029 J**	**0.0025 J**
	Mercury	mg/l	< 0.0005	< 0.0005	< 0.0005	NA	< 0.0005	NA	NA	< 0.00014	NA	NA
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	< 0.01	< 0.00095	< 0.00095	< 0.00069
	Combined Radium - 226/228	pci/l	0.429 U	0.579 U	**1.39**	NA	**2.03**	0.609 U	NA	1.16 U	0.568 U	< 0.769 U
	Selenium	mg/l	**0.066**	**0.061**	**0.061**	NA	**0.058**	NA	**0.052**	**0.059**	**0.057**	**0.046**
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	NA	< 0.001	NA	NA	< 0.000052	< 0.000052	< 0.00014
Field	Conductivity	µS/cm	763.4	671.4	700.1	574.2	578.6	NA	578.4	NA	NA	NA
	Dissolved Oxygen	mg/l	1.53	1.84	1.93	2.71	2.56	NA	4.94	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	64.7	176.7	746.6	202.4	110.7	NA	92.7	NA	NA	NA
	pH	SU	4.78	4.77	4.78	5	4.89	NA	4.86	4.84	4.87	4.95
	Temperature	C	21.9	19.5	20.84	18.78	19.59	NA	18.79	NA	NA	NA
	Turbidity	ntu	0.2	0.92	1.02	0.49	2.74	NA	1.03	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**3.6**	**3.3**	**3.3**	**3.2**	NA	NA	**3.3**	NA	NA	NA
	Fluoride (F-, Anion)	mg/l	< 0.3	**0.11 J**	< 0.3	**0.1 J**	< 0.3	NA	< 0.3	NA	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-42	YGWC-42	YGWC-42	YGWC-42	YGWC-42	YGWC-42	YGWC-42	YGWC-42	YGWC-42	YGWC-42
			YGWC-42 (083016)	YGWC-42 (111616)	YGWC-42 (022717)	YGWC-42 (051017)	YGWC-42 (071117)	YGWC-42 (101217)	YGWC-42 (040418)	YGWC-42 (092018)	YGWC-42 (032719)	YGWC-42 (082219)
			8/30/2016	11/16/2016	2/27/2017	5/10/2017	7/11/2017	10/12/2017	4/4/2018	9/20/2018	3/27/2019	8/22/2019
Appendix III	Boron	mg/l	**24.7**	**16.4**	**17.9**	**20.4**	**25.2**	**20**	**22.7**	**20.3**	**20.3**	NA
	Calcium	mg/l	**133**	**125**	**139**	**130**	**172**	**144**	**137**	**108**	**109**	NA
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**980**	**940**	**940**	**1200**	**1300**	**1100**	**1020**	**810**	**831**	NA
	Total Dissolved Solids	mg/l	**1650**	**1420**	**1640**	**1630**	**1800**	**1600**	**1520**	**1240**	**1100**	NA
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003
	Arsenic	mg/l	**0.0023 J**	**0.0017 J**	**0.002 J**	**0.0022 J**	**0.003 J**	**0.0031 J**	**0.0023 J**	**0.0018 J**	NA	**0.00089 J**
	Barium	mg/l	**0.0455**	**0.0541**	**0.0573**	**0.0517**	**0.0451**	**0.0429**	**0.041**	**0.038**	NA	**0.031**
	Beryllium	mg/l	**0.00009 J**	< 0.003	< 0.003	**0.00009 J**	**0.0001 J**	< 0.003	< 0.003	< 0.003	NA	< 0.003
	Cadmium	mg/l	< 0.001	< 0.001	< 0.001	**0.0002 J**	**0.0005 J**	**0.0006 J**	< 0.001	**0.0002 J**	NA	**0.00017 J**
	Chromium	mg/l	< 0.01	< 0.01	< 0.01	**0.0006 J**	< 0.01	< 0.01	< 0.01	< 0.01	NA	< 0.01
	Cobalt	mg/l	**0.0025 J**	**0.002 J**	**0.0021 J**	**0.0021 J**	**0.0014 J**	**0.0017 J**	< 0.01	**0.003 J**	NA	**0.0019 J**
	Lead	mg/l	< 0.005	**0.0002 J**	< 0.005	**0.00009 J**	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005
	Lithium	mg/l	**0.0257 J**	**0.0221 J**	**0.0208 J**	**0.0316 J**	**0.0281 J**	**0.0331 J**	**0.037 J**	**0.049 J**	NA	**0.047**
	Mercury	mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000048 J**	NA	< 0.0005
	Molybdenum	mg/l	**0.0019 J**	**0.0027 J**	**0.0031 J**	**0.0017 J**	**0.0014 J**	< 0.01	< 0.01	< 0.01	NA	< 0.01
	Combined Radium - 226/228	pci/l	**2.99**	**4.01**	**2.5**	**2.55**	**3.94**	**3.57**	**1.9**	**1.94**	NA	**1.59**
	Selenium	mg/l	**0.0711**	**0.0313**	**0.0316**	**0.053**	**0.0697**	**0.0594**	**0.055**	**0.041**	NA	**0.047**
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001
Field	Conductivity	µS/cm	NA	1673.6	1694.1	1632.5	1858.7	1798.2	1725.36	1386	1360.6	1289.9
	Dissolved Oxygen	mg/l	NA	0.33	0.49	0.49	0.6	0.64	0.69	0.56	0.7	0.86
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	-13.8	59.3	57	43	118.9	112.33	83.9	121.1	114.2
	pH	SU	5.64	6.21	6.09	5.79	5.45	5.48	5.93	5.63	5.57	5.61
	Temperature	C	NA	20.76	15.69	19.24	19.86	21.87	19.92	21.32	17.37	19.38
	Turbidity	ntu	NA	NA	4.82	4.68	4.02	4.88	4.41	4.86	4.83	3.68
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**4.4**	**4.7**	**4.7**	**4.4**	**4.7**	**4.3**	**3.7**	**3.8**	**3.9**	NA
	Fluoride (F-, Anion)	mg/l	**0.02 J**	**0.07 J**	**0.06 J**	< 0.3	< 0.3	< 0.3	< 0.3	**0.041 J**	< 0.3	< 0.3
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-42	YGWC-42	YGWC-42	YGWC-42	YGWC-42	YGWC-43	YGWC-43	YGWC-43	YGWC-43	YGWC-43
			YGWC-42 (100819)	YGWC-42 (100919)	YGWC-42 (021420)	YGWC-42 (032520)	YGWC-42 (092420)	YGWC-43 (083116)	YGWC-43 (111616)	YGWC-43 (022417)	YGWC-43 (051017)	YGWC-43 (071117)
			10/8/2019	10/9/2019	2/14/2020	3/25/2020	9/24/2020	8/31/2016	11/16/2016	2/24/2017	5/10/2017	7/11/2017
Appendix III	Boron	mg/l	NA	**16.6**	NA	**15.5**	**15.2**	**0.169**	**0.406**	**0.725**	**0.955**	**0.994**
	Calcium	mg/l	NA	**92**	NA	**107 M1**	**84.3 M1**	**3.4**	**3.79**	**6.42**	**7.9**	**6.71**
	Chloride	mg/l	NA	NA	NA	**3.2**	**3.3**	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	< 0.050	< 0.050	< 0.050	NA	NA	NA	NA	NA
	Sulfate	mg/l	NA	**725**	NA	NA	**579**	**34**	**240**	**89**	**100**	**110**
	Total Dissolved Solids	mg/l	NA	**1170**	NA	**1200**	**1060**	**80**	**112**	**147**	**203**	**238**
Appendix IV	Antimony	mg/l	NA	NA	< 0.00027	< 0.00027	< 0.00028	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Arsenic	mg/l	NA	**0.00078 J**	**0.0033 J**	**0.0013 J**	< 0.00078	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	Barium	mg/l	NA	**0.027**	**0.031**	**0.030**	**0.026**	**0.0065 J**	**0.0092 J**	**0.0144**	**0.0173**	**0.0183**
	Beryllium	mg/l	NA	< 0.003	< 0.000074	< 0.000074	**0.000067 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	Cadmium	mg/l	NA	**0.00025 J**	**0.00025 J**	**0.00021 J**	**0.00014 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Chromium	mg/l	NA	**0.00043 J**	< 0.00039	**0.0013 J**	< 0.00055	< 0.01	< 0.01	< 0.01	**0.0005 J**	< 0.01
	Cobalt	mg/l	NA	**0.0019 J**	**0.0019 J**	**0.0018 J**	**0.0017 J**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Lead	mg/l	NA	< 0.005	< 0.000046	**0.000047 J**	< 0.000036	< 0.005	< 0.005	< 0.005	**0.00008 J**	< 0.005
	Lithium	mg/l	NA	**0.037**	**0.038**	**0.045**	**0.050**	**0.006 J**	**0.0095 J**	**0.0104 J**	**0.0123 J**	**0.0131 J**
	Mercury	mg/l	NA	NA	< 0.00014	NA	NA	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	Molybdenum	mg/l	NA	< 0.01	< 0.00095	< 0.00095	**0.00091 J**	**0.0022 J**	< 0.01	< 0.01	< 0.01	< 0.01
	Combined Radium - 226/228	pci/l	0.995 U	NA	**1.56**	1.17 U	< 0.751 U	0.926 U	0.773 U	0.661 U	**1.27**	**1.02**
	Selenium	mg/l	NA	**0.042**	**0.040**	**0.046**	**0.046**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	Thallium	mg/l	NA	NA	< 0.000052	< 0.000052	< 0.00014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Field	Conductivity	µS/cm	NA	1293.2	NA	NA	NA	NA	270.2	320.5	329.7	337.2
	Dissolved Oxygen	mg/l	NA	1.44	NA	NA	NA	NA	0.12	0.13	0.12	0.12
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	113.9	NA	NA	NA	NA	-76.6	-25.4	-13.8	-71.5
	pH	SU	NA	5.5	5.80	5.53	5.55	7.27	6.79	6.39	6.5	6.32
	Temperature	C	NA	19.84	NA	NA	NA	NA	19.46	18.54	18.32	19.79
	Turbidity	ntu	NA	3.38	NA	NA	NA	NA	2.79	4.84	3.96	2.86
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	NA	**4.1**	NA	NA	NA	**1.5**	**1.7**	**1.5**	**1.2**	**1.5**
	Fluoride (F-, Anion)	mg/l	NA	< 0.3	NA	NA	NA	**0.12 J**	**0.2 J**	**0.21 J**	**0.04 J**	**0.2 J**
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-43	YGWC-43	YGWC-43	YGWC-43	YGWC-43	YGWC-43	YGWC-43	YGWC-43	YGWC-43	YGWC-43
			YGWC-43 (101217)	YGWC-43 (040418)	YGWC-43 (092018)	YGWC-43 (032819)	YGWC-43 (082119)	YGWC-43 (100819)	YGWC-43 (100919)	YGWC-43 (021720)	YGWC-43 (032520)	YGWC-43 (092520)
			10/12/2017	4/4/2018	9/20/2018	3/28/2019	8/21/2019	10/8/2019	10/9/2019	2/17/2020	3/25/2020	9/25/2020
Appendix III	Boron	mg/l	**1.15**	**1.2**	**2.1**	**1.8**	NA	NA	**2.7**	NA	**2.4**	**3.9**
	Calcium	mg/l	**7.05**	**8.6**	**15.9 J**	**8.9**	NA	NA	**18.2**	NA	**12.1**	**19.8**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	**1.8**	**2.3**
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	**0.15 J**	**0.073 J**	< 0.050
	Sulfate	mg/l	**120**	**160**	**247**	**181**	NA	NA	**279**	NA	NA	**281**
	Total Dissolved Solids	mg/l	**287**	**292**	**434**	**323**	NA	NA	**501**	NA	**352**	**494**
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	< 0.003	NA	< 0.003	NA	NA	< 0.00027	**0.00031 J**	< 0.00028
	Arsenic	mg/l	< 0.005	< 0.005	**0.00099 J**	NA	< 0.005	NA	**0.00051 J**	< 0.00035	**0.00070 J**	< 0.00078
	Barium	mg/l	**0.0205**	**0.024**	**0.035**	NA	**0.03**	NA	**0.04**	**0.037**	**0.033**	**0.046**
	Beryllium	mg/l	**0.0001 J**	< 0.003	**0.00029 J**	NA	**0.0003 J**	NA	**0.00034 J**	**0.00034 J**	**0.00034 J**	**0.00054 J**
	Cadmium	mg/l	< 0.001	< 0.001	< 0.001	NA	< 0.0025	NA	< 0.0025	< 0.00011	< 0.00011	< 0.00012
	Chromium	mg/l	< 0.01	< 0.01	< 0.01	NA	**0.00062 J**	NA	**0.00074 J**	< 0.00039	< 0.00039	**0.00071 J**
	Cobalt	mg/l	**0.0006 J**	< 0.01	**0.0034 J**	NA	**0.0026 J**	NA	**0.0023 J**	**0.00088 J**	**0.0016 J**	**0.0018 J**
	Lead	mg/l	< 0.005	< 0.005	< 0.005	NA	< 0.005	NA	< 0.005	< 0.000046	**0.000075 J**	< 0.000036
	Lithium	mg/l	**0.013 J**	**0.016 J**	**0.019 J**	NA	**0.015 J**	NA	**0.018 J**	**0.015 J**	**0.016 J**	**0.018 J**
	Mercury	mg/l	< 0.0005	< 0.0005	**0.000052 J**	NA	< 0.0005	NA	NA	< 0.00014	NA	NA
	Molybdenum	mg/l	< 0.01	< 0.01	< 0.01	NA	**0.0012 J**	NA	**0.0012 J**	< 0.00095	**0.0015 J**	**0.0011 J**
	Combined Radium - 226/228	pci/l	**1.58**	**1.71**	**2.8**	NA	**3.16**	**3.65**	NA	**4.19**	**3.04**	**4.75**
	Selenium	mg/l	< 0.01	< 0.01	< 0.01	NA	< 0.01	NA	< 0.01	< 0.0013	< 0.0013	< 0.0016
	Thallium	mg/l	< 0.001	< 0.001	< 0.001	NA	< 0.001	NA	NA	< 0.000052	< 0.000052	< 0.00014
Field	Conductivity	µS/cm	373.9	425.6	535.6	467.9	446.6	NA	596.2	NA	NA	NA
	Dissolved Oxygen	mg/l	0.08	0.09	0.1	0.06	0.08	NA	0.06	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	41.7	77.1	-1	71.8	36	NA	44.9	NA	NA	NA
	pH	SU	5.97	6.41	5.69	5.96	5.84	NA	5.78	5.93	5.79	5.75
	Temperature	C	19.21	16.46	18.82	18.26	23.97	NA	21.05	NA	NA	NA
	Turbidity	ntu	1.75	4.25	4.18	4.04	1.11	NA	3.12	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**1.6**	**1.8**	**1.9**	**1.8**	NA	NA	**2.3**	NA	NA	NA
	Fluoride (F-, Anion)	mg/l	**0.1 J**	< 0.3	< 0.3	**0.078 J**	**0.062 J**	NA	< 0.3	NA	NA	NA
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-49	YGWC-49	YGWC-49	YGWC-49	YGWC-49	YGWC-49	YGWC-49	YGWC-49	YGWC-49	YGWC-49
			YGWC-49 (090116)	YGWC-49 (111516)	YGWC-49 (022717)	YGWC-49 (050917)	YGWC-49 (071317)	YGWC-49 (101117)	YGWC-49 (040418)	YGWC-49 (092018)	YGWC-49 (032819)	YGWC-49 (092619)
			9/1/2016	11/15/2016	2/27/2017	5/9/2017	7/13/2017	10/11/2017	4/4/2018	9/20/2018	3/28/2019	9/26/2019
Appendix III	Boron	mg/l	**0.0113 J**	**0.0074 J**	< 0.04	< 0.04	**0.0093 J**	< 0.04	**0.0041 J**	**0.0042 J**	< 0.04	< 0.04
	Calcium	mg/l	**13.9**	**13.5**	**12.5**	**14.4**	**14.1**	**12.4**	< 25	**12 J**	**11.3 J**	**12.1**
	Chloride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoride	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfate	mg/l	**95**	**94**	**84**	**91**	**88**	**86**	**76.5**	**84.1**	**82.8**	**80**
	Total Dissolved Solids	mg/l	**228**	**211**	**382**	**154**	**192**	**177**	**174**	**186**	**164**	**192**
Appendix IV	Antimony	mg/l	< 0.003	< 0.003	**0.0011 J**	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	NA	< 0.003
	Arsenic	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0006 J**	< 0.005	**0.001 J**	NA	< 0.005
	Barium	mg/l	**0.077**	**0.0772**	**0.0888**	**0.0792**	**0.0839**	**0.078**	**0.074**	**0.074**	NA	**0.065**
	Beryllium	mg/l	**0.0001 J**	**0.0001 J**	**0.0001 J**	**0.0001 J**	**0.0001 J**	**0.0001 J**	< 0.003 o	**0.00011 J**	NA	**0.00013 J**
	Cadmium	mg/l	< 0.001	< 0.001	**0.00007 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.0025
	Chromium	mg/l	**0.0013 J**	**0.0014 J**	**0.0016 J**	**0.0017 J**	**0.0019 J**	**0.0014 J**	< 0.01 o	**0.0017 J**	NA	NA
	Cobalt	mg/l	< 0.01	**0.0006 J**	**0.0008 J**	< 0.01	**0.0005 J**	**0.0006 J**	< 0.01	< 0.01	NA	< 0.005
	Lead	mg/l	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	NA	< 0.005
	Lithium	mg/l	**0.0034 J**	**0.0044 J**	**0.0036 J**	**0.0038 J**	**0.0036 J**	**0.0036 J**	**0.0039 J**	**0.0036 J**	NA	**0.0036 J**
	Mercury	mg/l	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000061 J**	NA	NA
	Molybdenum	mg/l	< 0.01	< 0.01	**0.0007 J**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	NA	NA
	Combined Radium - 226/228	pci/l	**1.2**	0.645 U	0.244 U	0.519 U	0.5 U	**1.41**	0.442 U	1.14 U	NA	1.16 U
	Selenium	mg/l	**0.0086 J**	**0.0056 J**	**0.0098 J**	**0.0076 J**	**0.0093 J**	**0.0089 J**	< 0.01	**0.0081 J**	NA	**0.0077 J**
	Thallium	mg/l	< 0.001	< 0.001	**0.00009 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	NA	< 0.001
Field	Conductivity	µS/cm	NA	291.9	263.7	268.9	266.2	266.9	263.3	249.3	259.5	241.05
	Dissolved Oxygen	mg/l	NA	1.3	1.62	1.64	1.6	1.76	1.94	2.03	2.08	2.37
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	48.1	67.8	141.5	87.3	124.4	91	73.8	153.6	104.8
	pH	SU	5.78	5.81	5.68	6.18	5.6	5.61	5.98	5.67	5.86	5.6
	Temperature	C	NA	18.83	16.68	20.69	20.66	22.55	18.21	20.75	17.72	20.91
	Turbidity	ntu	NA	4.23	0.96	0.45	0.78	4.3	1.92	1.29	2.67	1.86
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Alkalinity, Carbonate	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aluminum	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloride	mg/l	**5.3**	**5.8**	**4.6**	**5.3**	**4.7**	**5.8**	**4.3**	**4.8**	**4.4**	**5**
	Fluoride (F-, Anion)	mg/l	**0.09 J**	**0.16 J**	**0.06 J**	**0.05 J**	< 0.3	**0.14 J**	< 0.3	< 0.3	< 0.3	**0.09 J**
	Iron (Ferric)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate-N	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Potassium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sodium	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total Organic Carbon	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes can be found on last page.

Analyte		Units	YGWC-49	YGWC-49	YGWC-49	YGWC-49
			YGWC-49 (101019)	YGWC-49 (021720)	YGWC-49 (032520)	YGWC-49 (09242020)
			10/10/2019	2/17/2020	3/25/2020	9/24/2020
Appendix III	Boron	mg/l	NA	NA	**0.012 J**	**0.062 J**
	Calcium	mg/l	NA	NA	**13.2**	**12.0**
	Chloride	mg/l	NA	NA	**4.1**	**4.6**
	Fluoride	mg/l	NA	< 0.050	< 0.050	< 0.050
	Sulfate	mg/l	NA	NA	NA	**77.0**
	Total Dissolved Solids	mg/l	NA	NA	**130**	**187**
Appendix IV	Antimony	mg/l	NA	< 0.00027	**0.00053 J**	< 0.00028
	Arsenic	mg/l	NA	**0.0028 J**	**0.00086 J**	< 0.00078
	Barium	mg/l	NA	**0.071**	**0.071**	**0.066**
	Beryllium	mg/l	NA	**0.00011 J**	**0.00013 J**	**0.00013 J**
	Cadmium	mg/l	NA	< 0.00011	< 0.00011	< 0.00012
	Chromium	mg/l	NA	**0.0020 J**	**0.0019 J**	**0.0019 J**
	Cobalt	mg/l	NA	< 0.00030	< 0.00030	< 0.00038
	Lead	mg/l	NA	**0.000071 J**	**0.000059 J**	< 0.000036
	Lithium	mg/l	NA	**0.0032 J**	**0.0037 J**	**0.0037 J**
	Mercury	mg/l	NA	< 0.00014	NA	NA
	Molybdenum	mg/l	NA	< 0.00095	< 0.00095	< 0.00069
	Combined Radium - 226/228	pci/l	NA	**1.52**	**1.20**	< 1.57 U
	Selenium	mg/l	NA	**0.0068 J**	**0.0085 J**	**0.0091 J**
	Thallium	mg/l	NA	< 0.000052	< 0.000052	< 0.00014
Field	Conductivity	µS/cm	NA	NA	NA	NA
	Dissolved Oxygen	mg/l	NA	NA	NA	NA
	Iron (Ferrous)	mg/l	NA	NA	NA	NA
	Oxidation Reduction Potential	mV	NA	NA	NA	NA
	pH	SU	NA	5.82	5.69	5.62
	Temperature	C	NA	NA	NA	NA
	Turbidity	ntu	NA	NA	NA	NA
Supplemental	Alkalinity	mg/l	NA	NA	NA	NA
	Alkalinity (as CaCO3)	mg/l	**14.2**	NA	NA	NA
	Alkalinity, Bicarbonate	mg/l	**14.2**	NA	NA	NA
	Alkalinity, Carbonate	mg/l	< 1	NA	NA	NA
	Aluminum	mg/l	< 0.1	NA	NA	NA
	Chloride	mg/l	NA	NA	NA	NA
	Fluoride (F-, Anion)	mg/l	NA	NA	NA	NA
	Iron (Ferric)	mg/l	<-0.2	NA	NA	NA
	Iron (Ferrous)	mg/l	0	NA	NA	NA
	Magnesium	mg/l	**8.9**	NA	NA	NA
	Manganese	mg/l	**0.0076 J**	NA	NA	NA
	Nitrate-N	mg/l	**1.1**	NA	NA	NA
	ortho-Phosphate (As P)	mg/l	< 0.02	NA	NA	NA
	Potassium	mg/l	**1.9**	NA	NA	NA
	Sodium	mg/l	**17.2**	NA	NA	NA
	Sulfide	mg/l	NA	NA	NA	NA
	Total Organic Carbon	mg/l	< 1	NA	NA	NA

Notes can be found on last page.

Notes:

1. < indicates the analyte was not detected above the laboratory method detection limit (MDL).
2. J values indicate the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
3. Detections are in **bold**

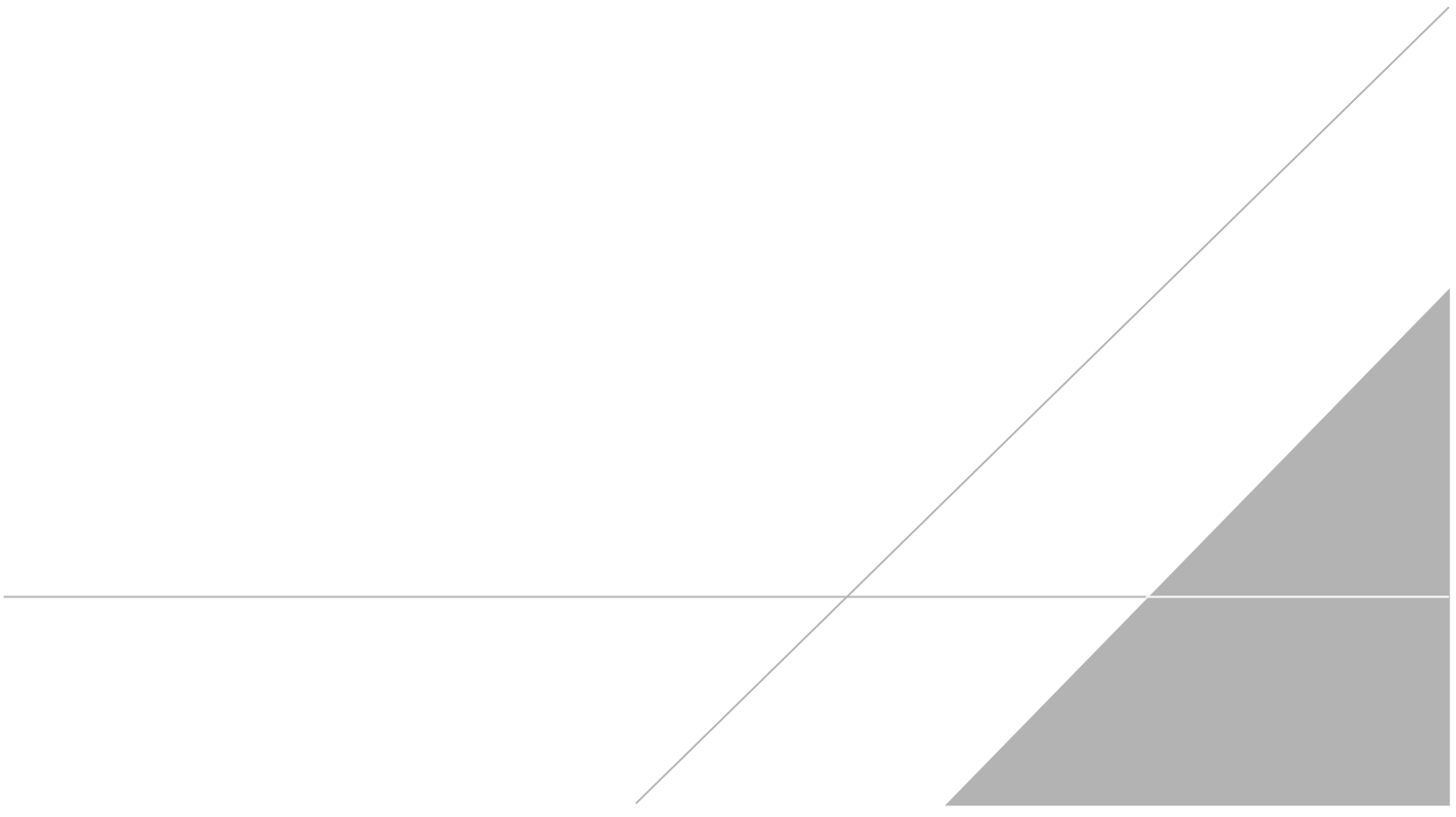
mg/L - milligrams per liter
pCi/L - picoCuries per liter
S.U. - Standard Units
C - Celcius
NTU - Nephelometric turbidity unit
CaCO3 - Calcium carbonate
uS/cm - microsiemens/centimeter
mV - millivolts
NA - Not Analyzed
U - the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
D6- The precision between the sample and sample duplicate exceeded the laboratory control limits
B - Analyte was detected in the associated method blank

APPENDIX F

Statistical Analysis

March 2020

Semiannual Event



Appendix III Statistically Significant Increase Summary (March 2020)

Appendix III Parameter	Monitoring Wells
Boron	YGWC-23S, YGWC-33S, YGWC-38, YGWC-41, YGWC-42, YGWC-43
Calcium	YGWC-33S, YGWC-38, YGWC-42
pH	YGWC-33S
Sulfate	YGWC-33S, YGWC-38, YGWC-41, YGWC-42, YGWC-43, YGWC-49
Total Dissolved Solids	YGWC-33S, YGWC-38, YGWC-41, YGWC-42, YGWC-43

Appendix III Statistically Significant Increase Summary (September 2020)

Appendix III Parameter	Monitoring Wells
Boron	YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43
Calcium	YGWC-38, YGWC-42
Chloride	YGWC-24SA, YGWC-42
Sulfate	YGWC-38, YGWC-41, YGWC-42, YGWC-43
Total Dissolved Solids	YGWC-38, YGWC-41, YGWC-42, YGWC-43

GROUNDWATER STATS CONSULTING

August 26, 2020

Southern Company Services
Attn: Ms. Lauren Petty
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Yates Ash Management Area (AMA) and R6 CCR Landfill
March 2020 Statistical Analysis

Dear Ms. Petty,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2020 statistical analysis of groundwater data 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 Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the USEPA Unified Guidance (2009).

Sampling began for the CCR program in 2016, and at least 8 background samples have been collected at each of the groundwater monitoring wells.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-21I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, YGWA-5I
- **Downgradient wells:** YGWC-23S, YGWC-24S, YGWC-33S, YGWC-36, YGWC-38, YGWC-41, YGWC-42, YGWC-43, YGWC-49

The CCR program consists of the following constituents:

- **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.

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.

Data at all wells were evaluated during the background screening conducted in April 2019 for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided with the screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

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.

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 nondetects. 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 Regional Screening Levels discussed below, nondetects 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 2020

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed to evaluate compliance data at each of the downgradient wells (Figure C). Interwell 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).

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. The confidence levels associated with parametric prediction limits are based on an overall false positive rate of 5%. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized where the highest background value is used to establish the upper prediction limit (and lowest value in the case of pH). The associated confidence level is dependent on the number of available background, future comparisons and resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (USEPA Unified Guidance, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects.
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect 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% nondetects.

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 the resample confirms the initial exceedance, a statistically significant increase is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no exceedance is noted, and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Prediction limit exceedances were noted for Appendix III parameters. A summary table of the background prediction limits and exceedances follows this letter.

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 D). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. Several statistically significant decreasing trends were noted as may be seen on the summary table. Of particular interest are the decreasing trends for pH in background wells YGWA-18S, YGWA-39, YGWA-5D and downgradient well YGWC-33S. Statistically significant increasing trends were noted in downgradient well YGWC-43 for boron and TDS. Statistically significant increasing trends were also noted in upgradient wells for calcium and pH in well YGWA-21I; and sulfate in wells YGWA-4I, YGWA-5I and YGWA-17S. When significant trends are noted upgradient of the facility, it is an indication of natural variation in groundwater quality which may also be observed in downgradient wells. A summary of the trend test results follows this letter.

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 will be necessary to accommodate these types of changes. In the interwell case, newer data will be included in background following each event, provided that upgradient well data are reviewed for outliers and trending data. In some cases, it may be necessary to deselect the earlier portion of data prior to construction of limits in order 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.

Statistical Analysis of Appendix IV Parameters – March 2020

Interwell tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents (Figure E). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for barium and radium. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. 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) (Figure G).

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

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified level (RSLs) 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

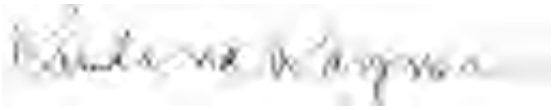
On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the 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, GWPS were established for statistical comparison of Appendix IV constituents for the March 2020 sample event (Figure F). Confidence intervals were then constructed for each of the Appendix IV constituents in each downgradient well (Figure G). 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 Georgia EPD Rules 391-3-4-.10(6)(a). 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. Exceedances were noted for beryllium in wells YGWC-33S and YGWC-38; cobalt in well YGWC-33S; and selenium in wells YGWC-38 and YGWC-41. A summary of the confidence intervals follows this letter.

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 me.

For Groundwater Stats Consulting,



Kristina L. Rayner
Groundwater Statistician

Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	YGWC-23S	0.16	n/a	3/26/2020	0.94	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-33S	0.16	n/a	3/25/2020	5.3	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-38	0.16	n/a	3/25/2020	9.3	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-41	0.16	n/a	3/25/2020	7.9	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-42	0.16	n/a	3/25/2020	15.5	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-43	0.16	n/a	3/25/2020	2.4	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-33S	37	n/a	3/25/2020	97.8	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-38	37	n/a	3/25/2020	124	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-42	37	n/a	3/25/2020	107	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-33S	7.67	4.86	3/25/2020	3.86	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-33S	71	n/a	3/25/2020	448	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-38	71	n/a	3/25/2020	483	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-41	71	n/a	3/25/2020	214	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-42	71	n/a	3/25/2020	642	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-43	71	n/a	3/25/2020	164	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-49	71	n/a	3/25/2020	76.1	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-33S	185.4	n/a	3/25/2020	839	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-38	185.4	n/a	3/25/2020	883	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-41	185.4	n/a	3/25/2020	428	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-42	185.4	n/a	3/25/2020	1200	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-43	185.4	n/a	3/25/2020	352	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**3/26/2020**	**0.94**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-24S	0.16	n/a	3/26/2020	0.033	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	**YGWC-33S**	**0.16**	**n/a**	**3/25/2020**	**5.3**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-36	0.16	n/a	3/25/2020	0.11	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**3/25/2020**	**9.3**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**3/25/2020**	**7.9**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**3/25/2020**	**15.5**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**3/25/2020**	**2.4**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-49	0.16	n/a	3/25/2020	0.012	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	3/26/2020	5.6	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24S	37	n/a	3/26/2020	1.7	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-33S**	**37**	**n/a**	**3/25/2020**	**97.8**	**134**	**n/a**	**n/a**	**0.7463**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-36	37	n/a	3/25/2020	10.6	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**3/25/2020**	**124**	**134**	**n/a**	**n/a**	**0.7463**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-41	37	n/a	3/25/2020	29.6	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**3/25/2020**	**107**	**134**	**n/a**	**n/a**	**0.7463**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-43	37	n/a	3/25/2020	12.1	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-49	37	n/a	3/25/2020	13.2	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-23S	7.9	n/a	3/26/2020	1.6	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-24S	7.9	n/a	3/26/2020	5.4	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-33S	7.9	n/a	3/25/2020	3.8	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-36	7.9	n/a	3/25/2020	6.3	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-38	7.9	n/a	3/25/2020	4	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-41	7.9	n/a	3/25/2020	2.7	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-42	7.9	n/a	3/25/2020	3.2	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-43	7.9	n/a	3/25/2020	1.8	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-49	7.9	n/a	3/25/2020	4.1	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-23S	0.32	n/a	3/26/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24S	0.32	n/a	3/26/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-33S	0.32	n/a	3/25/2020	0.25	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-38	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-41	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-42	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-43	0.32	n/a	3/25/2020	0.073	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-49	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-23S	7.67	4.86	3/26/2020	5.69	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-24S	7.67	4.86	3/26/2020	5.51	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	**YGWC-33S**	**7.67**	**4.86**	**3/25/2020**	**3.86**	**152**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001713**	**NP Inter (normality) 1 of 2**
pH (S.U.)	YGWC-36	7.67	4.86	3/25/2020	5.49	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-38	7.67	4.86	3/25/2020	4.89	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-41	7.67	4.86	3/25/2020	4.87	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-42	7.67	4.86	3/25/2020	5.53	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-43	7.67	4.86	3/25/2020	5.79	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-49	7.67	4.86	3/25/2020	5.69	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-23S	71	n/a	3/26/2020	36.5	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-24S	71	n/a	3/26/2020	0.5ND	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-33S**	**71**	**n/a**	**3/25/2020**	**448**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-36	71	n/a	3/25/2020	58.8	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-38**	**71**	**n/a**	**3/25/2020**	**483**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**YGWC-41**	**71**	**n/a**	**3/25/2020**	**214**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-42**	**71**	**n/a**	**3/25/2020**	**642**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-43**	**71**	**n/a**	**3/25/2020**	**164**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-49**	**71**	**n/a**	**3/25/2020**	**76.1**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-23S	185.4	n/a	3/26/2020	110	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-24S	185.4	n/a	3/26/2020	67	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-33S**	**185.4**	**n/a**	**3/25/2020**	**839**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-36	185.4	n/a	3/25/2020	164	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-38**	**185.4**	**n/a**	**3/25/2020**	**883**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**185.4**	**n/a**	**3/25/2020**	**428**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**185.4**	**n/a**	**3/25/2020**	**1200**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-43**	**185.4**	**n/a**	**3/25/2020**	**352**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-49	185.4	n/a	3/25/2020	130	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2

Trend Test Summary - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**YGWC-43**	**0.6477**	**51**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-21I (bg)**	**2.207**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWC-38**	**-25.87**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-18S (bg)**	**-0.08453**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-21I (bg)**	**0.2542**	**65**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-39 (bg)**	**-0.3058**	**-47**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-5D (bg)**	**-0.1483**	**-67**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWC-33S**	**-0.3435**	**-147**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-17S (bg)**	**0.2314**	**52**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-40 (bg)**	**-17.01**	**-35**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-4I (bg)**	**0.3067**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5D (bg)**	**-4.378**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.1217**	**55**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-38**	**-102.7**	**-44**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-41**	**-85.6**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-49**	**-4.89**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-41**	**-120.9**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-43**	**131**	**49**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-17S (bg)	-0.0002523	-8	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-30	-48	No	14	78.57	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003116	-11	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-5	-48	No	14	92.86	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	-0.00632	-39	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.002401	6	34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.0315	-24	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-15	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0006887	26	48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	0	-33	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-23S	-0.2383	-46	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-33S	-0.09196	-2	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-38	-3.784	-33	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-41	-2.225	-21	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-42	-1.254	-14	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-43**	**0.6477**	**51**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-17S (bg)	0.1071	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18I (bg)	0.01475	6	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.08778	-40	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-20S (bg)	0.1183	41	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**2.207**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-39 (bg)	-0.23	-10	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-1.297	-28	-34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-4I (bg)	0.4896	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.47	-43	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5I (bg)	0.06941	26	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-33S	-1.161	-7	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWC-38**	**-25.87**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWC-42	-11.17	-23	-34	No	11	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-17S (bg)	-0.00607	-22	-58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-18I (bg)	-0.0211	-21	-58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-18S (bg)**	**-0.08453**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-20S (bg)	0.03732	48	58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-21I (bg)**	**0.2542**	**65**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-39 (bg)**	**-0.3058**	**-47**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-40 (bg)	0.02308	2	38	No	12	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-4I (bg)	-0.01041	-14	-58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-5D (bg)**	**-0.1483**	**-67**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-5I (bg)	-0.0216	-25	-58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWC-33S**	**-0.3435**	**-147**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-17S (bg)**	**0.2314**	**52**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-18I (bg)	-0.2926	-34	-48	No	14	21.43	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.2179	-38	-48	No	14	14.29	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	12	48	No	14	57.14	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.3724	-11	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.919	-27	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-40 (bg)**	**-17.01**	**-35**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-4I (bg)**	**0.3067**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5D (bg)**	**-4.378**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.1217**	**55**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWC-33S	-76.07	-31	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWC-38**	**-102.7**	**-44**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-41**	**-85.6**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWC-42	-94.68	-26	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-43	49.2	33	34	No	11	0	n/a	n/a	0.01	NP

Trend Test Summary - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Sulfate (mg/L)	**YGWC-49**	**-4.89**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	5.544	21	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-2.555	-12	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	6.215	22	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	7.597	35	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	24.57	43	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	4.803	7	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-19.81	-27	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	7.969	29	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-15	-45	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	1.982	11	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-33S	-39.38	-34	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-38	-148.4	-25	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-41**	**-120.9**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWC-42	-143.1	-33	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-43**	**131**	**49**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Tolerance Limit Summary Table - Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:38 PM

Constituent	Well	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0035	n/a	124	n/a	n/a	91.13	n/a	n/a	0.001729	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	142	n/a	n/a	83.1	n/a	n/a	0.0006867	NP Inter(NDs)
Barium (mg/L)	n/a	0.0671	n/a	142	n/a	n/a	2.817	n/a	n/a	0.0006867	NP Inter(normality)
Beryllium (mg/L)	n/a	0.003	n/a	142	n/a	n/a	80.99	n/a	n/a	0.0006867	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	142	n/a	n/a	97.18	n/a	n/a	0.0006867	NP Inter(NDs)
Chromium (mg/L)	n/a	0.01	n/a	110	n/a	n/a	78.18	n/a	n/a	0.003545	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.013	n/a	142	n/a	n/a	79.58	n/a	n/a	0.0006867	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	141	n/a	n/a	0	n/a	n/a	0.0007228	NP Inter(normality)
Fluoride (mg/L)	n/a	0.32	n/a	152	n/a	n/a	87.5	n/a	n/a	0.0004111	NP Inter(NDs)
Lead (mg/L)	n/a	0.005	n/a	126	n/a	n/a	86.51	n/a	n/a	0.00156	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	142	n/a	n/a	30.99	n/a	n/a	0.0006867	NP Inter(normality)
Mercury (mg/L)	n/a	0.0005	n/a	106	n/a	n/a	94.34	n/a	n/a	0.004352	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	110	n/a	n/a	80.91	n/a	n/a	0.003545	NP Inter(NDs)
Selenium (mg/L)	n/a	0.01	n/a	142	n/a	n/a	86.62	n/a	n/a	0.0006867	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	125	n/a	n/a	100	n/a	n/a	0.001642	NP Inter(NDs)

PLANT AMA-R6 GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.0035	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.067	2
Beryllium, Total (mg/L)	0.004	0.003	0.004
Cadmium, Total (mg/L)	0.005	0.0025	0.005
Chromium, Total (mg/L)	0.1	0.01	0.1
Cobalt, Total (mg/L)	n/a	0.013	0.013
Combined Radium, Total (pCi/L)	5	6.92	6.92
Fluoride, Total (mg/L)	4	0.32	4
Lead, Total (mg/L)	n/a	0.005	0.005
Lithium, Total (mg/L)	n/a	0.03	0.03
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)	n/a	0.01	0.01
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Grey cell indicates background is higher than MCL.*

**MCL = Maximum Contaminant Level*

Confidence Interval Summary Table - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-33S**	**0.01955**	**0.01454**	**0.004**	**Yes**	**15**	**0.01717**	**0.003916**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Beryllium (mg/L)	**YGWC-38**	**0.005717**	**0.004702**	**0.004**	**Yes**	**11**	**0.005209**	**0.000609**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**YGWC-33S**	**0.02603**	**0.01477**	**0.013**	**Yes**	**15**	**0.0204**	**0.008309**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.2511**	**0.1547**	**0.05**	**Yes**	**11**	**0.2029**	**0.05784**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06837**	**0.05309**	**0.05**	**Yes**	**11**	**0.05907**	**0.01451**	**0**	**None**	**x^3**	**0.01**	**Param.**

Confidence Interval Summary Table - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-23S	0.003	0.00029	0.006	No	13	0.002792	0.0007516	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-24S	0.003	0.0009	0.006	No	13	0.002838	0.0005824	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-33S	0.003	0.003	0.006	No	13	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36	0.002291	0.0004486	0.006	No	13	0.002738	0.001558	53.85	Kapla...	sqrt(x)	0.01	Param.
Antimony (mg/L)	YGWC-38	0.003	0.0015	0.006	No	10	0.002613	0.0008412	80	Kapla...	No	0.011	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.003	0.006	No	10	0.003	0	100	Kapla...	No	0.011	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.003	0.006	No	10	0.003	0	100	Kapla...	No	0.011	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.003	0.006	No	10	0.002731	0.0008507	90	Kapla...	No	0.011	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	10	0.002563	0.000931	80	Kapla...	No	0.011	NP (NDs)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	15	0.004747	0.0009812	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-24S	0.005	0.0015	0.01	No	15	0.004767	0.0009037	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-33S	0.004793	0.002861	0.01	No	15	0.003827	0.001426	6.667	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-36	0.005	0.00066	0.01	No	15	0.004124	0.001814	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.001615	0.0006536	0.01	No	11	0.001135	0.0005771	0	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00052	0.01	No	11	0.002302	0.00215	36.36	None	No	0.006	NP (normality)
Arsenic (mg/L)	YGWC-42	0.002574	0.001312	0.01	No	11	0.001943	0.0007573	0	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.0007	0.01	No	11	0.003836	0.001996	72.73	None	No	0.006	NP (normality)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	10	0.003746	0.002021	70	None	No	0.011	NP (normality)
Barium (mg/L)	YGWC-23S	0.04614	0.0268	2	No	15	0.03647	0.01427	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24S	0.01975	0.01865	2	No	15	0.01917	0.0008591	0	None	x^4	0.01	Param.
Barium (mg/L)	YGWC-33S	0.01741	0.01104	2	No	15	0.01441	0.005105	6.667	None	sqrt(x)	0.01	Param.
Barium (mg/L)	YGWC-36	0.04604	0.03306	2	No	15	0.0387	0.01078	0	None	x^2	0.01	Param.
Barium (mg/L)	YGWC-38	0.02507	0.02012	2	No	11	0.02259	0.00297	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.0325	0.02317	2	No	11	0.02784	0.005599	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.0505	0.0338	2	No	11	0.04215	0.01002	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03161	0.01352	2	No	11	0.02256	0.01086	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.08269	0.07093	2	No	10	0.07681	0.006586	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.003	0.000077	0.004	No	15	0.001058	0.001422	33.33	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-24S	0.003	0.0001	0.004	No	15	0.000698	0.001192	20	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-33S**	**0.01955**	**0.01454**	**0.004**	**Yes**	**15**	**0.01717**	**0.003916**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-36	0.00033	0.0002	0.004	No	15	0.000446	0.0007109	6.667	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005717**	**0.004702**	**0.004**	**Yes**	**11**	**0.005209**	**0.000609**	**0**	**None**	**No**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.003766	0.003074	0.004	No	11	0.003364	0.0005201	0	None	x^5	0.01	Param.
Beryllium (mg/L)	YGWC-42	0.003	0.00009	0.004	No	11	0.002207	0.001358	72.73	None	No	0.006	NP (normality)
Beryllium (mg/L)	YGWC-43	0.003	0.00029	0.004	No	11	0.001761	0.001425	54.55	None	No	0.006	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	10	0.000397	0.0009147	10	None	No	0.011	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0025	0.00007	0.005	No	15	0.002338	0.0006274	93.33	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-24S	0.0025	0.0025	0.005	No	15	0.0025	0	100	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-33S	0.003063	0.002068	0.005	No	15	0.002565	0.0007337	0	None	No	0.01	Param.
Cadmium (mg/L)	YGWC-36	0.0025	0.00015	0.005	No	15	0.000484	0.0008192	13.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-38	0.002911	0.002324	0.005	No	11	0.002609	0.0003807	0	None	x^2	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0025	0.00017	0.005	No	11	0.0006273	0.0009268	18.18	None	No	0.006	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0025	0.0002	0.005	No	11	0.001103	0.001116	36.36	None	No	0.006	NP (normality)
Cadmium (mg/L)	YGWC-43	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	YGWC-49	0.0025	0.0025	0.005	No	10	0.002257	0.0007684	90	None	No	0.011	NP (NDs)
Chromium (mg/L)	YGWC-23S	0.01	0.0008	0.1	No	11	0.007582	0.004152	72.73	None	No	0.006	NP (normality)
Chromium (mg/L)	YGWC-24S	0.01	0.0011	0.1	No	11	0.008367	0.003633	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-33S	0.01	0.0012	0.1	No	11	0.006155	0.004431	54.55	None	No	0.006	NP (normality)
Chromium (mg/L)	YGWC-36	0.01	0.0035	0.1	No	11	0.008567	0.003247	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-38	0.01	0.00065	0.1	No	11	0.008286	0.003813	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-41	0.01	0.01	0.1	No	11	0.009126	0.002898	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-42	0.01	0.0006	0.1	No	11	0.007485	0.004313	72.73	None	No	0.006	NP (normality)
Chromium (mg/L)	YGWC-43	0.01	0.00062	0.1	No	11	0.007442	0.004382	72.73	None	No	0.006	NP (normality)
Chromium (mg/L)	YGWC-49	0.01	0.0013	0.1	No	9	0.002544	0.002804	11.11	None	No	0.002	NP (normality)
Cobalt (mg/L)	YGWC-23S	0.005	0.005	0.013	No	15	0.005	0	100	None	No	0.01	NP (NDs)

Confidence Interval Summary Table - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	YGWC-24S	0.005	0.005	0.013	No	15	0.005	0	100	None	No	0.01	NP (NDs)
Cobalt (mg/L)	**YGWC-33S**	**0.02603**	**0.01477**	**0.013**	**Yes**	**15**	**0.0204**	**0.008309**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	YGWC-36	0.005	0.0006	0.013	No	15	0.004097	0.001869	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-38	0.005	0.005	0.013	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	YGWC-41	0.005	0.0003	0.013	No	11	0.003399	0.002231	63.64	None	No	0.006	NP (normality)
Cobalt (mg/L)	YGWC-42	0.002884	0.001638	0.013	No	11	0.002309	0.0009864	9.091	None	ln(x)	0.01	Param.
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.013	No	11	0.003682	0.001656	54.55	None	No	0.006	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.013	No	10	0.00325	0.00226	60	None	No	0.011	NP (normality)
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8402	0.2935	6.92	No	15	0.5669	0.4034	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24S	0.8174	0.4518	6.92	No	15	0.6346	0.2697	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-33S	1.418	0.7125	6.92	No	15	1.065	0.5205	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36	1.114	0.5732	6.92	No	15	0.8437	0.3992	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.5	0.6416	6.92	No	11	1.071	0.5152	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.548	0.5806	6.92	No	11	1.082	0.6178	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	3.353	1.584	6.92	No	11	2.469	1.061	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	2.778	0.966	6.92	No	11	1.872	1.087	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.216	0.4762	6.92	No	10	0.846	0.4145	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.3	0.12	4	No	16	0.2562	0.09577	81.25	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-24S	0.3	0.098	4	No	16	0.2707	0.08097	87.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-33S	0.5075	0.2094	4	No	16	0.3881	0.3056	6.25	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	YGWC-36	0.3	0.05	4	No	16	0.2035	0.1181	56.25	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-38	0.2933	0.08603	4	No	12	0.277	0.1023	50	Kapla...	No	0.01	Param.
Fluoride (mg/L)	YGWC-41	0.3	0.11	4	No	12	0.2675	0.07593	83.33	Kapla...	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.3	0.041	4	No	12	0.2159	0.1247	66.67	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-43	0.1517	0.06199	4	No	12	0.1653	0.09893	25	Kapla...	No	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.3	0.06	4	No	11	0.19	0.1097	45.45	None	No	0.006	NP (normality)
Lead (mg/L)	YGWC-23S	0.005	0.00044	0.005	No	13	0.004275	0.001772	84.62	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-24S	0.005	0.000053	0.005	No	13	0.004619	0.001372	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-33S	0.001367	0.0006861	0.005	No	13	0.002108	0.001717	23.08	Kapla...	x^(1/3)	0.01	Param.
Lead (mg/L)	YGWC-36	0.0017	0.0002	0.005	No	13	0.001108	0.001774	15.38	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-38	0.005	0.0001	0.005	No	11	0.003664	0.002289	72.73	None	No	0.006	NP (normality)
Lead (mg/L)	YGWC-41	0.005	0.00007	0.005	No	11	0.003305	0.002368	63.64	None	No	0.006	NP (normality)
Lead (mg/L)	YGWC-42	0.005	0.00009	0.005	No	11	0.003667	0.002283	72.73	None	No	0.006	NP (normality)
Lead (mg/L)	YGWC-43	0.005	0.00008	0.005	No	11	0.004105	0.001991	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	YGWC-49	0.005	0.005	0.005	No	10	0.004506	0.001562	90	None	No	0.011	NP (NDs)
Lithium (mg/L)	YGWC-23S	0.0025	0.0017	0.03	No	15	0.003013	0.003363	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-24S	0.015	0.015	0.03	No	15	0.015	0	100	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-33S	0.02899	0.01907	0.03	No	15	0.02403	0.007318	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-36	0.006331	0.004669	0.03	No	15	0.005407	0.001354	0	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-38	0.0095	0.0081	0.03	No	11	0.008709	0.0006188	0	None	No	0.006	NP (normality)
Lithium (mg/L)	YGWC-41	0.0047	0.0032	0.03	No	11	0.004882	0.003398	9.091	None	No	0.006	NP (normality)
Lithium (mg/L)	YGWC-42	0.04238	0.02606	0.03	No	11	0.03422	0.009791	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.0167	0.01027	0.03	No	11	0.01348	0.003859	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0036	0.03	No	10	0.00372	0.0002741	0	None	No	0.011	NP (normality)
Mercury (mg/L)	YGWC-23S	0.0005	0.0005	0.002	No	11	0.0004635	0.0001212	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-24S	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-33S	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-36	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0005	0.000037	0.002	No	9	0.0004019	0.000195	77.78	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0005	0.00006	0.002	No	9	0.0004511	0.0001467	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0005	0.000048	0.002	No	9	0.0004498	0.0001507	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0005	0.000052	0.002	No	9	0.0004502	0.0001493	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0005	0.000061	0.002	No	8	0.0004451	0.0001552	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	YGWC-23S	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-24S	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)

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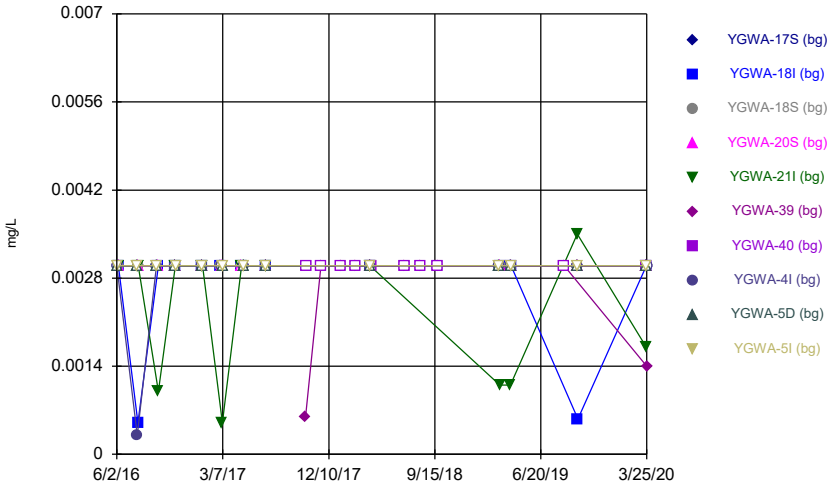
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	YGWC-33S	0.01	0.00095	0.01	No	11	0.008314	0.003753	81.82	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-36	0.01	0.0025	0.01	No	11	0.007045	0.003665	54.55	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-38	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-41	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-42	0.01	0.0017	0.01	No	11	0.006436	0.004119	54.55	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.01	No	11	0.006918	0.004284	63.64	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.01	No	9	0.008967	0.0031	88.89	None	No	0.002	NP (NDs)
Selenium (mg/L)	YGWC-23S	0.04108	0.02528	0.05	No	15	0.03318	0.01166	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-24S	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	YGWC-33S	0.01576	0.008984	0.05	No	15	0.01237	0.005001	6.667	None	No	0.01	Param.
Selenium (mg/L)	YGWC-36	0.01	0.0018	0.05	No	15	0.00392	0.003213	20	None	No	0.01	NP (normality)
Selenium (mg/L)	**YGWC-38**	**0.2511**	**0.1547**	**0.05**	**Yes**	**11**	**0.2029**	**0.05784**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06837**	**0.05309**	**0.05**	**Yes**	**11**	**0.05907**	**0.01451**	**0**	**None**	**x^3**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-42	0.06096	0.03852	0.05	No	11	0.04974	0.01347	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-43	0.01	0.01	0.05	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Selenium (mg/L)	YGWC-49	0.00955	0.00727	0.05	No	10	0.00841	0.001278	10	None	No	0.01	Param.
Thallium (mg/L)	YGWC-23S	0.001	0.001	0.002	No	13	0.001	0	100	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-24S	0.001	0.001	0.002	No	13	0.001	0	100	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-33S	0.0002493	0.0001146	0.002	No	13	0.0004454	0.0003932	30.77	Kapla...	ln(x)	0.01	Param.
Thallium (mg/L)	YGWC-36	0.001	0.001	0.002	No	13	0.001	0	100	Kapla...	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-38	0.001	0.001	0.002	No	10	0.001	0	100	Kapla...	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-41	0.001	0.001	0.002	No	10	0.001	0	100	Kapla...	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-42	0.001	0.001	0.002	No	10	0.001	0	100	Kapla...	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-43	0.001	0.001	0.002	No	10	0.001	0	100	Kapla...	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-49	0.001	0.001	0.002	No	10	0.000909	0.0002878	90	Kapla...	No	0.011	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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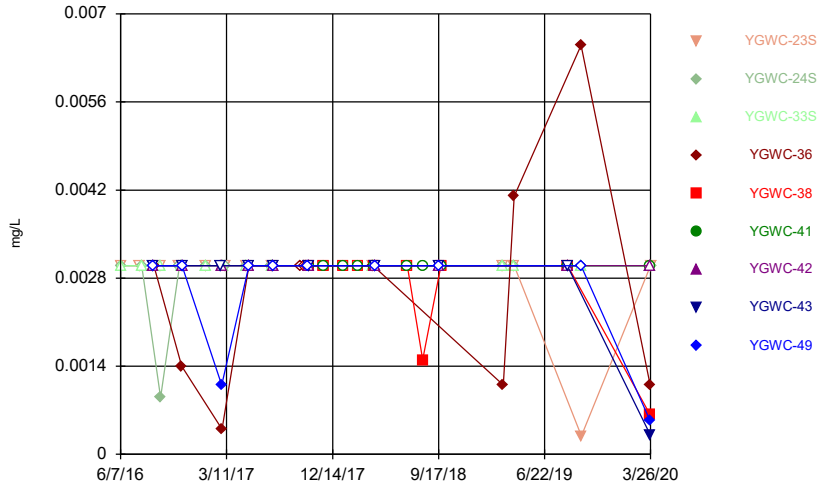

Constituent: Antimony Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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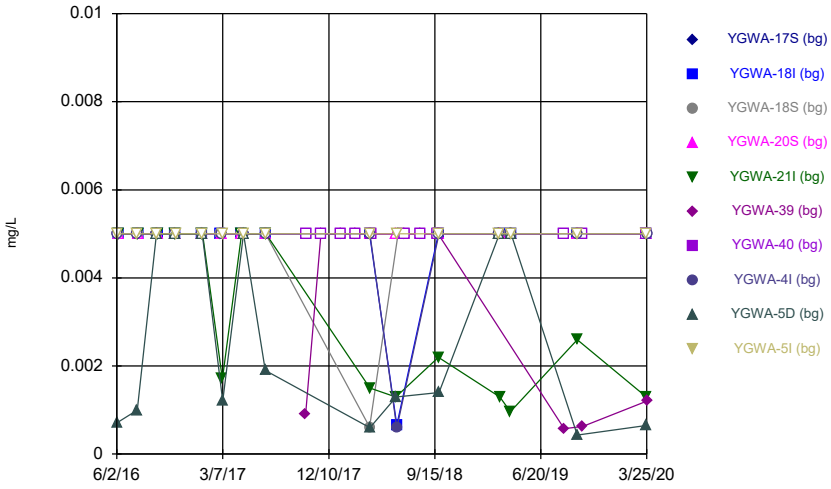

Constituent: Arsenic Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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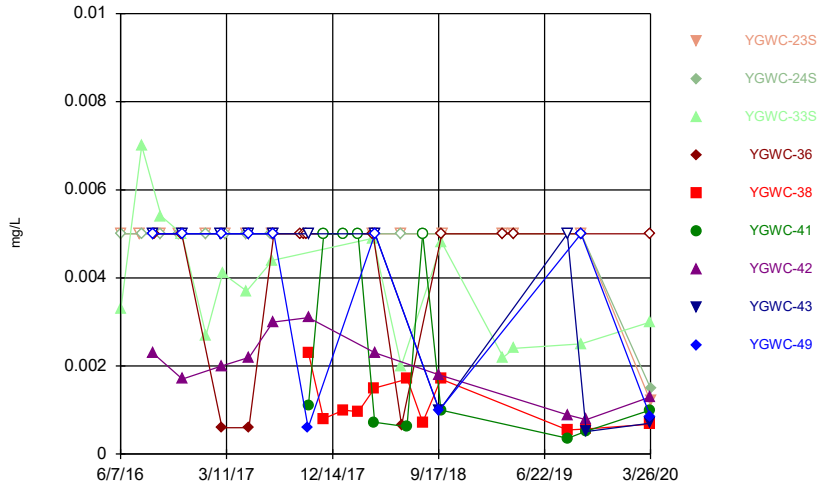
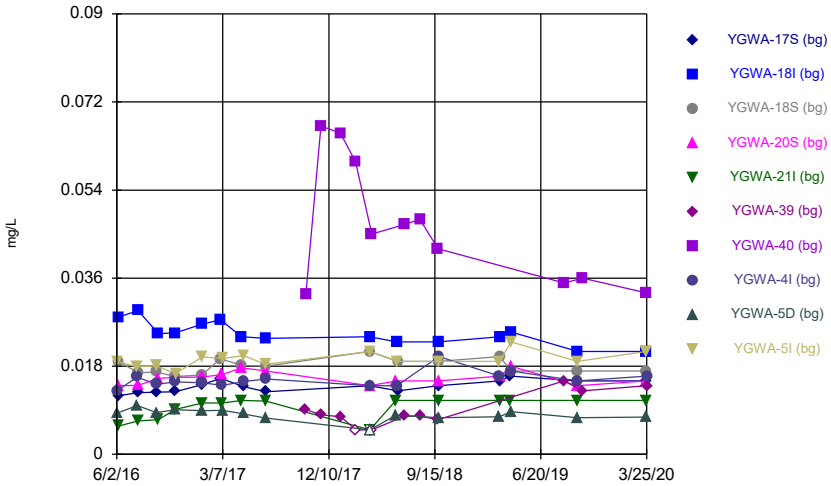


Constituent: Arsenic Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

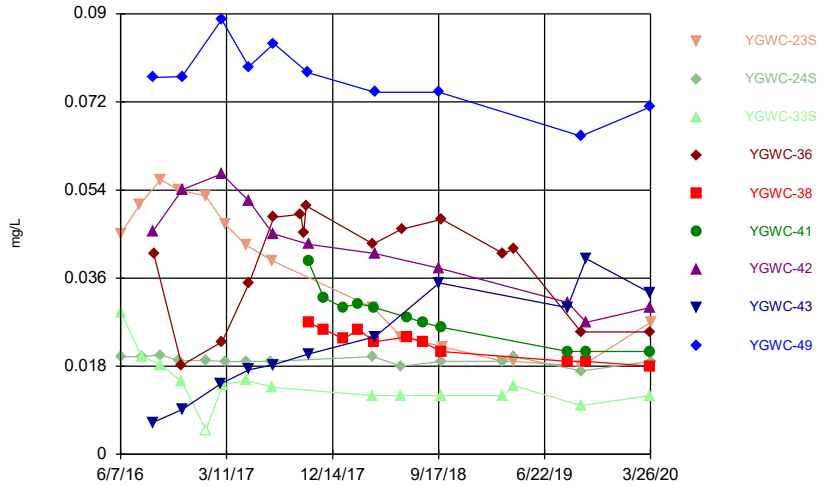
Time Series



Constituent: Barium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Barium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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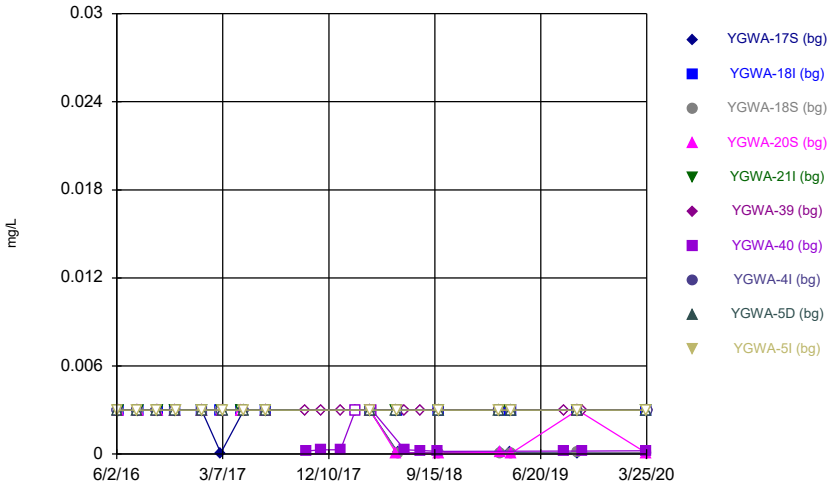

Constituent: Beryllium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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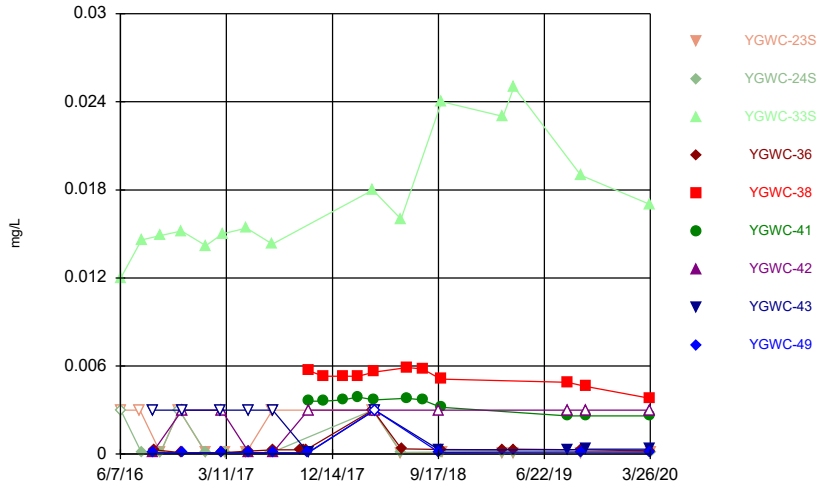
Time Series



Constituent: Beryllium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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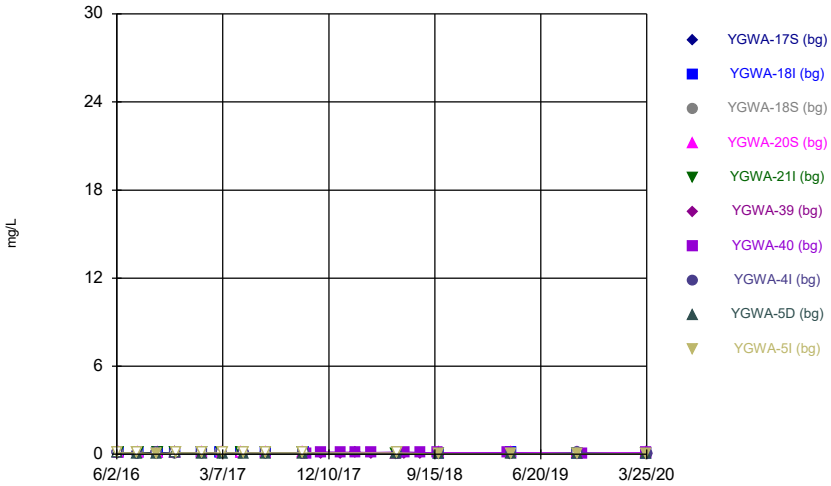
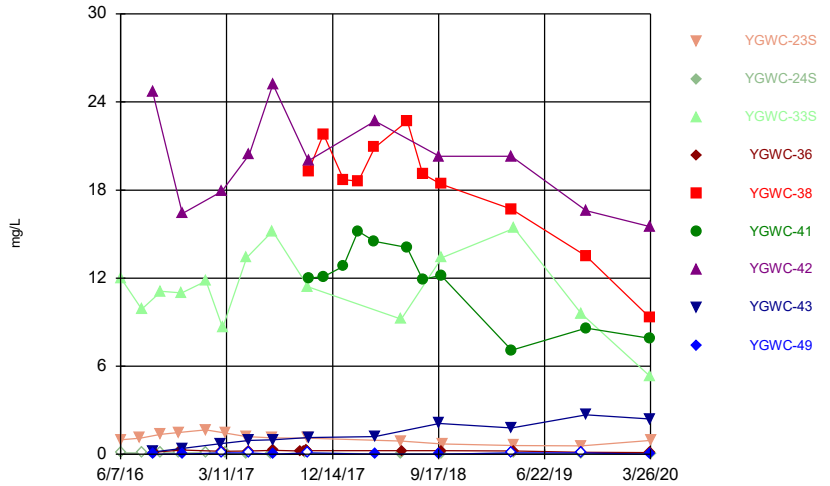
Time Series



Constituent: Boron Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

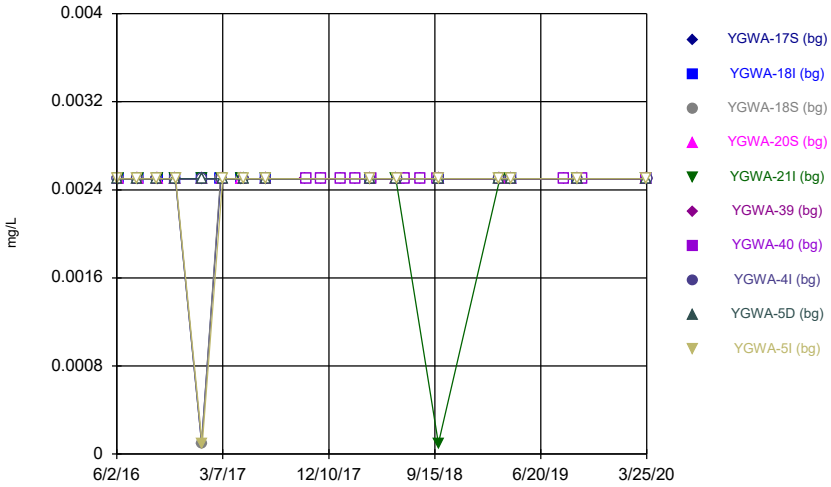
Time Series



Constituent: Boron Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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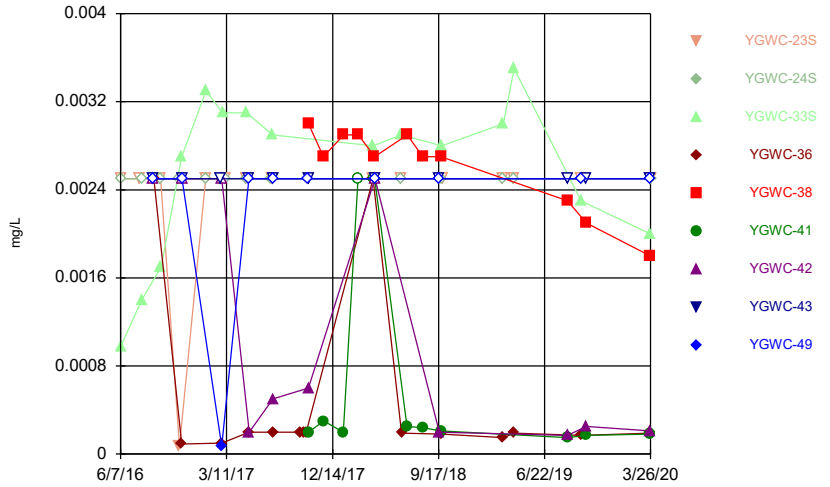
Time Series



Constituent: Cadmium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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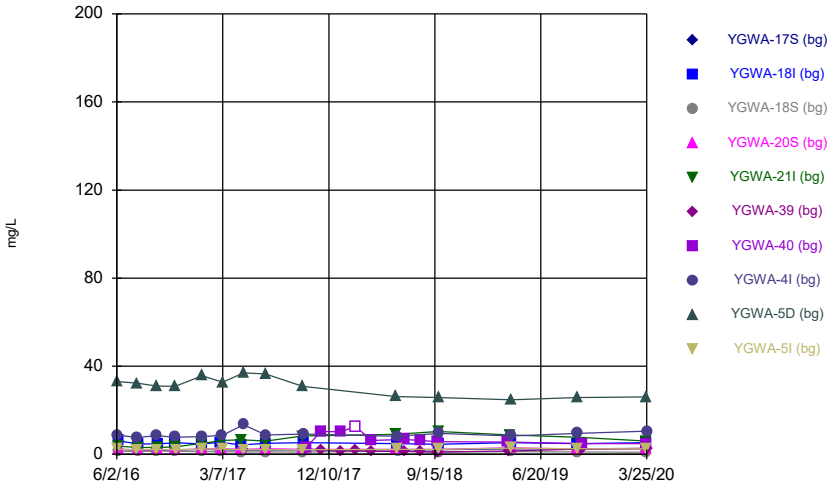

Constituent: Calcium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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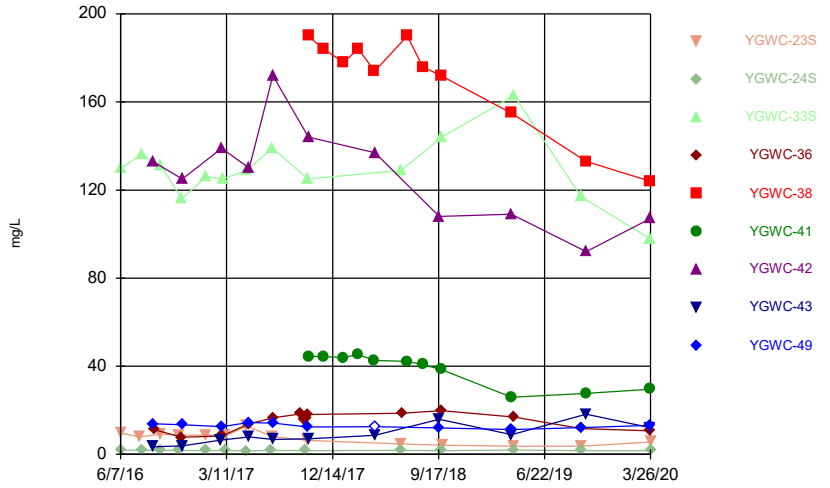
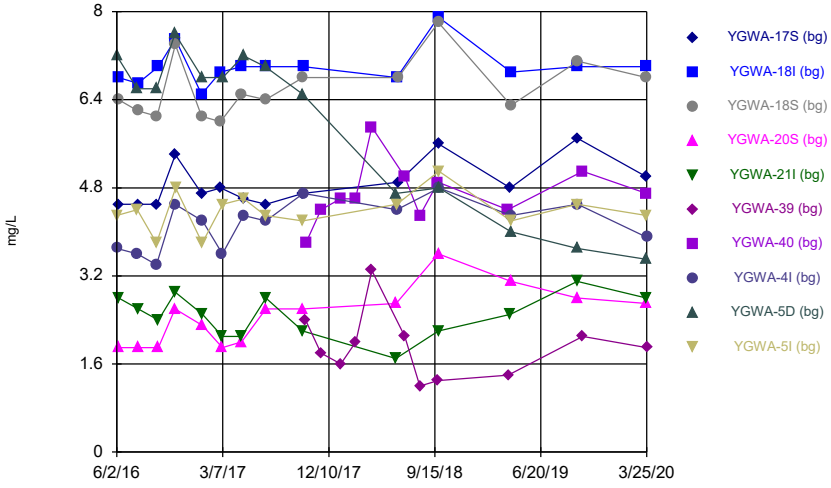


Constituent: Calcium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

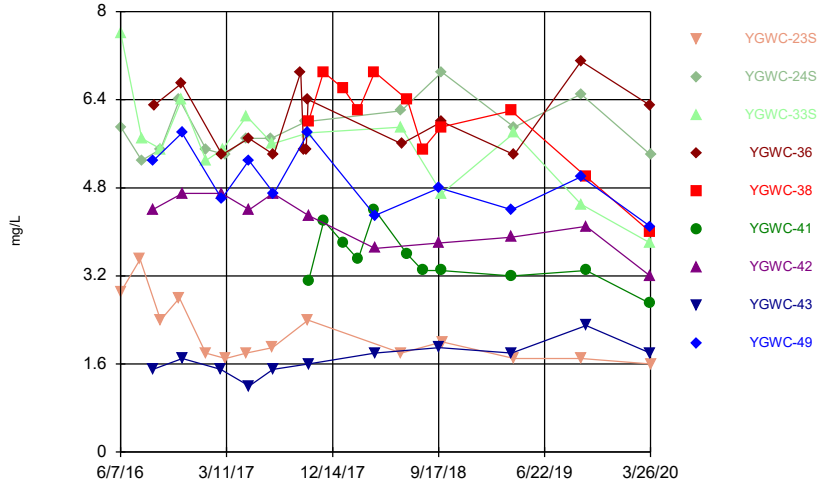
Time Series



Constituent: Chloride Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Chloride Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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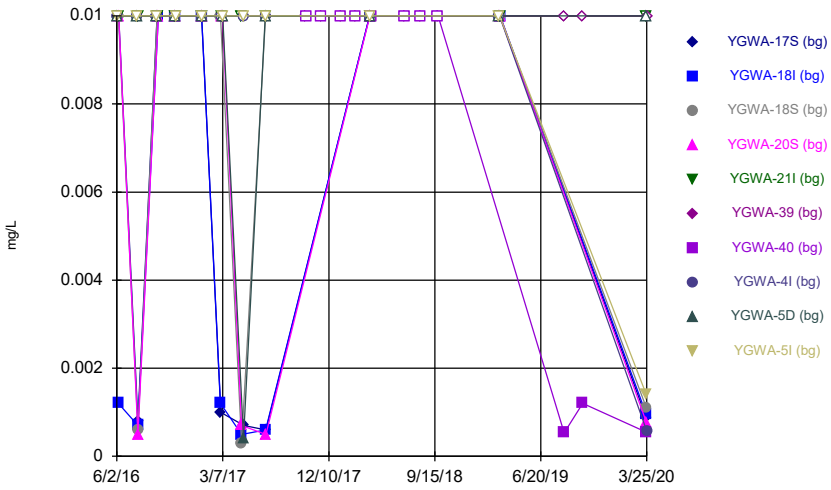
Time Series



Constituent: Chromium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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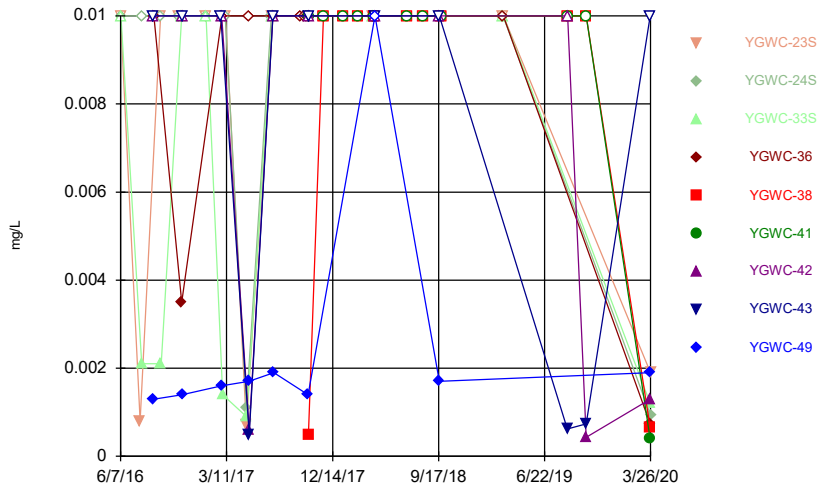

Constituent: Chromium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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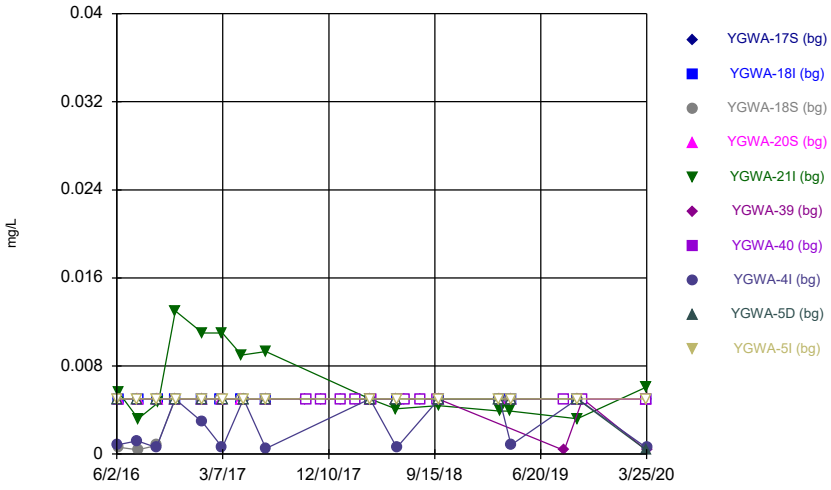
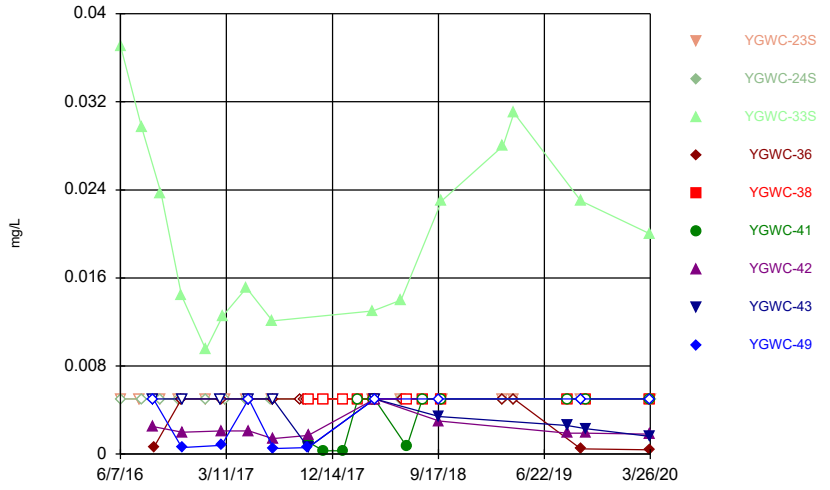


Constituent: Cobalt Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

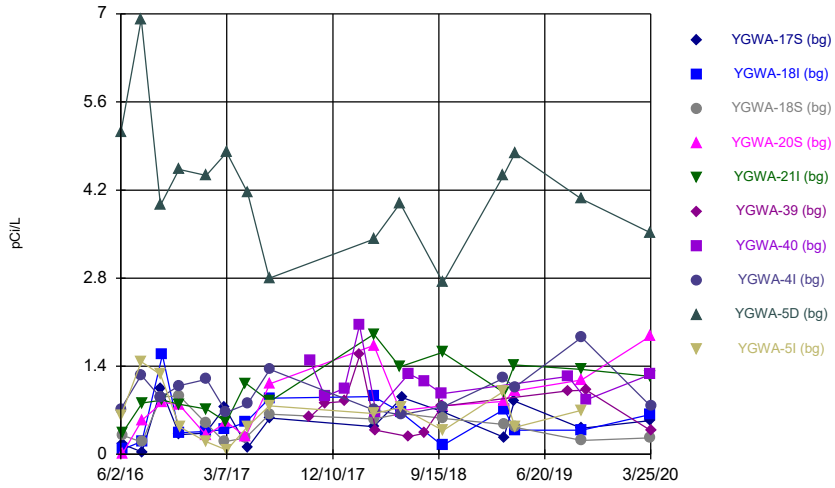
Time Series



Constituent: Cobalt Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

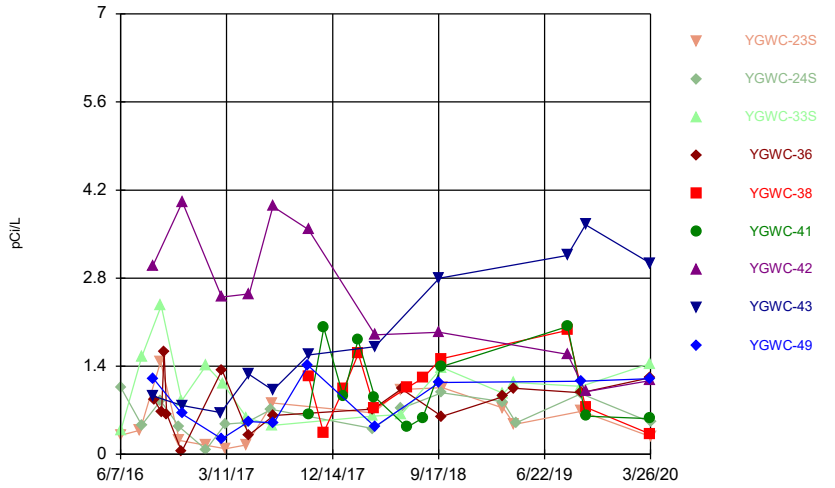
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

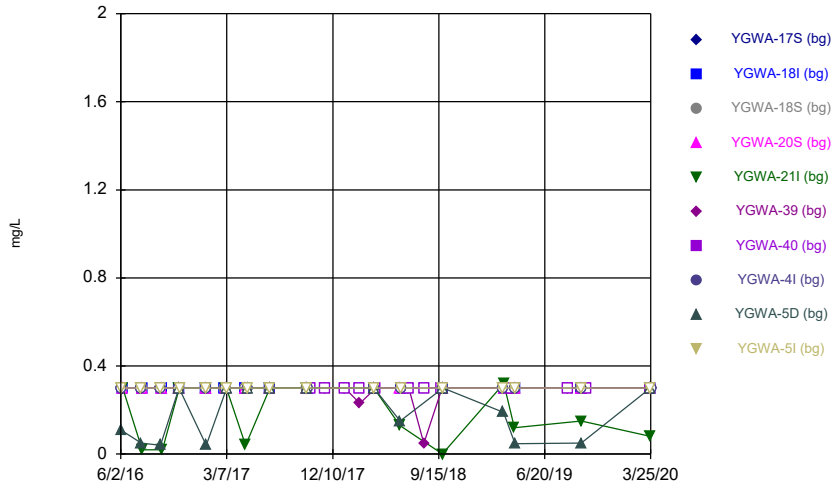
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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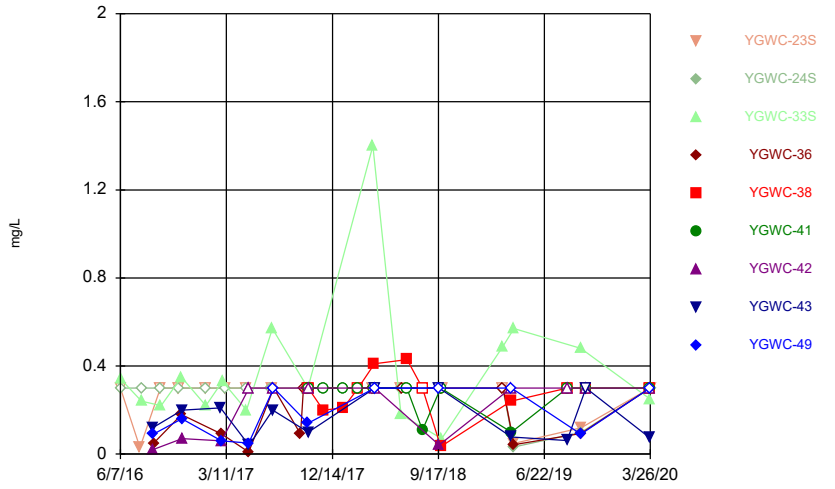

Constituent: Fluoride Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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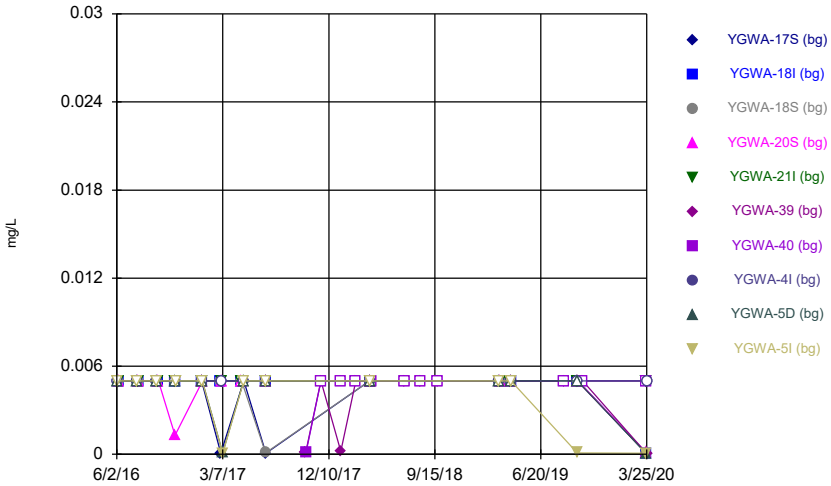
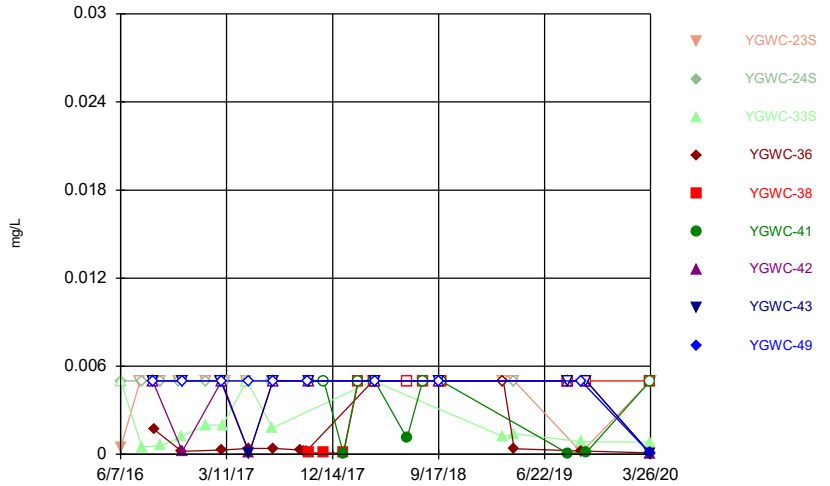


Constituent: Lead Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

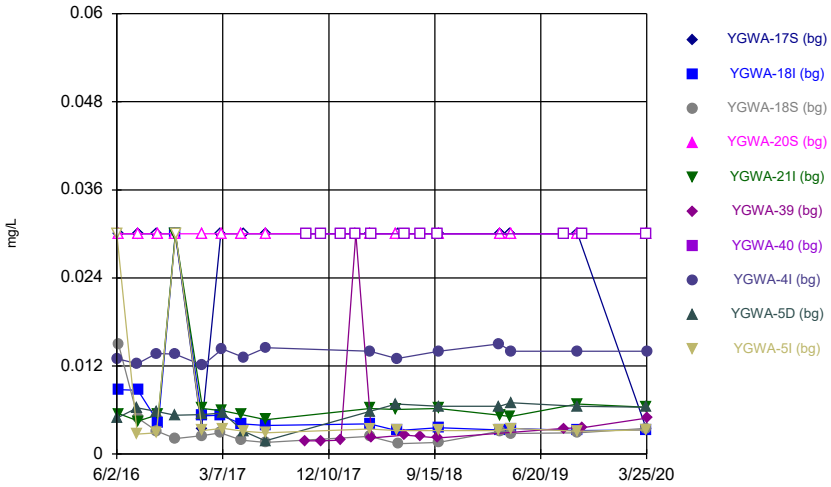
Time Series



Constituent: Lead Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lithium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
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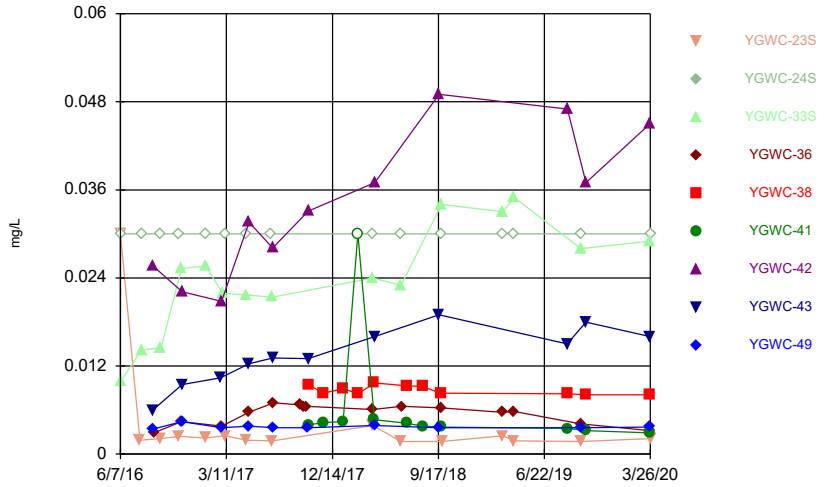
Time Series



Constituent: Lithium Analysis Run 5/5/2020 3:10 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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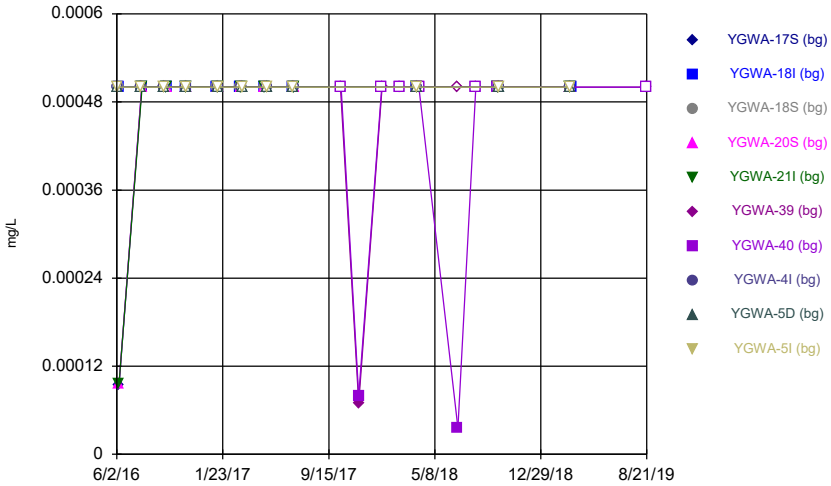
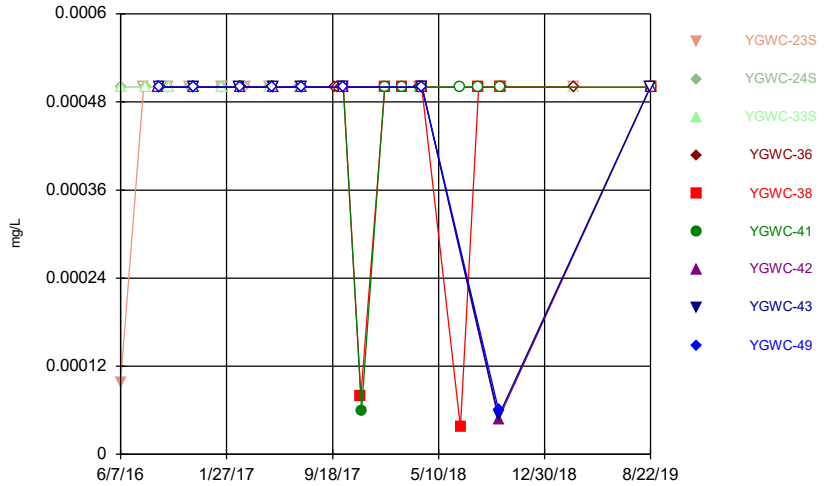
Time Series



Constituent: Mercury Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

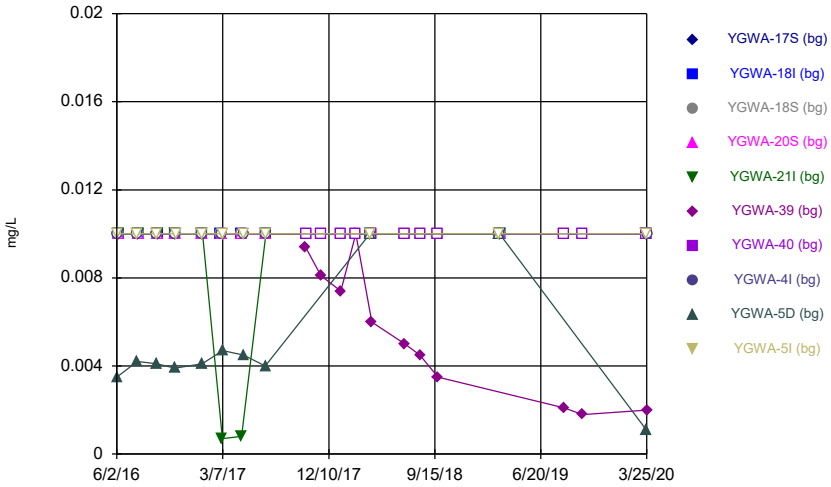
Time Series



Constituent: Mercury Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

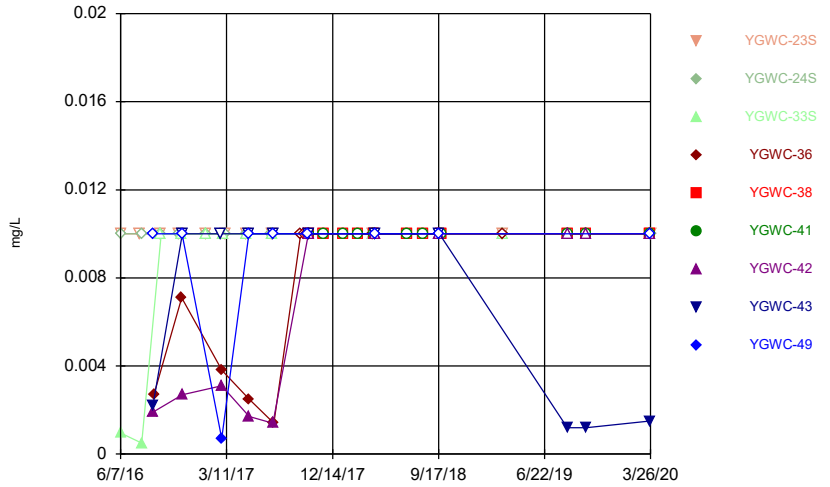
Time Series



Constituent: Molybdenum Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

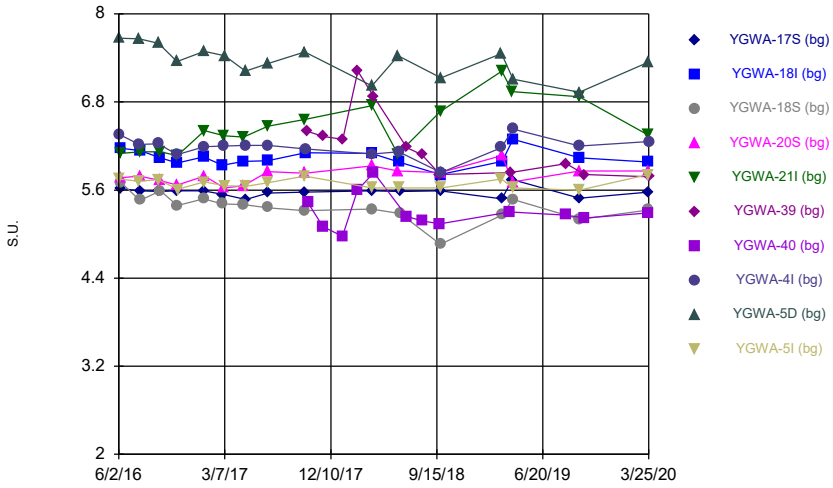
Time Series



Constituent: Molybdenum Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

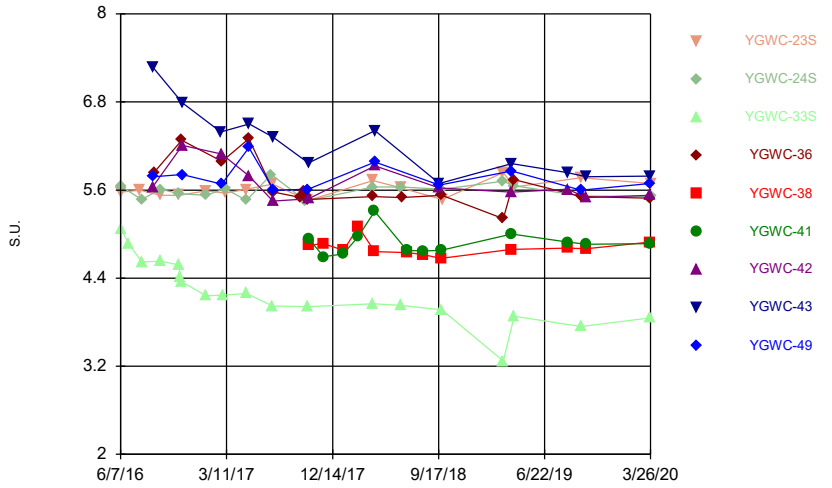
Time Series



Constituent: pH Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

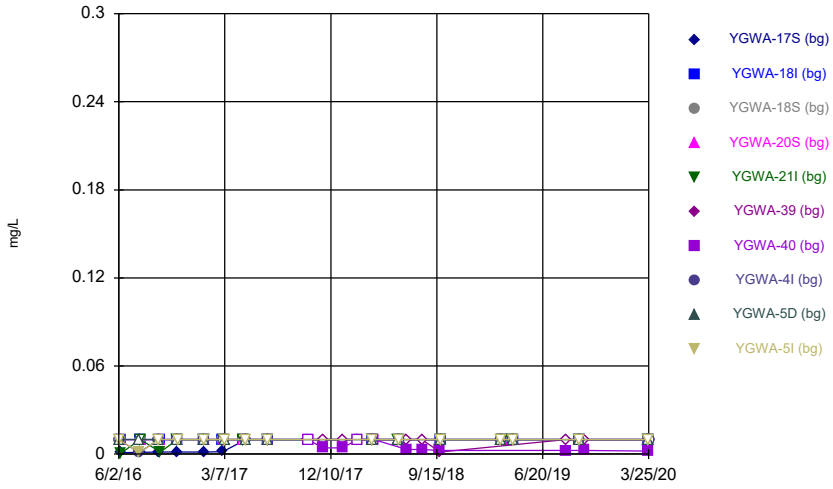
Time Series



Constituent: pH Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

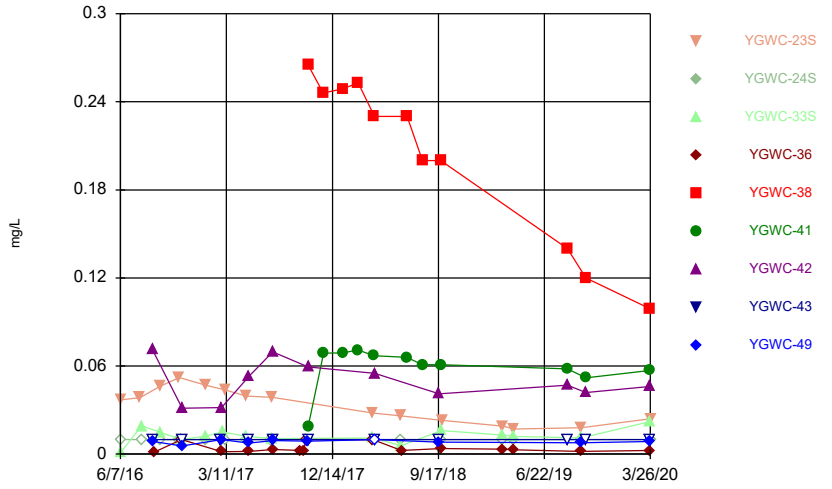
Time Series



Constituent: Selenium Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

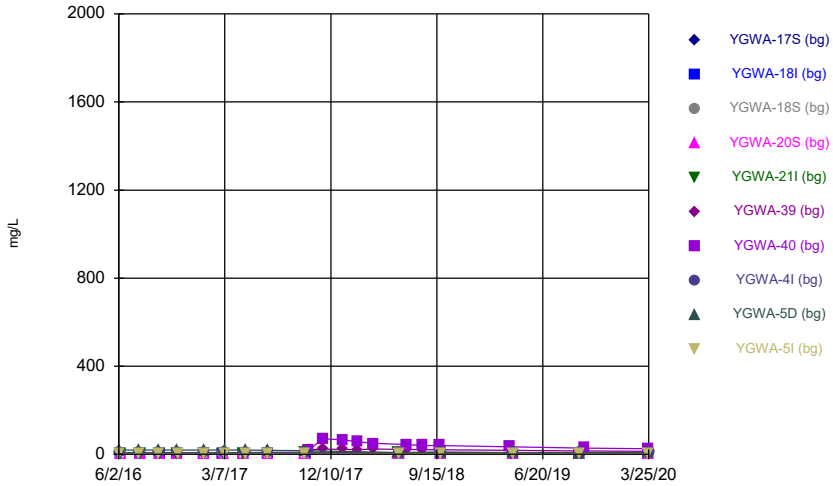
Time Series



Constituent: Selenium Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

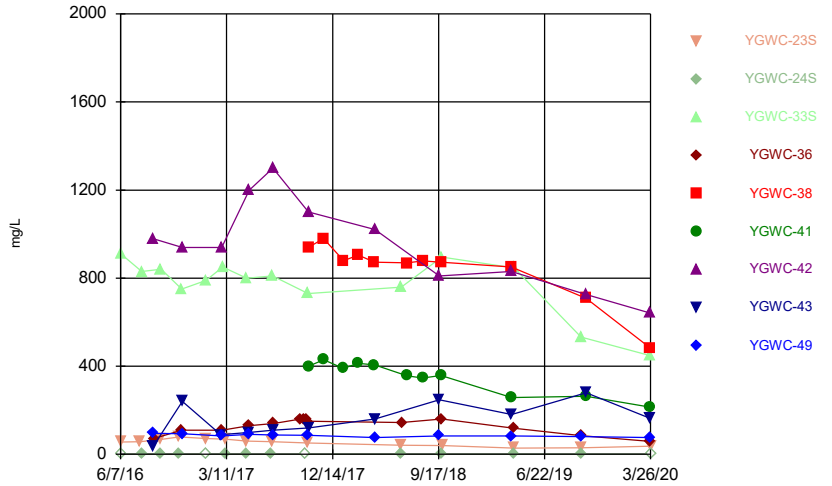
Time Series



Constituent: Sulfate Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

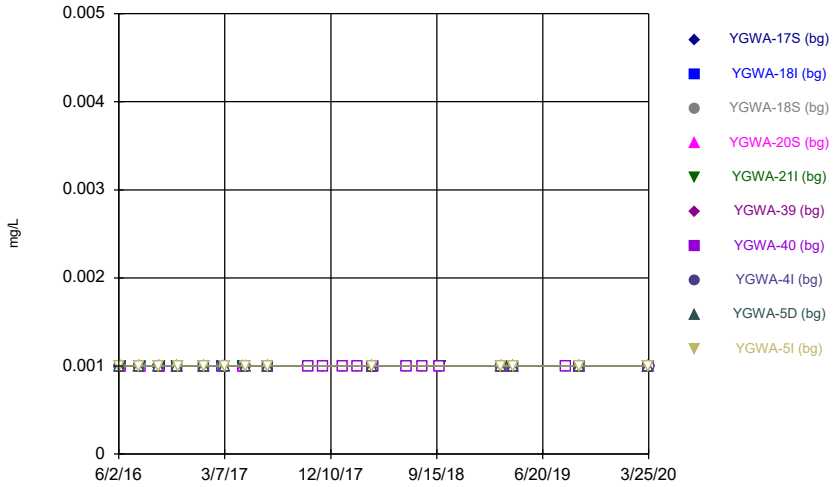
Time Series



Constituent: Sulfate Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

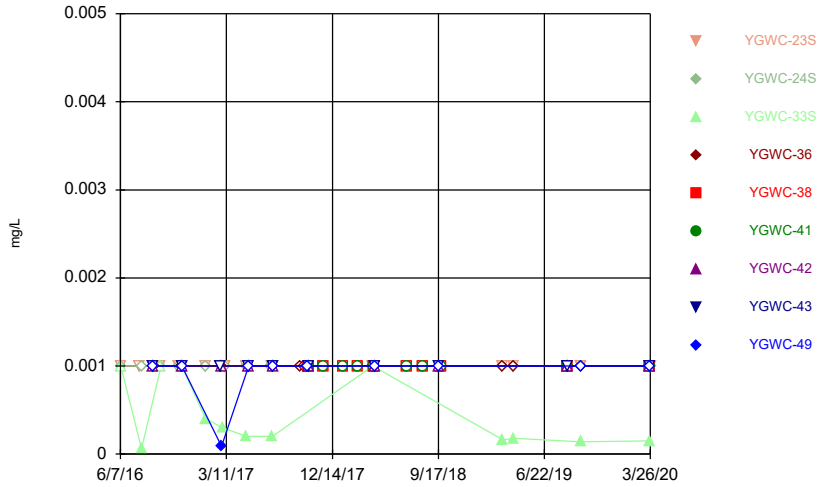
Time Series



Constituent: Thallium Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

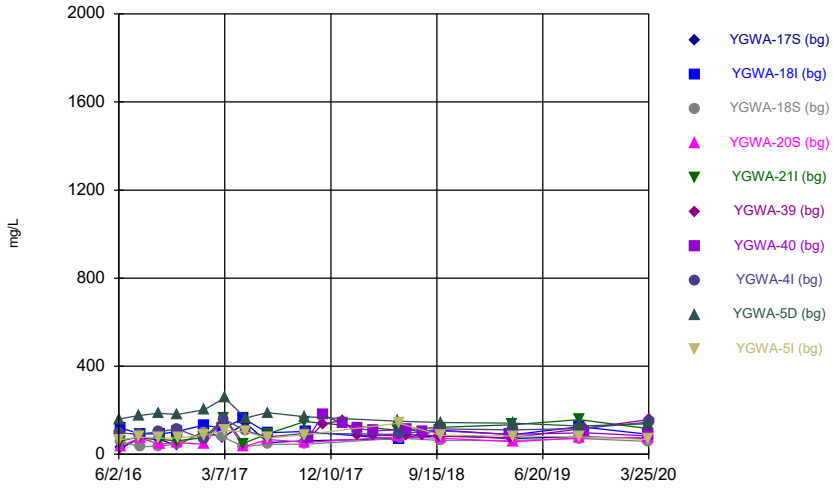
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

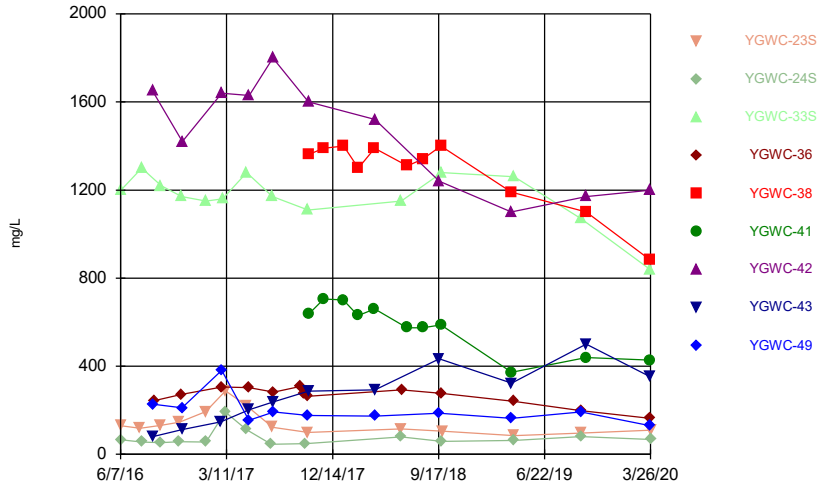
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/5/2020 3:11 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.003	<0.003
6/6/2016		<0.003	<0.003						
6/7/2016	<0.003			<0.003	<0.003				
7/26/2016								0.0003 (J)	<0.003
7/27/2016	<0.003	0.0005 (J)	<0.003	<0.003					
7/28/2016					<0.003				
9/14/2016								<0.003	<0.003
9/16/2016	<0.003		<0.003						
9/19/2016		<0.003		<0.003	0.001 (J)				
11/2/2016				<0.003				<0.003	<0.003
11/3/2016	<0.003	<0.003	<0.003		<0.003				
1/11/2017	<0.003	<0.003	<0.003						
1/12/2017									<0.003
1/13/2017				<0.003	<0.003			<0.003	
3/1/2017		<0.003	<0.003						
3/2/2017	<0.003								
3/6/2017				<0.003	0.0005 (J)			<0.003	
3/7/2017									<0.003
4/26/2017		<0.003	<0.003	<0.003	<0.003				
5/1/2017								<0.003	<0.003
5/2/2017	<0.003								
6/27/2017									<0.003
6/28/2017		<0.003	<0.003						
6/29/2017	<0.003			<0.003	<0.003			<0.003	
10/11/2017						0.0006 (J)			
10/12/2017							<0.003		
11/20/2017						<0.003	<0.003		
1/10/2018							<0.003		
1/11/2018						<0.003			
2/19/2018							<0.003		
2/20/2018						<0.003			
3/28/2018	<0.003	<0.003	<0.003						
3/29/2018				<0.003	<0.003			<0.003	<0.003
4/3/2018						<0.003	<0.003		
6/28/2018						<0.003	<0.003		
8/7/2018						<0.003	<0.003		
9/24/2018						<0.003	<0.003		
3/4/2019								<0.003	<0.003
3/5/2019	<0.003		<0.003	<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				<0.003	<0.003
8/21/2019						<0.003	<0.003		
9/24/2019					0.0035				<0.003
9/25/2019	<0.003			<0.003				<0.003	
9/26/2019		0.00056 (J)	<0.003						
3/24/2020	<0.003	<0.003	<0.003	<0.003	0.0017 (J)		<0.003		<0.003
3/25/2020						0.0014 (J)		<0.003	

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.003								
6/7/2016		<0.003							
6/8/2016			<0.003	<0.003					
7/26/2016	<0.003								
7/28/2016		<0.003							
8/1/2016			<0.003	<0.003					
8/30/2016								<0.003	
8/31/2016									<0.003
9/2/2016					<0.003				
9/14/2016	<0.003								
9/20/2016		<0.003	0.0009 (J)						
9/21/2016				<0.003					
11/4/2016	<0.003								
11/8/2016		<0.003	<0.003						
11/14/2016				<0.003	0.0014 (J)				
11/16/2016								<0.003	<0.003
1/12/2017	<0.003								
1/16/2017		<0.003							
1/17/2017			<0.003	<0.003					
2/24/2017									<0.003
2/27/2017								<0.003	
2/28/2017					0.0004 (J)				
3/1/2017				<0.003					
3/7/2017	<0.003								
3/8/2017			<0.003						
3/9/2017		<0.003							
5/2/2017	<0.003	<0.003	<0.003						
5/3/2017				<0.003					
5/9/2017					<0.003				
5/10/2017								<0.003	<0.003
6/27/2017	<0.003								
7/7/2017			<0.003						
7/10/2017		<0.003		<0.003					
7/11/2017								<0.003	<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	<0.003	<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			
3/29/2018	<0.003								
3/30/2018		<0.003	<0.003	<0.003	<0.003				
4/3/2018						<0.003	<0.003		
4/4/2018								<0.003	<0.003
6/27/2018							<0.003		
6/28/2018						<0.003			
8/7/2018						0.0015 (J)	<0.003		

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
9/20/2018								<0.003	<0.003
9/24/2018						<0.003	<0.003		
3/4/2019	<0.003								
3/5/2019			<0.003						
3/6/2019		<0.003		<0.003	0.0011 (J)				
4/3/2019	<0.003								
4/4/2019		<0.003	<0.003	<0.003	0.0041				
8/21/2019									<0.003
8/22/2019						<0.003	<0.003	<0.003	
9/24/2019	<0.003								
9/26/2019			<0.003	<0.003	0.0065				
9/27/2019		0.00029 (J)							
3/24/2020	<0.003								
3/25/2020				<0.003	0.0011 (J)	0.00063 (J)	<0.003	<0.003	0.00031 (J)
3/26/2020		<0.003	<0.003						

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	<0.003
11/15/2016	<0.003
2/27/2017	0.0011 (J)
5/9/2017	<0.003
7/13/2017	<0.003
10/11/2017	<0.003
4/4/2018	<0.003
9/20/2018	<0.003
9/26/2019	<0.003
3/25/2020	0.00053 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.005	0.00071 (J)
6/6/2016		<0.005	<0.005						
6/7/2016	<0.005			<0.005	<0.005				
7/26/2016								<0.005	0.001 (J)
7/27/2016	<0.005	<0.005	<0.005	<0.005					
7/28/2016					<0.005				
9/14/2016								<0.005	<0.005
9/16/2016	<0.005		<0.005						
9/19/2016		<0.005		<0.005	<0.005				
11/2/2016				<0.005				<0.005	<0.005
11/3/2016	<0.005	<0.005	<0.005		<0.005				
1/11/2017	<0.005	<0.005	<0.005						
1/12/2017									<0.005
1/13/2017				<0.005	<0.005			<0.005	
3/1/2017		<0.005	<0.005						
3/2/2017	<0.005								
3/6/2017				<0.005	0.0017 (J)			<0.005	
3/7/2017									0.0012 (J)
4/26/2017		<0.005	<0.005	<0.005	<0.005				
5/1/2017								<0.005	<0.005
5/2/2017	<0.005								
6/27/2017									0.0019 (J)
6/28/2017		<0.005	<0.005						
6/29/2017	<0.005			<0.005	<0.005			<0.005	
10/11/2017						0.0009 (J)			
10/12/2017							<0.005		
11/20/2017						<0.005	<0.005		
1/10/2018							<0.005		
1/11/2018						<0.005			
2/19/2018							<0.005		
2/20/2018						<0.005			
3/28/2018	<0.005	<0.005	0.00061 (J)						
3/29/2018				<0.005	0.0015 (J)			<0.005	0.0006 (J)
4/3/2018						<0.005	<0.005		
6/5/2018					0.0013 (J)				
6/6/2018				<0.005					0.0013 (J)
6/7/2018		0.00066 (J)						0.00059 (J)	
6/11/2018	<0.005		<0.005						
6/28/2018						<0.005	<0.005		
8/7/2018						<0.005	<0.005		
9/24/2018						<0.005	<0.005		
9/25/2018	<0.005	<0.005	<0.005	<0.005	0.0022 (J)				
9/26/2018								<0.005	0.0014 (J)
3/4/2019								<0.005	<0.005
3/5/2019	<0.005		<0.005	<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				<0.005	<0.005
8/21/2019						0.00058 (J)	<0.005		
9/24/2019					0.0026 (J)				0.00043 (J)
9/25/2019	<0.005			<0.005				<0.005	
9/26/2019		<0.005	<0.005						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
10/9/2019						0.00063 (J)	<0.005		
3/24/2020	<0.005	<0.005	<0.005	<0.005	0.0013 (J)		<0.005		0.00065 (J)
3/25/2020						0.0012 (J)		<0.005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.005								
6/7/2016		<0.005							
6/8/2016			<0.005	0.0033					
7/26/2016	<0.005								
7/28/2016		<0.005							
8/1/2016			<0.005	0.007					
8/30/2016								0.0023 (J)	
8/31/2016									<0.005
9/2/2016					<0.005				
9/14/2016	<0.005								
9/20/2016		<0.005	<0.005						
9/21/2016				0.0054					
11/4/2016	<0.005								
11/8/2016		<0.005	<0.005						
11/14/2016				<0.005	<0.005				
11/16/2016								0.0017 (J)	<0.005
1/12/2017	<0.005								
1/16/2017		<0.005							
1/17/2017			<0.005	0.0027 (J)					
2/24/2017									<0.005
2/27/2017								0.002 (J)	
2/28/2017					0.0006 (J)				
3/1/2017				0.0041 (J)					
3/7/2017	<0.005								
3/8/2017			<0.005						
3/9/2017		<0.005							
5/2/2017	<0.005	<0.005	<0.005						
5/3/2017				0.0037 (J)					
5/9/2017					0.0006 (J)				
5/10/2017								0.0022 (J)	<0.005
6/27/2017	<0.005								
7/7/2017			<0.005						
7/10/2017		<0.005		0.0044 (J)					
7/11/2017								0.003 (J)	<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						0.0023 (J)	0.0011 (J)	0.0031 (J)	<0.005
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)			
3/29/2018	<0.005								
3/30/2018		<0.005	<0.005	0.0049 (J)	<0.005				
4/3/2018						0.0015 (J)	0.00072 (J)		
4/4/2018								0.0023 (J)	<0.005
6/7/2018	<0.005								
6/12/2018		<0.005	<0.005	0.002 (J)					
6/13/2018					0.00066 (J)				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
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)	0.00099 (J)
9/24/2018						0.0017 (J)	0.001 (J)		
9/26/2018	<0.005		<0.005	0.0048 (J)	<0.005				
9/27/2018		<0.005							
3/4/2019	<0.005								
3/5/2019			<0.005						
3/6/2019		<0.005		0.0022 (J)	<0.005				
4/3/2019	<0.005								
4/4/2019		<0.005	<0.005	0.0024 (J)	<0.005				
8/21/2019									<0.005
8/22/2019						0.00055 (J)	0.00036 (J)	0.00089 (J)	
9/24/2019	<0.005								
9/26/2019			<0.005	0.0025 (J)	<0.005				
9/27/2019		<0.005							
10/9/2019						0.00057 (J)	0.00052 (J)	0.00078 (J)	0.00051 (J)
3/24/2020	<0.005								
3/25/2020				0.003 (J)	<0.005	0.00068 (J)	0.001 (J)	0.0013 (J)	0.0007 (J)
3/26/2020		0.0012 (J)	0.0015 (J)						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	<0.005
11/15/2016	<0.005
2/27/2017	<0.005
5/9/2017	<0.005
7/13/2017	<0.005
10/11/2017	0.0006 (J)
4/4/2018	<0.005
9/20/2018	0.001 (J)
9/26/2019	<0.005
3/25/2020	0.00086 (J)

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								0.013	0.0084
6/6/2016		0.028	0.019						
6/7/2016	0.012			0.014	0.0058				
7/26/2016								0.0158	0.01
7/27/2016	0.0126	0.0294	0.0167	0.0141					
7/28/2016					0.0068 (J)				
9/14/2016								0.0143	0.0085 (J)
9/16/2016	0.0127		0.0168						
9/19/2016		0.0247		0.0155	0.0071 (J)				
11/2/2016				0.0157				0.0148	0.0091 (J)
11/3/2016	0.0128	0.0248	0.0159		0.0092 (J)				
1/11/2017	0.0142	0.0266	0.0162						
1/12/2017									0.0089 (J)
1/13/2017				0.0158	0.0105			0.0146	
3/1/2017		0.0275	0.0195						
3/2/2017	0.0155								
3/6/2017				0.0163	0.0105			0.0141	
3/7/2017									0.009 (J)
4/26/2017		0.024	0.0182	0.0177	0.011				
5/1/2017								0.0149	0.0083 (J)
5/2/2017	0.0138								
6/27/2017									0.0074 (J)
6/28/2017		0.0237	0.018						
6/29/2017	0.0128			0.017	0.0109			0.0154	
10/11/2017						0.0092 (J)			
10/12/2017							0.0328		
11/20/2017						0.0081 (J)	0.0671		
1/10/2018							0.0656		
1/11/2018						0.0077 (J)			
2/19/2018							0.0598		
2/20/2018						<0.01			
3/28/2018	0.014	0.024	0.021						
3/29/2018				0.014	<0.01			0.014	<0.01
4/3/2018						<0.01	0.045		
6/5/2018					0.011				
6/6/2018				0.015					0.008 (J)
6/7/2018		0.023						0.014	
6/11/2018	0.013		0.019						
6/28/2018						0.0078 (J)	0.047		
8/7/2018						0.0078 (J)	0.048		
9/24/2018						0.0071 (J)	0.042		
9/25/2018	0.014	0.023	0.019	0.015	0.011				
9/26/2018								0.02	0.0075 (J)
3/4/2019								0.016	0.0077 (J)
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				0.017	0.0087 (J)
8/21/2019						0.015	0.035		
9/24/2019					0.011				0.0075 (J)
9/25/2019	0.015			0.014				0.015	
9/26/2019		0.021	0.017						

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
10/9/2019						0.013	0.036		
3/24/2020	0.015	0.021	0.017	0.015	0.011		0.033		0.0076 (J)
3/25/2020						0.014		0.016	

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	0.019								
6/7/2016		0.045							
6/8/2016			0.02	0.029					
7/26/2016	0.0179								
7/28/2016		0.0511							
8/1/2016			0.02	0.02					
8/30/2016								0.0455	
8/31/2016									0.0065 (J)
9/2/2016					0.0409				
9/14/2016	0.0181								
9/20/2016		0.0561	0.0203						
9/21/2016				0.0183					
11/4/2016	0.0165								
11/8/2016		0.054	0.0191						
11/14/2016				0.0149	0.0182				
11/16/2016								0.0541	0.0092 (J)
1/12/2017	0.0199								
1/16/2017		0.0528							
1/17/2017			0.0192	<0.01					
2/24/2017									0.0144
2/27/2017								0.0573	
2/28/2017					0.023				
3/1/2017				0.0142					
3/7/2017	0.0196								
3/8/2017			0.0189						
3/9/2017		0.0469							
5/2/2017	0.0202	0.0427	0.019						
5/3/2017				0.0151					
5/9/2017					0.0349				
5/10/2017								0.0517	0.0173
6/27/2017	0.0184								
7/7/2017			0.019						
7/10/2017		0.0395		0.0137					
7/11/2017								0.0451	0.0183
7/13/2017					0.0484				
9/22/2017					0.0491				
9/29/2017					0.0452				
10/6/2017					0.0508				
10/12/2017						0.0269	0.0394	0.0429	0.0205
11/20/2017						0.0255			
11/21/2017							0.032		
1/11/2018							0.03		
1/12/2018						0.0236			
2/19/2018							0.0308		
2/20/2018						0.0255			
3/29/2018	0.021								
3/30/2018		0.03	0.02	0.012	0.043				
4/3/2018						0.023	0.03		
4/4/2018								0.041	0.024
6/7/2018	0.019								
6/12/2018		0.024	0.018	0.012					
6/13/2018					0.046				

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/27/2018							0.028		
6/28/2018						0.024			
8/7/2018						0.023	0.027		
9/20/2018								0.038	0.035
9/24/2018						0.021	0.026		
9/26/2018	0.019		0.019	0.012	0.048				
9/27/2018		0.022							
3/4/2019	0.019								
3/5/2019			0.019						
3/6/2019		0.019		0.012	0.041				
4/3/2019	0.023								
4/4/2019		0.019	0.02	0.014	0.042				
8/21/2019									0.03
8/22/2019						0.019	0.021	0.031	
9/24/2019	0.019								
9/26/2019			0.017	0.01	0.025				
9/27/2019		0.018							
10/9/2019						0.019	0.021	0.027	0.04
3/24/2020	0.021								
3/25/2020				0.012	0.025	0.018	0.021	0.03	0.033
3/26/2020		0.027	0.019						

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	0.077
11/15/2016	0.0772
2/27/2017	0.0888
5/9/2017	0.0792
7/13/2017	0.0839
10/11/2017	0.078
4/4/2018	0.074
9/20/2018	0.074
9/26/2019	0.065
3/25/2020	0.071

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.003	<0.003
6/6/2016		<0.003	<0.003						
6/7/2016	<0.003			<0.003	<0.003				
7/26/2016								<0.003	<0.003
7/27/2016	<0.003	<0.003	<0.003	<0.003					
7/28/2016					<0.003				
9/14/2016								<0.003	<0.003
9/16/2016	<0.003		<0.003						
9/19/2016		<0.003		<0.003	<0.003				
11/2/2016				<0.003				<0.003	<0.003
11/3/2016	<0.003	<0.003	<0.003		<0.003				
1/11/2017	<0.003	<0.003	<0.003						
1/12/2017									<0.003
1/13/2017				<0.003	<0.003			<0.003	
3/1/2017		<0.003	<0.003						
3/2/2017	8E-05 (J)								
3/6/2017				<0.003	<0.003			<0.003	
3/7/2017									<0.003
4/26/2017		<0.003	<0.003	<0.003	<0.003				
5/1/2017								<0.003	<0.003
5/2/2017	<0.003								
6/27/2017									<0.003
6/28/2017		<0.003	<0.003						
6/29/2017	<0.003			<0.003	<0.003			<0.003	
10/11/2017						<0.003			
10/12/2017							0.0002 (J)		
11/20/2017						<0.003	0.0003 (J)		
1/10/2018							0.0003 (J)		
1/11/2018						<0.003			
2/19/2018							<0.003		
2/20/2018						<0.003			
3/28/2018	<0.003	<0.003	<0.003						
3/29/2018				<0.003	<0.003			<0.003	<0.003
4/3/2018						<0.003	<0.003		
6/5/2018					<0.003				
6/6/2018				8E-05 (J)					<0.003
6/7/2018		<0.003						<0.003	
6/11/2018	9E-05 (J)		5.7E-05 (J)						
6/28/2018						<0.003	0.00029 (J)		
8/7/2018						<0.003	0.00024 (J)		
9/24/2018						<0.003	0.00019 (J)		
9/25/2018	8.9E-05 (J)	<0.003	8.2E-05 (J)	6.1E-05 (J)	<0.003				
9/26/2018								<0.003	<0.003
3/4/2019								<0.003	<0.003
3/5/2019	9.1E-05 (J)		7.9E-05 (J)	0.00011 (J)	<0.003				
3/6/2019		<0.003							
4/2/2019	9E-05 (J)				<0.003				
4/3/2019		<0.003	7.5E-05 (J)	6.4E-05 (J)				<0.003	<0.003
8/21/2019						<0.003	0.0002 (J)		
9/24/2019					<0.003				<0.003
9/25/2019	8.1E-05 (J)			<0.003				<0.003	
9/26/2019		<0.003	8.4E-05 (J)						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
10/9/2019						<0.003	0.0002 (J)		
3/24/2020	8E-05 (J)	<0.003	8.9E-05 (J)	7.6E-05 (J)	<0.003		0.00022 (J)		<0.003
3/25/2020						<0.003		<0.003	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.003								
6/7/2016		<0.003							
6/8/2016			<0.003	0.012					
7/26/2016	<0.003								
7/28/2016		<0.003							
8/1/2016			0.0001 (J)	0.0146					
8/30/2016								9E-05 (J)	
8/31/2016									<0.003
9/2/2016					0.0003 (J)				
9/14/2016	<0.003								
9/20/2016		0.0001 (J)	0.0001 (J)						
9/21/2016				0.0149					
11/4/2016	<0.003								
11/8/2016		<0.003	<0.003						
11/14/2016				0.0152	9E-05 (J)				
11/16/2016								<0.003	<0.003
1/12/2017	<0.003								
1/16/2017		0.0001 (J)							
1/17/2017			0.0001 (J)	0.0142					
2/24/2017									<0.003
2/27/2017								<0.003	
2/28/2017					0.0001 (J)				
3/1/2017				0.015					
3/7/2017	<0.003								
3/8/2017			0.0001 (J)						
3/9/2017		0.0001 (J)							
5/2/2017	<0.003	9E-05 (J)	0.0001 (J)						
5/3/2017				0.0154					
5/9/2017					0.0002 (J)				
5/10/2017								9E-05 (J)	<0.003
6/27/2017	<0.003								
7/7/2017			0.0001 (J)						
7/10/2017		<0.003		0.0143					
7/11/2017								0.0001 (J)	<0.003
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						0.0057	0.0036	<0.003	0.0001 (J)
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			
3/29/2018	<0.003								
3/30/2018		<0.003	<0.003	0.018	<0.003				
4/3/2018						0.0056	0.0037		
4/4/2018								<0.003	<0.003
6/7/2018	<0.003								
6/12/2018		8.1E-05 (J)	0.00012 (J)	0.016					
6/13/2018					0.00035 (J)				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/27/2018							0.0038		
6/28/2018						0.0059			
8/7/2018						0.0058	0.0037		
9/20/2018								<0.003	0.00029 (J)
9/24/2018						0.0051	0.0032		
9/26/2018	<0.003		0.00014 (J)	0.024	0.00032 (J)				
9/27/2018		9E-05 (J)							
3/4/2019	<0.003								
3/5/2019			0.00016 (J)						
3/6/2019		6.6E-05 (J)		0.023	0.00029 (J)				
4/3/2019	<0.003								
4/4/2019		7.2E-05 (J)	0.00015 (J)	0.025	0.00033 (J)				
8/21/2019									0.0003 (J)
8/22/2019						0.0049	0.0026 (J)	<0.003	
9/24/2019	<0.003								
9/26/2019			0.00014 (J)	0.019	0.00029 (J)				
9/27/2019		7.7E-05 (J)							
10/9/2019						0.0046	0.0026 (J)	<0.003	0.00034 (J)
3/24/2020	<0.003								
3/25/2020				0.017	0.00022 (J)	0.0038	0.0026 (J)	<0.003	0.00034 (J)
3/26/2020		9E-05 (J)	0.00016 (J)						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	0.0001 (J)
11/15/2016	0.0001 (J)
2/27/2017	0.0001 (J)
5/9/2017	0.0001 (J)
7/13/2017	0.0001 (J)
10/11/2017	0.0001 (J)
4/4/2018	<0.003
9/20/2018	0.00011 (J)
9/26/2019	0.00013 (J)
3/25/2020	0.00013 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.1	<0.1
6/6/2016		<0.1	<0.1						
6/7/2016	<0.1			<0.1	<0.1				
7/26/2016								0.0047 (J)	0.0052 (J)
7/27/2016	0.008 (J)	<0.1	0.0059 (J)	<0.1					
7/28/2016					<0.1				
9/14/2016								<0.1	0.0071 (J)
9/16/2016	0.0086 (J)		0.0079 (J)						
9/19/2016		<0.1		<0.1	<0.1				
11/2/2016				<0.1				<0.1	<0.1
11/3/2016	0.0077 (J)	<0.1	0.0082 (J)		<0.1				
1/11/2017	0.0092 (J)	<0.1	0.0096 (J)						
1/12/2017									0.0076 (J)
1/13/2017				<0.1	<0.1			<0.1	
3/1/2017		<0.1	<0.1						
3/2/2017	0.0095 (J)								
3/6/2017				<0.1	<0.1			<0.1	
3/7/2017									0.0089 (J)
4/26/2017		<0.1	0.0091 (J)	<0.1	<0.1				
5/1/2017								<0.1	0.0061 (J)
5/2/2017	<0.1								
6/27/2017									0.0079 (J)
6/28/2017		<0.1	0.0079 (J)						
6/29/2017	0.0074 (J)			<0.1	<0.1			<0.1	
10/3/2017					<0.1				0.0094 (J)
10/4/2017	0.0077 (J)		0.009 (J)	<0.1					
10/5/2017		<0.1						<0.1	
10/11/2017						0.0135 (J)			
10/12/2017							0.0401		
11/20/2017						0.0251 (J)	0.156		
1/10/2018							0.15		
1/11/2018						0.0255 (J)			
2/19/2018							0.146		
2/20/2018						<0.1			
4/3/2018						0.033 (J)	0.12		
6/5/2018					0.0092 (J)				
6/6/2018				0.0049 (J)					0.0098 (J)
6/7/2018		<0.1						0.0045 (J)	
6/11/2018	0.01 (J)		0.0093 (J)						
6/28/2018						0.053	0.16		
8/7/2018						0.024 (J)	0.12		
9/24/2018						0.028 (J)	0.099		
9/25/2018	0.0096 (J)	0.0046 (J)	0.007 (J)	<0.1	0.0054 (J)				
9/26/2018								0.005 (J)	0.01 (J)
3/26/2019							0.096		
3/27/2019						0.017 (J)			
4/2/2019	0.0066 (J)				0.011 (J)				
4/3/2019		<0.1	0.0053 (J)	<0.1				0.0055 (J)	0.0076 (J)
9/24/2019					0.018 (J)				0.01 (J)
9/25/2019	0.0081 (J)			<0.1				<0.1	
9/26/2019		0.0062 (J)	0.0072 (J)						
10/9/2019						0.017 (J)	0.079		

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/24/2020	0.0092 (J)	0.0054 (J)	0.01 (J)	<0.1	0.016 (J)		0.088 (J)		0.011 (J)
3/25/2020						0.043 (J)		0.011 (J)	

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.1								
6/7/2016		0.99							
6/8/2016			<0.1	12					
7/26/2016	<0.1								
7/28/2016		1.09							
8/1/2016			<0.1	9.89					
8/30/2016								24.7	
8/31/2016									0.169
9/2/2016					0.133				
9/14/2016	0.01 (J)								
9/20/2016		1.35	<0.1						
9/21/2016				11.1					
11/4/2016	<0.1								
11/8/2016		1.5	<0.1						
11/14/2016				11	0.287				
11/16/2016								16.4	0.406
1/12/2017	<0.1								
1/16/2017		1.67							
1/17/2017			<0.1	11.8					
2/24/2017									0.725
2/27/2017								17.9	
2/28/2017					0.215				
3/1/2017				8.61					
3/7/2017	<0.1								
3/8/2017			<0.1						
3/9/2017		1.44							
5/2/2017	<0.1	1.2	0.0099 (J)						
5/3/2017				13.4					
5/9/2017					0.233				
5/10/2017								20.4	0.955
6/27/2017	<0.1								
7/7/2017			0.0076 (J)						
7/10/2017		1.12		15.2					
7/11/2017								25.2	0.994
7/13/2017					0.262				
9/22/2017					0.238				
9/29/2017					0.235				
10/3/2017	<0.1								
10/5/2017			<0.1						
10/6/2017					0.256				
10/11/2017		1.09		11.4	0.245				
10/12/2017						19.3	12	20	1.15
11/20/2017						21.8			
11/21/2017							12.1		
1/11/2018							12.8		
1/12/2018						18.7			
2/19/2018							15.2		
2/20/2018						18.6			
4/3/2018						20.9	14.5		
4/4/2018								22.7	1.2
6/7/2018	<0.1								
6/12/2018		0.9	0.018 (J)	9.2					

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/13/2018					0.25				
6/27/2018							14.1		
6/28/2018						22.7			
8/7/2018						19.1	11.9		
9/20/2018								20.3	2.1
9/24/2018						18.4	12.2		
9/26/2018	0.0057 (J)		0.0055 (J)	13.4	0.24				
9/27/2018		0.71							
3/27/2019						16.7		20.3	
3/28/2019							7.1		1.8
4/3/2019	0.0044 (J)								
4/4/2019		0.6	<0.1	15.4	0.22				
9/24/2019	0.0049 (J)								
9/26/2019			0.0068 (J)	9.6	0.13				
9/27/2019		0.58							
10/9/2019						13.5	8.6	16.6	2.7
3/24/2020	0.0068 (J)								
3/25/2020				5.3	0.11	9.3	7.9	15.5	2.4
3/26/2020		0.94	0.033 (J)						

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	0.0113 (J)
11/15/2016	0.0074 (J)
2/27/2017	<0.1
5/9/2017	<0.1
7/13/2017	0.0093 (J)
10/11/2017	<0.1
4/4/2018	0.0041 (J)
9/20/2018	0.0042 (J)
3/28/2019	<0.1
9/26/2019	<0.1
3/25/2020	0.012 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.0025	<0.0025
6/6/2016		<0.0025	<0.0025						
6/7/2016	<0.0025			<0.0025	<0.0025				
7/26/2016								<0.0025	<0.0025
7/27/2016	<0.0025	<0.0025	<0.0025	<0.0025					
7/28/2016					<0.0025				
9/14/2016								<0.0025	<0.0025
9/16/2016	<0.0025		<0.0025						
9/19/2016		<0.0025		<0.0025	<0.0025				
11/2/2016				<0.0025				<0.0025	<0.0025
11/3/2016	<0.0025	<0.0025	<0.0025		<0.0025				
1/11/2017	0.0001 (J)	<0.0025	0.0001 (J)						
1/12/2017									<0.0025
1/13/2017				<0.0025	<0.0025			<0.0025	
3/1/2017		<0.0025	<0.0025						
3/2/2017	<0.0025								
3/6/2017				<0.0025	<0.0025			<0.0025	
3/7/2017									<0.0025
4/26/2017		<0.0025	<0.0025	<0.0025	<0.0025				
5/1/2017								<0.0025	<0.0025
5/2/2017	<0.0025								
6/27/2017									<0.0025
6/28/2017		<0.0025	<0.0025						
6/29/2017	<0.0025			<0.0025	<0.0025			<0.0025	
10/11/2017						<0.0025			
10/12/2017							<0.0025		
11/20/2017						<0.0025	<0.0025		
1/10/2018							<0.0025		
1/11/2018						<0.0025			
2/19/2018							<0.0025		
2/20/2018						<0.0025			
3/28/2018	<0.0025	<0.0025	<0.0025						
3/29/2018				<0.0025	<0.0025			<0.0025	<0.0025
4/3/2018						<0.0025	<0.0025		
6/5/2018					<0.0025				
6/6/2018				<0.0025					<0.0025
6/7/2018		<0.0025						<0.0025	
6/11/2018	<0.0025		<0.0025						
6/28/2018						<0.0025	<0.0025		
8/7/2018						<0.0025	<0.0025		
9/24/2018						<0.0025	<0.0025		
9/25/2018	<0.0025	<0.0025	<0.0025	<0.0025	9.6E-05 (J)				
9/26/2018								<0.0025	<0.0025
3/4/2019								<0.0025	<0.0025
3/5/2019	<0.0025		<0.0025	<0.0025	<0.0025				
3/6/2019		<0.0025							
4/2/2019	<0.0025				<0.0025				
4/3/2019		<0.0025	<0.0025	<0.0025				<0.0025	<0.0025
8/21/2019						<0.0025	<0.0025		
9/24/2019					<0.0025				<0.0025
9/25/2019	<0.0025			<0.0025				<0.0025	
9/26/2019		<0.0025	<0.0025						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
10/9/2019						<0.0025	<0.0025		
3/24/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025		<0.0025
3/25/2020						<0.0025		<0.0025	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.0025								
6/7/2016		<0.0025							
6/8/2016			<0.0025	0.00098 (J)					
7/26/2016	<0.0025								
7/28/2016		<0.0025							
8/1/2016			<0.0025	0.0014					
8/30/2016								<0.0025	
8/31/2016									<0.0025
9/2/2016					<0.0025				
9/14/2016	<0.0025								
9/20/2016		<0.0025	<0.0025						
9/21/2016				0.0017					
11/4/2016	<0.0025								
11/8/2016		7E-05 (J)	<0.0025						
11/14/2016				0.0027	9E-05 (J)				
11/16/2016								<0.0025	<0.0025
1/12/2017	9E-05 (J)								
1/16/2017		<0.0025							
1/17/2017			<0.0025	0.0033					
2/24/2017									<0.0025
2/27/2017								<0.0025	
2/28/2017					0.0001 (J)				
3/1/2017				0.0031					
3/7/2017	<0.0025								
3/8/2017			<0.0025						
3/9/2017		<0.0025							
5/2/2017	<0.0025	<0.0025	<0.0025						
5/3/2017				0.0031					
5/9/2017					0.0002 (J)				
5/10/2017								0.0002 (J)	<0.0025
6/27/2017	<0.0025								
7/7/2017			<0.0025						
7/10/2017		<0.0025		0.0029					
7/11/2017								0.0005 (J)	<0.0025
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						0.003	0.0002 (J)	0.0006 (J)	<0.0025
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							<0.0025		
2/20/2018						0.0029			
3/29/2018	<0.0025								
3/30/2018		<0.0025	<0.0025	0.0028	<0.0025				
4/3/2018						0.0027	<0.0025		
4/4/2018								<0.0025	<0.0025
6/7/2018	<0.0025								
6/12/2018		<0.0025	<0.0025	0.0029					
6/13/2018					0.00019 (J)				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
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)	<0.0025
9/24/2018						0.0027	0.00021 (J)		
9/26/2018	<0.0025		<0.0025	0.0028	0.00018 (J)				
9/27/2018		<0.0025							
3/4/2019	<0.0025								
3/5/2019			<0.0025						
3/6/2019		<0.0025		0.003	0.00015 (J)				
4/3/2019	<0.0025								
4/4/2019		<0.0025	<0.0025	0.0035	0.00019 (J)				
8/21/2019									<0.0025
8/22/2019						0.0023 (J)	0.00015 (J)	0.00017 (J)	
9/24/2019	<0.0025								
9/26/2019			<0.0025	0.0023 (J)	0.00017 (J)				
9/27/2019		<0.0025							
10/9/2019						0.0021 (J)	0.00017 (J)	0.00025 (J)	<0.0025
3/24/2020	<0.0025								
3/25/2020				0.002 (J)	0.00019 (J)	0.0018 (J)	0.00018 (J)	0.00021 (J)	<0.0025
3/26/2020		<0.0025	<0.0025						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	<0.0025
11/15/2016	<0.0025
2/27/2017	7E-05 (J)
5/9/2017	<0.0025
7/13/2017	<0.0025
10/11/2017	<0.0025
4/4/2018	<0.0025
9/20/2018	<0.0025
9/26/2019	<0.0025
3/25/2020	<0.0025

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								8.8	33
6/6/2016		6.2	1.4						
6/7/2016	2.2			2.3	3.7				
7/26/2016								7.69	32.3
7/27/2016	2	4.73	1.19	2.08					
7/28/2016					3.15				
9/14/2016								8.49	31
9/16/2016	1.97		1.5						
9/19/2016		4.76		1.97	3.17				
11/2/2016				2.13				7.83	30.9
11/3/2016	1.99	5.25	1.31		3.4				
1/11/2017	2.28	4.74	1.25						
1/12/2017									35.7
1/13/2017				2.45	4.98			8.08	
3/1/2017		5.37	1.26						
3/2/2017	2.15								
3/6/2017				2.48	6.28			8.64	
3/7/2017									32.7
4/26/2017		4.28	1.05	2.3	6.65				
5/1/2017								13.4	37
5/2/2017	1.95								
6/27/2017									36.5
6/28/2017		4.95	1.06						
6/29/2017	2.02			2.54	6.04			8.81	
10/3/2017					8.28				30.9
10/4/2017	2.03		1.1	2.25					
10/5/2017		5.28						9.29	
10/11/2017						2.74			
10/12/2017							2.9		
11/20/2017						1.81	10.4		
1/10/2018							10.2		
1/11/2018						1.54			
2/19/2018							<25		
2/20/2018						1.71			
4/3/2018						1.4	6.3		
6/5/2018					9.1				
6/6/2018				2.3					26.2
6/7/2018		4.8						8.2	
6/11/2018	2.1		1.4						
6/28/2018						1.4	6.7		
8/7/2018						1.2	6.3		
9/24/2018						1.1	5.7		
9/25/2018	2.1	4.6	1	2.3	10.4 (J)				
9/26/2018								9.5 (J)	25.8
3/26/2019							5.6		
3/27/2019						1.5			
4/2/2019	2.5				8.8				
4/3/2019		5.3	1.2	2.9				8.4	24.7 (J)
9/24/2019					7.7				25.8
9/25/2019	2.6			2.4				9.5	
9/26/2019		4.9	1.1						
10/9/2019						2.4	4.9		

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/24/2020	2.7	5.3	1	2.6	6		4.8		26.1
3/25/2020						2.7		10.5	

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	2.4								
6/7/2016		9.6							
6/8/2016			1.9	130					
7/26/2016	2.12								
7/28/2016		7.87							
8/1/2016			1.83	136					
8/30/2016								133	
8/31/2016									3.4
9/2/2016					11.2				
9/14/2016	2.18								
9/20/2016		9.28	1.78						
9/21/2016				131					
11/4/2016	2.17 (J)								
11/8/2016		8.6	1.77						
11/14/2016				116	7.79				
11/16/2016								125	3.79
1/12/2017	2.37								
1/16/2017		8.85							
1/17/2017			1.7	126					
2/24/2017									6.42
2/27/2017								139	
2/28/2017					8.37				
3/1/2017				125					
3/7/2017	2.34								
3/8/2017			1.77						
3/9/2017		8.4							
5/2/2017	2.17	12.9	1.57						
5/3/2017				129					
5/9/2017					13.9				
5/10/2017								130	7.9
6/27/2017	2.13								
7/7/2017			1.8						
7/10/2017		8.09		139					
7/11/2017								172	6.71
7/13/2017					16.6				
9/22/2017					18.4				
9/29/2017					16.1				
10/3/2017	2.15								
10/5/2017			1.7						
10/6/2017					16.6				
10/11/2017		6.36		125	18.1				
10/12/2017						190	44.5	144	7.05
11/20/2017						184			
11/21/2017							44.4		
1/11/2018							43.9		
1/12/2018						178			
2/19/2018							45.3		
2/20/2018						184			
4/3/2018						174	42.7		
4/4/2018								137	8.6
6/7/2018	2.3								
6/12/2018		4.7	1.8	129					

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/13/2018					18.7 (J)				
6/27/2018							42.2		
6/28/2018						190			
8/7/2018						176	40.7		
9/20/2018								108	15.9 (J)
9/24/2018						172	38.5		
9/26/2018	2.3		1.7	144	19.8 (J)				
9/27/2018		4.1							
3/27/2019						155		109	
3/28/2019							26		8.9
4/3/2019	2.8								
4/4/2019		3.7	1.9	163	16.9 (J)				
9/24/2019	2.5								
9/26/2019			1.7	117	11.7				
9/27/2019		3.7							
10/9/2019						133	27.6	92	18.2
3/24/2020	2.5								
3/25/2020				97.8	10.6	124	29.6	107	12.1
3/26/2020		5.6	1.7						

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	13.9
11/15/2016	13.5
2/27/2017	12.5
5/9/2017	14.4
7/13/2017	14.1
10/11/2017	12.4
4/4/2018	<25
9/20/2018	12 (J)
3/28/2019	11.3 (J)
9/26/2019	12.1
3/25/2020	13.2

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								3.7	7.2
6/6/2016		6.8	6.4						
6/7/2016	4.5			1.9	2.8				
7/26/2016								3.6	6.6
7/27/2016	4.5	6.7	6.2	1.9					
7/28/2016					2.6				
9/14/2016								3.4	6.6
9/16/2016	4.5		6.1						
9/19/2016		7		1.9	2.4				
11/2/2016				2.6				4.5	7.6
11/3/2016	5.4	7.5	7.4		2.9				
1/11/2017	4.7	6.5	6.1						
1/12/2017									6.8
1/13/2017				2.3	2.5			4.2	
3/1/2017		6.9	6						
3/2/2017	4.8								
3/6/2017				1.9	2.1			3.6	
3/7/2017									6.8
4/26/2017		7	6.5	2	2.1				
5/1/2017								4.3	7.2
5/2/2017	4.6								
6/27/2017									7
6/28/2017		7	6.4						
6/29/2017	4.5			2.6	2.8			4.2	
10/3/2017					2.2				6.5
10/4/2017	4.7		6.8	2.6					
10/5/2017		7						4.7	
10/11/2017						2.4			
10/12/2017							3.8		
11/20/2017						1.8	4.4		
1/10/2018							4.6		
1/11/2018						1.6			
2/19/2018							4.6		
2/20/2018						2			
4/3/2018						3.3	5.9		
6/5/2018					1.7				
6/6/2018				2.7					4.7
6/7/2018		6.8						4.4	
6/11/2018	4.9		6.8						
6/28/2018						2.1	5		
8/7/2018						1.2	4.3		
9/24/2018						1.3	4.9		
9/25/2018	5.6	7.9	7.8	3.6	2.2				
9/26/2018								4.8	4.8
3/26/2019							4.4		
3/27/2019						1.4			
4/2/2019	4.8				2.5				
4/3/2019		6.9	6.3	3.1				4.3	4
9/24/2019					3.1				3.7
9/25/2019	5.7			2.8				4.5	
9/26/2019		7	7.1						
10/9/2019						2.1	5.1		

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/24/2020	5	7	6.8	2.7	2.8		4.7		3.5
3/25/2020						1.9		3.9	

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	4.3								
6/7/2016		2.9							
6/8/2016			5.9	7.6					
7/26/2016	4.4								
7/28/2016		3.5							
8/1/2016			5.3	5.7					
8/30/2016								4.4	
8/31/2016									1.5
9/2/2016					6.3				
9/14/2016	3.8								
9/20/2016		2.4	5.5						
9/21/2016				5.5					
11/4/2016	4.8								
11/8/2016		2.8	6.4						
11/14/2016				6.4	6.7				
11/16/2016								4.7	1.7
1/12/2017	3.8								
1/16/2017		1.8							
1/17/2017			5.5	5.3					
2/24/2017									1.5
2/27/2017								4.7	
2/28/2017					5.4				
3/1/2017				5.5					
3/7/2017	4.5								
3/8/2017			5.4						
3/9/2017		1.7							
5/2/2017	4.6	1.8	5.7						
5/3/2017				6.1					
5/9/2017					5.7				
5/10/2017								4.4	1.2
6/27/2017	4.3								
7/7/2017			5.7						
7/10/2017		1.9		5.6					
7/11/2017								4.7	1.5
7/13/2017					5.4				
9/22/2017					6.9				
9/29/2017					5.5				
10/3/2017	4.2								
10/5/2017			6						
10/6/2017					5.5				
10/11/2017		2.4		5.8	6.4				
10/12/2017						6	3.1	4.3	1.6
11/20/2017						6.9			
11/21/2017							4.2		
1/11/2018							3.8		
1/12/2018						6.6			
2/19/2018							3.5		
2/20/2018						6.2			
4/3/2018						6.9	4.4		
4/4/2018								3.7	1.8
6/7/2018	4.5								
6/12/2018		1.8	6.2	5.9					

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/13/2018					5.6				
6/27/2018							3.6		
6/28/2018						6.4			
8/7/2018						5.5	3.3		
9/20/2018								3.8	1.9
9/24/2018						5.9	3.3		
9/26/2018	5.1		6.9	4.7	6				
9/27/2018		2							
3/27/2019						6.2		3.9	
3/28/2019							3.2		1.8
4/3/2019	4.2								
4/4/2019		1.7	5.9	5.8	5.4				
9/24/2019	4.5								
9/26/2019			6.5	4.5	7.1				
9/27/2019		1.7							
10/9/2019						5	3.3	4.1	2.3
3/24/2020	4.3								
3/25/2020				3.8	6.3	4	2.7	3.2	1.8
3/26/2020		1.6	5.4						

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	5.3
11/15/2016	5.8
2/27/2017	4.6
5/9/2017	5.3
7/13/2017	4.7
10/11/2017	5.8
4/4/2018	4.3
9/20/2018	4.8
3/28/2019	4.4
9/26/2019	5
3/25/2020	4.1

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.01	<0.01
6/6/2016		0.0012 (J)	<0.01						
6/7/2016	<0.01			<0.01	<0.01				
7/26/2016								<0.01	<0.01
7/27/2016	0.0008 (J)	0.0007 (J)	0.0006 (J)	0.0005 (J)					
7/28/2016					<0.01				
9/14/2016								<0.01	<0.01
9/16/2016	<0.01		<0.01						
9/19/2016		<0.01		<0.01	<0.01				
11/2/2016				<0.01				<0.01	<0.01
11/3/2016	<0.01	<0.01	<0.01		<0.01				
1/11/2017	<0.01	<0.01	<0.01						
1/12/2017									<0.01
1/13/2017				<0.01	<0.01			<0.01	
3/1/2017		0.0012 (J)	<0.01						
3/2/2017	0.001 (J)								
3/6/2017				<0.01	<0.01			<0.01	
3/7/2017									<0.01
4/26/2017		0.0005 (J)	0.0003 (J)	0.0007 (J)	<0.01				
5/1/2017								<0.01	0.0004 (J)
5/2/2017	0.0007 (J)								
6/27/2017									<0.01
6/28/2017		0.0006 (J)	<0.01						
6/29/2017	0.0006 (J)			0.0005 (J)	<0.01			<0.01	
10/11/2017						<0.01			
10/12/2017							<0.01		
11/20/2017						<0.01	<0.01		
1/10/2018							<0.01		
1/11/2018						<0.01			
2/19/2018							<0.01		
2/20/2018						<0.01			
3/28/2018	<0.01	<0.01	<0.01						
3/29/2018				<0.01	<0.01			<0.01	<0.01
4/3/2018						<0.01	<0.01		
6/28/2018						<0.01	<0.01		
8/7/2018						<0.01	<0.01		
9/24/2018						<0.01	<0.01		
3/4/2019								<0.01	<0.01
3/5/2019	<0.01		<0.01	<0.01	<0.01				
3/6/2019		<0.01							
8/21/2019						<0.01	0.00053 (J)		
10/9/2019						<0.01	0.0012 (J)		
3/24/2020	0.00087 (J)	0.00095 (J)	0.0011 (J)	0.00077 (J)	<0.01		0.00055 (J)		<0.01
3/25/2020						<0.01		0.00058 (J)	

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.01								
6/7/2016		<0.01							
6/8/2016			<0.01	<0.01					
7/26/2016	<0.01								
7/28/2016		0.0008 (J)							
8/1/2016			<0.01	0.0021 (J)					
8/30/2016								<0.01	
8/31/2016									<0.01
9/2/2016					<0.01				
9/14/2016	<0.01								
9/20/2016		<0.01	<0.01						
9/21/2016				0.0021 (J)					
11/4/2016	<0.01								
11/8/2016		<0.01	<0.01						
11/14/2016				<0.01	0.0035				
11/16/2016								<0.01	<0.01
1/12/2017	<0.01								
1/16/2017		<0.01							
1/17/2017			<0.01	<0.01					
2/24/2017									<0.01
2/27/2017								<0.01	
2/28/2017					<0.01				
3/1/2017				0.0014 (J)					
3/7/2017	<0.01								
3/8/2017			<0.01						
3/9/2017		<0.01							
5/2/2017	<0.01	0.0007 (J)	0.0011 (J)						
5/3/2017				0.0009 (J)					
5/9/2017					<0.01				
5/10/2017								0.0006 (J)	0.0005 (J)
6/27/2017	<0.01								
7/7/2017			<0.01						
7/10/2017		<0.01		<0.01					
7/11/2017								<0.01	<0.01
7/13/2017					<0.01				
9/22/2017					<0.01				
9/29/2017					<0.01				
10/6/2017					<0.01				
10/12/2017						0.0005 (J)	<0.01	<0.01	<0.01
11/20/2017						<0.01			
11/21/2017							<0.01		
1/11/2018							<0.01		
1/12/2018						<0.01			
2/19/2018							<0.01		
2/20/2018						<0.01			
3/29/2018	<0.01								
3/30/2018		<0.01	<0.01	<0.01	<0.01				
4/3/2018						<0.01	<0.01		
4/4/2018								<0.01	<0.01
6/27/2018							<0.01		
6/28/2018						<0.01			
8/7/2018						<0.01	<0.01		

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
9/20/2018								<0.01	<0.01
9/24/2018						<0.01	<0.01		
3/4/2019	<0.01								
3/5/2019			<0.01						
3/6/2019		<0.01		<0.01	<0.01				
8/21/2019									0.00062 (J)
8/22/2019						<0.01	<0.01	<0.01	
10/9/2019						<0.01	<0.01	0.00043 (J)	0.00074 (J)
3/24/2020	0.0014 (J)								
3/25/2020				0.0012 (J)	0.00074 (J)	0.00065 (J)	0.00039 (J)	0.0013 (J)	<0.01
3/26/2020		0.0019 (J)	0.00094 (J)						

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	0.0013 (J)
11/15/2016	0.0014 (J)
2/27/2017	0.0016 (J)
5/9/2017	0.0017 (J)
7/13/2017	0.0019 (J)
10/11/2017	0.0014 (J)
4/4/2018	<0.01
9/20/2018	0.0017 (J)
3/25/2020	0.0019 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								0.00082 (J)	<0.005
6/6/2016		<0.005	0.00061 (J)						
6/7/2016	<0.005			<0.005	0.0056				
7/26/2016								0.0012 (J)	<0.005
7/27/2016	<0.005	<0.005	0.0004 (J)	<0.005					
7/28/2016					0.0032 (J)				
9/14/2016								0.0006 (J)	<0.005
9/16/2016	<0.005		0.0008 (J)						
9/19/2016		<0.005		<0.005	0.0047 (J)				
11/2/2016				<0.005				<0.005	<0.005
11/3/2016	<0.005	<0.005	<0.005		0.013				
1/11/2017	<0.005	<0.005	<0.005						
1/12/2017									<0.005
1/13/2017				<0.005	0.011			0.0029 (J)	
3/1/2017		<0.005	<0.005						
3/2/2017	<0.005								
3/6/2017				<0.005	0.011			0.0006 (J)	
3/7/2017									<0.005
4/26/2017		<0.005	<0.005	<0.005	0.009 (J)				
5/1/2017								<0.005	<0.005
5/2/2017	<0.005								
6/27/2017									<0.005
6/28/2017		<0.005	<0.005						
6/29/2017	<0.005			<0.005	0.0093 (J)			0.0005 (J)	
10/11/2017						<0.005			
10/12/2017							<0.005		
11/20/2017						<0.005	<0.005		
1/10/2018							<0.005		
1/11/2018						<0.005			
2/19/2018							<0.005		
2/20/2018						<0.005			
3/28/2018	<0.005	<0.005	<0.005						
3/29/2018				<0.005	<0.005			<0.005	<0.005
4/3/2018						<0.005	<0.005		
6/5/2018					0.0041 (J)				
6/6/2018				<0.005					<0.005
6/7/2018		<0.005						0.00058 (J)	
6/11/2018	<0.005		<0.005						
6/28/2018						<0.005	<0.005		
8/7/2018						<0.005	<0.005		
9/24/2018						<0.005	<0.005		
9/25/2018	<0.005	<0.005	<0.005	<0.005	0.0044 (J)				
9/26/2018								<0.005	<0.005
3/4/2019								<0.005	<0.005
3/5/2019	<0.005		<0.005	<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				0.00083 (J)	<0.005
8/21/2019						0.00034 (J)	<0.005		
9/24/2019					0.0032 (J)				<0.005
9/25/2019	<0.005			<0.005				<0.005	
9/26/2019		<0.005	<0.005						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
10/9/2019						<0.005	<0.005		
3/24/2020	<0.005	<0.005	<0.005	<0.005	0.0061		<0.005		0.00035 (J)
3/25/2020						0.00034 (J)		0.00056 (J)	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.005								
6/7/2016		<0.005							
6/8/2016			<0.005	0.037					
7/26/2016	<0.005								
7/28/2016		<0.005							
8/1/2016			<0.005	0.0297					
8/30/2016								0.0025 (J)	
8/31/2016									<0.005
9/2/2016					0.0006 (J)				
9/14/2016	<0.005								
9/20/2016		<0.005	<0.005						
9/21/2016				0.0237					
11/4/2016	<0.005								
11/8/2016		<0.005	<0.005						
11/14/2016				0.0144	<0.005				
11/16/2016								0.002 (J)	<0.005
1/12/2017	<0.005								
1/16/2017		<0.005							
1/17/2017			<0.005	0.0095 (J)					
2/24/2017									<0.005
2/27/2017								0.0021 (J)	
2/28/2017					<0.005				
3/1/2017				0.0125					
3/7/2017	<0.005								
3/8/2017			<0.005						
3/9/2017		<0.005							
5/2/2017	<0.005	<0.005	<0.005						
5/3/2017				0.0151					
5/9/2017					<0.005				
5/10/2017								0.0021 (J)	<0.005
6/27/2017	<0.005								
7/7/2017			<0.005						
7/10/2017		<0.005		0.0121					
7/11/2017								0.0014 (J)	<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						<0.005	0.0011 (J)	0.0017 (J)	0.0006 (J)
11/20/2017						<0.005			
11/21/2017							0.0003 (J)		
1/11/2018							0.0003 (J)		
1/12/2018						<0.005			
2/19/2018							<0.005		
2/20/2018						<0.005			
3/29/2018	<0.005								
3/30/2018		<0.005	<0.005	0.013	<0.005				
4/3/2018						<0.005	<0.005		
4/4/2018								<0.005	<0.005
6/7/2018	<0.005								
6/12/2018		<0.005	<0.005	0.014					
6/13/2018					<0.005				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/27/2018							0.00069 (J)		
6/28/2018						<0.005			
8/7/2018						<0.005	<0.005		
9/20/2018								0.003 (J)	0.0034 (J)
9/24/2018						<0.005	<0.005		
9/26/2018	<0.005		<0.005	0.023	<0.005				
9/27/2018		<0.005							
3/4/2019	<0.005								
3/5/2019			<0.005						
3/6/2019		<0.005		0.028	<0.005				
4/3/2019	<0.005								
4/4/2019		<0.005	<0.005	0.031	<0.005				
8/21/2019									0.0026 (J)
8/22/2019						<0.005	<0.005	0.0019 (J)	
9/24/2019	<0.005								
9/26/2019			<0.005	0.023	0.00048 (J)				
9/27/2019		<0.005							
10/9/2019						<0.005	<0.005	0.0019 (J)	0.0023 (J)
3/24/2020	<0.005								
3/25/2020				0.02	0.00038 (J)	<0.005	<0.005	0.0018 (J)	0.0016 (J)
3/26/2020		<0.005	<0.005						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	<0.005
11/15/2016	0.0006 (J)
2/27/2017	0.0008 (J)
5/9/2017	<0.005
7/13/2017	0.0005 (J)
10/11/2017	0.0006 (J)
4/4/2018	<0.005
9/20/2018	<0.005
9/26/2019	<0.005
3/25/2020	<0.005

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								0.721	5.11
6/6/2016		0.0804 (U)	0.301 (U)						
6/7/2016	0.158 (U)			0.0191 (U)	0.347				
7/26/2016								1.26	6.92
7/27/2016	0.0354 (U)	0.206 (U)	0.196 (U)	0.541 (U)					
7/28/2016					0.815 (U)				
9/14/2016								0.901 (U)	3.96
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)				1.09 (U)	4.53
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)						
1/12/2017									4.43
1/13/2017				0.296 (U)	0.72 (U)			1.19	
3/1/2017		0.395 (U)	0.202 (U)						
3/2/2017	0.746 (U)								
3/6/2017				0.518 (U)	0.518 (U)			0.669 (U)	
3/7/2017									4.8
4/26/2017		0.507 (U)	0.264 (U)	0.282 (U)	1.13 (U)				
5/1/2017								0.803 (U)	4.16
5/2/2017	0.111 (U)								
6/27/2017									2.8
6/28/2017		0.892	0.636 (U)						
6/29/2017	0.576 (U)			1.12	0.841 (U)			1.35	
10/11/2017						0.586 (U)			
10/12/2017							1.49		
11/20/2017						0.816 (U)	0.918 (U)		
1/10/2018							1.05		
1/11/2018						0.841 (U)			
2/19/2018							2.05		
2/20/2018						1.58			
3/28/2018	0.438 (U)	0.92 (U)	0.56 (U)						
3/29/2018				1.73	1.91			0.703 (U)	3.42
4/3/2018						0.385 (U)	0.68 (U)		
6/5/2018					1.39				
6/6/2018				0.694 (U)					3.99
6/7/2018		0.668 (U)						0.628 (U)	
6/11/2018	0.901 (U)		0.649 (U)						
6/28/2018						0.283 (U)	1.28		
8/7/2018						0.332 (U)	1.16		
9/24/2018						0.767 (U)	0.965 (U)		
9/25/2018	0.68 (U)	0.141 (U)	0.574 (U)	0.772 (U)	1.62				
9/26/2018								0.756 (U)	2.73
3/4/2019								1.21 (U)	4.43
3/5/2019	0.272 (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				1.07 (U)	4.79
8/21/2019						1.01 (U)	1.24 (U)		
9/24/2019					1.35				4.06
9/25/2019	0.412 (U)			1.18 (U)				1.86	
9/26/2019		0.386 (U)	0.222 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
10/8/2019						1.02 (U)	0.866 (U)		
3/24/2020	0.534 (U)	0.632 (U)	0.262 (U)	1.88	1.24 (U)		1.27 (U)		3.52
3/25/2020						0.377 (U)		0.766 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	0.614								
6/7/2016		0.303 (U)							
6/8/2016			1.06	0.384 (U)					
7/26/2016	1.47								
7/28/2016		0.386 (U)							
8/1/2016			0.467 (U)	1.55					
8/30/2016								2.99	
8/31/2016									0.926 (U)
9/2/2016					0.873 (U)				
9/14/2016	1.27								
9/20/2016		1.47	0.853 (U)						
9/21/2016				2.36					
9/22/2016					0.667 (U)				
9/29/2016					1.63				
10/6/2016					0.641 (U)				
11/4/2016	0.434 (U)								
11/8/2016		0.22 (U)	0.433 (U)						
11/14/2016				0.851 (U)	0.0451 (U)				
11/16/2016								4.01	0.773 (U)
1/12/2017	0.202 (U)								
1/16/2017		0.147 (U)							
1/17/2017			0.0759 (U)	1.41 (U)					
2/24/2017									0.661 (U)
2/27/2017								2.5	
2/28/2017					1.34 (U)				
3/1/2017				1.13					
3/7/2017	0.0674 (U)								
3/8/2017			0.479 (U)						
3/9/2017		0.0892 (U)							
5/2/2017	0.444 (U)	0.149 (U)	0.506 (U)						
5/3/2017				0.584 (U)					
5/9/2017					0.309 (U)				
5/10/2017								2.55	1.27
6/27/2017	0.77 (U)								
7/7/2017			0.713 (U)						
7/10/2017		0.815 (U)		0.46 (U)					
7/11/2017								3.94	1.02
7/13/2017					0.618 (U)				
10/12/2017						1.24	0.641 (U)	3.57	1.58
11/20/2017						0.342 (U)			
11/21/2017							2.01		
1/11/2018							0.919 (U)		
1/12/2018						1.04			
2/19/2018							1.82		
2/20/2018						1.6 (U)			
3/29/2018	0.648 (U)								
3/30/2018		0.659 (U)	0.409 (U)	0.607 (U)	0.721 (U)				
4/3/2018						0.726 (U)	0.911 (U)		
4/4/2018								1.9	1.71
6/7/2018	0.745 (U)								
6/12/2018		1.03 (U)	0.728 (U)	0.633 (U)					
6/13/2018					1.04 (U)				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/27/2018							0.429 (U)		
6/28/2018						1.06 (U)			
8/7/2018						1.21	0.579 (U)		
9/20/2018								1.94	2.8
9/24/2018						1.52	1.39		
9/26/2018	0.377 (U)		0.981	1.38	0.604 (U)				
9/27/2018		1.06 (U)							
3/4/2019	1 (U)								
3/5/2019			0.837 (U)						
3/6/2019		0.736 (U)		0.97 (U)	0.919 (U)				
4/3/2019	0.43 (U)								
4/4/2019		0.474 (U)		1.14	1.05 (U)				
4/9/2019			0.502 (U)						
8/21/2019									3.16
8/22/2019						1.97	2.03	1.59	
9/24/2019	0.699 (U)								
9/26/2019			0.964 (U)	1.08 (U)	0.979 (U)				
9/27/2019		0.684 (U)							
10/8/2019						0.751 (U)	0.609 (U)	0.995 (U)	3.65
3/25/2020				1.44	1.22 (U)	0.321 (U)	0.568 (U)	1.17 (U)	3.04
3/26/2020		0.281 (U)	0.511 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	1.2
11/15/2016	0.645 (U)
2/27/2017	0.244 (U)
5/9/2017	0.519 (U)
7/13/2017	0.5 (U)
10/11/2017	1.41
4/4/2018	0.442 (U)
9/20/2018	1.14 (U)
9/26/2019	1.16 (U)
3/25/2020	1.2 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.3	0.11 (J)
6/6/2016		<0.3	<0.3						
6/7/2016	<0.3			<0.3	<0.3				
7/26/2016								<0.3	0.05 (J)
7/27/2016	<0.3	<0.3	<0.3	<0.3					
7/28/2016					0.02 (J)				
9/14/2016								<0.3	0.04 (J)
9/16/2016	<0.3		<0.3						
9/19/2016		<0.3		<0.3	0.02 (J)				
11/2/2016				<0.3				<0.3	<0.3
11/3/2016	<0.3	<0.3	<0.3		<0.3				
1/11/2017	<0.3	<0.3	<0.3						
1/12/2017									0.04 (J)
1/13/2017				<0.3	<0.3			<0.3	
3/1/2017		<0.3	<0.3						
3/2/2017	<0.3								
3/6/2017				<0.3	<0.3			<0.3	
3/7/2017									<0.3
4/26/2017		<0.3	<0.3	<0.3	0.04 (J)				
5/1/2017								<0.3	<0.3
5/2/2017	<0.3								
6/27/2017									<0.3
6/28/2017		<0.3	<0.3						
6/29/2017	<0.3			<0.3	<0.3			<0.3	
10/3/2017					<0.3				<0.3
10/4/2017	<0.3		<0.3	<0.3					
10/5/2017		<0.3						<0.3	
10/11/2017						<0.3			
10/12/2017							<0.3		
11/20/2017						<0.3	<0.3		
1/10/2018							<0.3		
1/11/2018						<0.3			
2/19/2018							<0.3		
2/20/2018						0.23			
3/28/2018	<0.3	<0.3	<0.3						
3/29/2018				<0.3	<0.3			<0.3	<0.3
4/3/2018						<0.3	<0.3		
6/5/2018					0.13 (J)				
6/6/2018				<0.3					0.15 (J)
6/7/2018		<0.3						<0.3	
6/11/2018	<0.3		<0.3						
6/28/2018						<0.3	<0.3		
8/7/2018						0.048 (J)	<0.3		
9/24/2018						<0.3	<0.3		
9/25/2018	<0.3	<0.3	<0.3	<0.3	0 (J)				
9/26/2018								<0.3	<0.3
3/4/2019								<0.3	0.19 (J)
3/5/2019	<0.3		<0.3	<0.3	0.32				
3/6/2019		<0.3							
3/26/2019							<0.3		
3/27/2019						<0.3			
4/2/2019	<0.3				0.12 (J)				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
4/3/2019		<0.3	<0.3	<0.3				<0.3	0.047 (J)
8/21/2019						<0.3	<0.3		
9/24/2019					0.15 (J)				0.05 (J)
9/25/2019	<0.3			<0.3				<0.3	
9/26/2019		<0.3	<0.3						
10/9/2019						<0.3	<0.3		
3/24/2020	<0.3	<0.3	<0.3	<0.3	0.081 (J)		<0.3		<0.3
3/25/2020						<0.3		<0.3	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.3								
6/7/2016		<0.3							
6/8/2016			<0.3	0.34					
7/26/2016	<0.3								
7/28/2016		0.03 (J)							
8/1/2016			<0.3	0.24 (J)					
8/30/2016								0.02 (J)	
8/31/2016									0.12 (J)
9/2/2016					0.05 (J)				
9/14/2016	<0.3								
9/20/2016		<0.3	<0.3						
9/21/2016				0.22 (J)					
11/4/2016	<0.3								
11/8/2016		<0.3	<0.3						
11/14/2016				0.35	0.18 (J)				
11/16/2016								0.07 (J)	0.2 (J)
1/12/2017	<0.3								
1/16/2017		<0.3							
1/17/2017			<0.3	0.22 (J)					
2/24/2017									0.21 (J)
2/27/2017								0.06 (J)	
2/28/2017					0.09 (J)				
3/1/2017				0.33					
3/7/2017	<0.3								
3/8/2017			<0.3						
3/9/2017		<0.3							
5/2/2017	<0.3	<0.3	<0.3						
5/3/2017				0.2 (J)					
5/9/2017					0.009 (J)				
5/10/2017								<0.3	0.04 (J)
6/27/2017	<0.3								
7/7/2017			<0.3						
7/10/2017		<0.3		0.57					
7/11/2017								<0.3	0.2 (J)
7/13/2017					<0.3				
9/22/2017					0.09 (J)				
9/29/2017					<0.3				
10/3/2017	<0.3								
10/5/2017			<0.3						
10/6/2017					<0.3				
10/11/2017		<0.3		<0.3	<0.3				
10/12/2017						<0.3	<0.3	<0.3	0.1 (J)
11/20/2017						0.2 (J)			
11/21/2017							<0.3		
1/11/2018							<0.3		
1/12/2018						0.21 (J)			
2/19/2018							<0.3		
2/20/2018						<0.3			
3/29/2018	<0.3								
3/30/2018		<0.3	<0.3	1.4	<0.3				
4/3/2018						0.41	<0.3		
4/4/2018								<0.3	<0.3

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/7/2018	<0.3								
6/12/2018		<0.3	<0.3	0.18 (J)					
6/13/2018					<0.3				
6/27/2018							<0.3		
6/28/2018						0.43			
8/7/2018						<0.3	0.11 (J)		
9/20/2018								0.041 (J)	<0.3
9/24/2018						0.034 (J)	<0.3		
9/26/2018	<0.3		<0.3	0.07 (J)	<0.3				
9/27/2018		<0.3							
3/4/2019	<0.3								
3/5/2019			<0.3						
3/6/2019		<0.3		0.49	<0.3				
3/27/2019						0.24 (J)		<0.3	
3/28/2019							0.1 (J)		0.078 (J)
4/3/2019	<0.3								
4/4/2019		0.049 (J)	0.033 (J)	0.57	0.043 (J)				
8/21/2019									0.062 (J)
8/22/2019						<0.3	<0.3	<0.3	
9/24/2019	<0.3								
9/26/2019			0.098 (J)	0.48	0.094 (J)				
9/27/2019		0.12 (J)							
10/9/2019						<0.3	<0.3	<0.3	<0.3
3/24/2020	<0.3								
3/25/2020				0.25 (J)	<0.3	<0.3	<0.3	<0.3	0.073 (J)
3/26/2020		<0.3	<0.3						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	0.09 (J)
11/15/2016	0.16 (J)
2/27/2017	0.06 (J)
5/9/2017	0.05 (J)
7/13/2017	<0.3
10/11/2017	0.14 (J)
4/4/2018	<0.3
9/20/2018	<0.3
3/28/2019	<0.3
9/26/2019	0.09 (J)
3/25/2020	<0.3

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.005	<0.005
6/6/2016		<0.005	<0.005						
6/7/2016	<0.005			<0.005	<0.005				
7/26/2016								<0.005	<0.005
7/27/2016	<0.005	<0.005	<0.005	<0.005					
7/28/2016					<0.005				
9/14/2016								<0.005	<0.005
9/16/2016	<0.005		<0.005						
9/19/2016		<0.005		<0.005	<0.005				
11/2/2016				0.0013 (J)				<0.005	<0.005
11/3/2016	<0.005	<0.005	<0.005		<0.005				
1/11/2017	<0.005	<0.005	<0.005						
1/12/2017									<0.005
1/13/2017				<0.005	<0.005			<0.005	
3/1/2017		<0.005	<0.005						
3/2/2017	8E-05 (J)								
3/6/2017				<0.005	<0.005			<0.005	
3/7/2017									0.0001 (J)
4/26/2017		<0.005	<0.005	<0.005	<0.005				
5/1/2017								<0.005	<0.005
5/2/2017	<0.005								
6/27/2017									<0.005
6/28/2017		<0.005	0.0001 (J)						
6/29/2017	8E-05 (J)			<0.005	<0.005			<0.005	
10/11/2017						0.0001 (J)			
10/12/2017							9E-05 (J)		
11/20/2017						<0.005	<0.005		
1/10/2018							<0.005		
1/11/2018						0.0002 (J)			
2/19/2018							<0.005		
2/20/2018						<0.005			
3/28/2018	<0.005	<0.005	<0.005						
3/29/2018				<0.005	<0.005			<0.005	<0.005
4/3/2018						<0.005	<0.005		
6/28/2018						<0.005	<0.005		
8/7/2018						<0.005	<0.005		
9/24/2018						<0.005	<0.005		
3/4/2019								<0.005	<0.005
3/5/2019	<0.005		<0.005	<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				<0.005	<0.005
8/21/2019						<0.005	<0.005		
9/24/2019					<0.005				<0.005
9/25/2019	<0.005			<0.005				<0.005	
9/26/2019		<0.005	<0.005						
10/9/2019						<0.005	<0.005		
3/24/2020	6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)	0.00011 (J)	<0.005		<0.005		5.4E-05 (J)
3/25/2020						5.1E-05 (J)		<0.005	

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.005								
6/7/2016		0.00044 (J)							
6/8/2016			<0.005	<0.005					
7/26/2016	<0.005								
7/28/2016		<0.005							
8/1/2016			<0.005	0.0005 (J)					
8/30/2016								<0.005	
8/31/2016									<0.005
9/2/2016					0.0017 (J)				
9/14/2016	<0.005								
9/20/2016		<0.005	<0.005						
9/21/2016				0.0006 (J)					
11/4/2016	<0.005								
11/8/2016		<0.005	<0.005						
11/14/2016				0.0012 (J)	0.0002 (J)				
11/16/2016								0.0002 (J)	<0.005
1/12/2017	<0.005								
1/16/2017		<0.005							
1/17/2017			<0.005	0.002 (J)					
2/24/2017									<0.005
2/27/2017								<0.005	
2/28/2017					0.0003 (J)				
3/1/2017				0.002 (J)					
3/7/2017	7E-05 (J)								
3/8/2017			<0.005						
3/9/2017		<0.005							
5/2/2017	<0.005	<0.005	<0.005						
5/3/2017				<0.005					
5/9/2017					0.0004 (J)				
5/10/2017								9E-05 (J)	8E-05 (J)
6/27/2017	<0.005								
7/7/2017			<0.005						
7/10/2017		<0.005		0.0018 (J)					
7/11/2017								<0.005	<0.005
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						0.0001 (J)	<0.005	<0.005	<0.005
11/20/2017						0.0001 (J)			
11/21/2017							<0.005		
1/11/2018							7E-05 (J)		
1/12/2018						0.0001 (J)			
2/19/2018							<0.005		
2/20/2018						<0.005			
3/29/2018	<0.005								
3/30/2018		<0.005	<0.005	<0.005	<0.005				
4/3/2018						<0.005	<0.005		
4/4/2018								<0.005	<0.005
6/27/2018							0.0011 (J)		
6/28/2018						<0.005			
8/7/2018						<0.005	<0.005		

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
9/20/2018								<0.005	<0.005
9/24/2018						<0.005	<0.005		
3/4/2019	<0.005								
3/5/2019			<0.005						
3/6/2019		<0.005		0.0012 (J)	<0.005				
4/3/2019	<0.005								
4/4/2019		<0.005	<0.005	0.0014 (J)	0.00037 (J)				
8/21/2019									<0.005
8/22/2019						<0.005	6.7E-05 (J)	<0.005	
9/24/2019	9E-05 (J)								
9/26/2019			<0.005	0.00087 (J)	0.00023 (J)				
9/27/2019		0.00013 (J)							
10/9/2019						<0.005	0.00012 (J)	<0.005	<0.005
3/24/2020	6.8E-05 (J)								
3/25/2020				0.00083 (J)	0.0001 (J)	<0.005	<0.005	4.7E-05 (J)	7.5E-05 (J)
3/26/2020		<0.005	5.3E-05 (J)						

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	<0.005
11/15/2016	<0.005
2/27/2017	<0.005
5/9/2017	<0.005
7/13/2017	<0.005
10/11/2017	<0.005
4/4/2018	<0.005
9/20/2018	<0.005
9/26/2019	<0.005
3/25/2020	5.9E-05 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								0.013	0.0049 (J)
6/6/2016		0.0088	0.015						
6/7/2016	<0.03			<0.03	0.0055				
7/26/2016								0.0123 (J)	0.0063 (J)
7/27/2016	<0.03	0.0087 (J)	0.0049 (J)	<0.03					
7/28/2016					0.0045 (J)				
9/14/2016								0.0137 (J)	0.0058 (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				0.0136 (J)	0.0053 (J)
11/3/2016	<0.03	<0.03	0.0021 (J)		<0.03				
1/11/2017	0.0035 (J)	0.0052 (J)	0.0025 (J)						
1/12/2017									0.0054 (J)
1/13/2017				<0.03	0.0062 (J)			0.0121 (J)	
3/1/2017		0.0053 (J)	0.0029 (J)						
3/2/2017	<0.03								
3/6/2017				<0.03	0.0059 (J)			0.0143 (J)	
3/7/2017									0.0056 (J)
4/26/2017		0.0041 (J)	0.0019 (J)	<0.03	0.0054 (J)				
5/1/2017								0.0132 (J)	0.0031 (J)
5/2/2017	<0.03								
6/27/2017									0.0018 (J)
6/28/2017		0.0039 (J)	0.0016 (J)						
6/29/2017	<0.03			<0.03	0.0047 (J)			0.0145 (J)	
10/11/2017						0.0018 (J)			
10/12/2017							<0.03		
11/20/2017						0.0018 (J)	<0.03		
1/10/2018							<0.03		
1/11/2018						0.0019 (J)			
2/19/2018							<0.03		
2/20/2018						<0.03			
3/28/2018	<0.03	0.0041 (J)	0.0024 (J)						
3/29/2018				<0.03	0.0062 (J)			0.014 (J)	0.0058 (J)
4/3/2018						0.0022 (J)	<0.03		
6/5/2018					0.0061 (J)				
6/6/2018				<0.03					0.0068 (J)
6/7/2018		0.0032 (J)						0.013 (J)	
6/11/2018	<0.03		0.0014 (J)						
6/28/2018						0.0026 (J)	<0.03		
8/7/2018						0.0024 (J)	<0.03		
9/24/2018						0.0022 (J)	<0.03		
9/25/2018	<0.03	0.0036 (J)	0.0016 (J)	<0.03	0.0062 (J)				
9/26/2018								0.014 (J)	0.0065 (J)
3/4/2019								0.015 (J)	0.0065 (J)
3/5/2019	<0.03		0.0031 (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				0.014 (J)	0.007 (J)
8/21/2019						0.0035 (J)	<0.03		
9/24/2019					0.0068 (J)				0.0065 (J)
9/25/2019	<0.03			<0.03				0.014 (J)	
9/26/2019		0.0032 (J)	0.0029 (J)						

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
10/9/2019						0.0036 (J)	<0.03		
3/24/2020	0.0034 (J)	0.0033 (J)	0.0035 (J)	<0.03	0.0064 (J)		<0.03		0.0064 (J)
3/25/2020						0.0049 (J)		0.014 (J)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.03								
6/7/2016		<0.03							
6/8/2016			<0.03	0.0099					
7/26/2016	0.0027 (J)								
7/28/2016		0.0019 (J)							
8/1/2016			<0.03	0.0142 (J)					
8/30/2016								0.0257 (J)	
8/31/2016									0.006 (J)
9/2/2016					0.0029 (J)				
9/14/2016	0.0029 (J)								
9/20/2016		0.0021 (J)	<0.03						
9/21/2016				0.0145 (J)					
11/4/2016	<0.03								
11/8/2016		0.0024 (J)	<0.03						
11/14/2016				0.0253 (J)	0.0044 (J)				
11/16/2016								0.0221 (J)	0.0095 (J)
1/12/2017	0.0032 (J)								
1/16/2017		0.0022 (J)							
1/17/2017			<0.03	0.0256 (J)					
2/24/2017									0.0104 (J)
2/27/2017								0.0208 (J)	
2/28/2017					0.0038 (J)				
3/1/2017				0.0219 (J)					
3/7/2017	0.0035 (J)								
3/8/2017			<0.03						
3/9/2017		0.0025 (J)							
5/2/2017	0.0031 (J)	0.0019 (J)	<0.03						
5/3/2017				0.0217 (J)					
5/9/2017					0.0057 (J)				
5/10/2017								0.0316 (J)	0.0123 (J)
6/27/2017	0.0029 (J)								
7/7/2017			<0.03						
7/10/2017		0.0018 (J)		0.0214 (J)					
7/11/2017								0.0281 (J)	0.0131 (J)
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						0.0095 (J)	0.004 (J)	0.0331 (J)	0.013 (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)			
3/29/2018	0.0034 (J)								
3/30/2018		0.0039 (J)	<0.03	0.024 (J)	0.0061 (J)				
4/3/2018						0.0097 (J)	0.0047 (J)		
4/4/2018								0.037 (J)	0.016 (J)
6/7/2018	0.0032 (J)								
6/12/2018		0.0017 (J)	<0.03	0.023 (J)					
6/13/2018					0.0065 (J)				

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/27/2018							0.0042 (J)		
6/28/2018						0.0093 (J)			
8/7/2018						0.0092 (J)	0.0038 (J)		
9/20/2018								0.049 (J)	0.019 (J)
9/24/2018						0.0083 (J)	0.0037 (J)		
9/26/2018	0.0032 (J)		<0.03	0.034 (J)	0.0063 (J)				
9/27/2018		0.0017 (J)							
3/4/2019	0.0032 (J)								
3/5/2019			<0.03						
3/6/2019		0.0025 (J)		0.033 (J)	0.0057 (J)				
4/3/2019	0.0035 (J)								
4/4/2019		0.0018 (J)	<0.03	0.035 (J)	0.0058 (J)				
8/21/2019									0.015 (J)
8/22/2019						0.0082 (J)	0.0035 (J)	0.047	
9/24/2019	0.0031 (J)								
9/26/2019			<0.03	0.028 (J)	0.0041 (J)				
9/27/2019		0.0017 (J)							
10/9/2019						0.0081 (J)	0.0032 (J)	0.037	0.018 (J)
3/24/2020	0.0033 (J)								
3/25/2020				0.029 (J)	0.0032 (J)	0.0081 (J)	0.0029 (J)	0.045	0.016 (J)
3/26/2020		0.0021 (J)	<0.03						

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	0.0034 (J)
11/15/2016	0.0044 (J)
2/27/2017	0.0036 (J)
5/9/2017	0.0038 (J)
7/13/2017	0.0036 (J)
10/11/2017	0.0036 (J)
4/4/2018	0.0039 (J)
9/20/2018	0.0036 (J)
9/26/2019	0.0036 (J)
3/25/2020	0.0037 (J)

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.0005	<0.0005
6/6/2016		<0.0005	<0.0005						
6/7/2016	9.5E-05 (J)			9.6E-05 (J)	9.6E-05 (J)				
7/26/2016								<0.0005	<0.0005
7/27/2016	<0.0005	<0.0005	<0.0005	<0.0005					
7/28/2016					<0.0005				
9/14/2016								<0.0005	<0.0005
9/16/2016	<0.0005		<0.0005						
9/19/2016		<0.0005		<0.0005	<0.0005				
11/2/2016				<0.0005				<0.0005	<0.0005
11/3/2016	<0.0005	<0.0005	<0.0005		<0.0005				
1/11/2017	<0.0005	<0.0005	<0.0005						
1/12/2017									<0.0005
1/13/2017				<0.0005	<0.0005			<0.0005	
3/1/2017		<0.0005	<0.0005						
3/2/2017	<0.0005								
3/6/2017				<0.0005	<0.0005			<0.0005	
3/7/2017									<0.0005
4/26/2017		<0.0005	<0.0005	<0.0005	<0.0005				
5/1/2017								<0.0005	<0.0005
5/2/2017	<0.0005								
6/27/2017									<0.0005
6/28/2017		<0.0005	<0.0005						
6/29/2017	<0.0005			<0.0005	<0.0005			<0.0005	
10/11/2017						<0.0005			
10/12/2017							<0.0005		
11/20/2017						7E-05 (J)	8E-05 (J)		
1/10/2018							<0.0005		
1/11/2018						<0.0005			
2/19/2018							<0.0005		
2/20/2018						<0.0005			
3/28/2018	<0.0005	<0.0005	<0.0005						
3/29/2018				<0.0005	<0.0005			<0.0005	<0.0005
4/3/2018						<0.0005	<0.0005		
6/28/2018						<0.0005	3.6E-05 (J)		
8/7/2018						<0.0005	<0.0005		
9/24/2018						<0.0005	<0.0005		
9/25/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
9/26/2018								<0.0005	<0.0005
3/4/2019								<0.0005	<0.0005
3/5/2019	<0.0005		<0.0005	<0.0005	<0.0005				
3/6/2019		<0.0005							
8/21/2019						<0.0005	<0.0005		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.0005								
6/7/2016		9.8E-05 (J)							
6/8/2016			<0.0005	<0.0005					
7/26/2016	<0.0005								
7/28/2016		<0.0005							
8/1/2016			<0.0005	<0.0005					
8/30/2016								<0.0005	
8/31/2016									<0.0005
9/2/2016					<0.0005				
9/14/2016	<0.0005								
9/20/2016		<0.0005	<0.0005						
9/21/2016				<0.0005					
11/4/2016	<0.0005								
11/8/2016		<0.0005	<0.0005						
11/14/2016				<0.0005	<0.0005				
11/16/2016								<0.0005	<0.0005
1/12/2017	<0.0005								
1/16/2017		<0.0005							
1/17/2017			<0.0005	<0.0005					
2/24/2017									<0.0005
2/27/2017								<0.0005	
2/28/2017					<0.0005				
3/1/2017				<0.0005					
3/7/2017	<0.0005								
3/8/2017			<0.0005						
3/9/2017		<0.0005							
5/2/2017	<0.0005	<0.0005	<0.0005						
5/3/2017				<0.0005					
5/9/2017					<0.0005				
5/10/2017								<0.0005	<0.0005
6/27/2017	<0.0005								
7/7/2017			<0.0005						
7/10/2017		<0.0005		<0.0005					
7/11/2017								<0.0005	<0.0005
7/13/2017					<0.0005				
9/22/2017					<0.0005				
9/29/2017					<0.0005				
10/6/2017					<0.0005				
10/12/2017						<0.0005	<0.0005	<0.0005	<0.0005
11/20/2017						8E-05 (J)			
11/21/2017							6E-05 (J)		
1/11/2018							<0.0005		
1/12/2018						<0.0005			
2/19/2018							<0.0005		
2/20/2018						<0.0005			
3/29/2018	<0.0005								
3/30/2018		<0.0005	<0.0005	<0.0005	<0.0005				
4/3/2018						<0.0005	<0.0005		
4/4/2018								<0.0005	<0.0005
6/27/2018							<0.0005		
6/28/2018						3.7E-05 (J)			
8/7/2018						<0.0005	<0.0005		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
9/20/2018								4.8E-05 (J)	5.2E-05 (J)
9/24/2018						<0.0005	<0.0005		
9/26/2018	<0.0005		<0.0005	<0.0005	<0.0005				
9/27/2018		<0.0005							
3/4/2019	<0.0005								
3/5/2019			<0.0005						
3/6/2019		<0.0005		<0.0005	<0.0005				
8/21/2019									<0.0005
8/22/2019						<0.0005	<0.0005	<0.0005	

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	<0.0005
11/15/2016	<0.0005
2/27/2017	<0.0005
5/9/2017	<0.0005
7/13/2017	<0.0005
10/11/2017	<0.0005
4/4/2018	<0.0005
9/20/2018	6.1E-05 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.01	0.0035 (J)
6/6/2016		<0.01	<0.01						
6/7/2016	<0.01			<0.01	<0.01				
7/26/2016								<0.01	0.0042 (J)
7/27/2016	<0.01	<0.01	<0.01	<0.01					
7/28/2016					<0.01				
9/14/2016								<0.01	0.0041 (J)
9/16/2016	<0.01		<0.01						
9/19/2016		<0.01		<0.01	<0.01				
11/2/2016				<0.01				<0.01	0.0039 (J)
11/3/2016	<0.01	<0.01	<0.01		<0.01				
1/11/2017	<0.01	<0.01	<0.01						
1/12/2017									0.0041 (J)
1/13/2017				<0.01	<0.01			<0.01	
3/1/2017		<0.01	<0.01						
3/2/2017	<0.01								
3/6/2017				<0.01	0.0007 (J)			<0.01	
3/7/2017									0.0047 (J)
4/26/2017		<0.01	<0.01	<0.01	0.0008 (J)				
5/1/2017								<0.01	0.0045 (J)
5/2/2017	<0.01								
6/27/2017									0.004 (J)
6/28/2017		<0.01	<0.01						
6/29/2017	<0.01			<0.01	<0.01			<0.01	
10/11/2017						0.0094 (J)			
10/12/2017							<0.01		
11/20/2017						0.0081 (J)	<0.01		
1/10/2018							<0.01		
1/11/2018						0.0074 (J)			
2/19/2018							<0.01		
2/20/2018						<0.01			
3/28/2018	<0.01	<0.01	<0.01						
3/29/2018				<0.01	<0.01			<0.01	<0.01
4/3/2018						0.006 (J)	<0.01		
6/28/2018						0.005 (J)	<0.01		
8/7/2018						0.0045 (J)	<0.01		
9/24/2018						0.0035 (J)	<0.01		
3/4/2019								<0.01	<0.01
3/5/2019	<0.01		<0.01	<0.01	<0.01				
3/6/2019		<0.01							
8/21/2019						0.0021 (J)	<0.01		
10/9/2019						0.0018 (J)	<0.01		
3/24/2020	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01		0.0011 (J)
3/25/2020						0.002 (J)		<0.01	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.01								
6/7/2016		<0.01							
6/8/2016			<0.01	0.00095 (J)					
7/26/2016	<0.01								
7/28/2016		<0.01							
8/1/2016			<0.01	0.0005 (J)					
8/30/2016								0.0019 (J)	
8/31/2016									0.0022 (J)
9/2/2016					0.0027 (J)				
9/14/2016	<0.01								
9/20/2016		<0.01	<0.01						
9/21/2016				<0.01					
11/4/2016	<0.01								
11/8/2016		<0.01	<0.01						
11/14/2016				<0.01	0.0071 (J)				
11/16/2016								0.0027 (J)	<0.01
1/12/2017	<0.01								
1/16/2017		<0.01							
1/17/2017			<0.01	<0.01					
2/24/2017									<0.01
2/27/2017								0.0031 (J)	
2/28/2017					0.0038 (J)				
3/1/2017				<0.01					
3/7/2017	<0.01								
3/8/2017			<0.01						
3/9/2017		<0.01							
5/2/2017	<0.01	<0.01	<0.01						
5/3/2017				<0.01					
5/9/2017					0.0025 (J)				
5/10/2017								0.0017 (J)	<0.01
6/27/2017	<0.01								
7/7/2017			<0.01						
7/10/2017		<0.01		<0.01					
7/11/2017								0.0014 (J)	<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						<0.01	<0.01	<0.01	<0.01
11/20/2017						<0.01			
11/21/2017							<0.01		
1/11/2018							<0.01		
1/12/2018						<0.01			
2/19/2018							<0.01		
2/20/2018						<0.01			
3/29/2018	<0.01								
3/30/2018		<0.01	<0.01	<0.01	<0.01				
4/3/2018						<0.01	<0.01		
4/4/2018								<0.01	<0.01
6/27/2018							<0.01		
6/28/2018						<0.01			
8/7/2018						<0.01	<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
9/20/2018								<0.01	<0.01
9/24/2018						<0.01	<0.01		
3/4/2019	<0.01								
3/5/2019			<0.01						
3/6/2019		<0.01		<0.01	<0.01				
8/21/2019									0.0012 (J)
8/22/2019						<0.01	<0.01	<0.01	
10/9/2019						<0.01	<0.01	<0.01	0.0012 (J)
3/24/2020	<0.01								
3/25/2020				<0.01	<0.01	<0.01	<0.01	<0.01	0.0015 (J)
3/26/2020		<0.01	<0.01						

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	<0.01
11/15/2016	<0.01
2/27/2017	0.0007 (J)
5/9/2017	<0.01
7/13/2017	<0.01
10/11/2017	<0.01
4/4/2018	<0.01
9/20/2018	<0.01
3/25/2020	<0.01

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								6.36	7.67
6/6/2016		6.17	5.71						
6/7/2016	5.62			5.77	6.1				
7/26/2016								6.22	7.66
7/27/2016	5.59	6.14	5.46	5.79					
7/28/2016					6.12				
9/14/2016								6.23	7.6
9/16/2016	5.58								
9/19/2016		6.04	5.59	5.73	6.12				
11/2/2016				5.67				6.08	7.35
11/3/2016	5.59	5.97	5.39		6.07				
1/11/2017	5.59	6.05	5.48						
1/12/2017									7.49
1/13/2017				5.79	6.41			6.19	
3/1/2017		5.94	5.41						
3/2/2017	5.54								
3/6/2017				5.63	6.34			6.2	
3/7/2017									7.43
4/26/2017		5.99	5.4	5.66	6.32				
5/1/2017								6.21	7.22
5/2/2017	5.47								
6/27/2017									7.32
6/28/2017		6	5.36						
6/29/2017	5.56			5.85	6.47			6.21	
10/3/2017					6.56				7.48
10/4/2017	5.57		5.32	5.83					
10/5/2017		6.11						6.16	
10/11/2017						6.4			
10/12/2017							5.43		
11/20/2017						6.33	5.1		
1/10/2018							4.97		
1/11/2018						6.29			
2/19/2018							5.6		
2/20/2018						7.22			
3/28/2018	5.59	6.1	5.34						
3/29/2018				5.93	6.75			6.09	7.02
4/3/2018						6.87	5.84		
6/5/2018					6.09				
6/6/2018				5.86					7.43
6/7/2018		5.98						6.12	
6/11/2018	5.58		5.28						
6/28/2018						6.18	5.24		
8/7/2018						6.08	5.18		
9/24/2018						5.81	5.14		
9/25/2018	5.59	5.81	4.86	5.84	6.67				
9/26/2018								5.84	7.13
3/4/2019								6.18	7.46
3/5/2019	5.48		5.26	6.07	7.22				
3/6/2019		5.99							
3/26/2019							5.3		
3/27/2019						5.84			
4/2/2019	5.74				6.94				

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
4/3/2019		6.29	5.47	5.71				6.43	7.11
8/21/2019						5.96	5.26		
9/24/2019					6.87				6.93
9/25/2019	5.49			5.86				6.2	
9/26/2019		6.04	5.2						
10/9/2019						5.81	5.22		
3/24/2020	5.57	5.98	5.33	5.86	6.35		5.29		7.34
3/25/2020						5.78		6.26	

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	5.75								
6/7/2016		5.57							
6/8/2016			5.65	5.07					
6/28/2016				4.87					
7/26/2016	5.72								
7/28/2016		5.6							
8/1/2016			5.47	4.62					
8/30/2016								5.64	
8/31/2016									7.27
9/2/2016					5.84				
9/14/2016	5.74								
9/20/2016		5.53	5.61						
9/21/2016				4.63					
11/4/2016	5.61								
11/8/2016		5.53	5.55	4.58					
11/10/2016				4.42					
11/14/2016				4.35	6.28				
11/16/2016								6.21	6.79
1/12/2017	5.71								
1/16/2017		5.59							
1/17/2017			5.53	4.16					
2/24/2017									6.39
2/27/2017								6.09	
2/28/2017					5.99				
3/1/2017				4.17					
3/7/2017	5.66								
3/8/2017			5.62						
3/9/2017		5.56							
5/2/2017	5.65	5.61	5.46						
5/3/2017				4.19					
5/9/2017					6.3				
5/10/2017								5.79	6.5
6/27/2017	5.7								
7/7/2017			5.81						
7/10/2017		5.68		4.02					
7/11/2017								5.45	6.32
7/13/2017					5.57				
9/22/2017					5.5				
9/29/2017					5.58				
10/3/2017	5.79								
10/5/2017			5.45						
10/6/2017					5.51				
10/11/2017		5.46		4.01	5.47				
10/12/2017						4.85	4.94	5.48	5.97
11/20/2017						4.87			
11/21/2017							4.69		
1/11/2018							4.73		
1/12/2018						4.78			
2/19/2018							4.96		
2/20/2018						5.1			
3/29/2018	5.63								
3/30/2018		5.73	5.64	4.05	5.51				

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
4/3/2018						4.76	5.31		
4/4/2018								5.93	6.41
6/7/2018	5.63								
6/12/2018		5.63	5.64	4.03					
6/13/2018					5.5				
6/27/2018							4.78		
6/28/2018						4.75			
8/7/2018						4.72	4.77		
9/20/2018								5.63	5.69
9/24/2018						4.67	4.78		
9/26/2018	5.63		5.61	3.97	5.53				
9/27/2018		5.47							
3/4/2019	5.75								
3/5/2019			5.72						
3/6/2019		5.84		3.27	5.21				
3/27/2019						4.79		5.57	
3/28/2019							5		5.96
4/3/2019	5.63								
4/4/2019		5.64	5.66	3.88	5.74				
8/21/2019									5.84
8/22/2019						4.81	4.89	5.61	
9/24/2019	5.6								
9/26/2019			5.52	3.74	5.51				
9/27/2019		5.77							
10/9/2019						4.8	4.86	5.5	5.78
3/24/2020	5.81								
3/25/2020				3.86	5.49	4.89	4.87	5.53	5.79
3/26/2020		5.69	5.51						

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	5.78
11/15/2016	5.81
2/27/2017	5.68
5/9/2017	6.18
7/13/2017	5.6
10/11/2017	5.61
4/4/2018	5.98
9/20/2018	5.67
3/28/2019	5.86
9/26/2019	5.6
3/25/2020	5.69

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.01	<0.01
6/6/2016		<0.01	<0.01						
6/7/2016	0.001 (J)			<0.01	0.00048 (J)				
7/26/2016								0.0009 (J)	<0.01
7/27/2016	0.0012 (J)	<0.01	<0.01	<0.01					
7/28/2016					<0.01				
9/14/2016								<0.01	<0.01
9/16/2016	0.0015 (J)		<0.01						
9/19/2016		<0.01		<0.01	0.0014 (J)				
11/2/2016				<0.01				<0.01	<0.01
11/3/2016	0.0015 (J)	<0.01	<0.01		<0.01				
1/11/2017	0.0014 (J)	<0.01	<0.01						
1/12/2017									<0.01
1/13/2017				<0.01	<0.01			<0.01	
3/1/2017		<0.01	<0.01						
3/2/2017	0.0017 (J)								
3/6/2017				<0.01	<0.01			<0.01	
3/7/2017									<0.01
4/26/2017		<0.01	<0.01	<0.01	<0.01				
5/1/2017								<0.01	<0.01
5/2/2017	<0.01								
6/27/2017									<0.01
6/28/2017		<0.01	<0.01						
6/29/2017	<0.01			<0.01	<0.01			<0.01	
10/11/2017						<0.01			
10/12/2017							<0.01		
11/20/2017						<0.01	0.0042 (J)		
1/10/2018							0.0043 (J)		
1/11/2018						<0.01			
2/19/2018							<0.01		
2/20/2018						<0.01			
3/28/2018	<0.01	<0.01	<0.01						
3/29/2018				<0.01	<0.01			<0.01	<0.01
4/3/2018						<0.01	<0.01		
6/5/2018					<0.01				
6/6/2018				<0.01					<0.01
6/7/2018		<0.01						<0.01	
6/11/2018	<0.01		<0.01						
6/28/2018						<0.01	0.0032 (J)		
8/7/2018						<0.01	0.0031 (J)		
9/24/2018						0.0015 (J)	0.0026 (J)		
9/25/2018	<0.01	<0.01	<0.01	<0.01	<0.01				
9/26/2018								<0.01	<0.01
3/4/2019								<0.01	<0.01
3/5/2019	<0.01		<0.01	<0.01	<0.01				
3/6/2019		<0.01							
4/2/2019	<0.01				<0.01				
4/3/2019		<0.01	<0.01	<0.01				<0.01	<0.01
8/21/2019						<0.01	0.0024 (J)		
9/24/2019					<0.01				<0.01
9/25/2019	<0.01			<0.01				<0.01	
9/26/2019		<0.01	<0.01						

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
10/9/2019						<0.01	0.0026 (J)		
3/24/2020	<0.01	<0.01	<0.01	<0.01	<0.01		0.002 (J)		<0.01
3/25/2020						<0.01		<0.01	

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.01								
6/7/2016		0.037							
6/8/2016			<0.01	0.0011 (J)					
7/26/2016	0.0009 (J)								
7/28/2016		0.0385							
8/1/2016			<0.01	0.0192					
8/30/2016								0.0711	
8/31/2016									<0.01
9/2/2016					0.0012 (J)				
9/14/2016	<0.01								
9/20/2016		0.0464	<0.01						
9/21/2016				0.0147					
11/4/2016	<0.01								
11/8/2016		0.0521	<0.01						
11/14/2016				<0.01	<0.01				
11/16/2016								0.0313	<0.01
1/12/2017	<0.01								
1/16/2017		0.0469							
1/17/2017			<0.01	0.0122					
2/24/2017									<0.01
2/27/2017								0.0316	
2/28/2017					0.0017 (J)				
3/1/2017				0.0151					
3/7/2017	<0.01								
3/8/2017			<0.01						
3/9/2017		0.0437							
5/2/2017	<0.01	0.0395	<0.01						
5/3/2017				0.012					
5/9/2017					0.0018 (J)				
5/10/2017								0.053	<0.01
6/27/2017	<0.01								
7/7/2017			<0.01						
7/10/2017		0.0386		0.0106					
7/11/2017								0.0697	<0.01
7/13/2017					0.0031 (J)				
9/22/2017					0.0024 (J)				
9/29/2017					0.002 (J)				
10/6/2017					<0.01				
10/12/2017						0.265	0.0191	0.0594	<0.01
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			
3/29/2018	<0.01								
3/30/2018		0.028	<0.01	0.011	<0.01				
4/3/2018						0.23	0.067		
4/4/2018								0.055	<0.01
6/7/2018	<0.01								
6/12/2018		0.026	<0.01	0.0057 (J)					
6/13/2018					0.0024 (J)				

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/27/2018							0.066		
6/28/2018						0.23			
8/7/2018						0.2	0.061		
9/20/2018								0.041	<0.01
9/24/2018						0.2	0.061		
9/26/2018	<0.01		<0.01	0.016	0.0037 (J)				
9/27/2018		0.023							
3/4/2019	<0.01								
3/5/2019			<0.01						
3/6/2019		0.019		0.013	0.0033 (J)				
4/3/2019	<0.01								
4/4/2019		0.017	<0.01	0.012	0.0029 (J)				
8/21/2019									<0.01
8/22/2019						0.14	0.058	0.047	
9/24/2019	<0.01								
9/26/2019			<0.01	0.011	0.0019 (J)				
9/27/2019		0.018							
10/9/2019						0.12	0.052	0.042	<0.01
3/24/2020	<0.01								
3/25/2020				0.022	0.0024 (J)	0.099	0.057	0.046	<0.01
3/26/2020		0.024	<0.01						

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	0.0086 (J)
11/15/2016	0.0056 (J)
2/27/2017	0.0098 (J)
5/9/2017	0.0076 (J)
7/13/2017	0.0093 (J)
10/11/2017	0.0089 (J)
4/4/2018	<0.01
9/20/2018	0.0081 (J)
9/26/2019	0.0077 (J)
3/25/2020	0.0085 (J)

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								8	20
6/6/2016		1.2	1.8						
6/7/2016	4.4			<1	5.2				
7/26/2016								7.7	20
7/27/2016	4.7	1.7	1.9	0.08 (J)					
7/28/2016					5.1				
9/14/2016								7.5	19
9/16/2016	4.8		1.7						
9/19/2016		1.8		0.08 (J)	4.8				
11/2/2016				0.1 (J)				8.2	20
11/3/2016	5.3	0.69 (J)	1.9		5				
1/11/2017	5.2	<1	1.7						
1/12/2017									19
1/13/2017				<1	4.3			8.1	
3/1/2017		1.8	<1						
3/2/2017	5								
3/6/2017				<1	4.5			8	
3/7/2017									20
4/26/2017		1.6	1.9	<1	4.9				
5/1/2017								8.4	20
5/2/2017	5								
6/27/2017									18
6/28/2017		<1	<1						
6/29/2017	5.2			<1	5.5			9.2	
10/3/2017					5.8				16
10/4/2017	5.3		1.7	<1					
10/5/2017		1.6						9.6	
10/11/2017						20			
10/12/2017							17		
11/20/2017						24	71		
1/10/2018							66		
1/11/2018						23			
2/19/2018							57.2		
2/20/2018						20.6			
4/3/2018						24.5	49.4		
6/5/2018					6.1				
6/6/2018				0.049 (J)					8.3
6/7/2018		0.68 (J)						8.5	
6/11/2018	5.2		0.95 (J)						
6/28/2018						22	43.8		
8/7/2018						20.7	40.5		
9/24/2018						21.2	39.7		
9/25/2018	6.1	1	1.5	0.13 (J)	7				
9/26/2018								10.2	7.9
3/26/2019							34.3		
3/27/2019						17.7			
4/2/2019	5.1				3.8				
4/3/2019		0.82 (J)	1.3	0.12 (J)				8.5	7
9/24/2019					1				5.5
9/25/2019	5.5			<1				8.5	
9/26/2019		0.64 (J)	1						
10/9/2019						15	27.9		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/24/2020	5.4	<1	0.99 (J)	<1	3		25.2		5.9
3/25/2020						14.3		8.8	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	1.9								
6/7/2016		56							
6/8/2016			<1	910					
7/26/2016	1.8								
7/28/2016		57							
8/1/2016			1.1	830					
8/30/2016								980	
8/31/2016									34
9/2/2016					72				
9/14/2016	1.8								
9/20/2016		68	0.38 (J)						
9/21/2016				840					
11/4/2016	2								
11/8/2016		79	0.39 (J)						
11/14/2016				750	110				
11/16/2016								940	240
1/12/2017	1.9								
1/16/2017		72							
1/17/2017			<1	790					
2/24/2017									89
2/27/2017								940	
2/28/2017					110				
3/1/2017				850					
3/7/2017	2.1								
3/8/2017			0.29 (J)						
3/9/2017		69							
5/2/2017	2	60	0.29 (J)						
5/3/2017				800					
5/9/2017					130				
5/10/2017								1200	100
6/27/2017	2.1								
7/7/2017			0.37 (J)						
7/10/2017		57		810					
7/11/2017								1300	110
7/13/2017					140				
9/22/2017					160				
9/29/2017					160				
10/3/2017	2.3								
10/5/2017			<1						
10/6/2017					160				
10/11/2017		52		730	150				
10/12/2017						940	400	1100	120
11/20/2017						980			
11/21/2017							430		
1/11/2018							390		
1/12/2018						880			
2/19/2018							414		
2/20/2018						905			
4/3/2018						872	406		
4/4/2018								1020	160
6/7/2018	2								
6/12/2018		41.4	0.35 (J)	759					

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/13/2018					144				
6/27/2018							357		
6/28/2018						869			
8/7/2018						879	346		
9/20/2018								810	247
9/24/2018						872	358		
9/26/2018	2.3		0.28 (J)	895	160				
9/27/2018		39.6							
3/27/2019						851		831	
3/28/2019							258		181
4/3/2019	2.1								
4/4/2019		27.9	0.29 (J)	847	119				
9/24/2019	2.4								
9/26/2019			0.23 (J)	532	84.8				
9/27/2019		30.3							
10/9/2019						708	263	725	279
3/24/2020	2.1								
3/25/2020				448	58.8	483	214	642	164
3/26/2020		36.5	<1						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	95
11/15/2016	94
2/27/2017	84
5/9/2017	91
7/13/2017	88
10/11/2017	86
4/4/2018	76.5
9/20/2018	84.1
3/28/2019	82.8
9/26/2019	80
3/25/2020	76.1

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								<0.001	<0.001
6/6/2016		<0.001	<0.001						
6/7/2016	<0.001			<0.001	<0.001				
7/26/2016								<0.001	<0.001
7/27/2016	<0.001	<0.001	<0.001	<0.001					
7/28/2016					<0.001				
9/14/2016								<0.001	<0.001
9/16/2016	<0.001		<0.001						
9/19/2016		<0.001		<0.001	<0.001				
11/2/2016				<0.001				<0.001	<0.001
11/3/2016	<0.001	<0.001	<0.001		<0.001				
1/11/2017	<0.001	<0.001	<0.001						
1/12/2017									<0.001
1/13/2017				<0.001	<0.001			<0.001	
3/1/2017		<0.001	<0.001						
3/2/2017	<0.001								
3/6/2017				<0.001	<0.001			<0.001	
3/7/2017									<0.001
4/26/2017		<0.001	<0.001	<0.001	<0.001				
5/1/2017								<0.001	<0.001
5/2/2017	<0.001								
6/27/2017									<0.001
6/28/2017		<0.001	<0.001						
6/29/2017	<0.001			<0.001	<0.001			<0.001	
10/11/2017						<0.001			
10/12/2017							<0.001		
11/20/2017						<0.001	<0.001		
1/10/2018							<0.001		
1/11/2018						<0.001			
2/19/2018							<0.001		
2/20/2018						<0.001			
3/28/2018	<0.001	<0.001	<0.001						
3/29/2018				<0.001	<0.001			<0.001	<0.001
4/3/2018						<0.001	<0.001		
6/28/2018						<0.001	<0.001		
8/7/2018						<0.001	<0.001		
9/24/2018						<0.001	<0.001		
9/25/2018					<0.001				
3/4/2019								<0.001	<0.001
3/5/2019	<0.001		<0.001	<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				<0.001	<0.001
8/21/2019						<0.001	<0.001		
9/24/2019					<0.001				<0.001
9/25/2019	<0.001			<0.001				<0.001	
9/26/2019		<0.001	<0.001						
3/24/2020	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001		<0.001
3/25/2020						<0.001		<0.001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	<0.001								
6/7/2016		<0.001							
6/8/2016			<0.001	<0.001					
7/26/2016	<0.001								
7/28/2016		<0.001							
8/1/2016			<0.001	6E-05 (J)					
8/30/2016								<0.001	
8/31/2016									<0.001
9/2/2016					<0.001				
9/14/2016	<0.001								
9/20/2016		<0.001	<0.001						
9/21/2016				<0.001					
11/4/2016	<0.001								
11/8/2016		<0.001	<0.001						
11/14/2016				<0.001	<0.001				
11/16/2016								<0.001	<0.001
1/12/2017	<0.001								
1/16/2017		<0.001							
1/17/2017			<0.001	0.0004 (J)					
2/24/2017									<0.001
2/27/2017								<0.001	
2/28/2017					<0.001				
3/1/2017				0.0003 (J)					
3/7/2017	<0.001								
3/8/2017			<0.001						
3/9/2017		<0.001							
5/2/2017	<0.001	<0.001	<0.001						
5/3/2017				0.0002 (J)					
5/9/2017					<0.001				
5/10/2017								<0.001	<0.001
6/27/2017	<0.001								
7/7/2017			<0.001						
7/10/2017		<0.001		0.0002 (J)					
7/11/2017								<0.001	<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	<0.001	<0.001	<0.001
11/20/2017						<0.001			
11/21/2017							<0.001		
1/11/2018							<0.001		
1/12/2018						<0.001			
2/19/2018							<0.001		
2/20/2018						<0.001			
3/29/2018	<0.001								
3/30/2018		<0.001	<0.001	<0.001	<0.001				
4/3/2018						<0.001	<0.001		
4/4/2018								<0.001	<0.001
6/27/2018							<0.001		
6/28/2018						<0.001			
8/7/2018						<0.001	<0.001		

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
9/20/2018								<0.001	<0.001
9/24/2018						<0.001	<0.001		
3/4/2019	<0.001								
3/5/2019			<0.001						
3/6/2019		<0.001		0.00016 (J)	<0.001				
4/3/2019	<0.001								
4/4/2019		<0.001	<0.001	0.00018 (J)	<0.001				
8/21/2019									<0.001
8/22/2019						<0.001	<0.001	<0.001	
9/24/2019	<0.001								
9/26/2019			<0.001	0.00014 (J)	<0.001				
9/27/2019		<0.001							
3/24/2020	<0.001								
3/25/2020				0.00015 (J)	<0.001	<0.001	<0.001	<0.001	<0.001
3/26/2020		<0.001	<0.001						

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	<0.001
11/15/2016	<0.001
2/27/2017	9E-05 (J)
5/9/2017	<0.001
7/13/2017	<0.001
10/11/2017	<0.001
4/4/2018	<0.001
9/20/2018	<0.001
9/26/2019	<0.001
3/25/2020	<0.001

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
6/2/2016								96	160
6/6/2016		120	58						
6/7/2016	28			38	60				
7/26/2016								92	177
7/27/2016	74	94	35	74					
7/28/2016					81				
9/14/2016								102	187
9/16/2016	67		35						
9/19/2016		92		45	68				
11/2/2016				53				115	181
11/3/2016	41	104	48		61				
1/11/2017	104	133	95						
1/12/2017									202
1/13/2017				46	76			67	
3/1/2017		119	79						
3/2/2017	77								
3/6/2017				164	167			159	
3/7/2017									257
4/26/2017		162	36	34	50				
5/1/2017								107	165
5/2/2017	142								
6/27/2017									189
6/28/2017		98	45						
6/29/2017	53			68	94			79	
10/3/2017					149				170
10/4/2017	61		45	54					
10/5/2017		104						95	
10/11/2017						68			
10/12/2017							74		
11/20/2017						139	179		
1/10/2018							140		
1/11/2018						153			
2/19/2018							119		
2/20/2018						87			
4/3/2018						85	106		
6/5/2018					109				
6/6/2018				79					151
6/7/2018		68						90	
6/11/2018	70		74						
6/28/2018						88	112		
8/7/2018						89	103		
9/24/2018						82	107		
9/25/2018	86	109	63	73	122				
9/26/2018								116	144
3/26/2019							90		
3/27/2019						75			
4/2/2019	72				134				
4/3/2019		89	63	57				111	142
9/24/2019					157				129
9/25/2019	81			75				117	
9/26/2019		126	72						
10/9/2019						119	98		

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)
3/24/2020	71	91	59	76	117		84		139
3/25/2020						158		146	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/2/2016	66								
6/7/2016		130							
6/8/2016			66	1200					
7/26/2016	78								
7/28/2016		119							
8/1/2016			56	1300					
8/30/2016								1650	
8/31/2016									80
9/2/2016					243				
9/14/2016	73								
9/20/2016		132	53						
9/21/2016				1220					
11/4/2016	75								
11/8/2016		146	58						
11/14/2016				1170	272				
11/16/2016								1420	112
1/12/2017	86								
1/16/2017		194							
1/17/2017			56	1150					
2/24/2017									147
2/27/2017								1640	
2/28/2017					306				
3/1/2017				1160					
3/7/2017	108								
3/8/2017			192						
3/9/2017		288							
5/2/2017	103	221	113						
5/3/2017				1280					
5/9/2017					303				
5/10/2017								1630	203
6/27/2017	73								
7/7/2017			46						
7/10/2017		123		1170					
7/11/2017								1800	238
7/13/2017					282				
9/22/2017					309				
9/29/2017					273				
10/3/2017	89								
10/5/2017			48						
10/6/2017					287				
10/11/2017		100		1110	264				
10/12/2017						1360	636	1600	287
11/20/2017						1390			
11/21/2017							706		
1/11/2018							701		
1/12/2018						1400			
2/19/2018							630		
2/20/2018						1300			
4/3/2018						1390	660		
4/4/2018								1520	292
6/7/2018	142								
6/12/2018		115	79	1150					

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWA-5I (bg)	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/13/2018					292				
6/27/2018							575		
6/28/2018						1310			
8/7/2018						1340	574		
9/20/2018								1240	434
9/24/2018						1400	588		
9/26/2018	86		59	1280	277				
9/27/2018		105							
3/27/2019						1190		1100	
3/28/2019							372		323
4/3/2019	83								
4/4/2019		85	63	1260	240				
9/24/2019	79								
9/26/2019			81	1070	198				
9/27/2019		96							
10/9/2019						1100	440	1170	501
3/24/2020	68								
3/25/2020				839	164	883	428	1200	352
3/26/2020		110	67						

Time Series

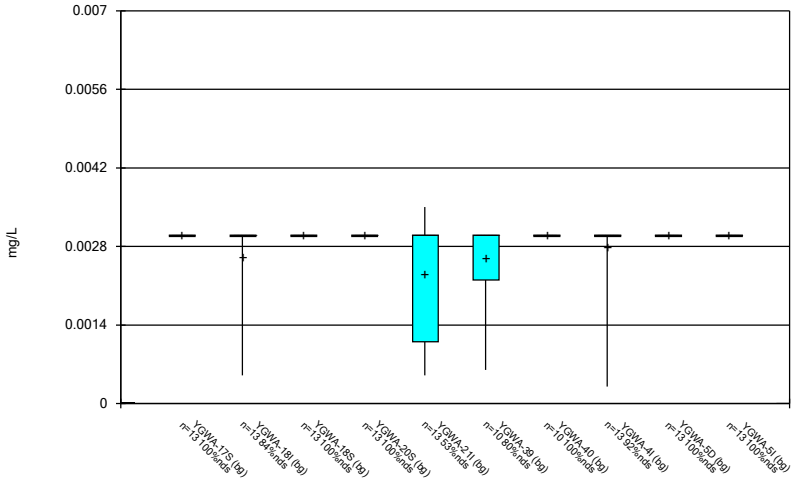
Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 3:22 PM View: Descriptive

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

	YGWC-49
9/1/2016	228
11/15/2016	211
2/27/2017	382
5/9/2017	154
7/13/2017	192
10/11/2017	177
4/4/2018	174
9/20/2018	186
3/28/2019	164
9/26/2019	192
3/25/2020	130

FIGURE B.

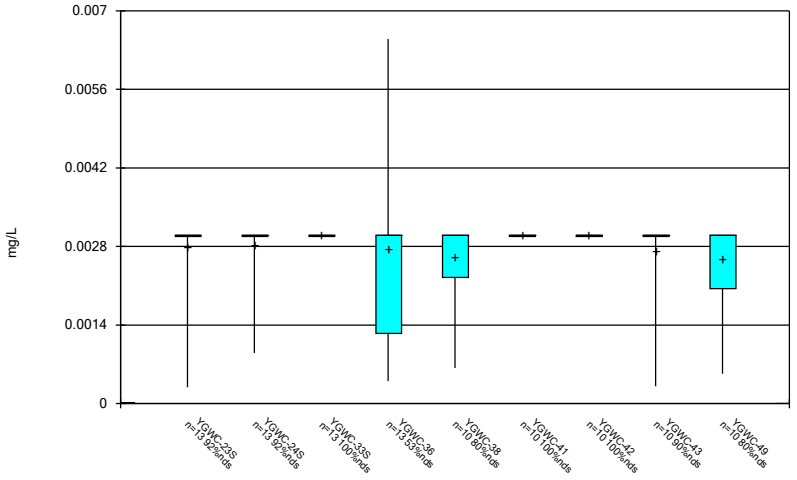
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

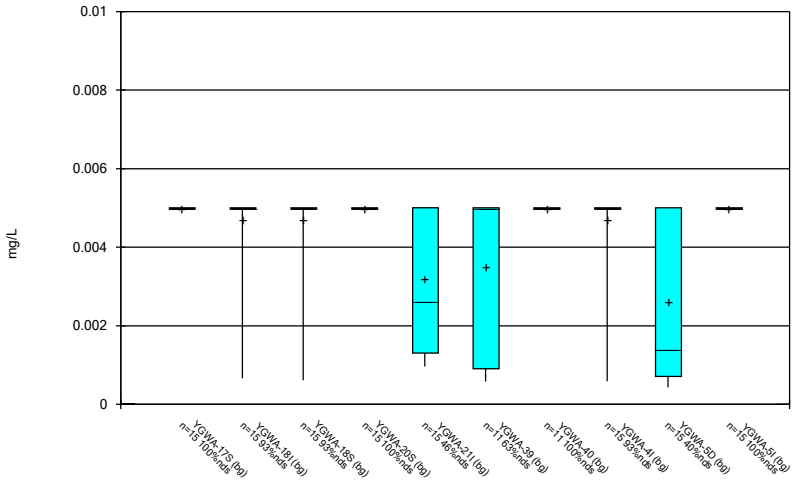
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

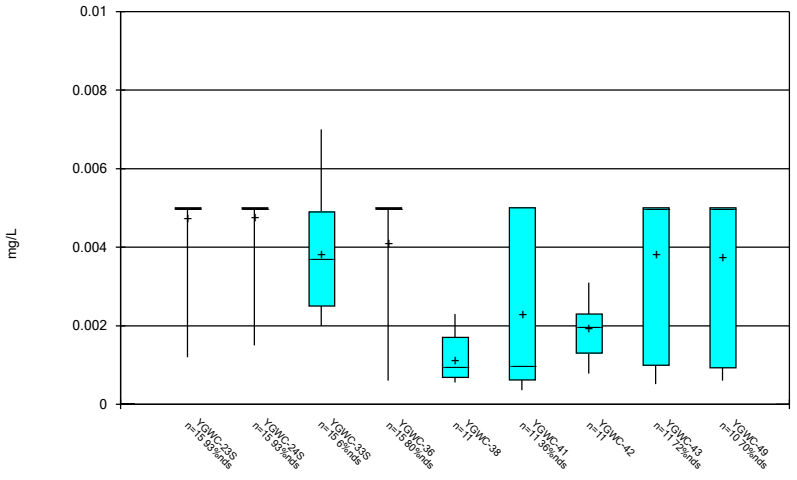
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

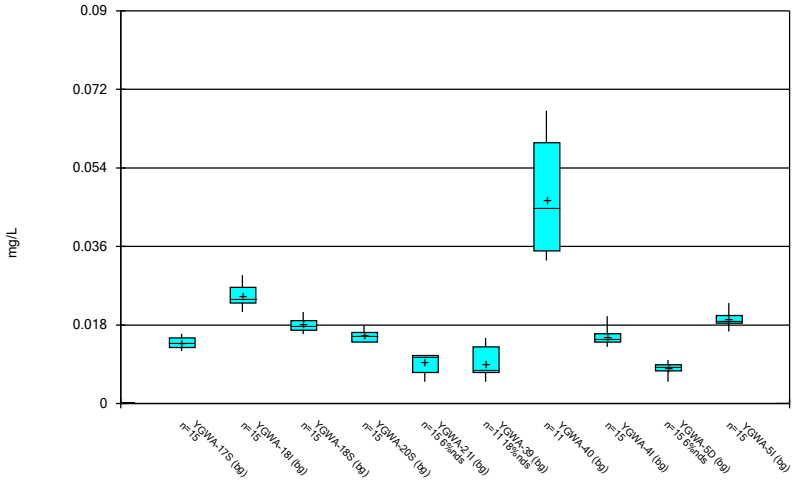
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

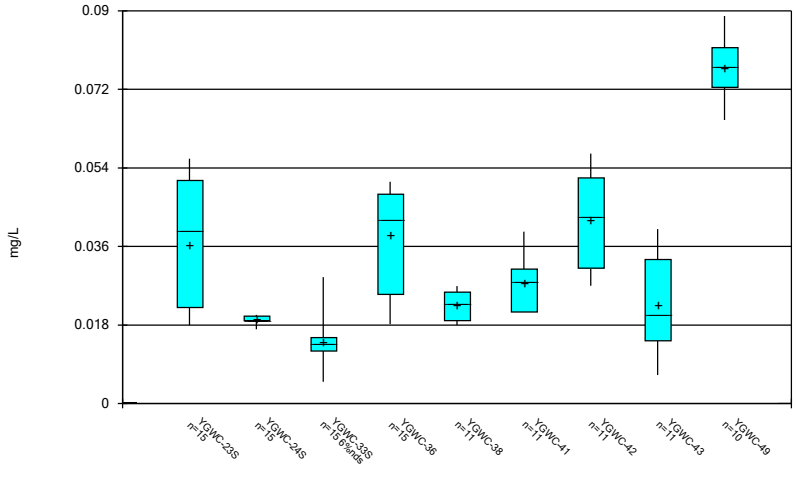
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

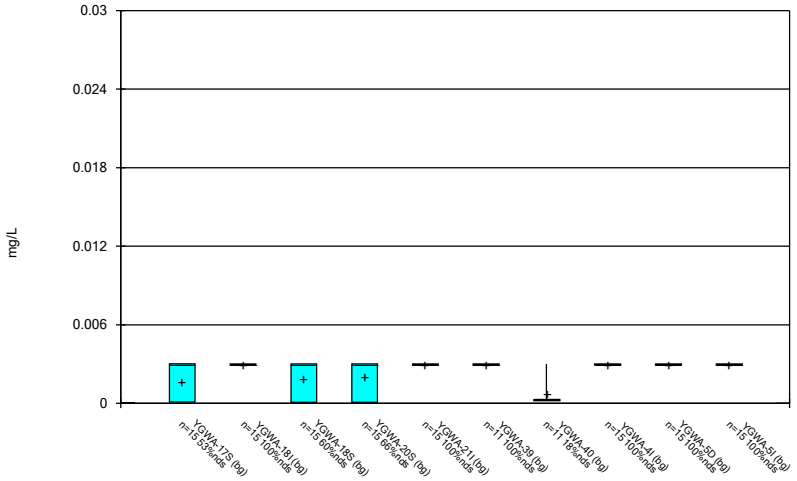
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

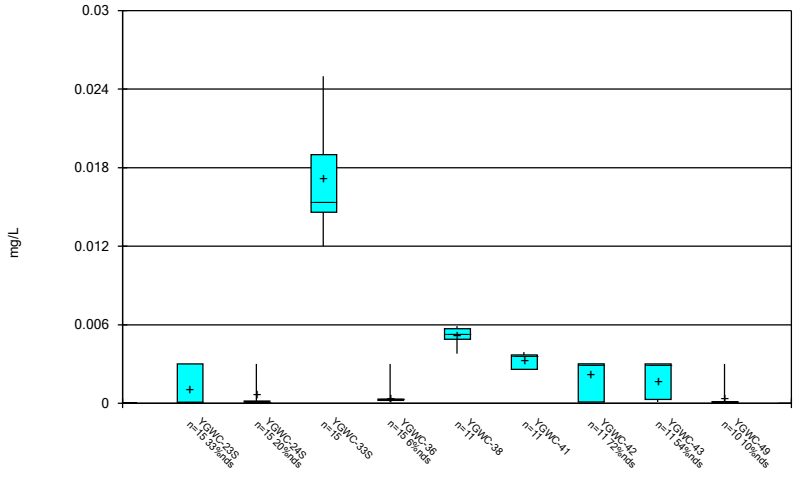
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

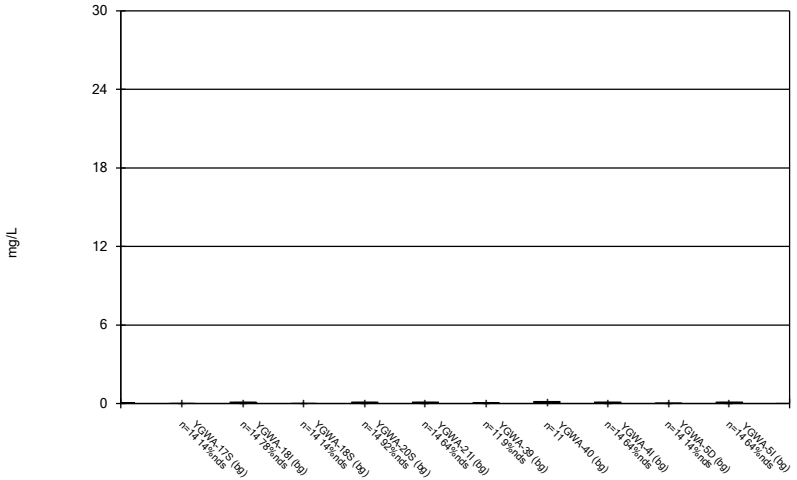
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

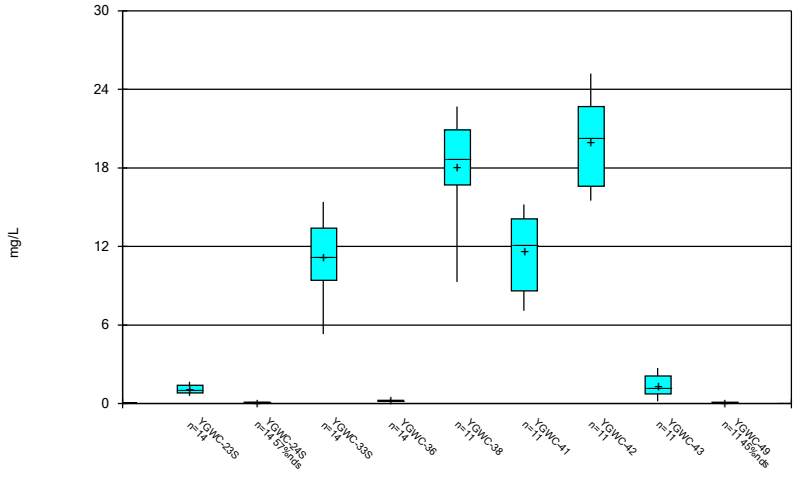
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

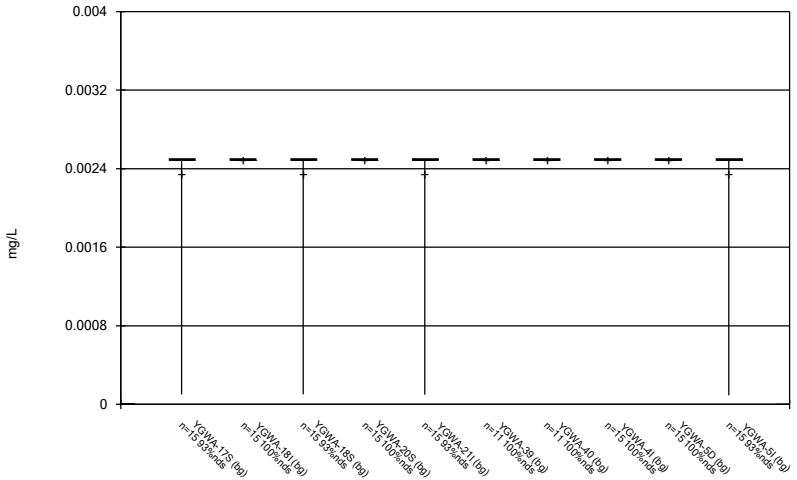
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

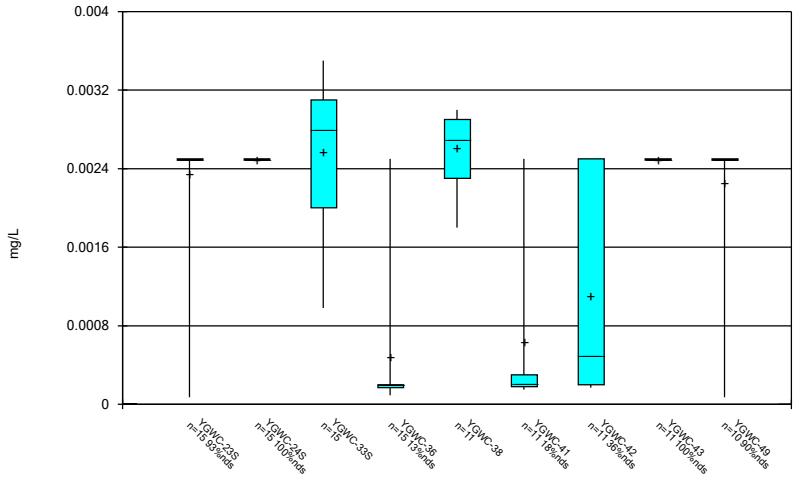
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

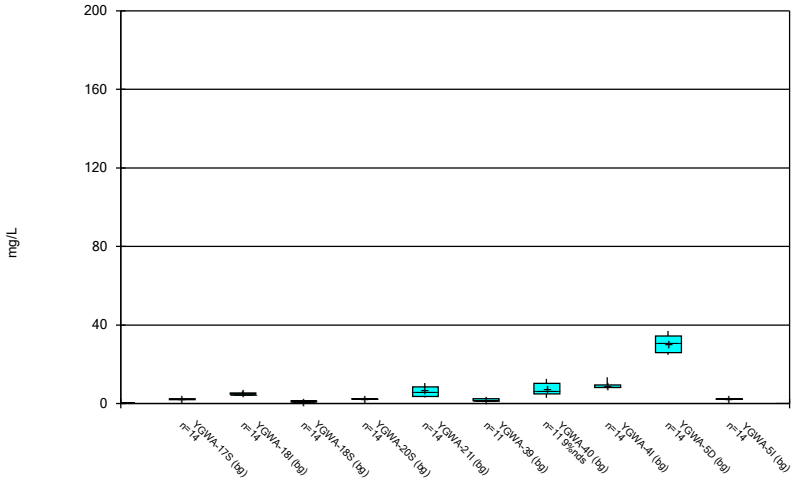
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

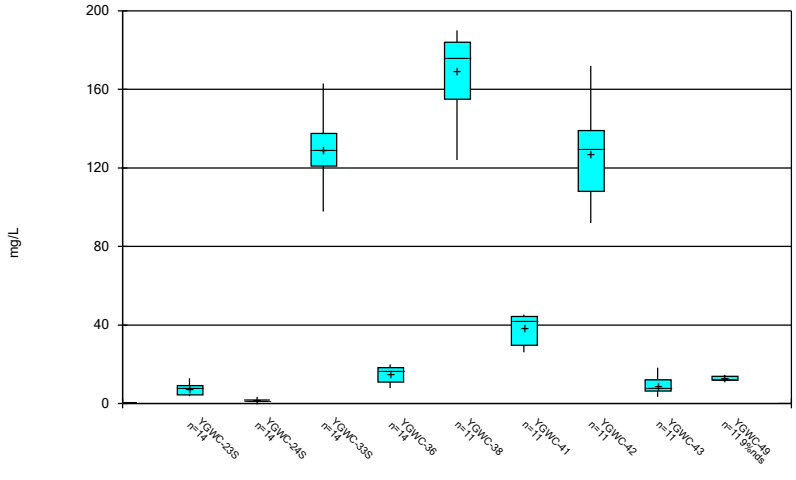
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

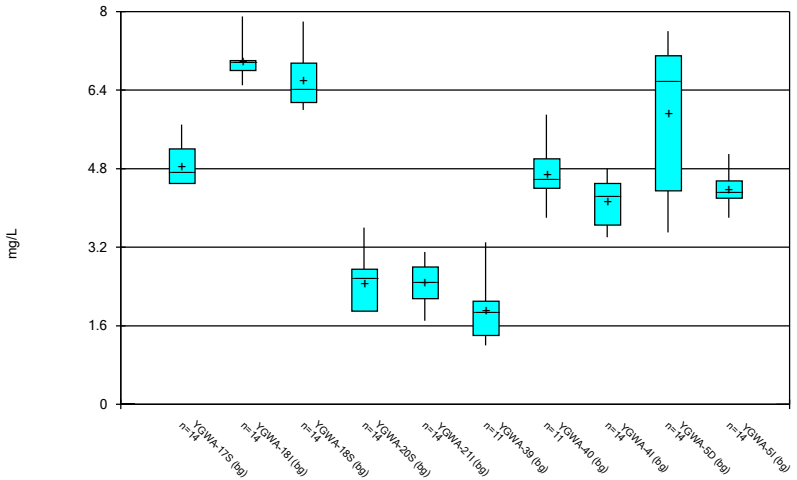
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

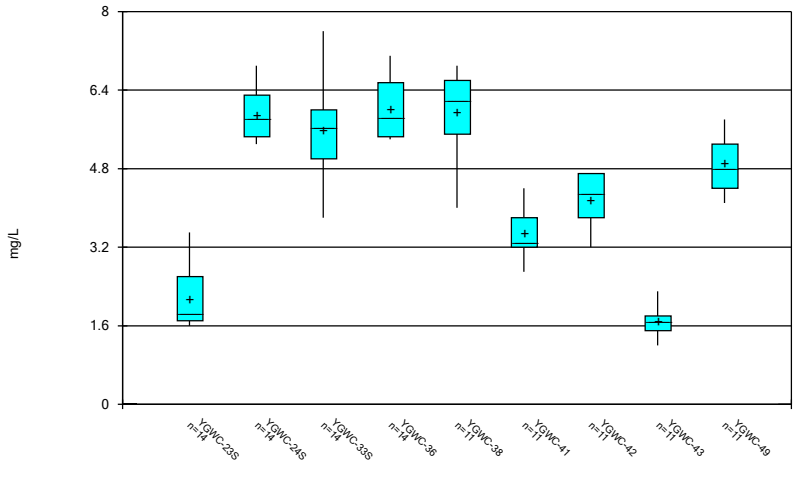
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

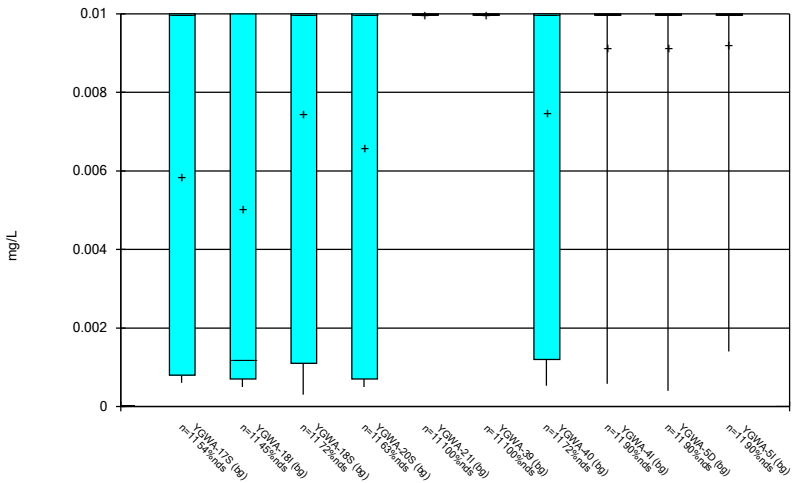
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

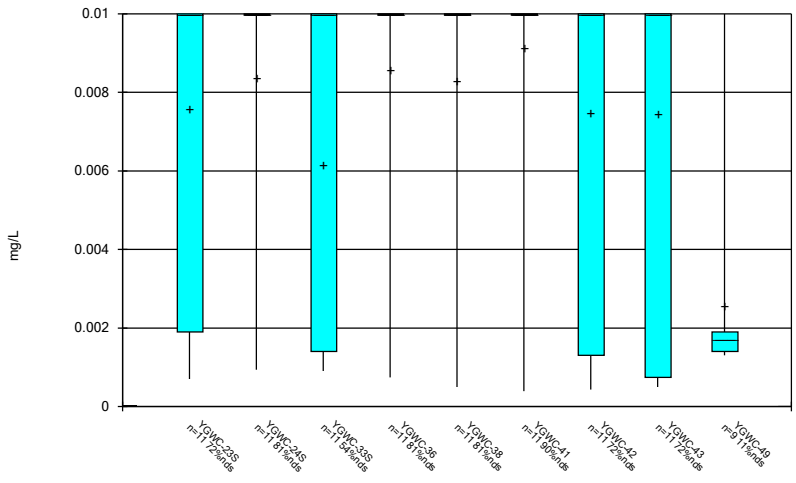
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

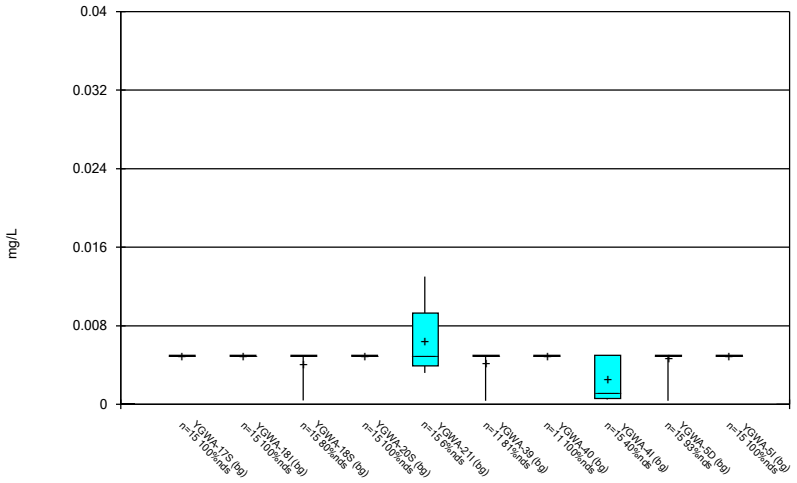
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

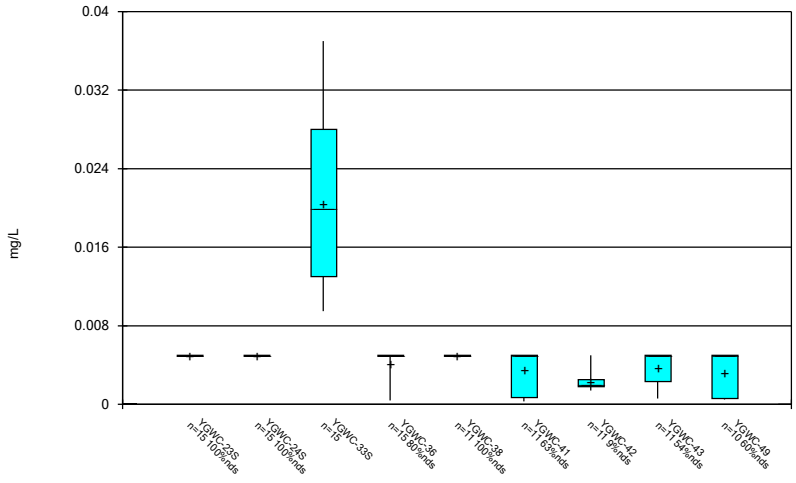
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

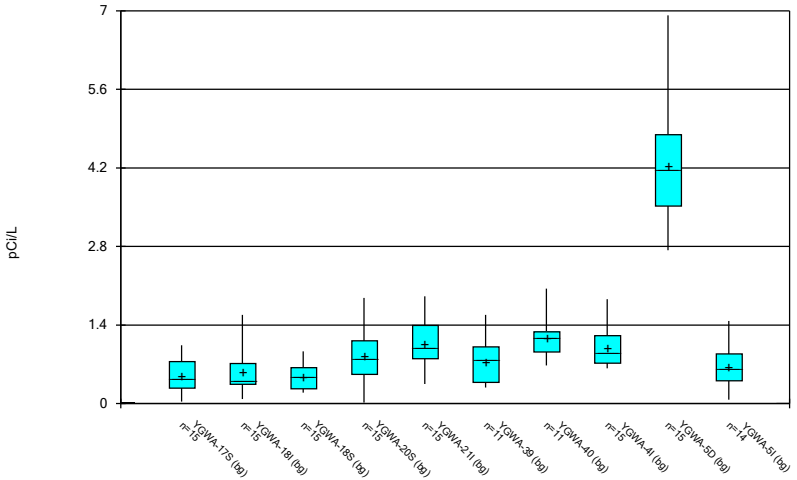
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

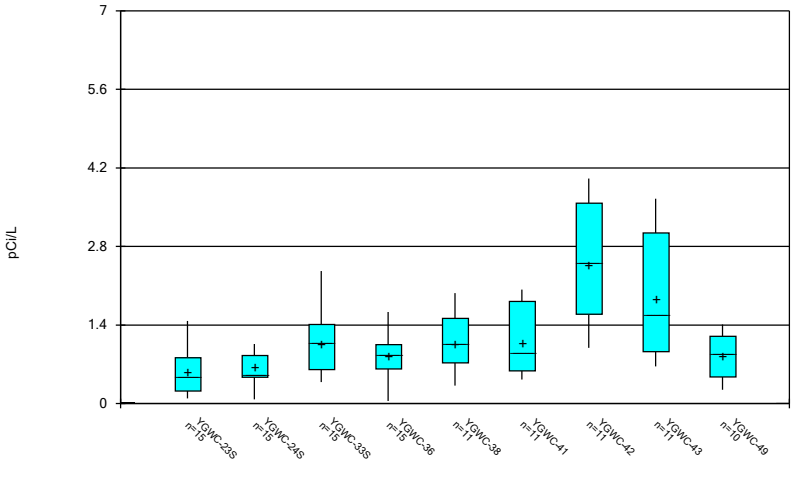
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

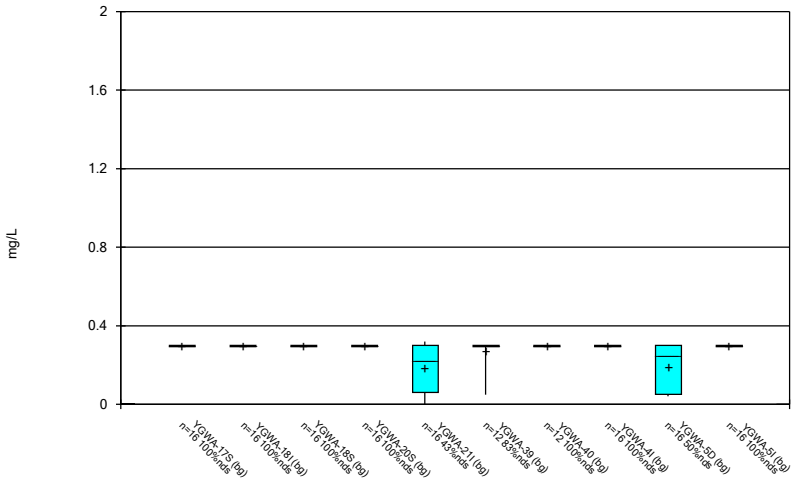
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

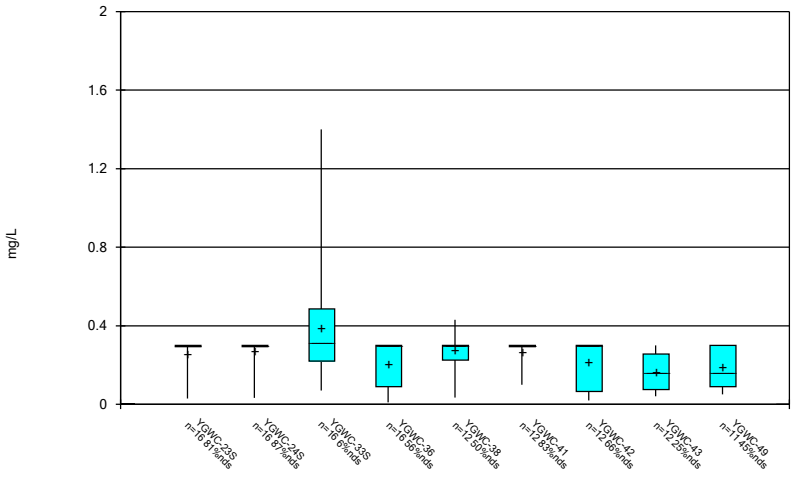
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

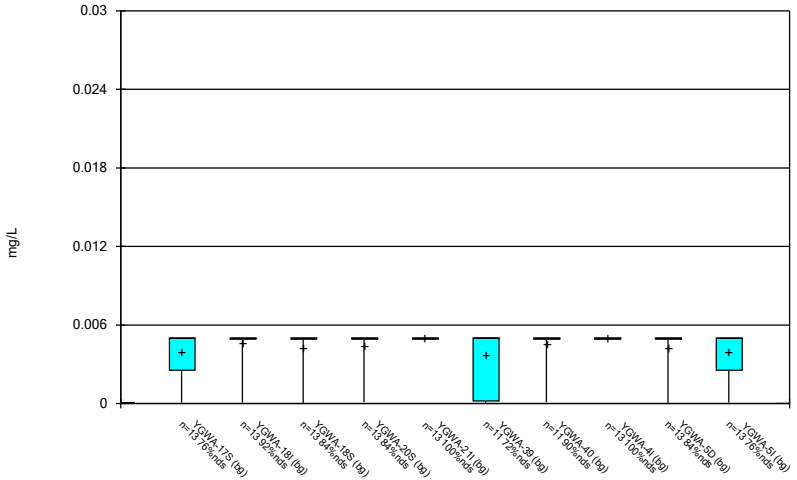
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

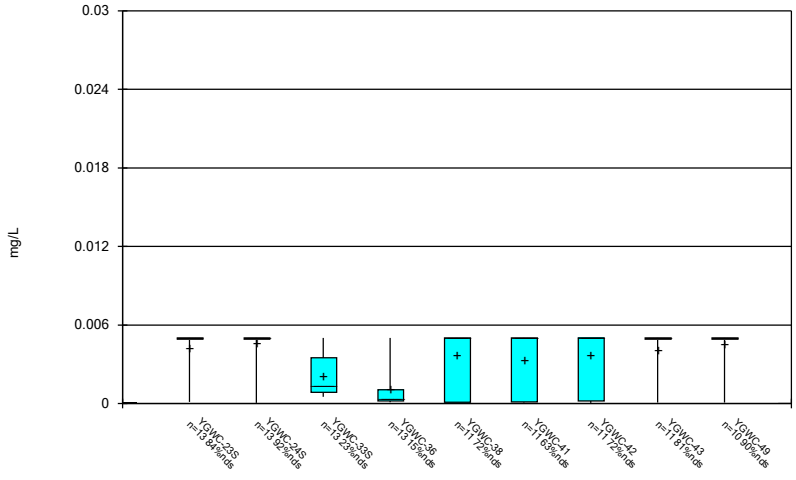
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

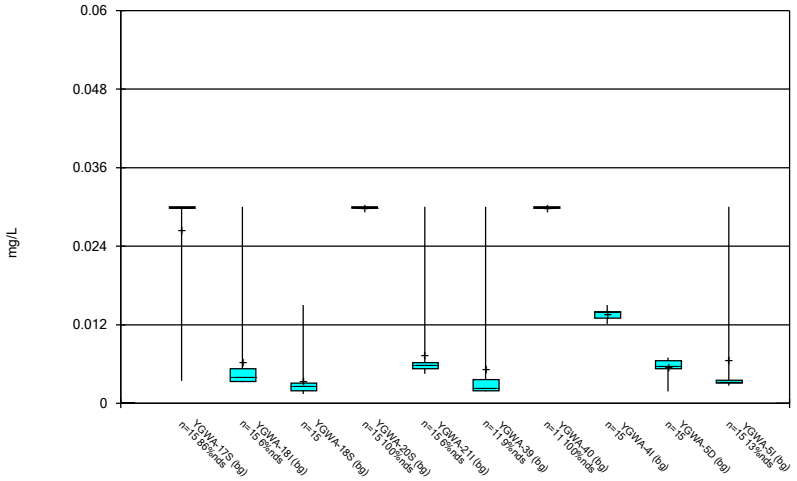
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

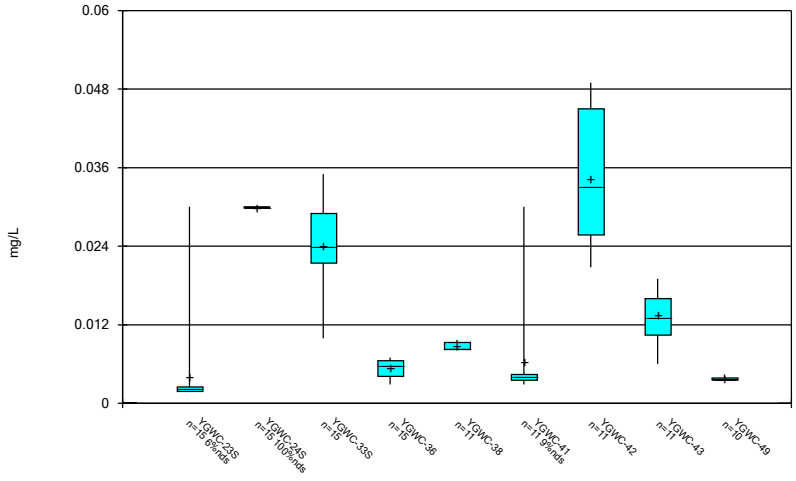
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

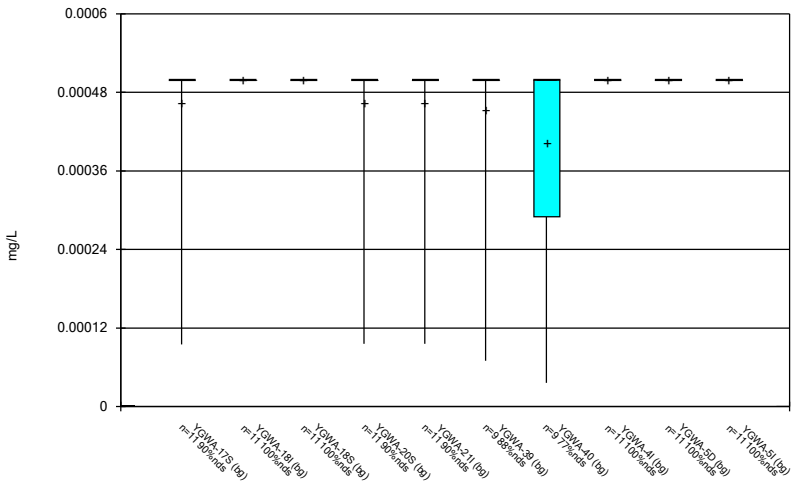
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



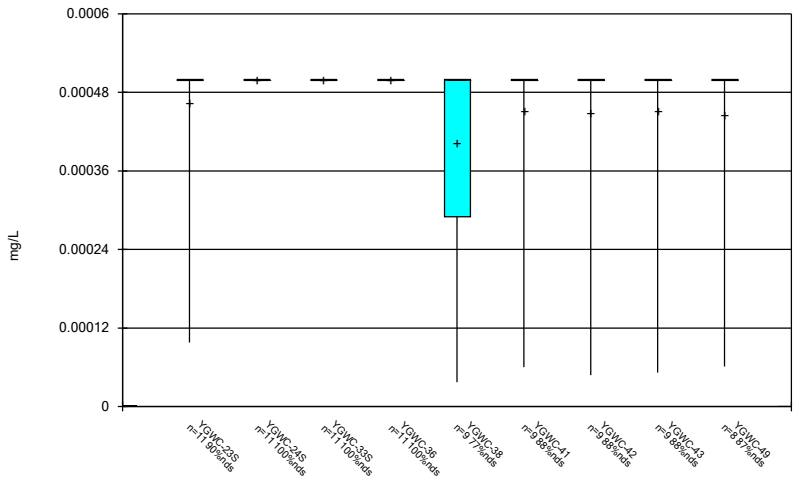
Constituent: Lithium Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



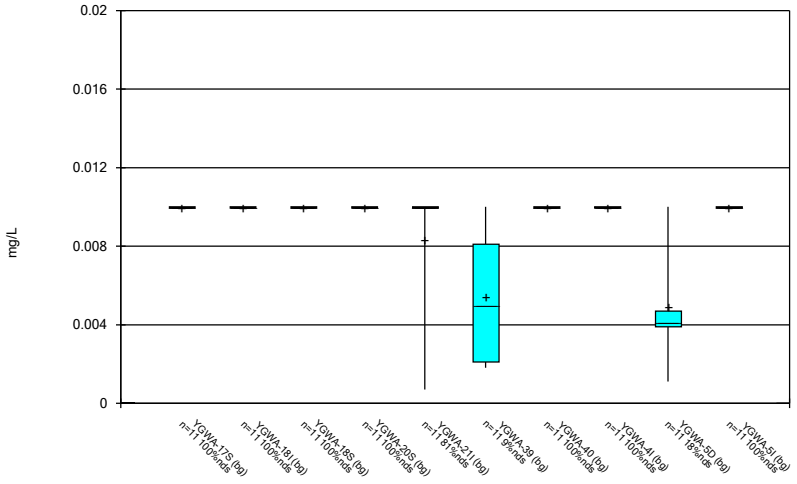
Constituent: Mercury Analysis Run 5/5/2020 3:23 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



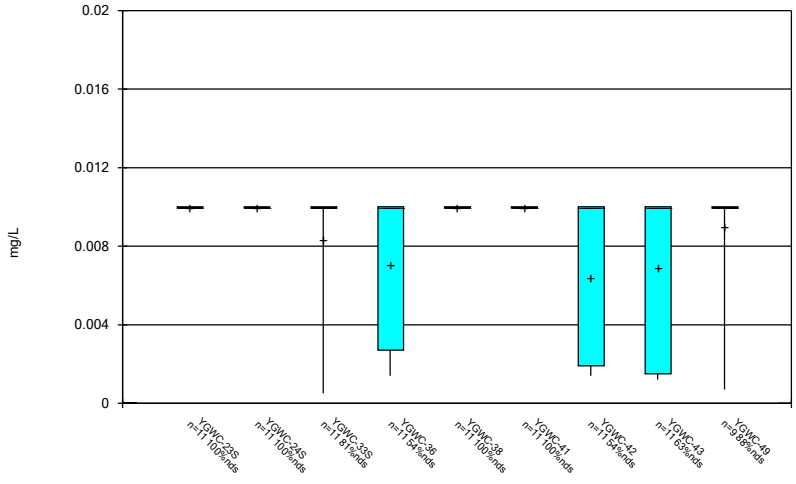
Constituent: Mercury Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



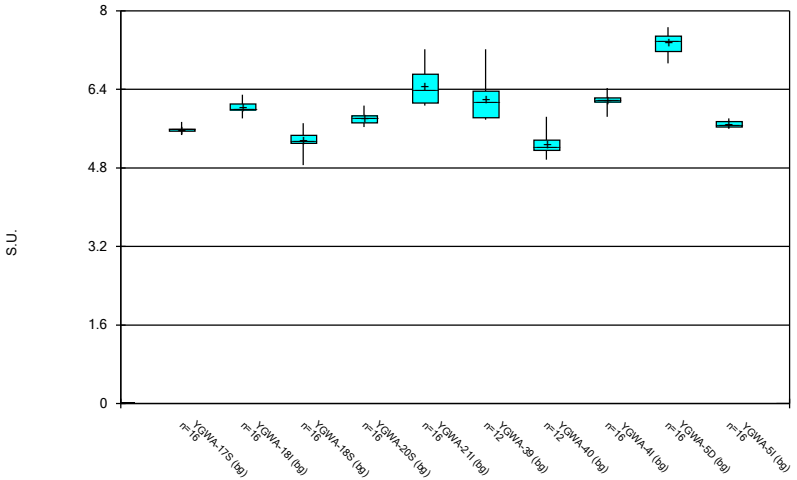
Constituent: Molybdenum Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

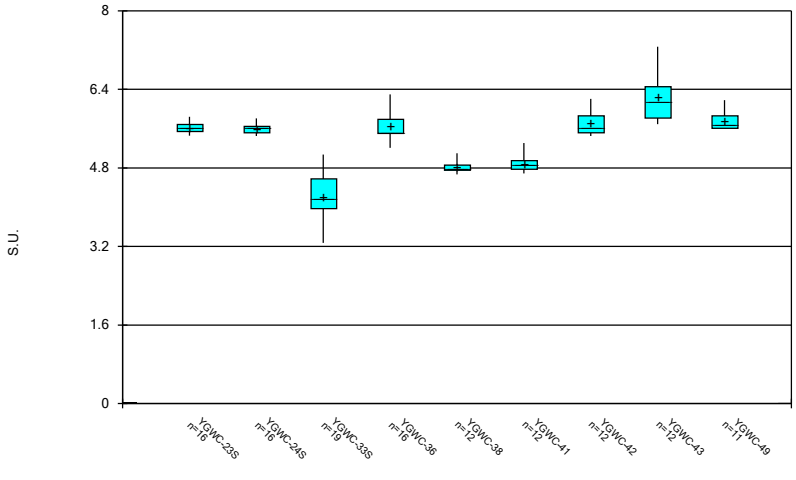
Box & Whiskers Plot



Constituent: pH Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

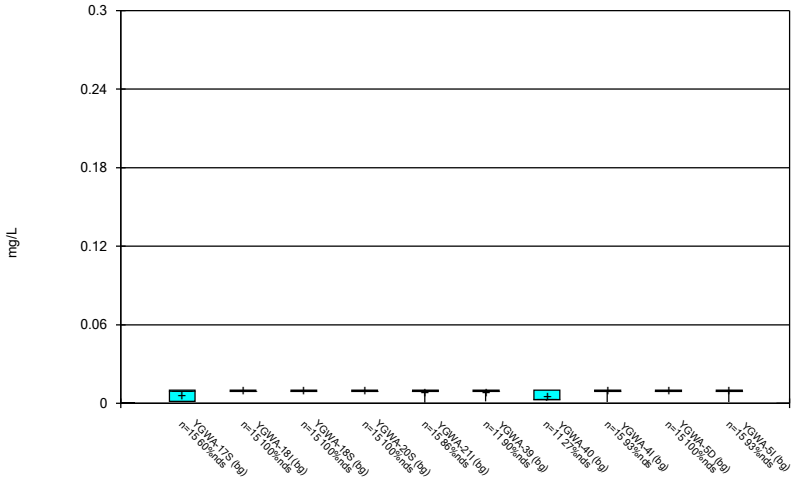
Box & Whiskers Plot



Constituent: pH Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

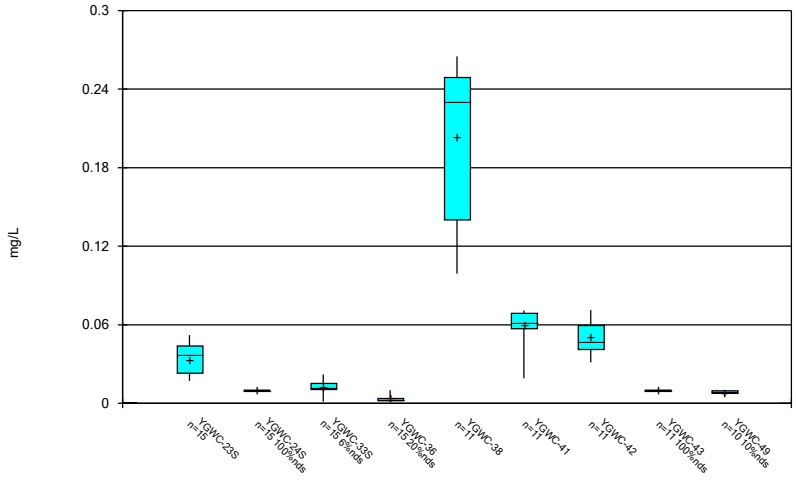
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

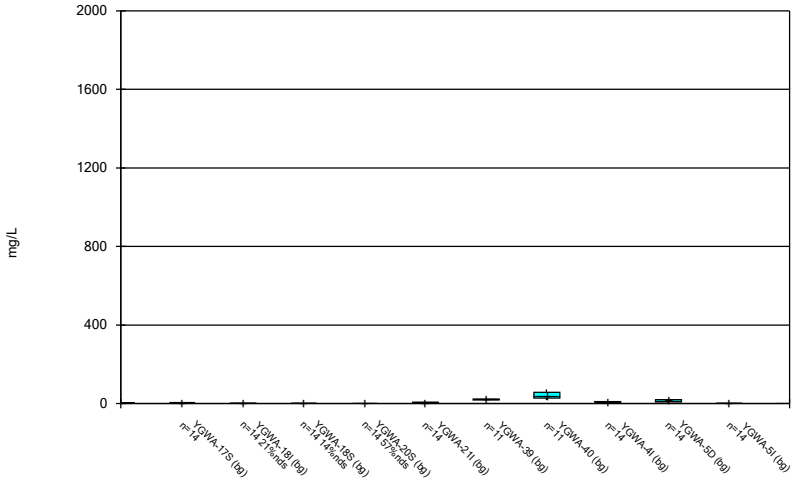
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

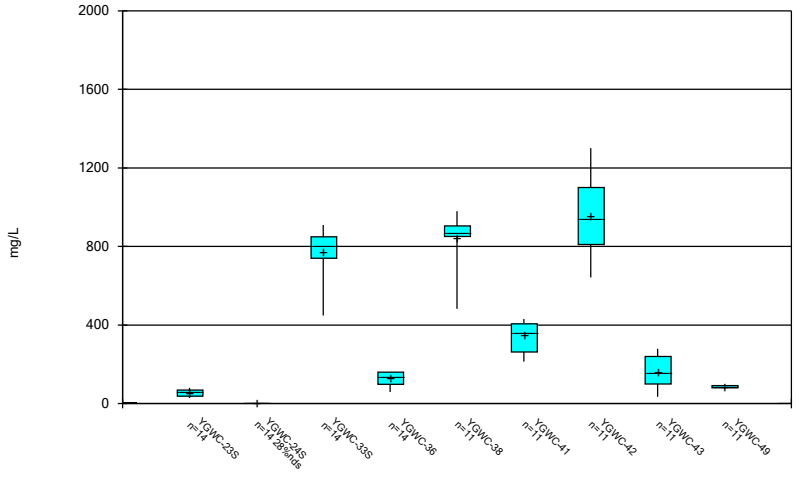
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

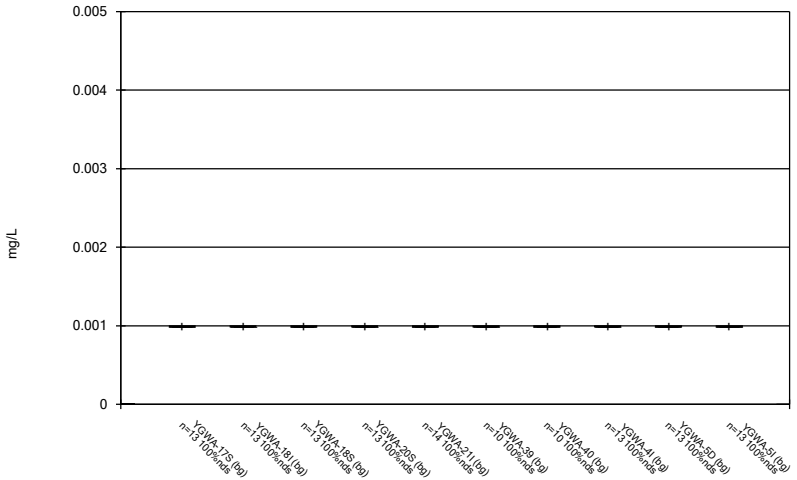
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

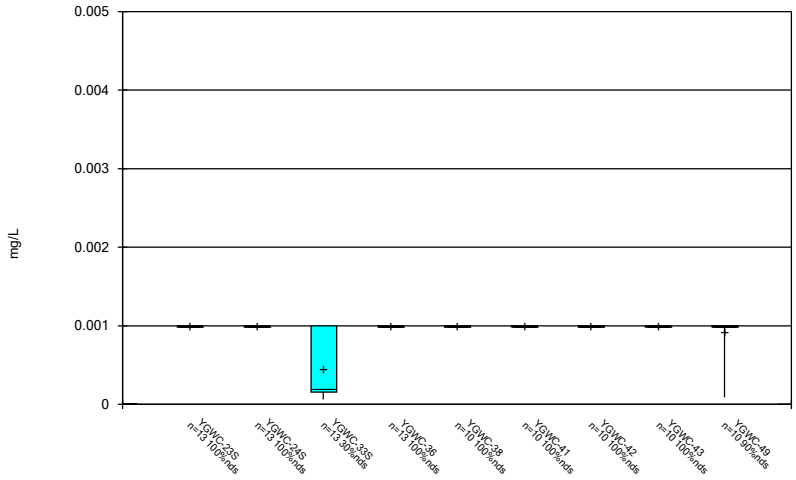
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

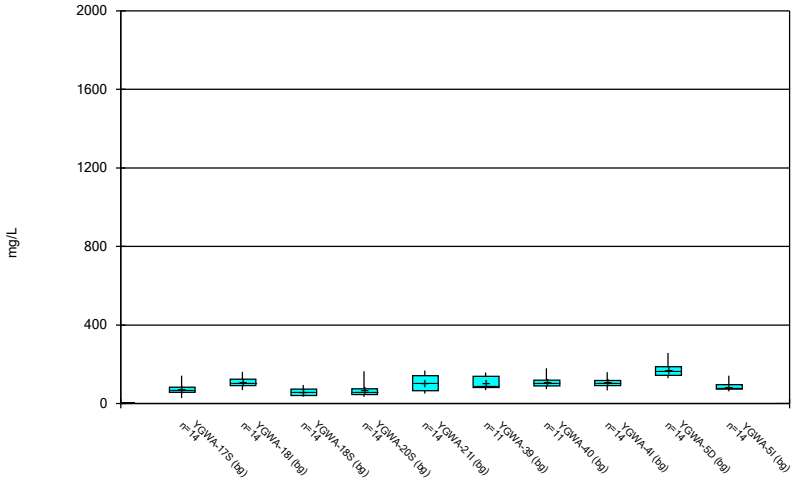
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

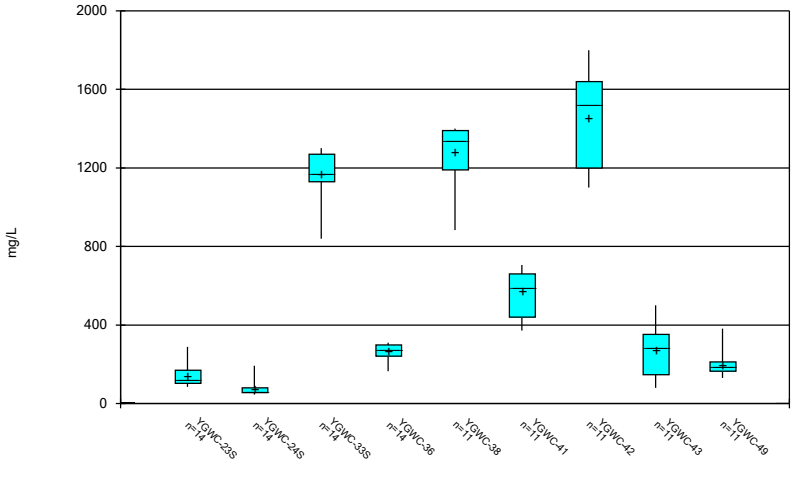
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/5/2020 3:24 PM View: Descriptive
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

FIGURE C.

Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	YGWC-23S	0.16	n/a	3/26/2020	0.94	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-33S	0.16	n/a	3/25/2020	5.3	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-38	0.16	n/a	3/25/2020	9.3	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-41	0.16	n/a	3/25/2020	7.9	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-42	0.16	n/a	3/25/2020	15.5	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-43	0.16	n/a	3/25/2020	2.4	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-33S	37	n/a	3/25/2020	97.8	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-38	37	n/a	3/25/2020	124	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-42	37	n/a	3/25/2020	107	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-33S	7.67	4.86	3/25/2020	3.86	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-33S	71	n/a	3/25/2020	448	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-38	71	n/a	3/25/2020	483	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-41	71	n/a	3/25/2020	214	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-42	71	n/a	3/25/2020	642	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-43	71	n/a	3/25/2020	164	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-49	71	n/a	3/25/2020	76.1	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-33S	185.4	n/a	3/25/2020	839	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-38	185.4	n/a	3/25/2020	883	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-41	185.4	n/a	3/25/2020	428	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-42	185.4	n/a	3/25/2020	1200	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-43	185.4	n/a	3/25/2020	352	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 2:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**3/26/2020**	**0.94**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-24S	0.16	n/a	3/26/2020	0.033	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	**YGWC-33S**	**0.16**	**n/a**	**3/25/2020**	**5.3**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-36	0.16	n/a	3/25/2020	0.11	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**3/25/2020**	**9.3**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**3/25/2020**	**7.9**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**3/25/2020**	**15.5**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**3/25/2020**	**2.4**	**134**	**n/a**	**n/a**	**43.28**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-49	0.16	n/a	3/25/2020	0.012	134	n/a	n/a	43.28	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	3/26/2020	5.6	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24S	37	n/a	3/26/2020	1.7	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-33S**	**37**	**n/a**	**3/25/2020**	**97.8**	**134**	**n/a**	**n/a**	**0.7463**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-36	37	n/a	3/25/2020	10.6	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**3/25/2020**	**124**	**134**	**n/a**	**n/a**	**0.7463**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-41	37	n/a	3/25/2020	29.6	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**3/25/2020**	**107**	**134**	**n/a**	**n/a**	**0.7463**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-43	37	n/a	3/25/2020	12.1	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-49	37	n/a	3/25/2020	13.2	134	n/a	n/a	0.7463	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-23S	7.9	n/a	3/26/2020	1.6	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-24S	7.9	n/a	3/26/2020	5.4	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-33S	7.9	n/a	3/25/2020	3.8	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-36	7.9	n/a	3/25/2020	6.3	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-38	7.9	n/a	3/25/2020	4	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-41	7.9	n/a	3/25/2020	2.7	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-42	7.9	n/a	3/25/2020	3.2	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-43	7.9	n/a	3/25/2020	1.8	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-49	7.9	n/a	3/25/2020	4.1	134	n/a	n/a	0	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-23S	0.32	n/a	3/26/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24S	0.32	n/a	3/26/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-33S	0.32	n/a	3/25/2020	0.25	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-38	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-41	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-42	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-43	0.32	n/a	3/25/2020	0.073	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-49	0.32	n/a	3/25/2020	0.3ND	152	n/a	n/a	87.5	n/a	n/a	0.00008565	NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-23S	7.67	4.86	3/26/2020	5.69	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-24S	7.67	4.86	3/26/2020	5.51	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	**YGWC-33S**	**7.67**	**4.86**	**3/25/2020**	**3.86**	**152**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001713**	**NP Inter (normality) 1 of 2**
pH (S.U.)	YGWC-36	7.67	4.86	3/25/2020	5.49	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-38	7.67	4.86	3/25/2020	4.89	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-41	7.67	4.86	3/25/2020	4.87	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-42	7.67	4.86	3/25/2020	5.53	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-43	7.67	4.86	3/25/2020	5.79	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-49	7.67	4.86	3/25/2020	5.69	152	n/a	n/a	0	n/a	n/a	0.0001713	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-23S	71	n/a	3/26/2020	36.5	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-24S	71	n/a	3/26/2020	0.5ND	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-33S**	**71**	**n/a**	**3/25/2020**	**448**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-36	71	n/a	3/25/2020	58.8	134	n/a	n/a	9.701	n/a	n/a	0.00011	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-38**	**71**	**n/a**	**3/25/2020**	**483**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 2:50 PM

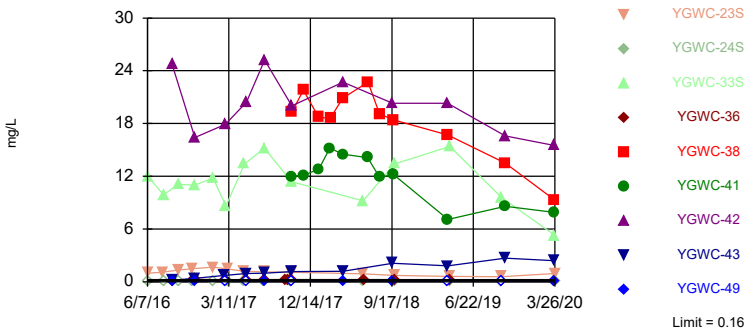
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**YGWC-41**	**71**	**n/a**	**3/25/2020**	**214**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-42**	**71**	**n/a**	**3/25/2020**	**642**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-43**	**71**	**n/a**	**3/25/2020**	**164**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-49**	**71**	**n/a**	**3/25/2020**	**76.1**	**134**	**n/a**	**n/a**	**9.701**	**n/a**	**n/a**	**0.00011**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-23S	185.4	n/a	3/26/2020	110	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-24S	185.4	n/a	3/26/2020	67	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-33S**	**185.4**	**n/a**	**3/25/2020**	**839**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-36	185.4	n/a	3/25/2020	164	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-38**	**185.4**	**n/a**	**3/25/2020**	**883**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**185.4**	**n/a**	**3/25/2020**	**428**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**185.4**	**n/a**	**3/25/2020**	**1200**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-43**	**185.4**	**n/a**	**3/25/2020**	**352**	**134**	**9.706**	**2.032**	**0**	**None**	**sqrt(x)**	**0.0008358**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-49	185.4	n/a	3/25/2020	130	134	9.706	2.032	0	None	sqrt(x)	0.0008358	Param Inter 1 of 2

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-23S, YGWC-33S, 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 134 background values. 43.28% NDs. Annual per-constituent alpha = 0.001979. Individual comparison alpha = 0.00011 (1 of 2). Comparing 9 points to limit.

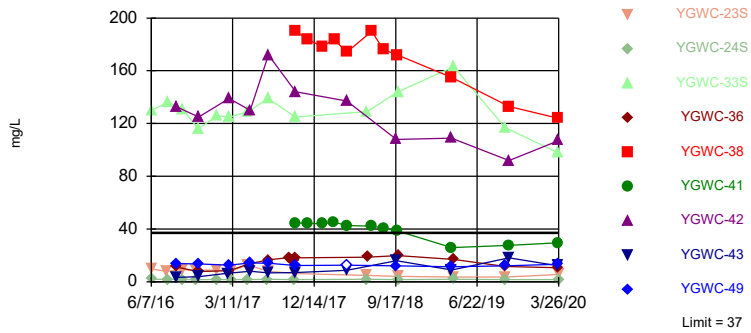
Constituent: Boron Analysis Run 5/5/2020 2:28 PM View: PL's
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-33S, 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 134 background values. 0.7463% NDs. Annual per-constituent alpha = 0.001979. Individual comparison alpha = 0.00011 (1 of 2). Comparing 9 points to limit.

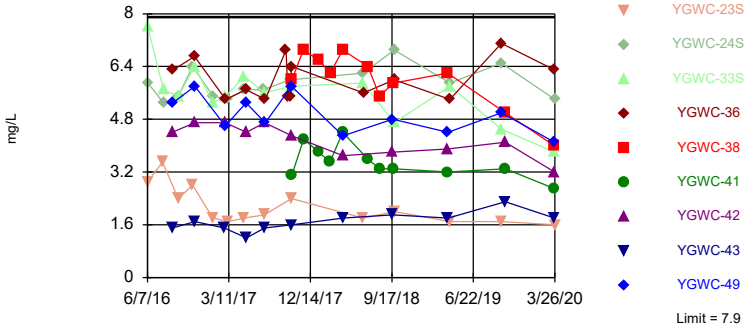
Constituent: Calcium Analysis Run 5/5/2020 2:28 PM View: PL's
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit

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 134 background values. Annual per-constituent alpha = 0.001979. Individual comparison alpha = 0.00011 (1 of 2). Comparing 9 points to limit.

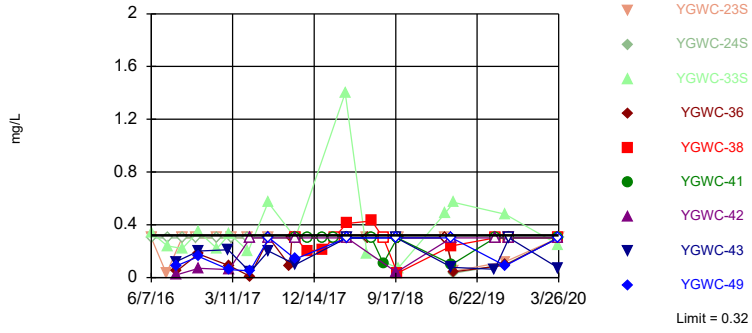
Constituent: Chloride Analysis Run 5/5/2020 2:28 PM View: PL's
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by 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 152 background values. 87.5% NDs. Annual per-constituent alpha = 0.001541. Individual comparison alpha = 0.00008565 (1 of 2). Comparing 9 points to limit.

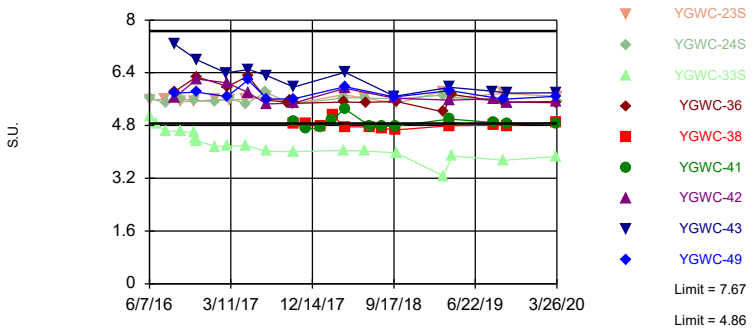
Constituent: Fluoride Analysis Run 5/5/2020 2:28 PM View: PL's
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limits: YGWC-33S

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 152 background values. Annual per-constituent alpha = 0.003081. Individual comparison alpha = 0.0001713 (1 of 2). Comparing 9 points to limit.

Constituent: pH Analysis Run 5/5/2020 2:28 PM View: PL's

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

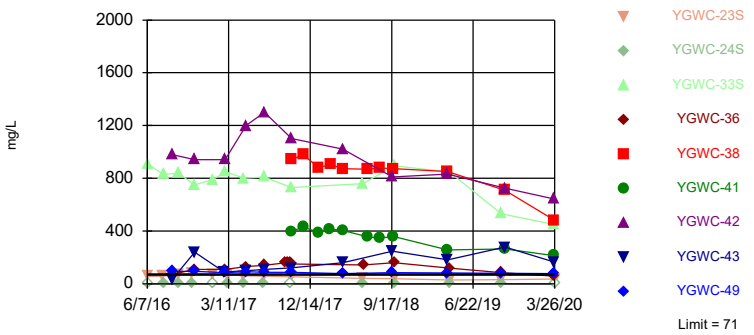
Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: YGWC-33S, YGWC-38, YGWC-41, YGWC-42, YGWC-43, YGWC-49

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 134 background values. 9.701% NDs. Annual per-constituent alpha = 0.001979. Individual comparison alpha = 0.00011 (1 of 2). Comparing 9 points to limit.

Constituent: Sulfate Analysis Run 5/5/2020 2:28 PM View: PL's

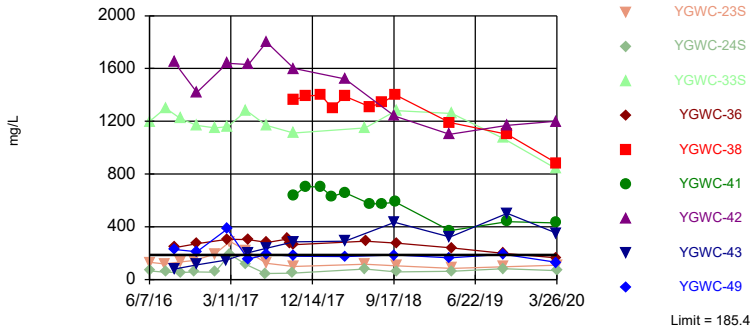
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: YGWC-33S, YGWC-38, YGWC-41, YGWC-42, YGWC-43

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=9.706, Std. Dev.=2.032, n=134. Normality test: Chi Squared @alpha = 0.01, calculated = 7.642, critical = 14.07. Kappa = 1.924 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0008358. Comparing 9 points to limit.

Constituent: Total Dissolved Solids Analysis Run 5/5/2020 2:28 PM View: PL's

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
6/2/2016	<0.1	<0.1	<0.1						
6/6/2016				<0.1	<0.1				
6/7/2016						<0.1	<0.1	0.99	<0.1
6/8/2016									
7/26/2016	<0.1	0.0047 (J)	0.0052 (J)						
7/27/2016				<0.1	0.0059 (J)	0.008 (J)	<0.1		
7/28/2016								1.09	<0.1
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/14/2016	0.01 (J)	<0.1	0.0071 (J)						
9/16/2016					0.0079 (J)	0.0086 (J)			
9/19/2016				<0.1			<0.1		<0.1
9/20/2016								1.35	
9/21/2016									
11/2/2016		<0.1	<0.1				<0.1		
11/3/2016				<0.1	0.0082 (J)	0.0077 (J)			<0.1
11/4/2016	<0.1								
11/8/2016								1.5	
11/14/2016									
11/15/2016									
11/16/2016									
1/11/2017				<0.1	0.0096 (J)	0.0092 (J)			
1/12/2017	<0.1		0.0076 (J)						
1/13/2017		<0.1					<0.1		<0.1
1/16/2017								1.67	
1/17/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017				<0.1	<0.1				
3/2/2017						0.0095 (J)			
3/6/2017		<0.1					<0.1		<0.1
3/7/2017	<0.1		0.0089 (J)						
3/8/2017									
3/9/2017								1.44	
4/26/2017				<0.1	0.0091 (J)		<0.1		<0.1
5/1/2017		<0.1	0.0061 (J)						
5/2/2017	<0.1					<0.1		1.2	
5/3/2017									
5/9/2017									
5/10/2017									
6/27/2017	<0.1		0.0079 (J)						
6/28/2017				<0.1	0.0079 (J)				
6/29/2017		<0.1				0.0074 (J)	<0.1		<0.1
7/7/2017									
7/10/2017								1.12	
7/11/2017									
7/13/2017									
9/22/2017									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
9/29/2017									
10/3/2017	<0.1		0.0094 (J)						<0.1
10/4/2017					0.009 (J)	0.0077 (J)	<0.1		
10/5/2017		<0.1		<0.1					
10/6/2017									
10/11/2017								1.09	
10/12/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/3/2018									
4/4/2018									
6/5/2018									0.0092 (J)
6/6/2018			0.0098 (J)				0.0049 (J)		
6/7/2018	<0.1	0.0045 (J)		<0.1					
6/11/2018					0.0093 (J)	0.01 (J)			
6/12/2018								0.9	
6/13/2018									
6/27/2018									
6/28/2018									
8/7/2018									
9/20/2018									
9/24/2018									
9/25/2018				0.0046 (J)	0.007 (J)	0.0096 (J)	<0.1		0.0054 (J)
9/26/2018	0.0057 (J)	0.005 (J)	0.01 (J)						
9/27/2018								0.71	
3/26/2019									
3/27/2019									
3/28/2019									
4/2/2019						0.0066 (J)			0.011 (J)
4/3/2019	0.0044 (J)	0.0055 (J)	0.0076 (J)	<0.1	0.0053 (J)		<0.1		
4/4/2019								0.6	
9/24/2019	0.0049 (J)		0.01 (J)						0.018 (J)
9/25/2019		<0.1				0.0081 (J)	<0.1		
9/26/2019				0.0062 (J)	0.0072 (J)				
9/27/2019								0.58	
10/9/2019									
3/24/2020	0.0068 (J)		0.011 (J)	0.0054 (J)	0.01 (J)	0.0092 (J)	<0.1		0.016 (J)
3/25/2020		0.011 (J)							
3/26/2020								0.94	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016	12	<0.1							
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016	9.89	<0.1							
8/30/2016			24.7						
8/31/2016				0.169					
9/1/2016					0.0113 (J)				
9/2/2016						0.133			
9/14/2016									
9/16/2016									
9/19/2016									
9/20/2016		<0.1							
9/21/2016	11.1								
11/2/2016									
11/3/2016									
11/4/2016									
11/8/2016		<0.1							
11/14/2016	11					0.287			
11/15/2016					0.0074 (J)				
11/16/2016			16.4	0.406					
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017									
1/17/2017	11.8	<0.1							
2/24/2017				0.725					
2/27/2017			17.9		<0.1				
2/28/2017						0.215			
3/1/2017	8.61								
3/2/2017									
3/6/2017									
3/7/2017									
3/8/2017		<0.1							
3/9/2017									
4/26/2017									
5/1/2017									
5/2/2017		0.0099 (J)							
5/3/2017	13.4								
5/9/2017					<0.1	0.233			
5/10/2017			20.4	0.955					
6/27/2017									
6/28/2017									
6/29/2017									
7/7/2017		0.0076 (J)							
7/10/2017	15.2								
7/11/2017			25.2	0.994					
7/13/2017					0.0093 (J)	0.262			
9/22/2017						0.238			

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
9/29/2017						0.235			
10/3/2017									
10/4/2017									
10/5/2017		<0.1							
10/6/2017						0.256			
10/11/2017	11.4				<0.1	0.245	0.0135 (J)		
10/12/2017			20	1.15				0.0401	19.3
11/20/2017							0.0251 (J)	0.156	21.8
11/21/2017									
1/10/2018								0.15	
1/11/2018							0.0255 (J)		
1/12/2018									18.7
2/19/2018								0.146	
2/20/2018							<0.1		18.6
4/3/2018							0.033 (J)	0.12	20.9
4/4/2018			22.7	1.2	0.0041 (J)				
6/5/2018									
6/6/2018									
6/7/2018									
6/11/2018									
6/12/2018	9.2	0.018 (J)							
6/13/2018						0.25			
6/27/2018									
6/28/2018							0.053	0.16	22.7
8/7/2018							0.024 (J)	0.12	19.1
9/20/2018			20.3	2.1	0.0042 (J)				
9/24/2018							0.028 (J)	0.099	18.4
9/25/2018									
9/26/2018	13.4	0.0055 (J)				0.24			
9/27/2018									
3/26/2019								0.096	
3/27/2019			20.3				0.017 (J)		16.7
3/28/2019				1.8	<0.1				
4/2/2019									
4/3/2019									
4/4/2019	15.4	<0.1				0.22			
9/24/2019									
9/25/2019									
9/26/2019	9.6	0.0068 (J)			<0.1	0.13			
9/27/2019									
10/9/2019			16.6	2.7			0.017 (J)	0.079	13.5
3/24/2020								0.088 (J)	
3/25/2020	5.3		15.5	2.4	0.012 (J)	0.11	0.043 (J)		9.3
3/26/2020		0.033 (J)							

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-41
6/2/2016	
6/6/2016	
6/7/2016	
6/8/2016	
7/26/2016	
7/27/2016	
7/28/2016	
8/1/2016	
8/30/2016	
8/31/2016	
9/1/2016	
9/2/2016	
9/14/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	
11/2/2016	
11/3/2016	
11/4/2016	
11/8/2016	
11/14/2016	
11/15/2016	
11/16/2016	
1/11/2017	
1/12/2017	
1/13/2017	
1/16/2017	
1/17/2017	
2/24/2017	
2/27/2017	
2/28/2017	
3/1/2017	
3/2/2017	
3/6/2017	
3/7/2017	
3/8/2017	
3/9/2017	
4/26/2017	
5/1/2017	
5/2/2017	
5/3/2017	
5/9/2017	
5/10/2017	
6/27/2017	
6/28/2017	
6/29/2017	
7/7/2017	
7/10/2017	
7/11/2017	
7/13/2017	
9/22/2017	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-41
9/29/2017	
10/3/2017	
10/4/2017	
10/5/2017	
10/6/2017	
10/11/2017	
10/12/2017	12
11/20/2017	
11/21/2017	12.1
1/10/2018	
1/11/2018	12.8
1/12/2018	
2/19/2018	15.2
2/20/2018	
4/3/2018	14.5
4/4/2018	
6/5/2018	
6/6/2018	
6/7/2018	
6/11/2018	
6/12/2018	
6/13/2018	
6/27/2018	14.1
6/28/2018	
8/7/2018	11.9
9/20/2018	
9/24/2018	12.2
9/25/2018	
9/26/2018	
9/27/2018	
3/26/2019	
3/27/2019	
3/28/2019	7.1
4/2/2019	
4/3/2019	
4/4/2019	
9/24/2019	
9/25/2019	
9/26/2019	
9/27/2019	
10/9/2019	8.6
3/24/2020	
3/25/2020	7.9
3/26/2020	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
6/2/2016	2.4	8.8	33						
6/6/2016				6.2	1.4				
6/7/2016						2.2	2.3	9.6	3.7
6/8/2016									
7/26/2016	2.12	7.69	32.3						
7/27/2016				4.73	1.19	2	2.08		
7/28/2016								7.87	3.15
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/14/2016	2.18	8.49	31						
9/16/2016					1.5	1.97			
9/19/2016				4.76			1.97		3.17
9/20/2016								9.28	
9/21/2016									
11/2/2016		7.83	30.9				2.13		
11/3/2016				5.25	1.31	1.99			3.4
11/4/2016	2.17 (J)								
11/8/2016								8.6	
11/14/2016									
11/15/2016									
11/16/2016									
1/11/2017				4.74	1.25	2.28			
1/12/2017	2.37		35.7						
1/13/2017		8.08					2.45		4.98
1/16/2017								8.85	
1/17/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017				5.37	1.26				
3/2/2017						2.15			
3/6/2017		8.64					2.48		6.28
3/7/2017	2.34		32.7						
3/8/2017									
3/9/2017								8.4	
4/26/2017				4.28	1.05		2.3		6.65
5/1/2017		13.4	37						
5/2/2017	2.17					1.95		12.9	
5/3/2017									
5/9/2017									
5/10/2017									
6/27/2017	2.13		36.5						
6/28/2017				4.95	1.06				
6/29/2017		8.81				2.02	2.54		6.04
7/7/2017									
7/10/2017								8.09	
7/11/2017									
7/13/2017									
9/22/2017									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
9/29/2017									
10/3/2017	2.15		30.9						8.28
10/4/2017					1.1	2.03	2.25		
10/5/2017		9.29		5.28					
10/6/2017									
10/11/2017								6.36	
10/12/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/3/2018									
4/4/2018									
6/5/2018									9.1
6/6/2018			26.2				2.3		
6/7/2018	2.3	8.2		4.8					
6/11/2018					1.4	2.1			
6/12/2018								4.7	
6/13/2018									
6/27/2018									
6/28/2018									
8/7/2018									
9/20/2018									
9/24/2018									
9/25/2018				4.6	1	2.1	2.3		10.4 (J)
9/26/2018	2.3	9.5 (J)	25.8						
9/27/2018								4.1	
3/26/2019									
3/27/2019									
3/28/2019									
4/2/2019						2.5			8.8
4/3/2019	2.8	8.4	24.7 (J)	5.3	1.2		2.9		
4/4/2019								3.7	
9/24/2019	2.5		25.8						7.7
9/25/2019		9.5				2.6	2.4		
9/26/2019				4.9	1.1				
9/27/2019								3.7	
10/9/2019									
3/24/2020	2.5		26.1	5.3	1	2.7	2.6		6
3/25/2020		10.5							
3/26/2020								5.6	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016	130	1.9							
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016	136	1.83							
8/30/2016			133						
8/31/2016				3.4					
9/1/2016					13.9				
9/2/2016						11.2			
9/14/2016									
9/16/2016									
9/19/2016									
9/20/2016		1.78							
9/21/2016	131								
11/2/2016									
11/3/2016									
11/4/2016									
11/8/2016		1.77							
11/14/2016	116					7.79			
11/15/2016					13.5				
11/16/2016			125	3.79					
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017									
1/17/2017	126	1.7							
2/24/2017				6.42					
2/27/2017			139		12.5				
2/28/2017						8.37			
3/1/2017	125								
3/2/2017									
3/6/2017									
3/7/2017									
3/8/2017		1.77							
3/9/2017									
4/26/2017									
5/1/2017									
5/2/2017		1.57							
5/3/2017	129								
5/9/2017					14.4	13.9			
5/10/2017			130	7.9					
6/27/2017									
6/28/2017									
6/29/2017									
7/7/2017		1.8							
7/10/2017	139								
7/11/2017			172	6.71					
7/13/2017					14.1	16.6			
9/22/2017						18.4			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
9/29/2017						16.1			
10/3/2017									
10/4/2017									
10/5/2017		1.7							
10/6/2017						16.6			
10/11/2017	125				12.4	18.1	2.74		
10/12/2017			144	7.05				2.9	190
11/20/2017							1.81	10.4	184
11/21/2017									
1/10/2018								10.2	
1/11/2018							1.54		
1/12/2018									178
2/19/2018								<25	
2/20/2018							1.71		184
4/3/2018							1.4	6.3	174
4/4/2018			137	8.6	<25				
6/5/2018									
6/6/2018									
6/7/2018									
6/11/2018									
6/12/2018	129	1.8							
6/13/2018						18.7 (J)			
6/27/2018									
6/28/2018							1.4	6.7	190
8/7/2018							1.2	6.3	176
9/20/2018			108	15.9 (J)	12 (J)				
9/24/2018							1.1	5.7	172
9/25/2018									
9/26/2018	144	1.7				19.8 (J)			
9/27/2018									
3/26/2019								5.6	
3/27/2019			109				1.5		155
3/28/2019				8.9	11.3 (J)				
4/2/2019									
4/3/2019									
4/4/2019	163	1.9				16.9 (J)			
9/24/2019									
9/25/2019									
9/26/2019	117	1.7			12.1	11.7			
9/27/2019									
10/9/2019			92	18.2			2.4	4.9	133
3/24/2020								4.8	
3/25/2020	97.8		107	12.1	13.2	10.6	2.7		124
3/26/2020		1.7							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-41
6/2/2016	
6/6/2016	
6/7/2016	
6/8/2016	
7/26/2016	
7/27/2016	
7/28/2016	
8/1/2016	
8/30/2016	
8/31/2016	
9/1/2016	
9/2/2016	
9/14/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	
11/2/2016	
11/3/2016	
11/4/2016	
11/8/2016	
11/14/2016	
11/15/2016	
11/16/2016	
1/11/2017	
1/12/2017	
1/13/2017	
1/16/2017	
1/17/2017	
2/24/2017	
2/27/2017	
2/28/2017	
3/1/2017	
3/2/2017	
3/6/2017	
3/7/2017	
3/8/2017	
3/9/2017	
4/26/2017	
5/1/2017	
5/2/2017	
5/3/2017	
5/9/2017	
5/10/2017	
6/27/2017	
6/28/2017	
6/29/2017	
7/7/2017	
7/10/2017	
7/11/2017	
7/13/2017	
9/22/2017	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-41
9/29/2017	
10/3/2017	
10/4/2017	
10/5/2017	
10/6/2017	
10/11/2017	
10/12/2017	44.5
11/20/2017	
11/21/2017	44.4
1/10/2018	
1/11/2018	43.9
1/12/2018	
2/19/2018	45.3
2/20/2018	
4/3/2018	42.7
4/4/2018	
6/5/2018	
6/6/2018	
6/7/2018	
6/11/2018	
6/12/2018	
6/13/2018	
6/27/2018	42.2
6/28/2018	
8/7/2018	40.7
9/20/2018	
9/24/2018	38.5
9/25/2018	
9/26/2018	
9/27/2018	
3/26/2019	
3/27/2019	
3/28/2019	26
4/2/2019	
4/3/2019	
4/4/2019	
9/24/2019	
9/25/2019	
9/26/2019	
9/27/2019	
10/9/2019	27.6
3/24/2020	
3/25/2020	29.6
3/26/2020	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
6/2/2016	4.3	3.7	7.2						
6/6/2016				6.8	6.4				
6/7/2016						4.5	1.9	2.9	2.8
6/8/2016									
7/26/2016	4.4	3.6	6.6						
7/27/2016				6.7	6.2	4.5	1.9		
7/28/2016								3.5	2.6
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/14/2016	3.8	3.4	6.6						
9/16/2016					6.1	4.5			
9/19/2016				7			1.9		2.4
9/20/2016								2.4	
9/21/2016									
11/2/2016		4.5	7.6				2.6		
11/3/2016				7.5	7.4	5.4			2.9
11/4/2016	4.8								
11/8/2016								2.8	
11/14/2016									
11/15/2016									
11/16/2016									
1/11/2017				6.5	6.1	4.7			
1/12/2017	3.8		6.8						
1/13/2017		4.2					2.3		2.5
1/16/2017								1.8	
1/17/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017				6.9	6				
3/2/2017						4.8			
3/6/2017		3.6					1.9		2.1
3/7/2017	4.5		6.8						
3/8/2017									
3/9/2017								1.7	
4/26/2017				7	6.5		2		2.1
5/1/2017		4.3	7.2						
5/2/2017	4.6					4.6		1.8	
5/3/2017									
5/9/2017									
5/10/2017									
6/27/2017	4.3		7						
6/28/2017				7	6.4				
6/29/2017		4.2				4.5	2.6		2.8
7/7/2017									
7/10/2017								1.9	
7/11/2017									
7/13/2017									
9/22/2017									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
9/29/2017									
10/3/2017	4.2		6.5						2.2
10/4/2017					6.8	4.7	2.6		
10/5/2017		4.7		7					
10/6/2017									
10/11/2017								2.4	
10/12/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/3/2018									
4/4/2018									
6/5/2018									1.7
6/6/2018			4.7				2.7		
6/7/2018	4.5	4.4		6.8					
6/11/2018					6.8	4.9			
6/12/2018								1.8	
6/13/2018									
6/27/2018									
6/28/2018									
8/7/2018									
9/20/2018									
9/24/2018									
9/25/2018				7.9	7.8	5.6	3.6		2.2
9/26/2018	5.1	4.8	4.8						
9/27/2018								2	
3/26/2019									
3/27/2019									
3/28/2019									
4/2/2019						4.8			2.5
4/3/2019	4.2	4.3	4	6.9	6.3		3.1		
4/4/2019								1.7	
9/24/2019	4.5		3.7						3.1
9/25/2019		4.5				5.7	2.8		
9/26/2019				7	7.1				
9/27/2019								1.7	
10/9/2019									
3/24/2020	4.3		3.5	7	6.8	5	2.7		2.8
3/25/2020		3.9							
3/26/2020								1.6	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016	7.6	5.9							
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016	5.7	5.3							
8/30/2016			4.4						
8/31/2016				1.5					
9/1/2016					5.3				
9/2/2016						6.3			
9/14/2016									
9/16/2016									
9/19/2016									
9/20/2016		5.5							
9/21/2016	5.5								
11/2/2016									
11/3/2016									
11/4/2016									
11/8/2016		6.4							
11/14/2016	6.4					6.7			
11/15/2016					5.8				
11/16/2016			4.7	1.7					
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017									
1/17/2017	5.3	5.5							
2/24/2017				1.5					
2/27/2017			4.7		4.6				
2/28/2017						5.4			
3/1/2017	5.5								
3/2/2017									
3/6/2017									
3/7/2017									
3/8/2017		5.4							
3/9/2017									
4/26/2017									
5/1/2017									
5/2/2017		5.7							
5/3/2017	6.1								
5/9/2017					5.3	5.7			
5/10/2017			4.4	1.2					
6/27/2017									
6/28/2017									
6/29/2017									
7/7/2017		5.7							
7/10/2017	5.6								
7/11/2017			4.7	1.5					
7/13/2017					4.7	5.4			
9/22/2017						6.9			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
9/29/2017						5.5			
10/3/2017									
10/4/2017									
10/5/2017		6							
10/6/2017						5.5			
10/11/2017	5.8				5.8	6.4	2.4		
10/12/2017			4.3	1.6				3.8	6
11/20/2017							1.8	4.4	6.9
11/21/2017									
1/10/2018								4.6	
1/11/2018							1.6		
1/12/2018									6.6
2/19/2018								4.6	
2/20/2018							2		6.2
4/3/2018							3.3	5.9	6.9
4/4/2018			3.7	1.8	4.3				
6/5/2018									
6/6/2018									
6/7/2018									
6/11/2018									
6/12/2018	5.9	6.2							
6/13/2018						5.6			
6/27/2018									
6/28/2018							2.1	5	6.4
8/7/2018							1.2	4.3	5.5
9/20/2018			3.8	1.9	4.8				
9/24/2018							1.3	4.9	5.9
9/25/2018									
9/26/2018	4.7	6.9				6			
9/27/2018									
3/26/2019								4.4	
3/27/2019			3.9				1.4		6.2
3/28/2019				1.8	4.4				
4/2/2019									
4/3/2019									
4/4/2019	5.8	5.9				5.4			
9/24/2019									
9/25/2019									
9/26/2019	4.5	6.5			5	7.1			
9/27/2019									
10/9/2019			4.1	2.3			2.1	5.1	5
3/24/2020								4.7	
3/25/2020	3.8		3.2	1.8	4.1	6.3	1.9		4
3/26/2020		5.4							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-41
6/2/2016	
6/6/2016	
6/7/2016	
6/8/2016	
7/26/2016	
7/27/2016	
7/28/2016	
8/1/2016	
8/30/2016	
8/31/2016	
9/1/2016	
9/2/2016	
9/14/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	
11/2/2016	
11/3/2016	
11/4/2016	
11/8/2016	
11/14/2016	
11/15/2016	
11/16/2016	
1/11/2017	
1/12/2017	
1/13/2017	
1/16/2017	
1/17/2017	
2/24/2017	
2/27/2017	
2/28/2017	
3/1/2017	
3/2/2017	
3/6/2017	
3/7/2017	
3/8/2017	
3/9/2017	
4/26/2017	
5/1/2017	
5/2/2017	
5/3/2017	
5/9/2017	
5/10/2017	
6/27/2017	
6/28/2017	
6/29/2017	
7/7/2017	
7/10/2017	
7/11/2017	
7/13/2017	
9/22/2017	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-41
9/29/2017	
10/3/2017	
10/4/2017	
10/5/2017	
10/6/2017	
10/11/2017	
10/12/2017	3.1
11/20/2017	
11/21/2017	4.2
1/10/2018	
1/11/2018	3.8
1/12/2018	
2/19/2018	3.5
2/20/2018	
4/3/2018	4.4
4/4/2018	
6/5/2018	
6/6/2018	
6/7/2018	
6/11/2018	
6/12/2018	
6/13/2018	
6/27/2018	3.6
6/28/2018	
8/7/2018	3.3
9/20/2018	
9/24/2018	3.3
9/25/2018	
9/26/2018	
9/27/2018	
3/26/2019	
3/27/2019	
3/28/2019	3.2
4/2/2019	
4/3/2019	
4/4/2019	
9/24/2019	
9/25/2019	
9/26/2019	
9/27/2019	
10/9/2019	3.3
3/24/2020	
3/25/2020	2.7
3/26/2020	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)
6/2/2016	<0.3	0.11 (J)	<0.3						
6/6/2016				<0.3	<0.3				
6/7/2016						<0.3	<0.3	<0.3	<0.3
6/8/2016									
7/26/2016	<0.3	0.05 (J)	<0.3						
7/27/2016				<0.3	<0.3	<0.3			<0.3
7/28/2016							0.03 (J)	0.02 (J)	
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/14/2016	<0.3	0.04 (J)	<0.3						
9/16/2016				<0.3		<0.3			
9/19/2016					<0.3			0.02 (J)	<0.3
9/20/2016							<0.3		
9/21/2016									
11/2/2016		<0.3	<0.3						<0.3
11/3/2016				<0.3	<0.3	<0.3		<0.3	
11/4/2016	<0.3								
11/8/2016							<0.3		
11/14/2016									
11/15/2016									
11/16/2016									
1/11/2017				<0.3	<0.3	<0.3			
1/12/2017	<0.3	0.04 (J)							
1/13/2017			<0.3					<0.3	<0.3
1/16/2017							<0.3		
1/17/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017				<0.3	<0.3				
3/2/2017						<0.3			
3/6/2017			<0.3					<0.3	<0.3
3/7/2017	<0.3	<0.3							
3/8/2017									
3/9/2017							<0.3		
4/26/2017				<0.3	<0.3			0.04 (J)	<0.3
5/1/2017		<0.3	<0.3						
5/2/2017	<0.3					<0.3	<0.3		
5/3/2017									
5/9/2017									
5/10/2017									
6/27/2017	<0.3	<0.3							
6/28/2017				<0.3	<0.3				
6/29/2017			<0.3			<0.3		<0.3	<0.3
7/7/2017									
7/10/2017							<0.3		
7/11/2017									
7/13/2017									
9/22/2017									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)
9/29/2017									
10/3/2017	<0.3	<0.3						<0.3	
10/4/2017				<0.3		<0.3			<0.3
10/5/2017			<0.3		<0.3				
10/6/2017									
10/11/2017							<0.3		
10/12/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
3/28/2018				<0.3	<0.3	<0.3			
3/29/2018	<0.3	<0.3	<0.3					<0.3	<0.3
3/30/2018							<0.3		
4/3/2018									
4/4/2018									
6/5/2018								0.13 (J)	
6/6/2018		0.15 (J)							<0.3
6/7/2018	<0.3		<0.3		<0.3				
6/11/2018				<0.3		<0.3			
6/12/2018							<0.3		
6/13/2018									
6/27/2018									
6/28/2018									
8/7/2018									
9/20/2018									
9/24/2018									
9/25/2018				<0.3	<0.3	<0.3		0 (J)	<0.3
9/26/2018	<0.3	<0.3	<0.3						
9/27/2018							<0.3		
3/4/2019	<0.3	0.19 (J)	<0.3						
3/5/2019				<0.3		<0.3		0.32	<0.3
3/6/2019					<0.3		<0.3		
3/26/2019									
3/27/2019									
3/28/2019									
4/2/2019						<0.3		0.12 (J)	
4/3/2019	<0.3	0.047 (J)	<0.3	<0.3	<0.3				<0.3
4/4/2019							0.049 (J)		
8/21/2019									
8/22/2019									
9/24/2019	<0.3	0.05 (J)						0.15 (J)	
9/25/2019			<0.3			<0.3			<0.3
9/26/2019				<0.3	<0.3				
9/27/2019							0.12 (J)		
10/9/2019									
3/24/2020	<0.3	<0.3		<0.3	<0.3	<0.3		0.081 (J)	<0.3
3/25/2020			<0.3						
3/26/2020							<0.3		

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 2:50 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWC-38	YGWC-41
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016	0.34	<0.3							
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016	0.24 (J)	<0.3							
8/30/2016			0.02 (J)						
8/31/2016				0.12 (J)					
9/1/2016					0.09 (J)				
9/2/2016						0.05 (J)			
9/14/2016									
9/16/2016									
9/19/2016									
9/20/2016		<0.3							
9/21/2016	0.22 (J)								
11/2/2016									
11/3/2016									
11/4/2016									
11/8/2016		<0.3							
11/14/2016	0.35					0.18 (J)			
11/15/2016					0.16 (J)				
11/16/2016			0.07 (J)	0.2 (J)					
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017									
1/17/2017	0.22 (J)	<0.3							
2/24/2017				0.21 (J)					
2/27/2017			0.06 (J)		0.06 (J)				
2/28/2017						0.09 (J)			
3/1/2017	0.33								
3/2/2017									
3/6/2017									
3/7/2017									
3/8/2017		<0.3							
3/9/2017									
4/26/2017									
5/1/2017									
5/2/2017		<0.3							
5/3/2017	0.2 (J)								
5/9/2017					0.05 (J)	0.009 (J)			
5/10/2017			<0.3	0.04 (J)					
6/27/2017									
6/28/2017									
6/29/2017									
7/7/2017		<0.3							
7/10/2017	0.57								
7/11/2017			<0.3	0.2 (J)					
7/13/2017					<0.3	<0.3			
9/22/2017						0.09 (J)			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWC-38	YGWC-41
9/29/2017						<0.3			
10/3/2017									
10/4/2017									
10/5/2017		<0.3							
10/6/2017						<0.3			
10/11/2017	<0.3				0.14 (J)	<0.3	<0.3		
10/12/2017			<0.3	0.1 (J)				<0.3	<0.3
11/20/2017							<0.3	0.2 (J)	
11/21/2017									<0.3
1/10/2018									
1/11/2018							<0.3		<0.3
1/12/2018								0.21 (J)	
2/19/2018									<0.3
2/20/2018							0.23	<0.3	
3/28/2018									
3/29/2018									
3/30/2018	1.4	<0.3				<0.3			
4/3/2018							<0.3	0.41	<0.3
4/4/2018			<0.3	<0.3	<0.3				
6/5/2018									
6/6/2018									
6/7/2018									
6/11/2018									
6/12/2018	0.18 (J)	<0.3							
6/13/2018						<0.3			
6/27/2018									<0.3
6/28/2018							<0.3	0.43	
8/7/2018							0.048 (J)	<0.3	0.11 (J)
9/20/2018			0.041 (J)	<0.3	<0.3				
9/24/2018							<0.3	0.034 (J)	<0.3
9/25/2018									
9/26/2018	0.07 (J)	<0.3				<0.3			
9/27/2018									
3/4/2019									
3/5/2019		<0.3							
3/6/2019	0.49					<0.3			
3/26/2019									
3/27/2019			<0.3				<0.3	0.24 (J)	
3/28/2019				0.078 (J)	<0.3				0.1 (J)
4/2/2019									
4/3/2019									
4/4/2019	0.57	0.033 (J)				0.043 (J)			
8/21/2019				0.062 (J)			<0.3		
8/22/2019			<0.3					<0.3	<0.3
9/24/2019									
9/25/2019									
9/26/2019	0.48	0.098 (J)			0.09 (J)	0.094 (J)			
9/27/2019									
10/9/2019			<0.3	<0.3			<0.3	<0.3	<0.3
3/24/2020									
3/25/2020	0.25 (J)		<0.3	0.073 (J)	<0.3	<0.3	<0.3	<0.3	<0.3
3/26/2020		<0.3							

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-40 (bg)
6/2/2016	
6/6/2016	
6/7/2016	
6/8/2016	
7/26/2016	
7/27/2016	
7/28/2016	
8/1/2016	
8/30/2016	
8/31/2016	
9/1/2016	
9/2/2016	
9/14/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	
11/2/2016	
11/3/2016	
11/4/2016	
11/8/2016	
11/14/2016	
11/15/2016	
11/16/2016	
1/11/2017	
1/12/2017	
1/13/2017	
1/16/2017	
1/17/2017	
2/24/2017	
2/27/2017	
2/28/2017	
3/1/2017	
3/2/2017	
3/6/2017	
3/7/2017	
3/8/2017	
3/9/2017	
4/26/2017	
5/1/2017	
5/2/2017	
5/3/2017	
5/9/2017	
5/10/2017	
6/27/2017	
6/28/2017	
6/29/2017	
7/7/2017	
7/10/2017	
7/11/2017	
7/13/2017	
9/22/2017	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-40 (bg)
9/29/2017	
10/3/2017	
10/4/2017	
10/5/2017	
10/6/2017	
10/11/2017	
10/12/2017	<0.3
11/20/2017	<0.3
11/21/2017	
1/10/2018	<0.3
1/11/2018	
1/12/2018	
2/19/2018	<0.3
2/20/2018	
3/28/2018	
3/29/2018	
3/30/2018	
4/3/2018	<0.3
4/4/2018	
6/5/2018	
6/6/2018	
6/7/2018	
6/11/2018	
6/12/2018	
6/13/2018	
6/27/2018	
6/28/2018	<0.3
8/7/2018	<0.3
9/20/2018	
9/24/2018	<0.3
9/25/2018	
9/26/2018	
9/27/2018	
3/4/2019	
3/5/2019	
3/6/2019	
3/26/2019	<0.3
3/27/2019	
3/28/2019	
4/2/2019	
4/3/2019	
4/4/2019	
8/21/2019	<0.3
8/22/2019	
9/24/2019	
9/25/2019	
9/26/2019	
9/27/2019	
10/9/2019	<0.3
3/24/2020	<0.3
3/25/2020	
3/26/2020	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (bg)
6/2/2016	5.75	6.36	7.67						
6/6/2016				6.17	5.71				
6/7/2016						5.62	6.1	5.57	5.77
6/8/2016									
6/28/2016									
7/26/2016	5.72	6.22	7.66						
7/27/2016				6.14	5.46	5.59			5.79
7/28/2016							6.12	5.6	
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/14/2016	5.74	6.23	7.6						
9/16/2016						5.58			
9/19/2016				6.04	5.59		6.12		5.73
9/20/2016								5.53	
9/21/2016									
11/2/2016		6.08	7.35						5.67
11/3/2016				5.97	5.39	5.59	6.07		
11/4/2016	5.61								
11/8/2016								5.53	
11/10/2016									
11/14/2016									
11/15/2016									
11/16/2016									
1/11/2017				6.05	5.48	5.59			
1/12/2017	5.71		7.49						
1/13/2017		6.19					6.41		5.79
1/16/2017								5.59	
1/17/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017				5.94	5.41				
3/2/2017						5.54			
3/6/2017		6.2					6.34		5.63
3/7/2017	5.66		7.43						
3/8/2017									
3/9/2017								5.56	
4/26/2017				5.99	5.4		6.32		5.66
5/1/2017		6.21	7.22						
5/2/2017	5.65					5.47		5.61	
5/3/2017									
5/9/2017									
5/10/2017									
6/27/2017	5.7		7.32						
6/28/2017				6	5.36				
6/29/2017		6.21				5.56	6.47		5.85
7/7/2017									
7/10/2017								5.68	
7/11/2017									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (bg)
7/13/2017									
9/22/2017									
9/29/2017									
10/3/2017	5.79		7.48				6.56		
10/4/2017					5.32	5.57			5.83
10/5/2017		6.16		6.11					
10/6/2017									
10/11/2017								5.46	
10/12/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
3/28/2018				6.1	5.34	5.59			
3/29/2018	5.63	6.09	7.02				6.75		5.93
3/30/2018								5.73	
4/3/2018									
4/4/2018									
6/5/2018							6.09		
6/6/2018			7.43						5.86
6/7/2018	5.63	6.12		5.98					
6/11/2018					5.28	5.58			
6/12/2018								5.63	
6/13/2018									
6/27/2018									
6/28/2018									
8/7/2018									
9/20/2018									
9/24/2018									
9/25/2018				5.81	4.86	5.59	6.67		5.84
9/26/2018	5.63	5.84	7.13						
9/27/2018								5.47	
3/4/2019	5.75	6.18	7.46						
3/5/2019					5.26	5.48	7.22		6.07
3/6/2019				5.99				5.84	
3/26/2019									
3/27/2019									
3/28/2019									
4/2/2019						5.74	6.94		
4/3/2019	5.63	6.43	7.11	6.29	5.47				5.71
4/4/2019								5.64	
8/21/2019									
8/22/2019									
9/24/2019	5.6		6.93				6.87		
9/25/2019		6.2				5.49			5.86
9/26/2019				6.04	5.2				
9/27/2019								5.77	
10/9/2019									
3/24/2020	5.81		7.34	5.98	5.33	5.57	6.35		5.86

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (bg)
3/25/2020		6.26							
3/26/2020								5.69	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-41
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016	5.07	5.65							
6/28/2016	4.87								
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016	4.62	5.47							
8/30/2016			5.64						
8/31/2016				7.27					
9/1/2016					5.78				
9/2/2016						5.84			
9/14/2016									
9/16/2016									
9/19/2016									
9/20/2016		5.61							
9/21/2016	4.63								
11/2/2016									
11/3/2016									
11/4/2016									
11/8/2016	4.58	5.55							
11/10/2016	4.42								
11/14/2016	4.35					6.28			
11/15/2016					5.81				
11/16/2016			6.21	6.79					
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017									
1/17/2017	4.16	5.53							
2/24/2017				6.39					
2/27/2017			6.09		5.68				
2/28/2017						5.99			
3/1/2017	4.17								
3/2/2017									
3/6/2017									
3/7/2017									
3/8/2017		5.62							
3/9/2017									
4/26/2017									
5/1/2017									
5/2/2017		5.46							
5/3/2017	4.19								
5/9/2017					6.18	6.3			
5/10/2017			5.79	6.5					
6/27/2017									
6/28/2017									
6/29/2017									
7/7/2017		5.81							
7/10/2017	4.02								
7/11/2017			5.45	6.32					

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-41
7/13/2017					5.6	5.57			
9/22/2017						5.5			
9/29/2017						5.58			
10/3/2017									
10/4/2017									
10/5/2017		5.45							
10/6/2017						5.51			
10/11/2017	4.01				5.61	5.47	6.4		
10/12/2017			5.48	5.97				5.43	4.94
11/20/2017							6.33	5.1	
11/21/2017									4.69
1/10/2018								4.97	
1/11/2018							6.29		4.73
1/12/2018									
2/19/2018								5.6	4.96
2/20/2018							7.22		
3/28/2018									
3/29/2018									
3/30/2018	4.05	5.64				5.51			
4/3/2018							6.87	5.84	5.31
4/4/2018			5.93	6.41	5.98				
6/5/2018									
6/6/2018									
6/7/2018									
6/11/2018									
6/12/2018	4.03	5.64							
6/13/2018						5.5			
6/27/2018									4.78
6/28/2018							6.18	5.24	
8/7/2018							6.08	5.18	4.77
9/20/2018			5.63	5.69	5.67				
9/24/2018							5.81	5.14	4.78
9/25/2018									
9/26/2018	3.97	5.61				5.53			
9/27/2018									
3/4/2019									
3/5/2019		5.72							
3/6/2019	3.27					5.21			
3/26/2019								5.3	
3/27/2019			5.57				5.84		
3/28/2019				5.96	5.86				5
4/2/2019									
4/3/2019									
4/4/2019	3.88	5.66				5.74			
8/21/2019				5.84			5.96	5.26	
8/22/2019			5.61						4.89
9/24/2019									
9/25/2019									
9/26/2019	3.74	5.52			5.6	5.51			
9/27/2019									
10/9/2019			5.5	5.78			5.81	5.22	4.86
3/24/2020								5.29	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-41
3/25/2020	3.86		5.53	5.79	5.69	5.49	5.78		4.87
3/26/2020		5.51							

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-38
6/2/2016	
6/6/2016	
6/7/2016	
6/8/2016	
6/28/2016	
7/26/2016	
7/27/2016	
7/28/2016	
8/1/2016	
8/30/2016	
8/31/2016	
9/1/2016	
9/2/2016	
9/14/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	
11/2/2016	
11/3/2016	
11/4/2016	
11/8/2016	
11/10/2016	
11/14/2016	
11/15/2016	
11/16/2016	
1/11/2017	
1/12/2017	
1/13/2017	
1/16/2017	
1/17/2017	
2/24/2017	
2/27/2017	
2/28/2017	
3/1/2017	
3/2/2017	
3/6/2017	
3/7/2017	
3/8/2017	
3/9/2017	
4/26/2017	
5/1/2017	
5/2/2017	
5/3/2017	
5/9/2017	
5/10/2017	
6/27/2017	
6/28/2017	
6/29/2017	
7/7/2017	
7/10/2017	
7/11/2017	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-38
7/13/2017	
9/22/2017	
9/29/2017	
10/3/2017	
10/4/2017	
10/5/2017	
10/6/2017	
10/11/2017	
10/12/2017	4.85
11/20/2017	4.87
11/21/2017	
1/10/2018	
1/11/2018	
1/12/2018	4.78
2/19/2018	
2/20/2018	5.1
3/28/2018	
3/29/2018	
3/30/2018	
4/3/2018	4.76
4/4/2018	
6/5/2018	
6/6/2018	
6/7/2018	
6/11/2018	
6/12/2018	
6/13/2018	
6/27/2018	
6/28/2018	4.75
8/7/2018	4.72
9/20/2018	
9/24/2018	4.67
9/25/2018	
9/26/2018	
9/27/2018	
3/4/2019	
3/5/2019	
3/6/2019	
3/26/2019	
3/27/2019	4.79
3/28/2019	
4/2/2019	
4/3/2019	
4/4/2019	
8/21/2019	
8/22/2019	4.81
9/24/2019	
9/25/2019	
9/26/2019	
9/27/2019	
10/9/2019	4.8
3/24/2020	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-38
3/25/2020	4.89
3/26/2020	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
6/2/2016	1.9	8	20						
6/6/2016				1.2	1.8				
6/7/2016						4.4	<1	56	5.2
6/8/2016									
7/26/2016	1.8	7.7	20						
7/27/2016				1.7	1.9	4.7	0.08 (J)		
7/28/2016								57	5.1
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/14/2016	1.8	7.5	19						
9/16/2016					1.7	4.8			
9/19/2016				1.8			0.08 (J)		4.8
9/20/2016								68	
9/21/2016									
11/2/2016		8.2	20				0.1 (J)		
11/3/2016				0.69 (J)	1.9	5.3			5
11/4/2016	2								
11/8/2016								79	
11/14/2016									
11/15/2016									
11/16/2016									
1/11/2017				<1	1.7	5.2			
1/12/2017	1.9		19						
1/13/2017		8.1					<1		4.3
1/16/2017								72	
1/17/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017				1.8	<1				
3/2/2017						5			
3/6/2017		8					<1		4.5
3/7/2017	2.1		20						
3/8/2017									
3/9/2017								69	
4/26/2017				1.6	1.9		<1		4.9
5/1/2017		8.4	20						
5/2/2017	2					5		60	
5/3/2017									
5/9/2017									
5/10/2017									
6/27/2017	2.1		18						
6/28/2017				<1	<1				
6/29/2017		9.2				5.2	<1		5.5
7/7/2017									
7/10/2017								57	
7/11/2017									
7/13/2017									
9/22/2017									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
9/29/2017									
10/3/2017	2.3		16						5.8
10/4/2017					1.7	5.3	<1		
10/5/2017		9.6		1.6					
10/6/2017									
10/11/2017								52	
10/12/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/3/2018									
4/4/2018									
6/5/2018									6.1
6/6/2018			8.3				0.049 (J)		
6/7/2018	2	8.5		0.68 (J)					
6/11/2018					0.95 (J)	5.2			
6/12/2018								41.4	
6/13/2018									
6/27/2018									
6/28/2018									
8/7/2018									
9/20/2018									
9/24/2018									
9/25/2018				1	1.5	6.1	0.13 (J)		7
9/26/2018	2.3	10.2	7.9						
9/27/2018								39.6	
3/26/2019									
3/27/2019									
3/28/2019									
4/2/2019						5.1			3.8
4/3/2019	2.1	8.5	7	0.82 (J)	1.3		0.12 (J)		
4/4/2019								27.9	
9/24/2019	2.4		5.5						1
9/25/2019		8.5				5.5	<1		
9/26/2019				0.64 (J)	1				
9/27/2019								30.3	
10/9/2019									
3/24/2020	2.1		5.9	<1	0.99 (J)	5.4	<1		3
3/25/2020		8.8							
3/26/2020								36.5	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016	910	<1							
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016	830	1.1							
8/30/2016			980						
8/31/2016				34					
9/1/2016					95				
9/2/2016						72			
9/14/2016									
9/16/2016									
9/19/2016									
9/20/2016		0.38 (J)							
9/21/2016	840								
11/2/2016									
11/3/2016									
11/4/2016									
11/8/2016		0.39 (J)							
11/14/2016	750					110			
11/15/2016					94				
11/16/2016			940	240					
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017									
1/17/2017	790	<1							
2/24/2017				89					
2/27/2017			940		84				
2/28/2017						110			
3/1/2017	850								
3/2/2017									
3/6/2017									
3/7/2017									
3/8/2017		0.29 (J)							
3/9/2017									
4/26/2017									
5/1/2017									
5/2/2017		0.29 (J)							
5/3/2017	800								
5/9/2017					91	130			
5/10/2017			1200	100					
6/27/2017									
6/28/2017									
6/29/2017									
7/7/2017		0.37 (J)							
7/10/2017	810								
7/11/2017			1300	110					
7/13/2017					88	140			
9/22/2017						160			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
9/29/2017						160			
10/3/2017									
10/4/2017									
10/5/2017		<1							
10/6/2017						160			
10/11/2017	730				86	150	20		
10/12/2017			1100	120				17	940
11/20/2017							24	71	980
11/21/2017									
1/10/2018								66	
1/11/2018							23		
1/12/2018									880
2/19/2018								57.2	
2/20/2018							20.6		905
4/3/2018							24.5	49.4	872
4/4/2018			1020	160	76.5				
6/5/2018									
6/6/2018									
6/7/2018									
6/11/2018									
6/12/2018	759	0.35 (J)							
6/13/2018						144			
6/27/2018									
6/28/2018							22	43.8	869
8/7/2018							20.7	40.5	879
9/20/2018			810	247	84.1				
9/24/2018							21.2	39.7	872
9/25/2018									
9/26/2018	895	0.28 (J)				160			
9/27/2018									
3/26/2019								34.3	
3/27/2019			831				17.7		851
3/28/2019				181	82.8				
4/2/2019									
4/3/2019									
4/4/2019	847	0.29 (J)				119			
9/24/2019									
9/25/2019									
9/26/2019	532	0.23 (J)			80	84.8			
9/27/2019									
10/9/2019			725	279			15	27.9	708
3/24/2020								25.2	
3/25/2020	448		642	164	76.1	58.8	14.3		483
3/26/2020		<1							

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-41
6/2/2016	
6/6/2016	
6/7/2016	
6/8/2016	
7/26/2016	
7/27/2016	
7/28/2016	
8/1/2016	
8/30/2016	
8/31/2016	
9/1/2016	
9/2/2016	
9/14/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	
11/2/2016	
11/3/2016	
11/4/2016	
11/8/2016	
11/14/2016	
11/15/2016	
11/16/2016	
1/11/2017	
1/12/2017	
1/13/2017	
1/16/2017	
1/17/2017	
2/24/2017	
2/27/2017	
2/28/2017	
3/1/2017	
3/2/2017	
3/6/2017	
3/7/2017	
3/8/2017	
3/9/2017	
4/26/2017	
5/1/2017	
5/2/2017	
5/3/2017	
5/9/2017	
5/10/2017	
6/27/2017	
6/28/2017	
6/29/2017	
7/7/2017	
7/10/2017	
7/11/2017	
7/13/2017	
9/22/2017	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-41
9/29/2017	
10/3/2017	
10/4/2017	
10/5/2017	
10/6/2017	
10/11/2017	
10/12/2017	400
11/20/2017	
11/21/2017	430
1/10/2018	
1/11/2018	390
1/12/2018	
2/19/2018	414
2/20/2018	
4/3/2018	406
4/4/2018	
6/5/2018	
6/6/2018	
6/7/2018	
6/11/2018	
6/12/2018	
6/13/2018	
6/27/2018	357
6/28/2018	
8/7/2018	346
9/20/2018	
9/24/2018	358
9/25/2018	
9/26/2018	
9/27/2018	
3/26/2019	
3/27/2019	
3/28/2019	258
4/2/2019	
4/3/2019	
4/4/2019	
9/24/2019	
9/25/2019	
9/26/2019	
9/27/2019	
10/9/2019	263
3/24/2020	
3/25/2020	214
3/26/2020	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
6/2/2016	66	96	160						
6/6/2016				120	58				
6/7/2016						28	38	130	60
6/8/2016									
7/26/2016	78	92	177						
7/27/2016				94	35	74	74		
7/28/2016								119	81
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/14/2016	73	102	187						
9/16/2016					35	67			
9/19/2016				92			45		68
9/20/2016								132	
9/21/2016									
11/2/2016		115	181				53		
11/3/2016				104	48	41			61
11/4/2016	75								
11/8/2016								146	
11/14/2016									
11/15/2016									
11/16/2016									
1/11/2017				133	95	104			
1/12/2017	86		202						
1/13/2017		67					46		76
1/16/2017								194	
1/17/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017				119	79				
3/2/2017						77			
3/6/2017		159					164		167
3/7/2017	108		257						
3/8/2017									
3/9/2017								288	
4/26/2017				162	36		34		50
5/1/2017		107	165						
5/2/2017	103					142		221	
5/3/2017									
5/9/2017									
5/10/2017									
6/27/2017	73		189						
6/28/2017				98	45				
6/29/2017		79				53	68		94
7/7/2017									
7/10/2017								123	
7/11/2017									
7/13/2017									
9/22/2017									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-21I (bg)
9/29/2017									
10/3/2017	89		170						149
10/4/2017					45	61	54		
10/5/2017		95		104					
10/6/2017									
10/11/2017								100	
10/12/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/3/2018									
4/4/2018									
6/5/2018									109
6/6/2018			151				79		
6/7/2018	142	90		68					
6/11/2018					74	70			
6/12/2018								115	
6/13/2018									
6/27/2018									
6/28/2018									
8/7/2018									
9/20/2018									
9/24/2018									
9/25/2018				109	63	86	73		122
9/26/2018	86	116	144						
9/27/2018								105	
3/26/2019									
3/27/2019									
3/28/2019									
4/2/2019						72			134
4/3/2019	83	111	142	89	63		57		
4/4/2019								85	
9/24/2019	79		129						157
9/25/2019		117				81	75		
9/26/2019				126	72				
9/27/2019								96	
10/9/2019									
3/24/2020	68		139	91	59	71	76		117
3/25/2020		146							
3/26/2020								110	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016	1200	66							
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016	1300	56							
8/30/2016			1650						
8/31/2016				80					
9/1/2016					228				
9/2/2016						243			
9/14/2016									
9/16/2016									
9/19/2016									
9/20/2016		53							
9/21/2016	1220								
11/2/2016									
11/3/2016									
11/4/2016									
11/8/2016		58							
11/14/2016	1170					272			
11/15/2016					211				
11/16/2016			1420	112					
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017									
1/17/2017	1150	56							
2/24/2017				147					
2/27/2017			1640		382				
2/28/2017						306			
3/1/2017	1160								
3/2/2017									
3/6/2017									
3/7/2017									
3/8/2017		192							
3/9/2017									
4/26/2017									
5/1/2017									
5/2/2017		113							
5/3/2017	1280								
5/9/2017					154	303			
5/10/2017			1630	203					
6/27/2017									
6/28/2017									
6/29/2017									
7/7/2017		46							
7/10/2017	1170								
7/11/2017			1800	238					
7/13/2017					192	282			
9/22/2017						309			

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-33S	YGWC-24S	YGWC-42	YGWC-43	YGWC-49	YGWC-36	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38
9/29/2017						273			
10/3/2017									
10/4/2017									
10/5/2017		48							
10/6/2017						287			
10/11/2017	1110				177	264	68		
10/12/2017			1600	287				74	1360
11/20/2017							139	179	1390
11/21/2017									
1/10/2018								140	
1/11/2018							153		
1/12/2018									1400
2/19/2018								119	
2/20/2018							87		1300
4/3/2018							85	106	1390
4/4/2018			1520	292	174				
6/5/2018									
6/6/2018									
6/7/2018									
6/11/2018									
6/12/2018	1150	79							
6/13/2018						292			
6/27/2018									
6/28/2018							88	112	1310
8/7/2018							89	103	1340
9/20/2018			1240	434	186				
9/24/2018							82	107	1400
9/25/2018									
9/26/2018	1280	59				277			
9/27/2018									
3/26/2019								90	
3/27/2019			1100				75		1190
3/28/2019				323	164				
4/2/2019									
4/3/2019									
4/4/2019	1260	63				240			
9/24/2019									
9/25/2019									
9/26/2019	1070	81			192	198			
9/27/2019									
10/9/2019			1170	501			119	98	1100
3/24/2020								84	
3/25/2020	839		1200	352	130	164	158		883
3/26/2020		67							

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-41
6/2/2016	
6/6/2016	
6/7/2016	
6/8/2016	
7/26/2016	
7/27/2016	
7/28/2016	
8/1/2016	
8/30/2016	
8/31/2016	
9/1/2016	
9/2/2016	
9/14/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	
11/2/2016	
11/3/2016	
11/4/2016	
11/8/2016	
11/14/2016	
11/15/2016	
11/16/2016	
1/11/2017	
1/12/2017	
1/13/2017	
1/16/2017	
1/17/2017	
2/24/2017	
2/27/2017	
2/28/2017	
3/1/2017	
3/2/2017	
3/6/2017	
3/7/2017	
3/8/2017	
3/9/2017	
4/26/2017	
5/1/2017	
5/2/2017	
5/3/2017	
5/9/2017	
5/10/2017	
6/27/2017	
6/28/2017	
6/29/2017	
7/7/2017	
7/10/2017	
7/11/2017	
7/13/2017	
9/22/2017	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/5/2020 2:51 PM View: PL's

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

	YGWC-41
9/29/2017	
10/3/2017	
10/4/2017	
10/5/2017	
10/6/2017	
10/11/2017	
10/12/2017	636
11/20/2017	
11/21/2017	706
1/10/2018	
1/11/2018	701
1/12/2018	
2/19/2018	630
2/20/2018	
4/3/2018	660
4/4/2018	
6/5/2018	
6/6/2018	
6/7/2018	
6/11/2018	
6/12/2018	
6/13/2018	
6/27/2018	575
6/28/2018	
8/7/2018	574
9/20/2018	
9/24/2018	588
9/25/2018	
9/26/2018	
9/27/2018	
3/26/2019	
3/27/2019	
3/28/2019	372
4/2/2019	
4/3/2019	
4/4/2019	
9/24/2019	
9/25/2019	
9/26/2019	
9/27/2019	
10/9/2019	440
3/24/2020	
3/25/2020	428
3/26/2020	

FIGURE D.

Trend Test Summary - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**YGWC-43**	**0.6477**	**51**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-21I (bg)**	**2.207**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWC-38**	**-25.87**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-18S (bg)**	**-0.08453**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-21I (bg)**	**0.2542**	**65**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-39 (bg)**	**-0.3058**	**-47**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-5D (bg)**	**-0.1483**	**-67**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWC-33S**	**-0.3435**	**-147**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-17S (bg)**	**0.2314**	**52**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-40 (bg)**	**-17.01**	**-35**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-4I (bg)**	**0.3067**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5D (bg)**	**-4.378**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.1217**	**55**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-38**	**-102.7**	**-44**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-41**	**-85.6**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-49**	**-4.89**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-41**	**-120.9**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-43**	**131**	**49**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-17S (bg)	-0.0002523	-8	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-30	-48	No	14	78.57	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003116	-11	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-5	-48	No	14	92.86	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	-0.00632	-39	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.002401	6	34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.0315	-24	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-15	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0006887	26	48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	0	-33	-48	No	14	64.29	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-23S	-0.2383	-46	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-33S	-0.09196	-2	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-38	-3.784	-33	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-41	-2.225	-21	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-42	-1.254	-14	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-43**	**0.6477**	**51**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-17S (bg)	0.1071	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18I (bg)	0.01475	6	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.08778	-40	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-20S (bg)	0.1183	41	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**2.207**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-39 (bg)	-0.23	-10	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-1.297	-28	-34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-4I (bg)	0.4896	40	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.47	-43	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5I (bg)	0.06941	26	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-33S	-1.161	-7	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWC-38**	**-25.87**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWC-42	-11.17	-23	-34	No	11	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-17S (bg)	-0.00607	-22	-58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-18I (bg)	-0.0211	-21	-58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-18S (bg)**	**-0.08453**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-20S (bg)	0.03732	48	58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-21I (bg)**	**0.2542**	**65**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-39 (bg)**	**-0.3058**	**-47**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-40 (bg)	0.02308	2	38	No	12	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-4I (bg)	-0.01041	-14	-58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-5D (bg)**	**-0.1483**	**-67**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-5I (bg)	-0.0216	-25	-58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWC-33S**	**-0.3435**	**-147**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-17S (bg)**	**0.2314**	**52**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-18I (bg)	-0.2926	-34	-48	No	14	21.43	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.2179	-38	-48	No	14	14.29	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	12	48	No	14	57.14	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.3724	-11	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.919	-27	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-40 (bg)**	**-17.01**	**-35**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-4I (bg)**	**0.3067**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5D (bg)**	**-4.378**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.1217**	**55**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWC-33S	-76.07	-31	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWC-38**	**-102.7**	**-44**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-41**	**-85.6**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWC-42	-94.68	-26	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-43	49.2	33	34	No	11	0	n/a	n/a	0.01	NP

Trend Test Summary - All Results

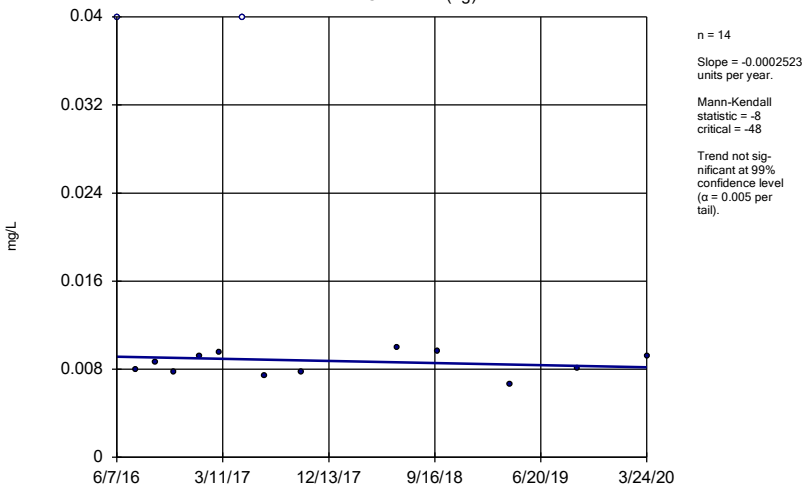
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Sulfate (mg/L)	**YGWC-49**	**-4.89**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	5.544	21	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-2.555	-12	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	6.215	22	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	7.597	35	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	24.57	43	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	4.803	7	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-19.81	-27	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	7.969	29	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-15	-45	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	1.982	11	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-33S	-39.38	-34	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-38	-148.4	-25	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-41**	**-120.9**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWC-42	-143.1	-33	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-43**	**131**	**49**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 14

Slope = -0.0002523 units per year.

Mann-Kendall statistic = -8
critical = -48

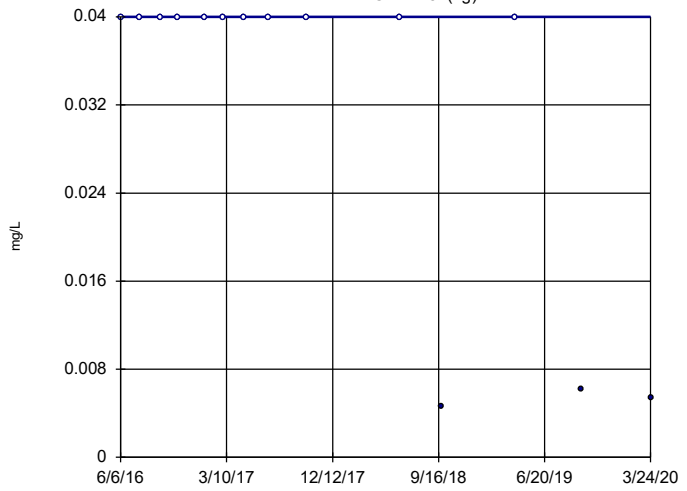
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = -30
critical = -48

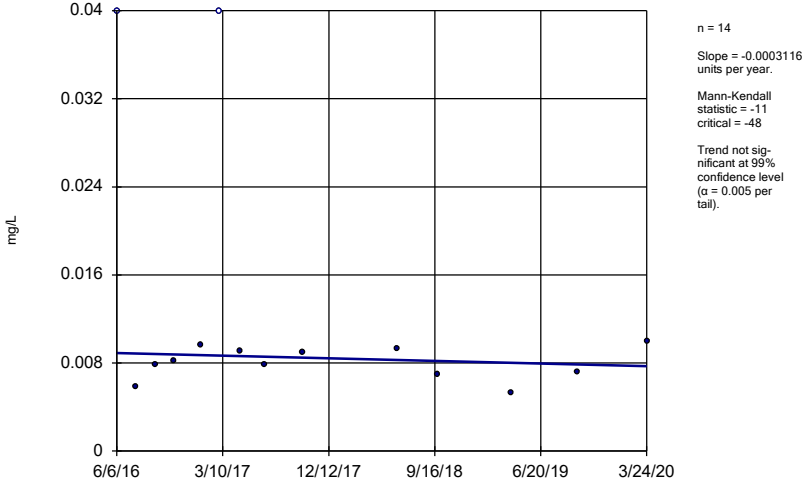
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 14

Slope = -0.0003116 units per year.

Mann-Kendall statistic = -11
critical = -48

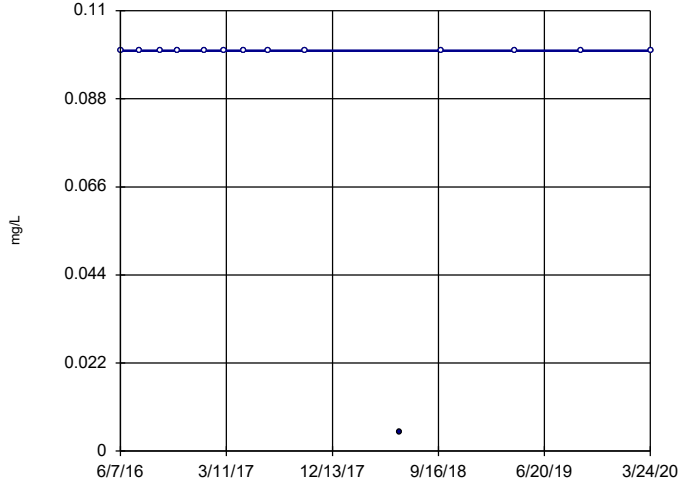
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = -5
critical = -48

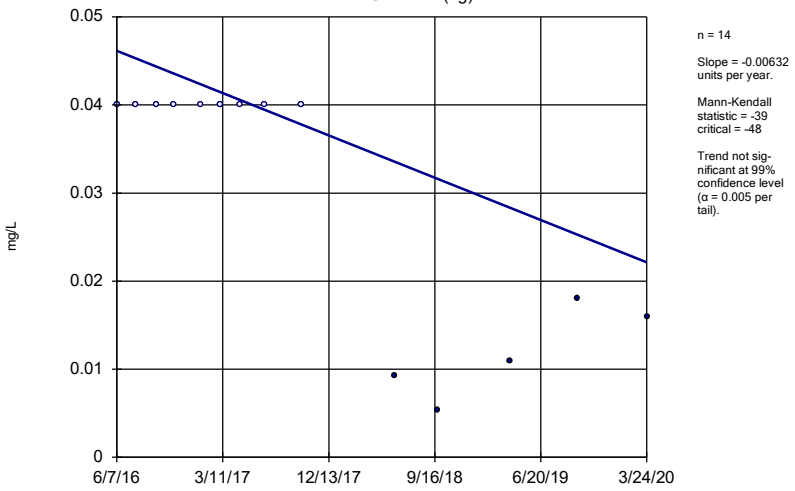
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 14

Slope = -0.00632 units per year.

Mann-Kendall statistic = -39
critical = -48

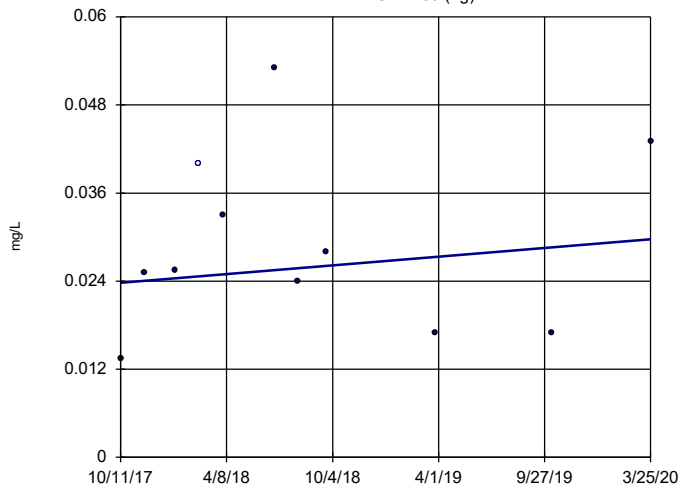
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 11

Slope = 0.002401 units per year.

Mann-Kendall statistic = 6
critical = 34

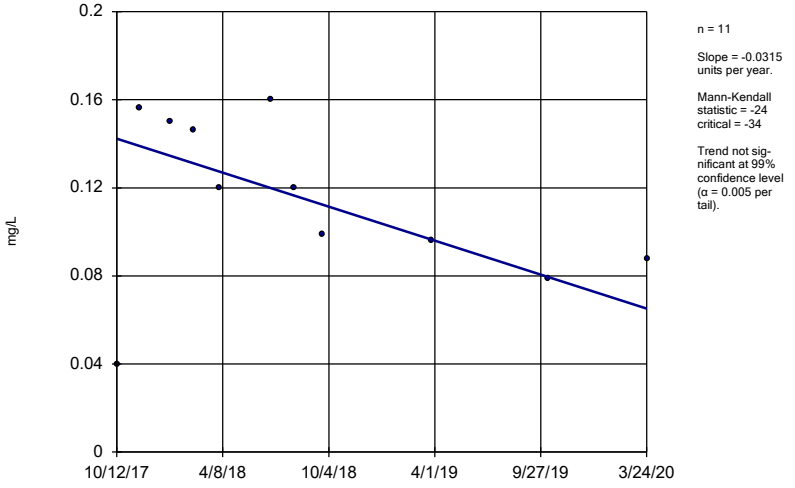
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 11

Slope = -0.0315 units per year.

Mann-Kendall statistic = -24
critical = -34

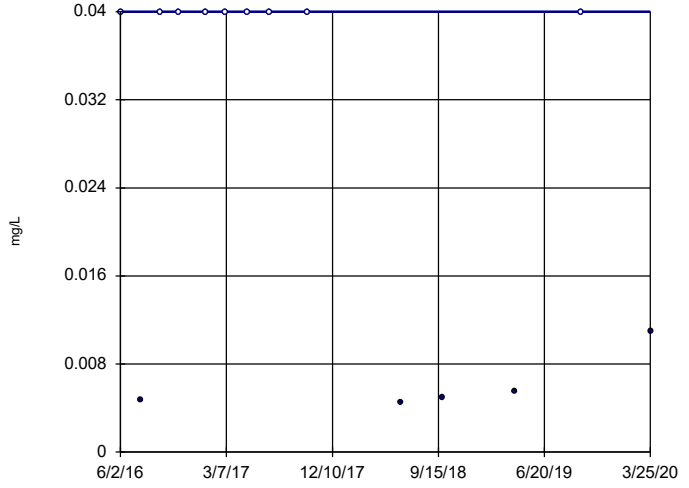
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = -15
critical = -48

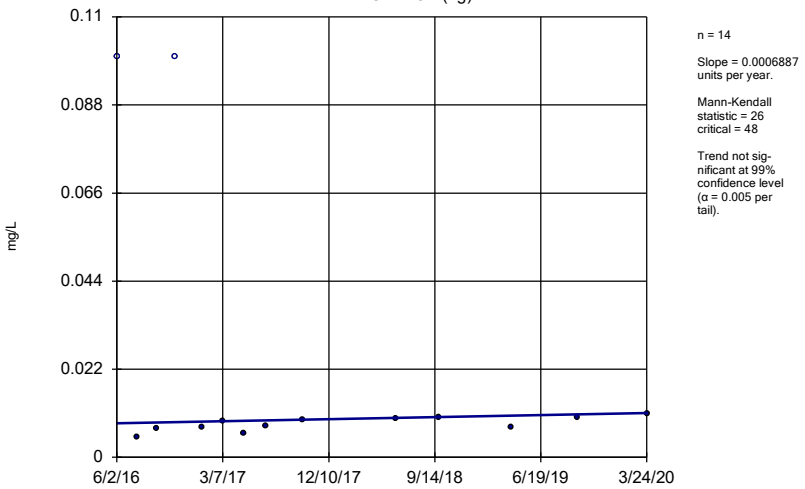
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 14

Slope = 0.0006887 units per year.

Mann-Kendall statistic = 26
critical = 48

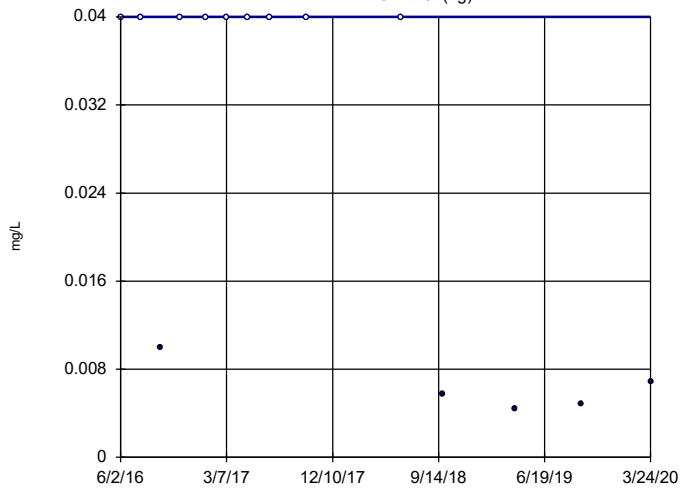
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = -33
critical = -48

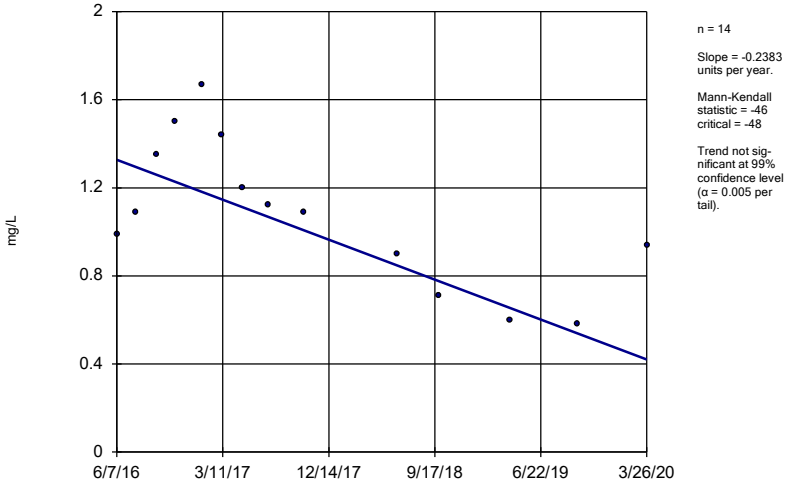
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-23S



n = 14

Slope = -0.2383 units per year.

Mann-Kendall statistic = -46
critical = -48

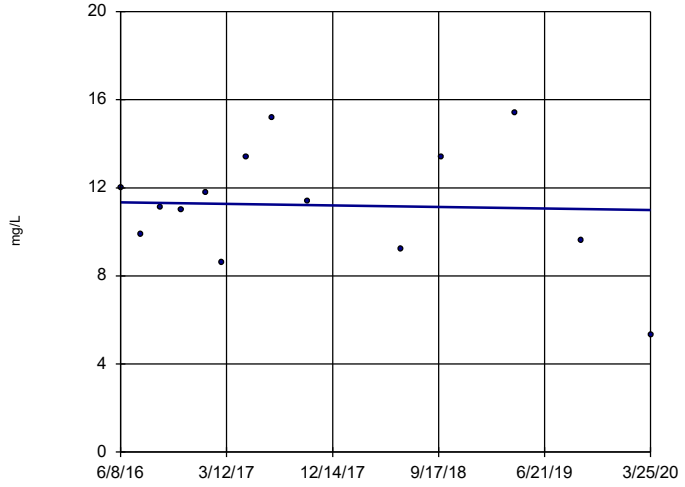
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-33S



n = 14

Slope = -0.09196 units per year.

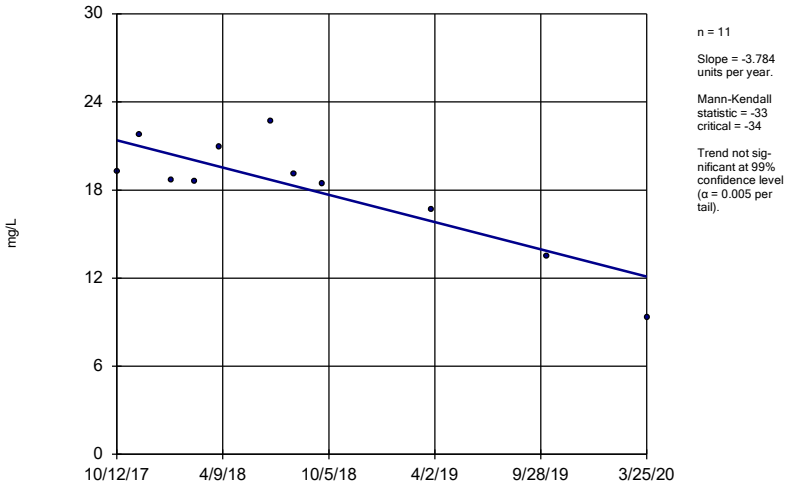
Mann-Kendall statistic = -2
critical = -48

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

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-38



n = 11

Slope = -3.784 units per year.

Mann-Kendall statistic = -33 critical = -34

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

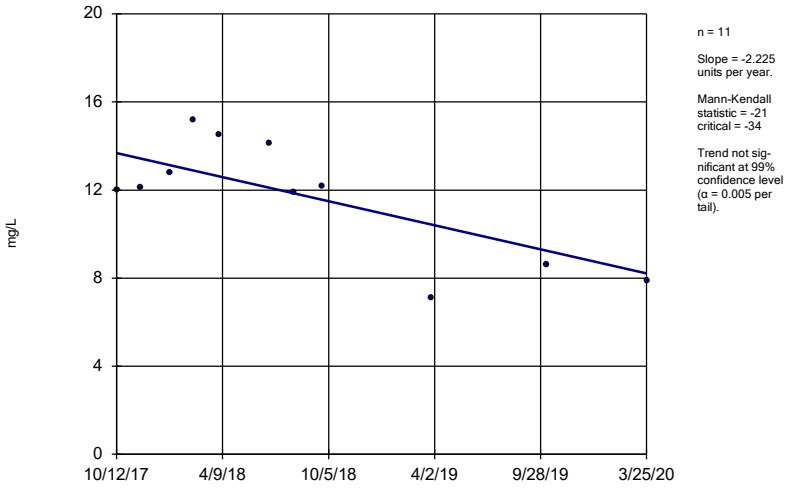
Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-41



n = 11

Slope = -2.225 units per year.

Mann-Kendall statistic = -21 critical = -34

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

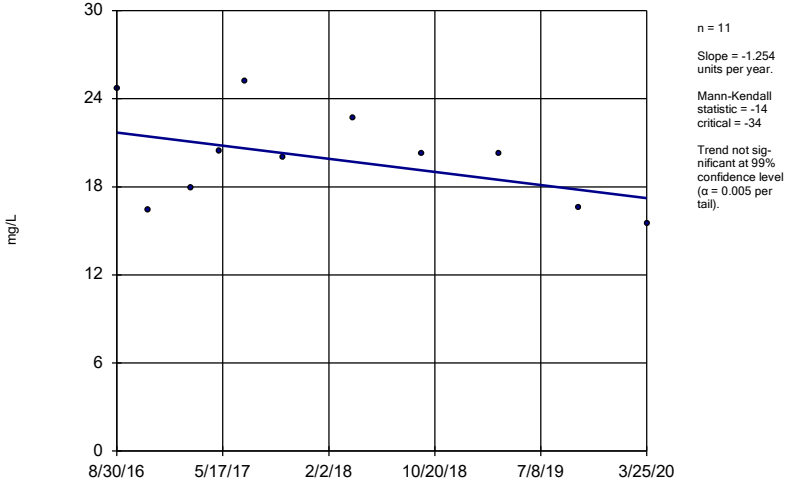
Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 11

Slope = -1.254 units per year.

Mann-Kendall statistic = -14 critical = -34

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

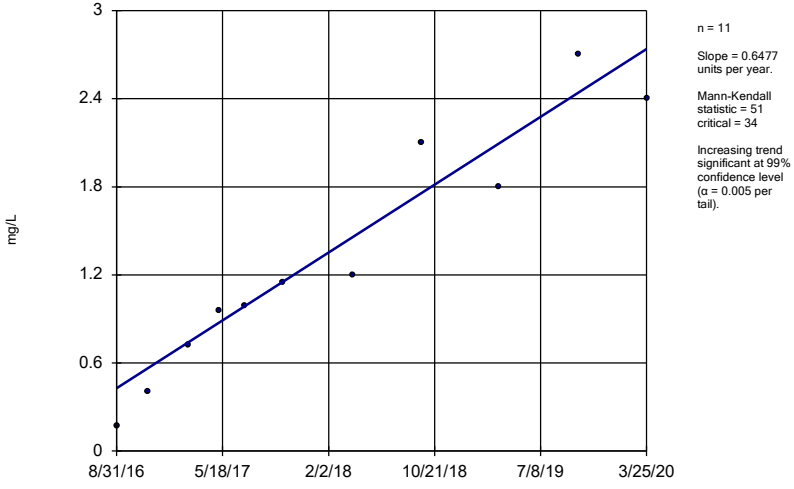
Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 11

Slope = 0.6477 units per year.

Mann-Kendall statistic = 51 critical = 34

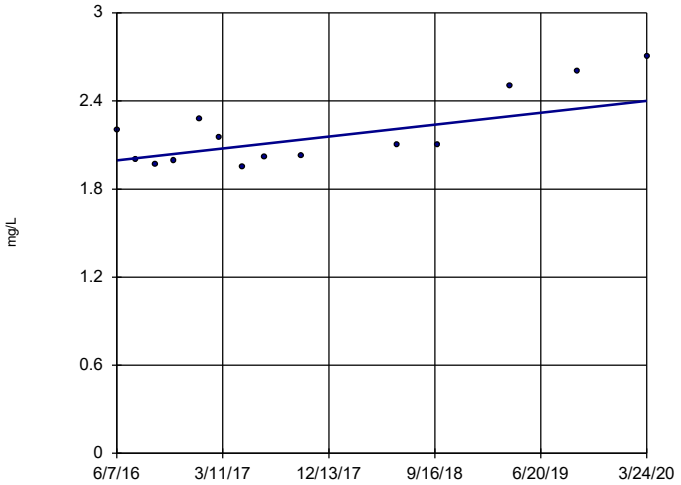
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sen's Slope Estimator

YGWA-17S (bg)



n = 14

Slope = 0.1071 units per year.

Mann-Kendall statistic = 40 critical = 48

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

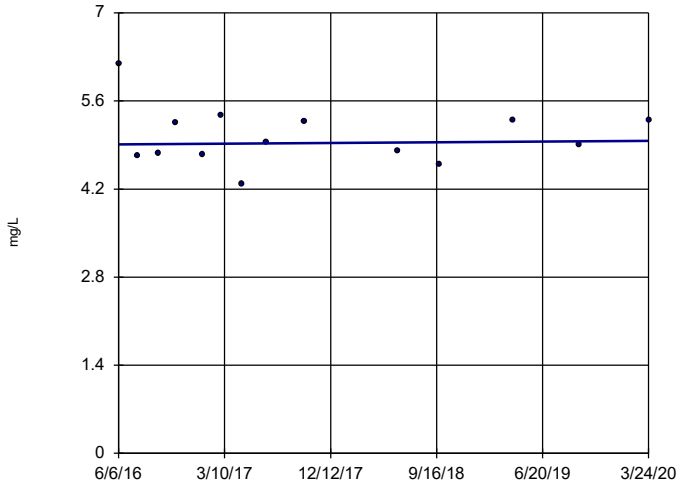
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 14

Slope = 0.01475 units per year.

Mann-Kendall statistic = 6 critical = 48

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

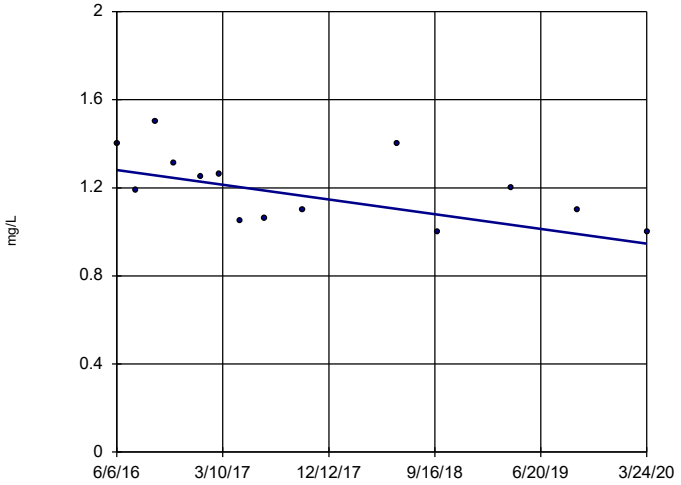
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 14

Slope = -0.08778 units per year.

Mann-Kendall statistic = -40 critical = -48

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

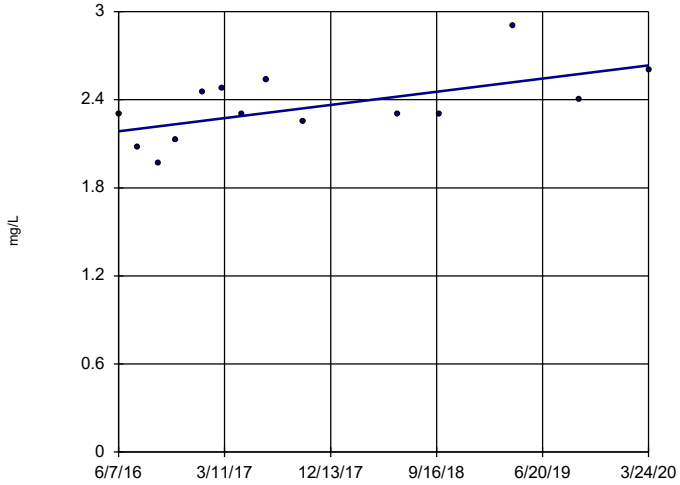
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 14

Slope = 0.1183 units per year.

Mann-Kendall statistic = 41 critical = 48

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

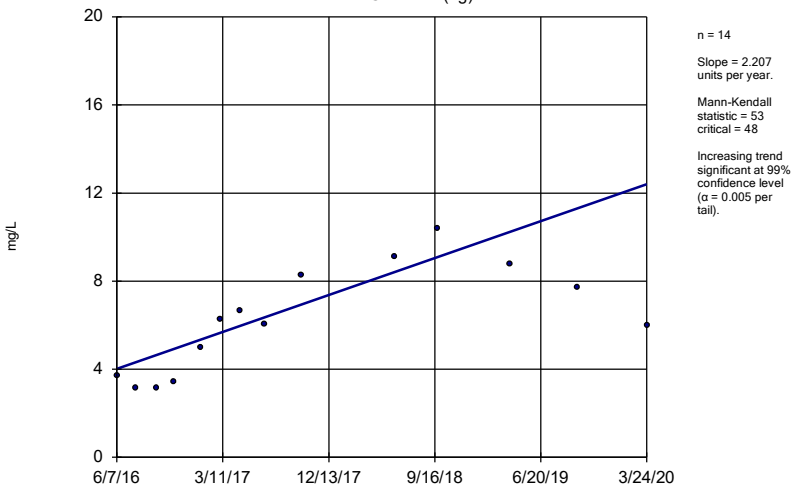
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 14

Slope = 2.207 units per year.

Mann-Kendall statistic = 53 critical = 48

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

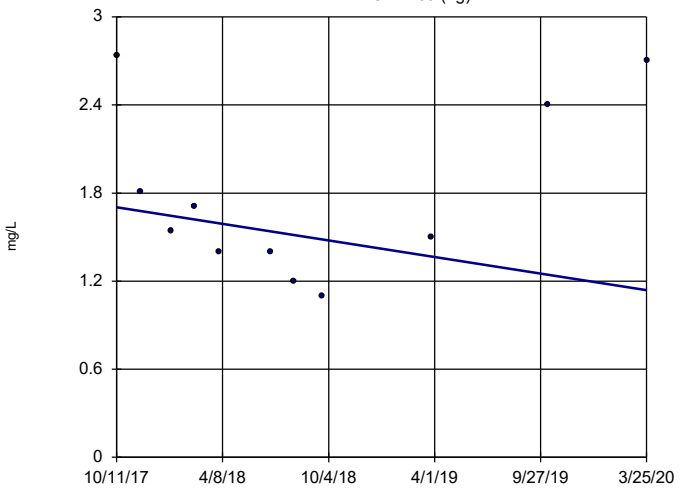
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 11

Slope = -0.23 units per year.

Mann-Kendall statistic = -10 critical = -34

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

Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

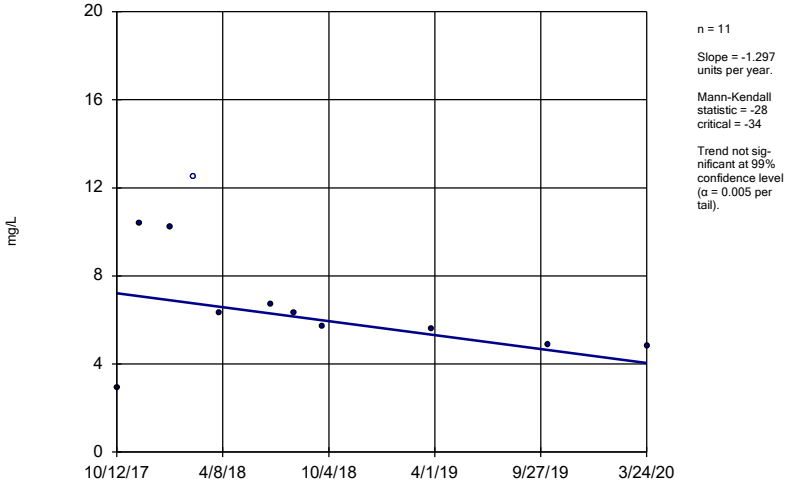
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 11

Slope = -1.297 units per year.

Mann-Kendall statistic = -28 critical = -34

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

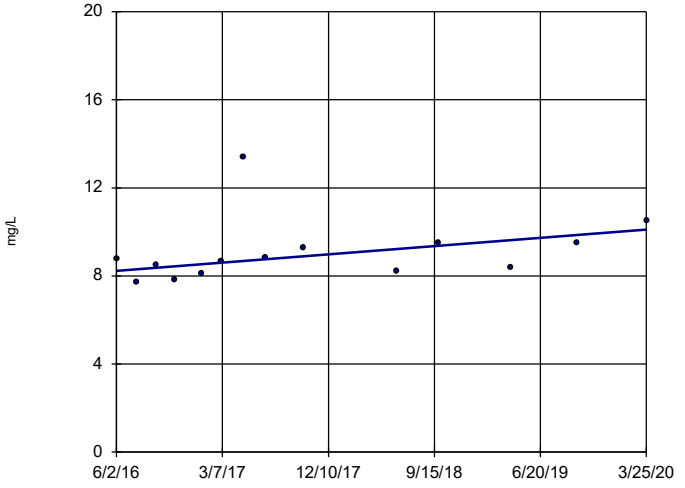
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 14

Slope = 0.4896 units per year.

Mann-Kendall statistic = 40 critical = 48

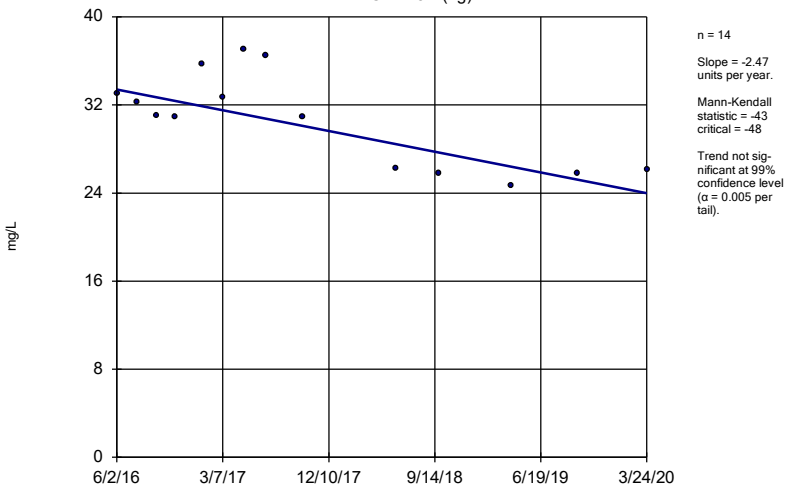
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sen's Slope Estimator

YGWA-5D (bg)



n = 14

Slope = -2.47 units per year.

Mann-Kendall statistic = -43 critical = -48

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

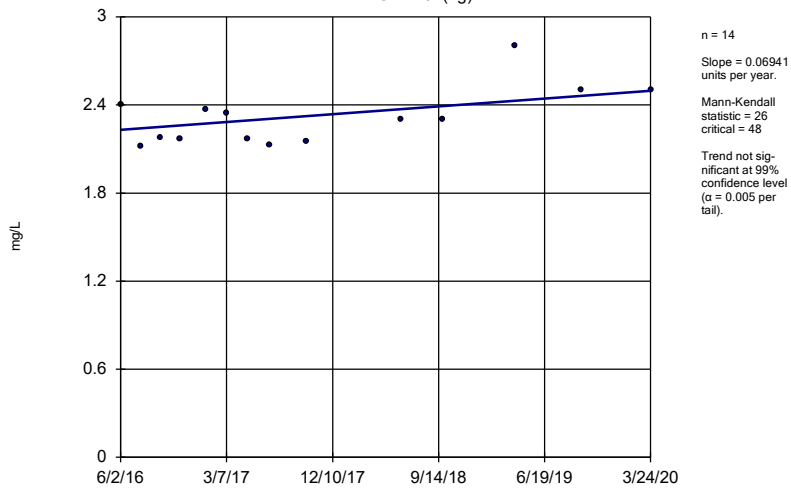
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 14

Slope = 0.06941 units per year.

Mann-Kendall statistic = 26 critical = 48

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

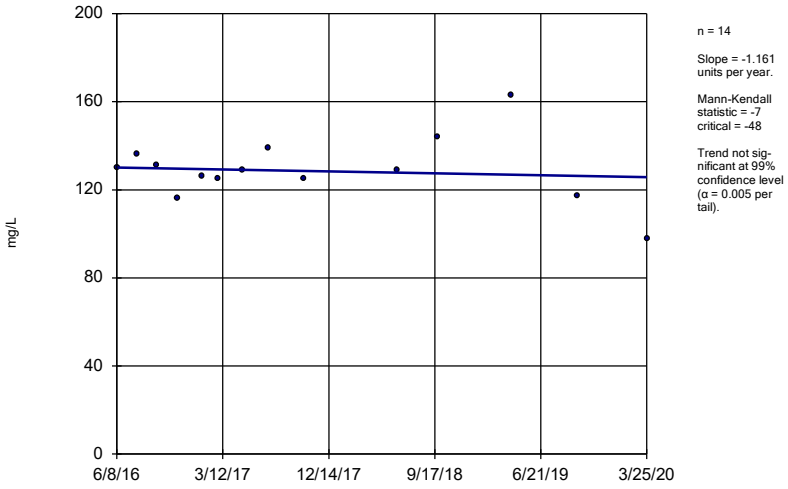
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-33S



n = 14

Slope = -1.161 units per year.

Mann-Kendall statistic = -7 critical = -48

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

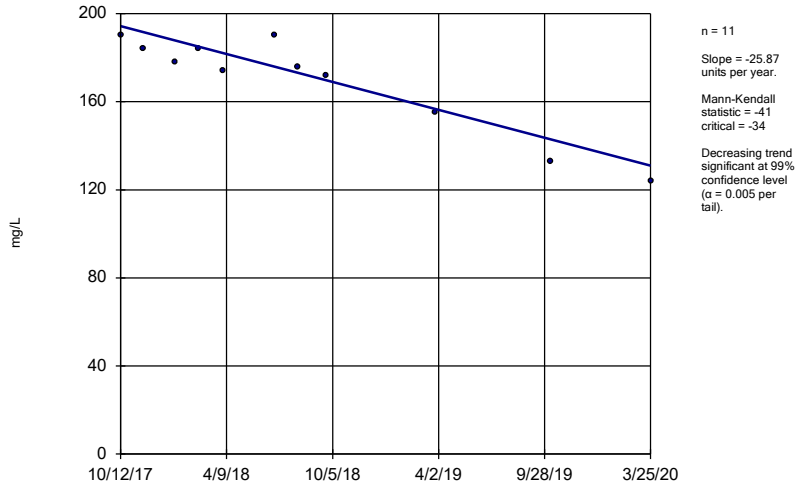
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 11

Slope = -25.87 units per year.

Mann-Kendall statistic = -41 critical = -34

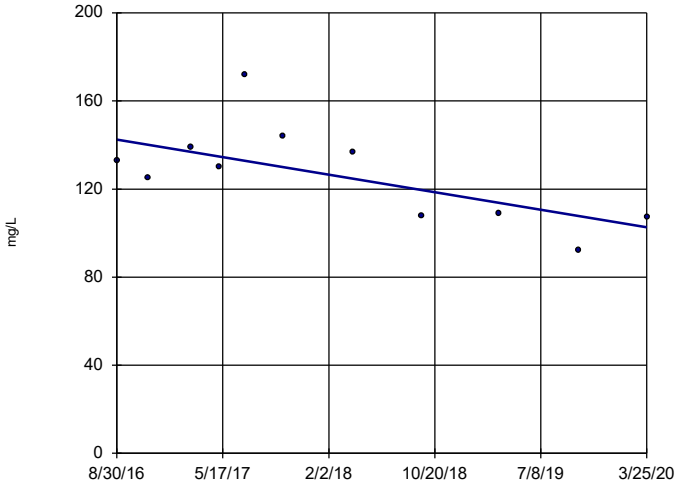
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sen's Slope Estimator

YGWC-42



n = 11

Slope = -11.17 units per year.

Mann-Kendall statistic = -23 critical = -34

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

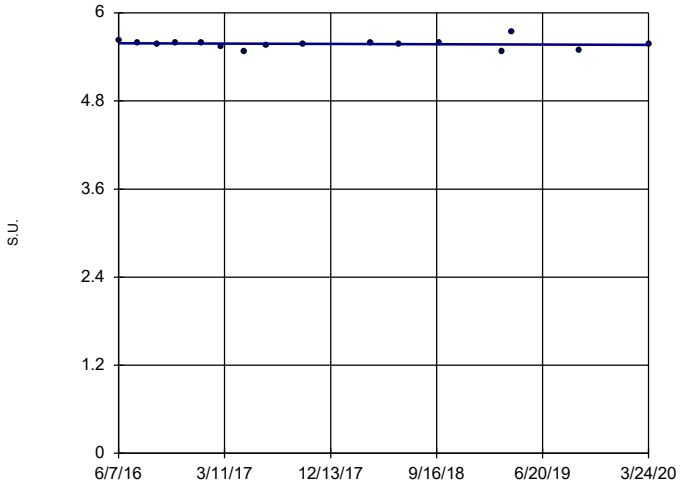
Constituent: Calcium Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = -0.00607 units per year.

Mann-Kendall statistic = -22 critical = -58

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

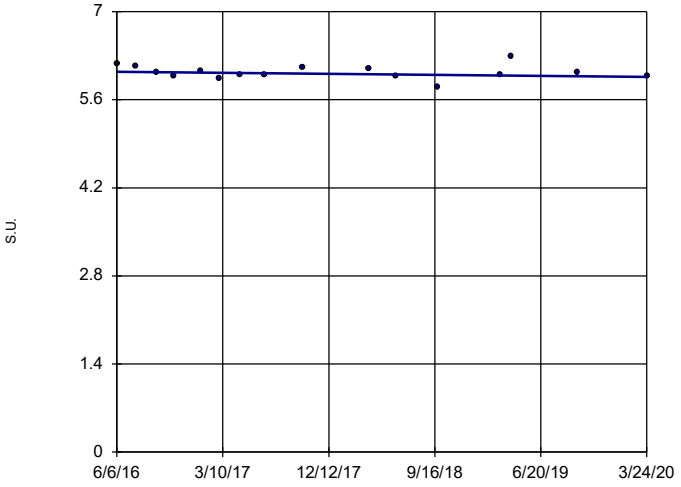
Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = -0.0211 units per year.

Mann-Kendall statistic = -21 critical = -58

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

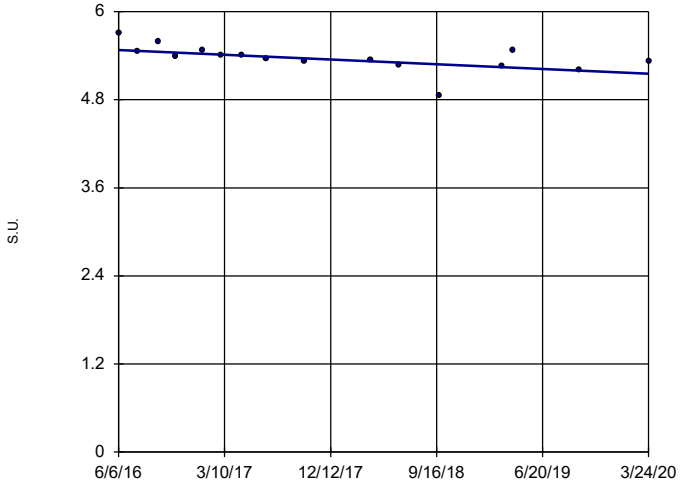
Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = -0.08453 units per year.

Mann-Kendall statistic = -74 critical = -58

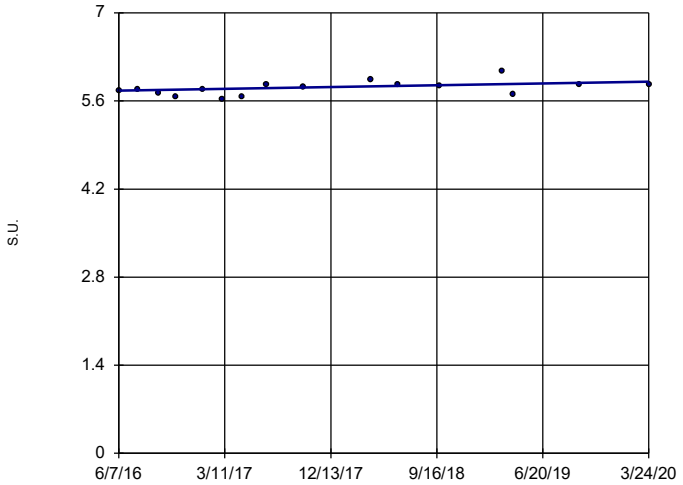
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests

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

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0.03732 units per year.

Mann-Kendall statistic = 48
critical = 58

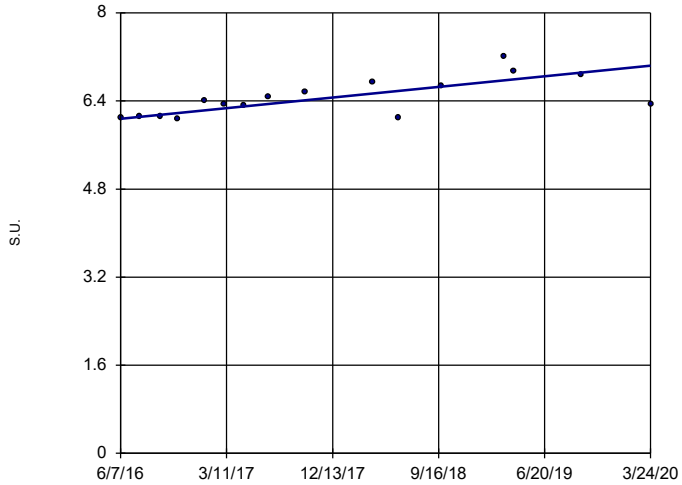
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = 0.2542 units per year.

Mann-Kendall statistic = 65
critical = 58

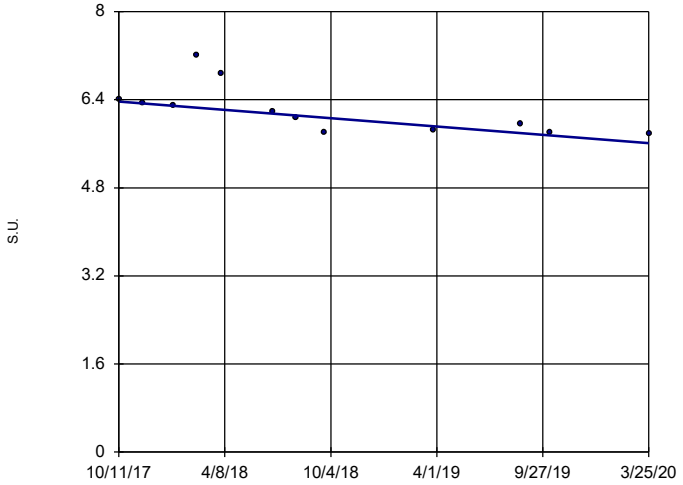
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 12

Slope = -0.3058 units per year.

Mann-Kendall statistic = -47
critical = -38

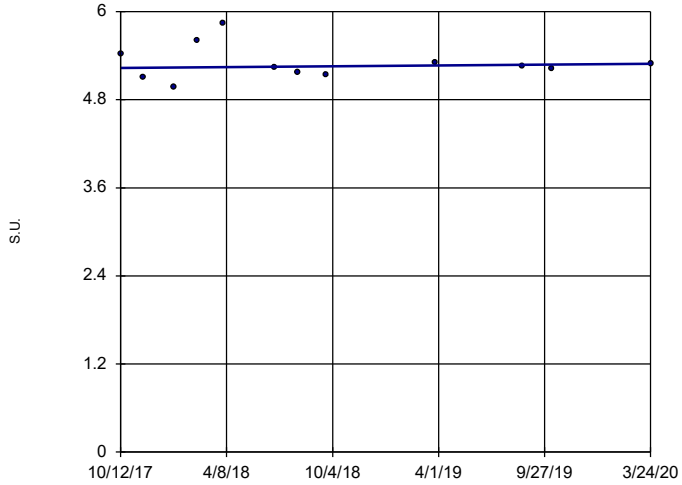
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 12

Slope = 0.02308 units per year.

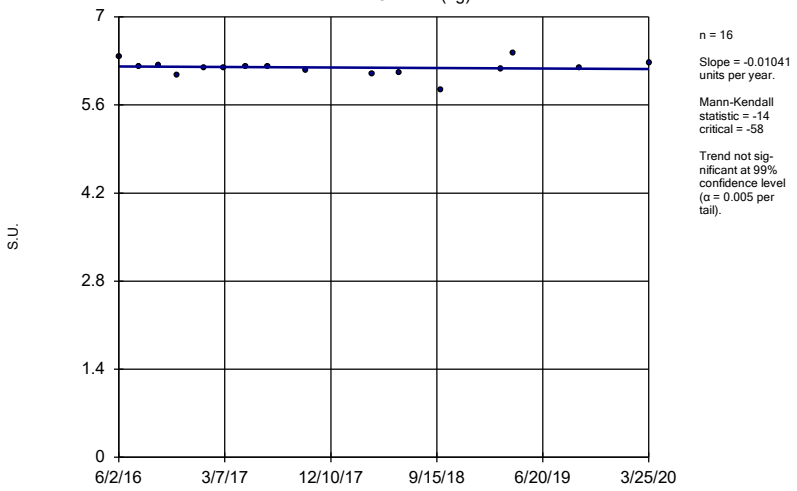
Mann-Kendall statistic = 2
critical = 38

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

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = -0.01041 units per year.

Mann-Kendall statistic = -14
critical = -58

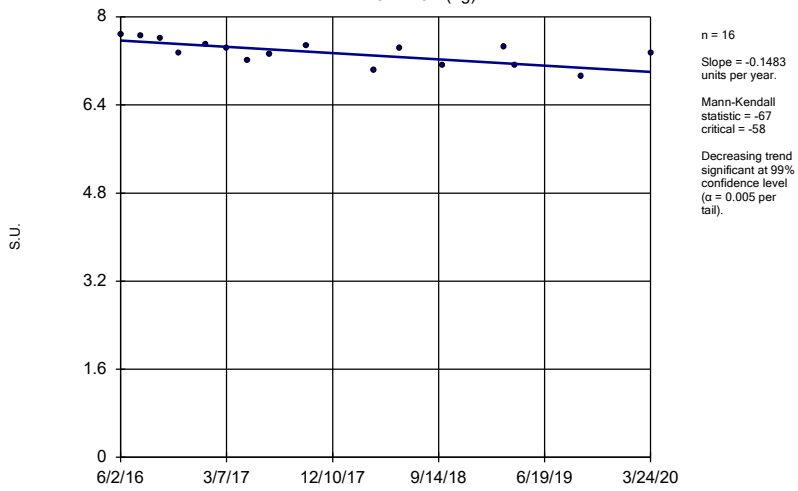
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -0.1483 units per year.

Mann-Kendall statistic = -67
critical = -58

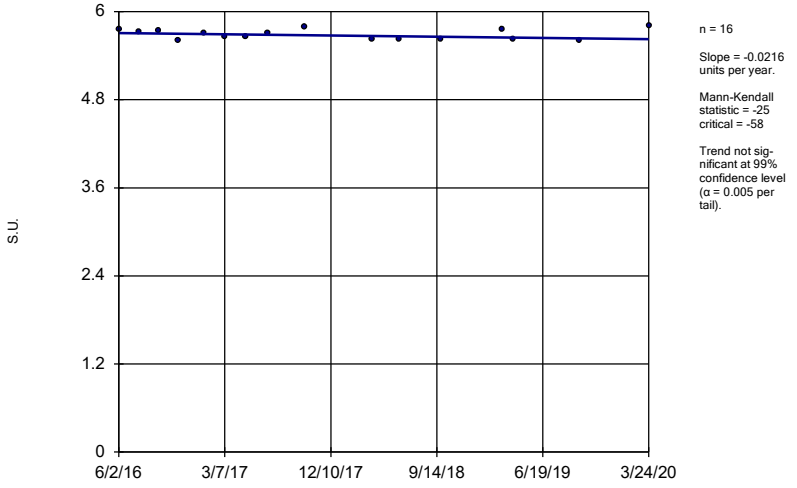
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = -0.0216 units per year.

Mann-Kendall statistic = -25
critical = -58

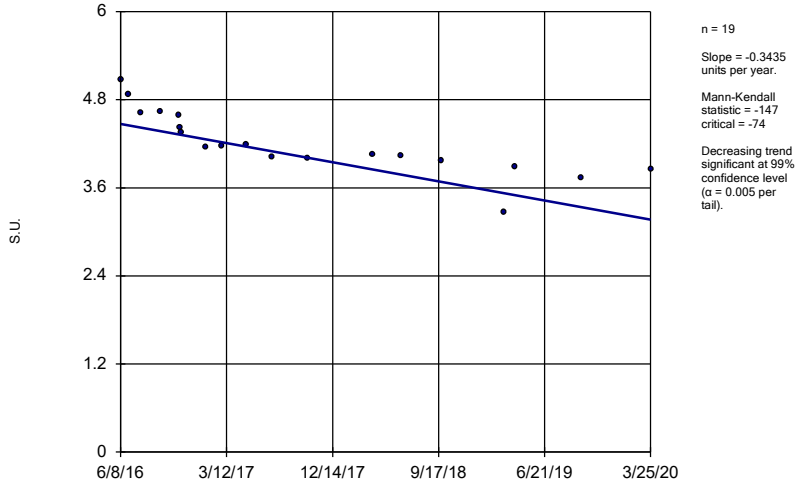
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-33S



n = 19

Slope = -0.3435 units per year.

Mann-Kendall statistic = -147
critical = -74

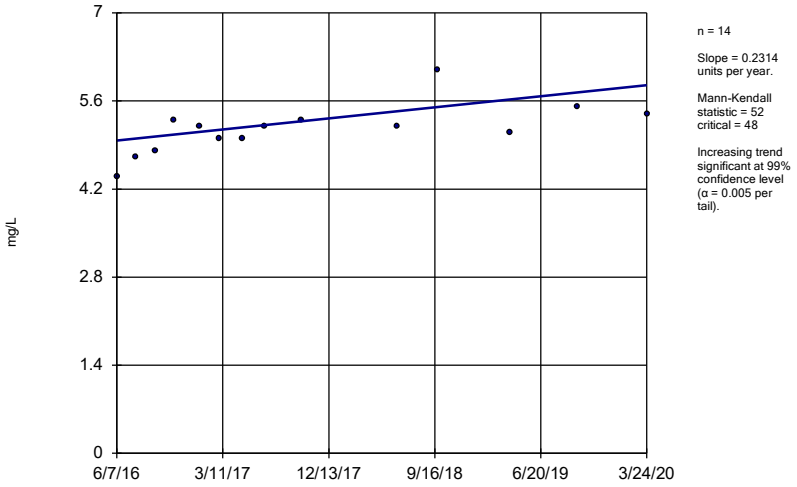
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/5/2020 4:14 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 14

Slope = 0.2314 units per year.

Mann-Kendall statistic = 52 critical = 48

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

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

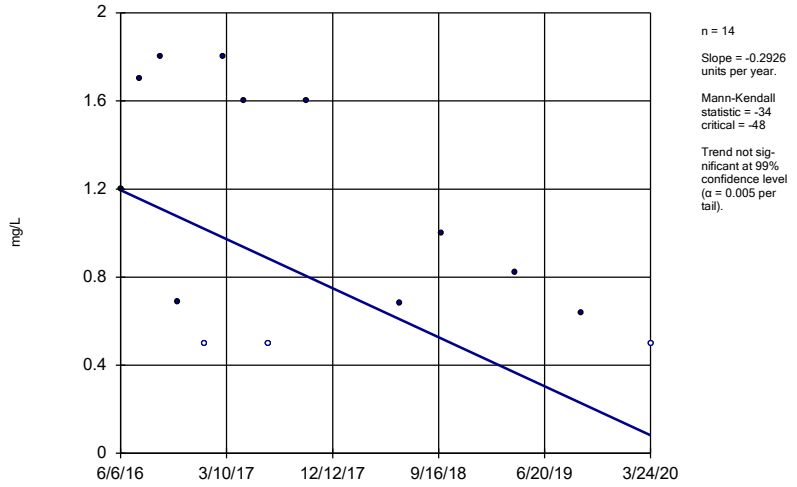
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 14

Slope = -0.2926 units per year.

Mann-Kendall statistic = -34 critical = -48

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

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

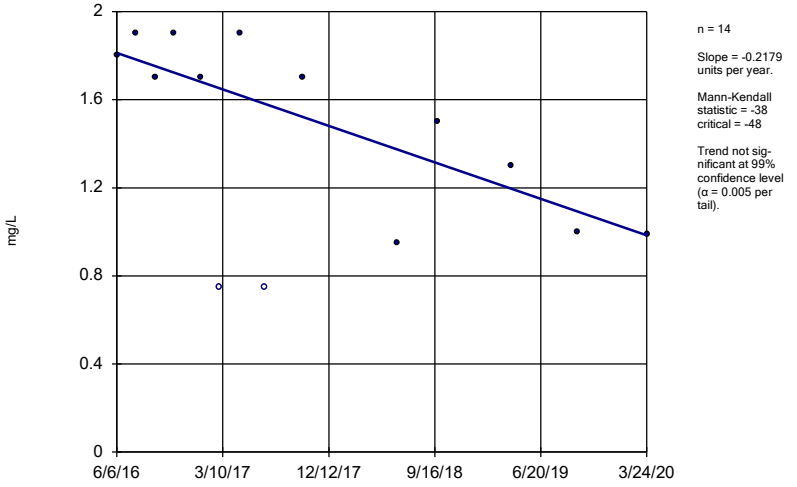
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 14

Slope = -0.2179 units per year.

Mann-Kendall statistic = -38 critical = -48

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

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

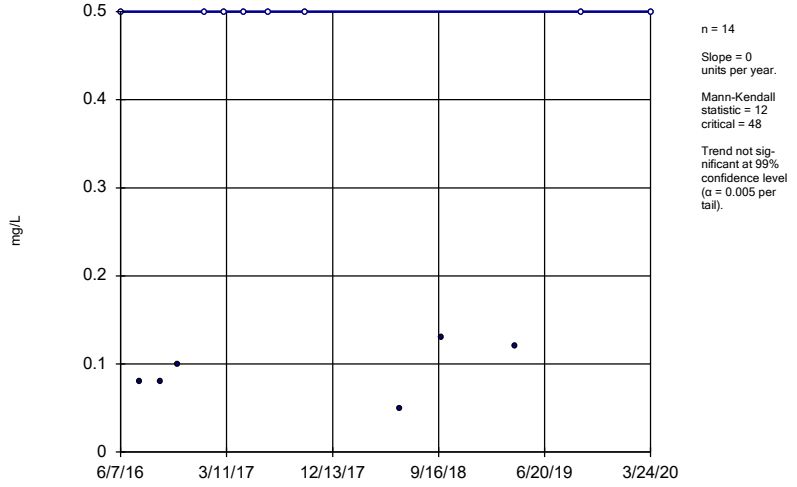
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 12 critical = 48

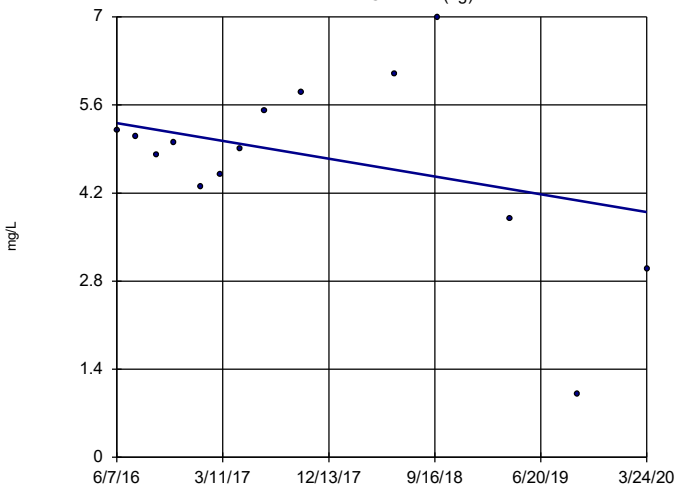
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sen's Slope Estimator

YGWA-21I (bg)



n = 14

Slope = -0.3724 units per year.

Mann-Kendall statistic = -11 critical = -48

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

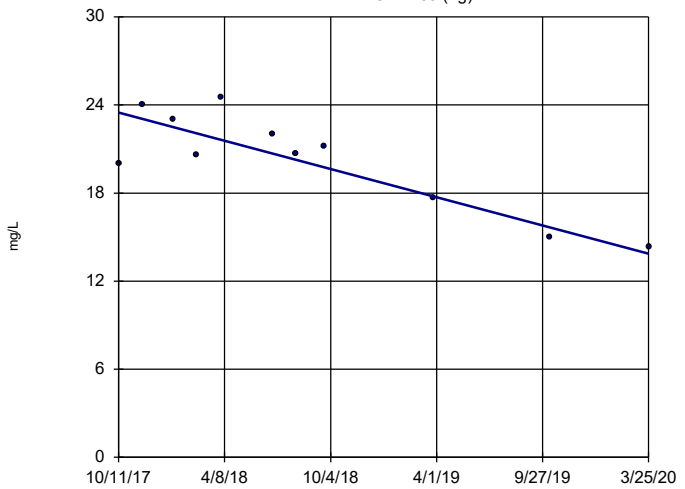
Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 11

Slope = -3.919 units per year.

Mann-Kendall statistic = -27 critical = -34

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

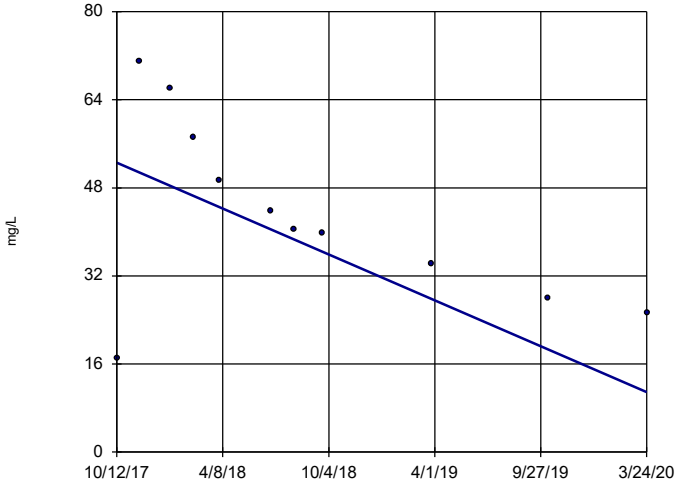
Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 11

Slope = -17.01 units per year.

Mann-Kendall statistic = -35 critical = -34

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

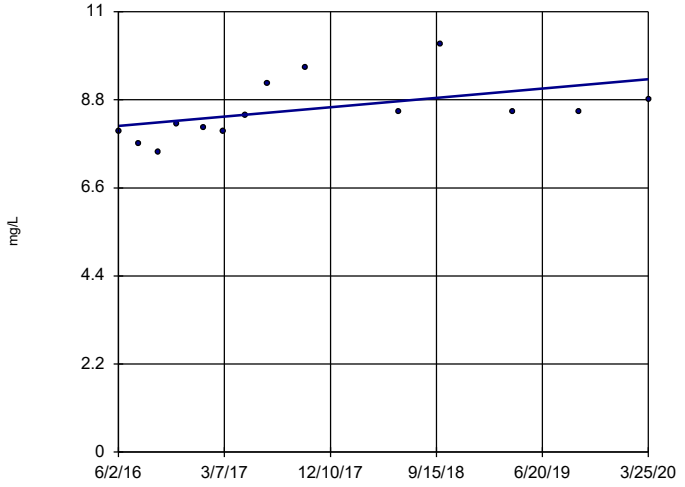
Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 14

Slope = 0.3067 units per year.

Mann-Kendall statistic = 53 critical = 48

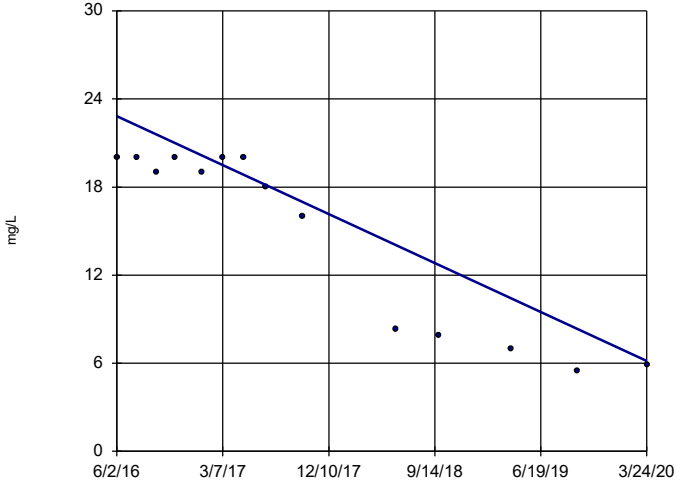
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sen's Slope Estimator

YGWA-5D (bg)



n = 14

Slope = -4.378 units per year.

Mann-Kendall statistic = -68
critical = -48

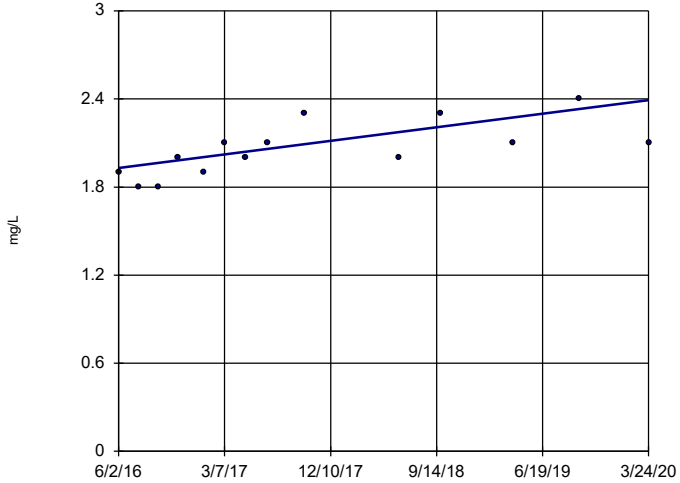
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 14

Slope = 0.1217 units per year.

Mann-Kendall statistic = 55
critical = 48

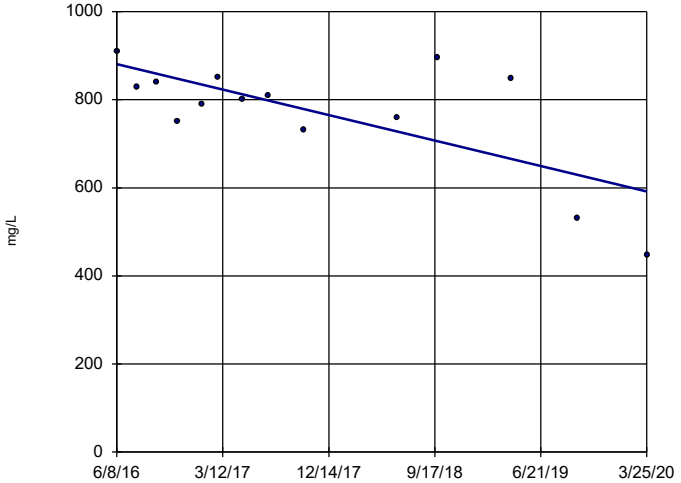
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-33S



n = 14

Slope = -76.07 units per year.

Mann-Kendall statistic = -31
critical = -48

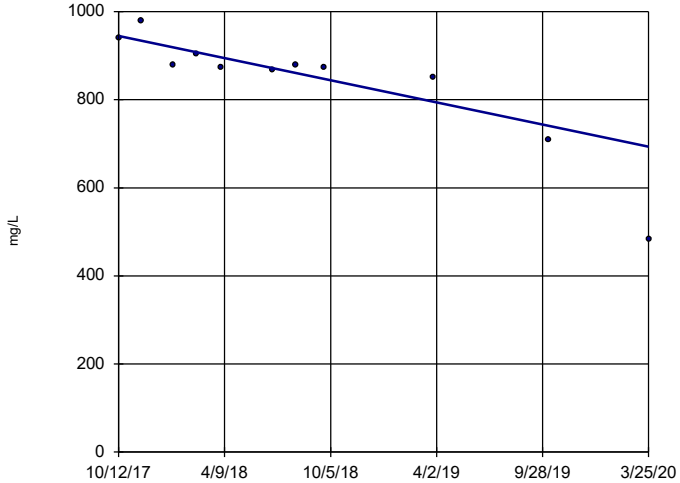
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 11

Slope = -102.7 units per year.

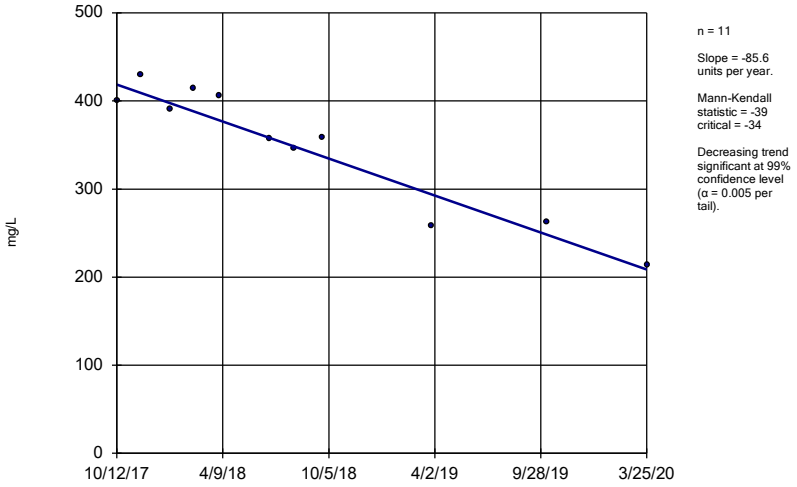
Mann-Kendall statistic = -44
critical = -34

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

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-41



n = 11

Slope = -85.6 units per year.

Mann-Kendall statistic = -39 critical = -34

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

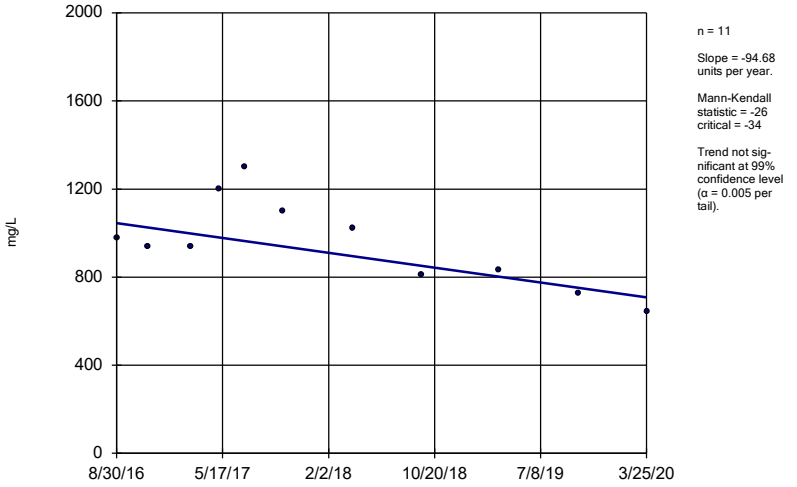
Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 11

Slope = -94.68 units per year.

Mann-Kendall statistic = -26 critical = -34

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

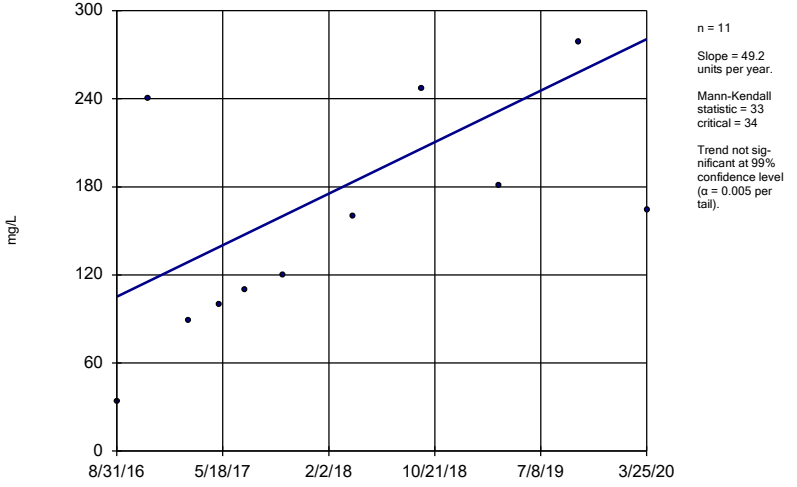
Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 11

Slope = 49.2 units per year.

Mann-Kendall statistic = 33 critical = 34

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

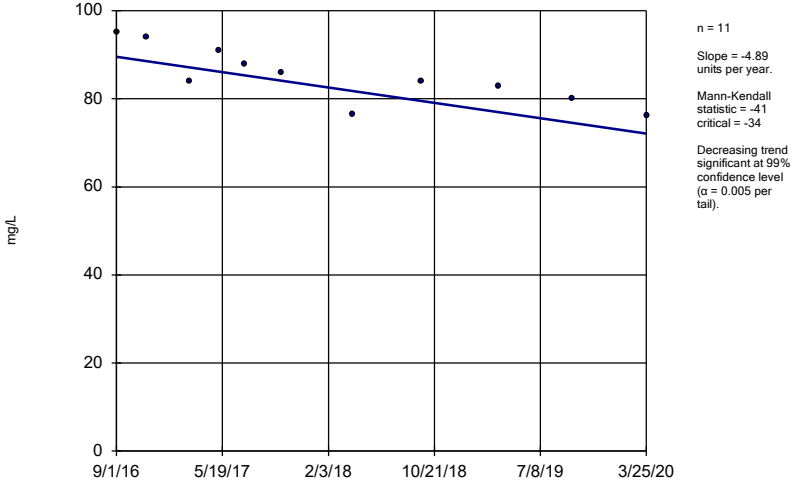
Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-49



n = 11

Slope = -4.89 units per year.

Mann-Kendall statistic = -41 critical = -34

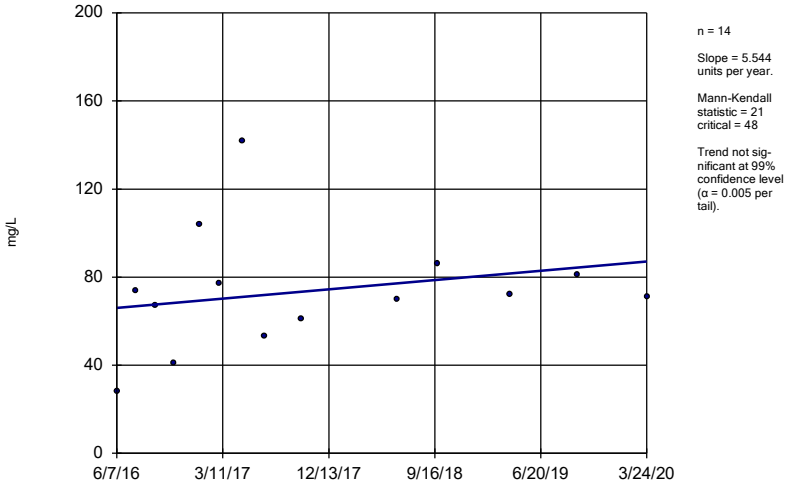
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sen's Slope Estimator

YGWA-17S (bg)



n = 14

Slope = 5.544 units per year.

Mann-Kendall statistic = 21 critical = 48

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

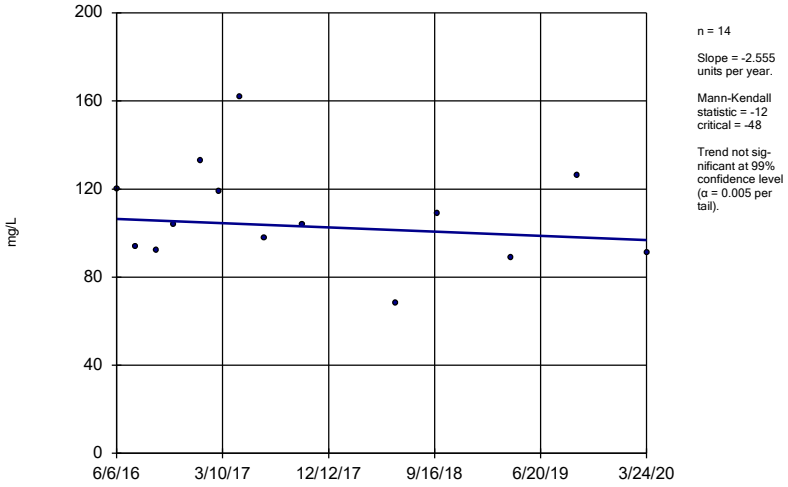
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 14

Slope = -2.555 units per year.

Mann-Kendall statistic = -12 critical = -48

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

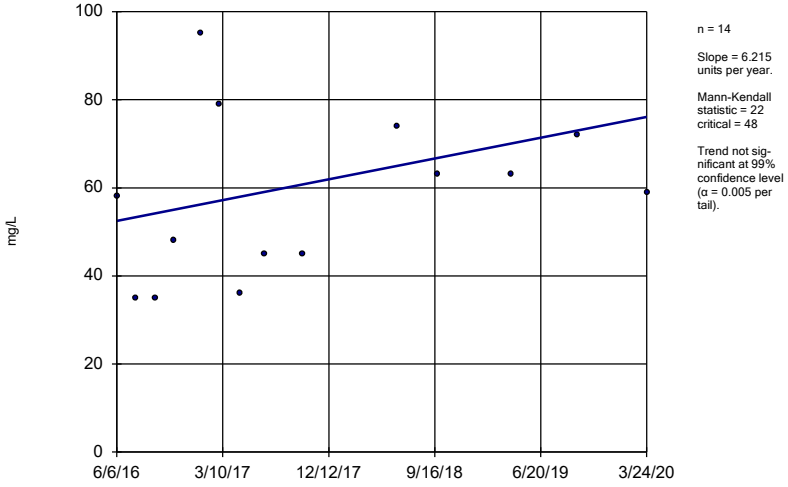
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 14

Slope = 6.215 units per year.

Mann-Kendall statistic = 22 critical = 48

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

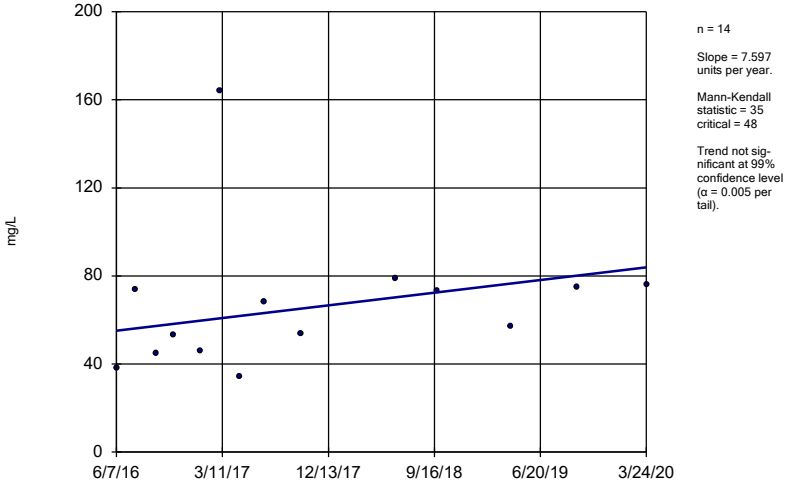
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 14

Slope = 7.597 units per year.

Mann-Kendall statistic = 35 critical = 48

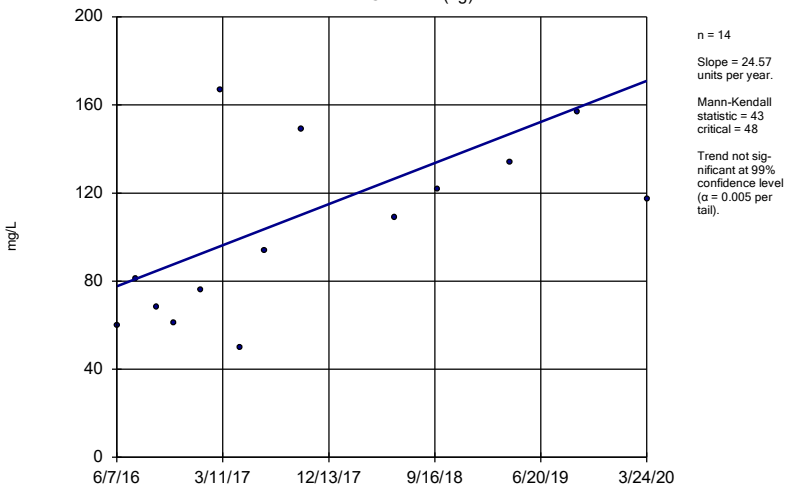
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sen's Slope Estimator

YGWA-21I (bg)



n = 14

Slope = 24.57 units per year.

Mann-Kendall statistic = 43 critical = 48

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

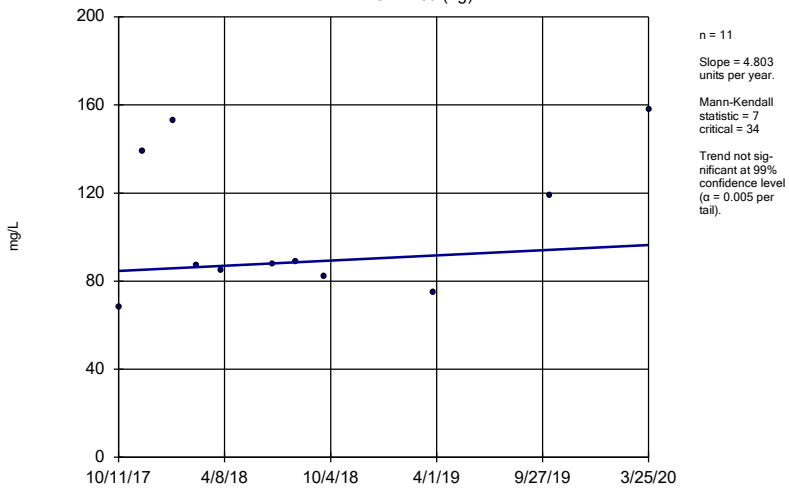
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 11

Slope = 4.803 units per year.

Mann-Kendall statistic = 7 critical = 34

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

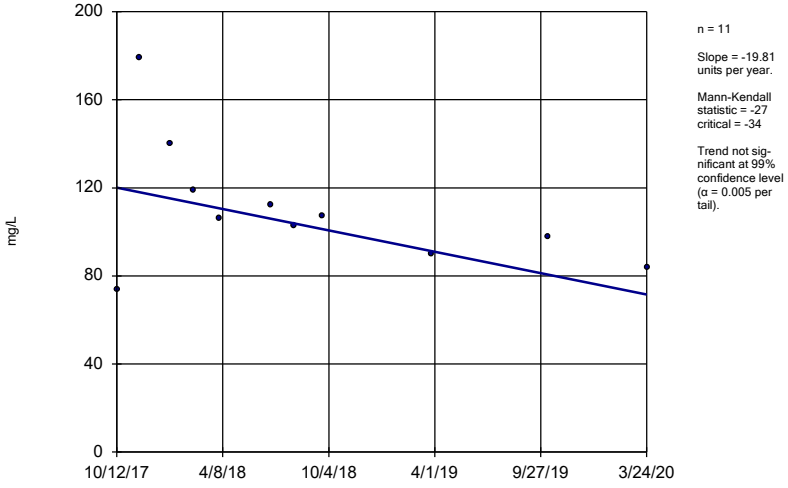
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 11

Slope = -19.81 units per year.

Mann-Kendall statistic = -27 critical = -34

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

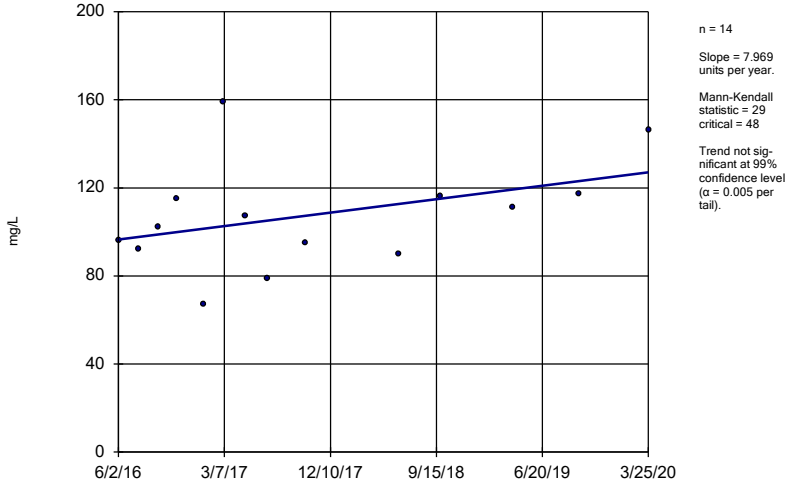
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 14

Slope = 7.969 units per year.

Mann-Kendall statistic = 29 critical = 48

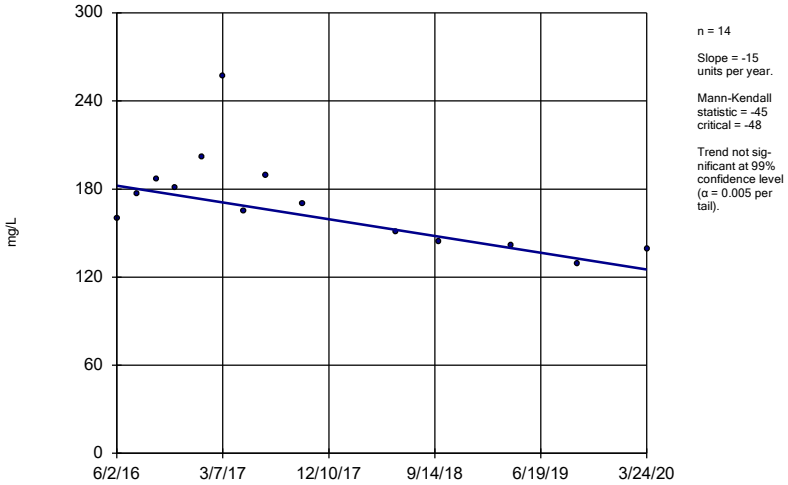
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sen's Slope Estimator

YGWA-5D (bg)



n = 14

Slope = -15 units per year.

Mann-Kendall statistic = -45 critical = -48

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

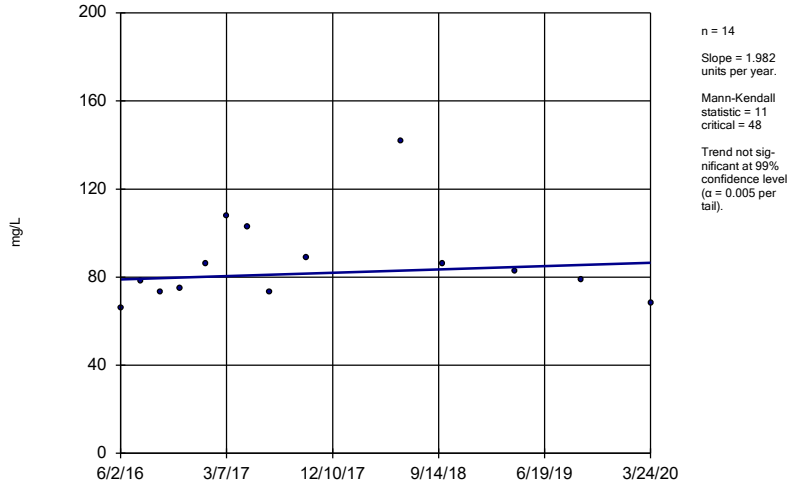
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 14

Slope = 1.982 units per year.

Mann-Kendall statistic = 11 critical = 48

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

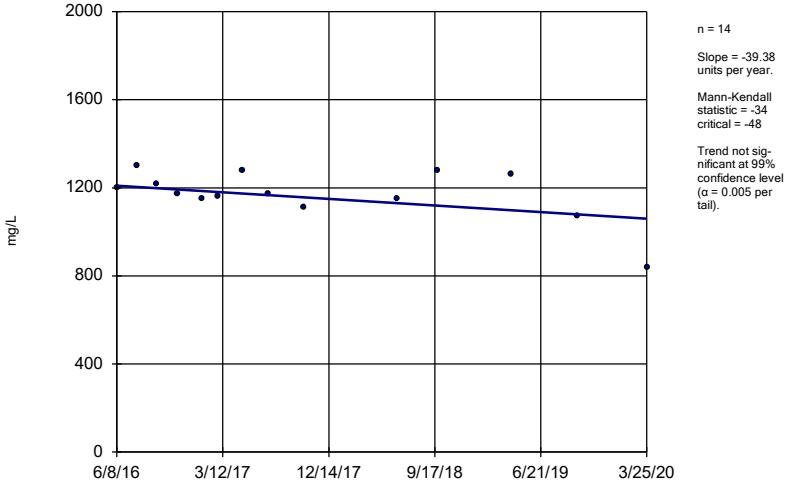
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-33S



n = 14

Slope = -39.38 units per year.

Mann-Kendall statistic = -34 critical = -48

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

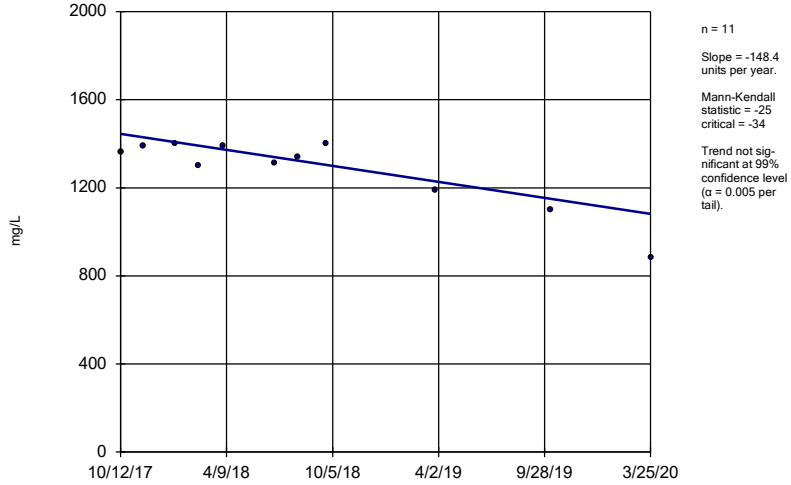
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 11

Slope = -148.4 units per year.

Mann-Kendall statistic = -25 critical = -34

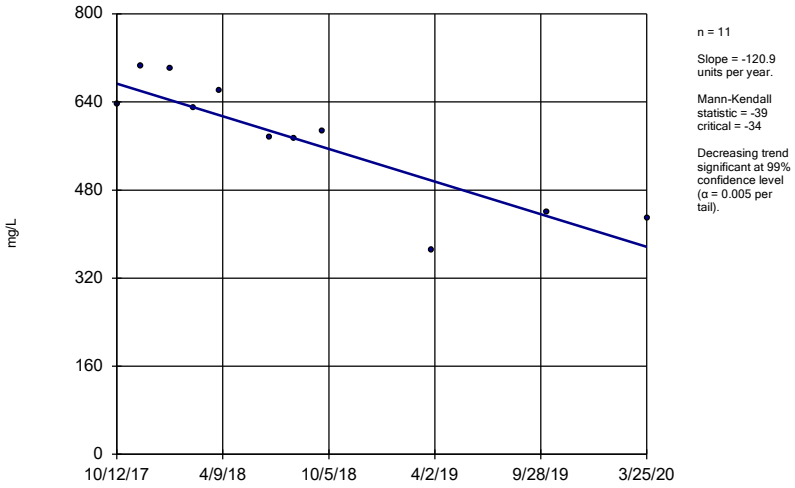
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sen's Slope Estimator

YGWC-41



n = 11

Slope = -120.9 units per year.

Mann-Kendall statistic = -39 critical = -34

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

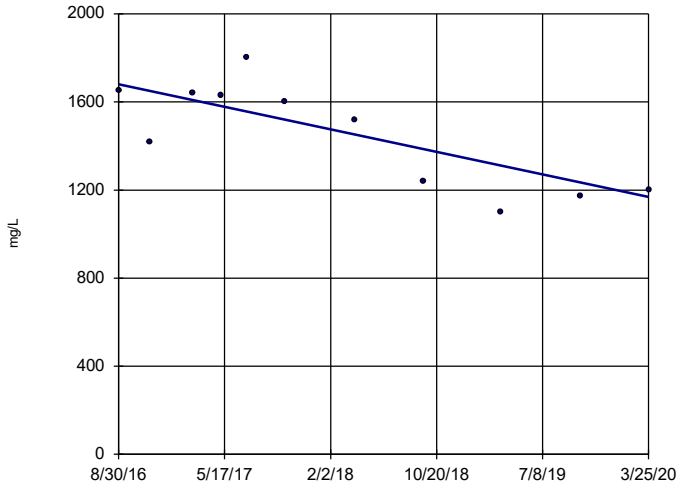
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 11

Slope = -143.1 units per year.

Mann-Kendall statistic = -33 critical = -34

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

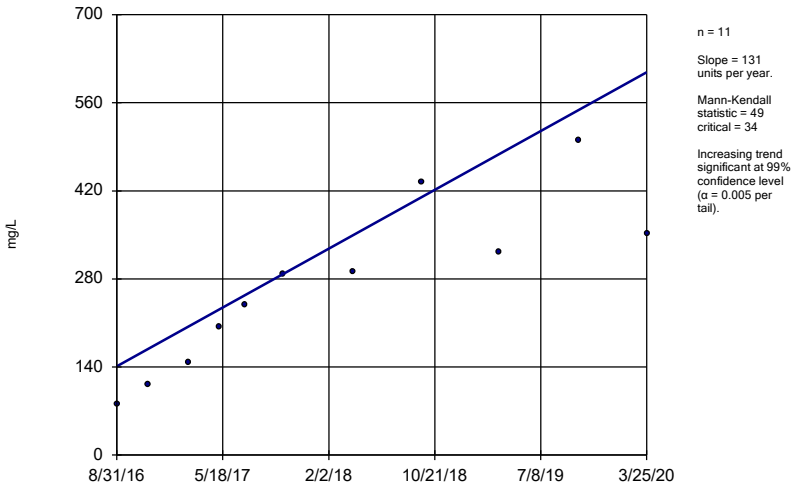
Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 11

Slope = 131 units per year.

Mann-Kendall statistic = 49 critical = 34

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

Constituent: Total Dissolved Solids Analysis Run 5/5/2020 4:15 PM View: Trend Tests

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

FIGURE E.

Tolerance Limit Summary Table - Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:38 PM

Constituent	Well	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0035	n/a	124	n/a	n/a	91.13	n/a	n/a	0.001729	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	142	n/a	n/a	83.1	n/a	n/a	0.0006867	NP Inter(NDs)
Barium (mg/L)	n/a	0.0671	n/a	142	n/a	n/a	2.817	n/a	n/a	0.0006867	NP Inter(normality)
Beryllium (mg/L)	n/a	0.003	n/a	142	n/a	n/a	80.99	n/a	n/a	0.0006867	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	142	n/a	n/a	97.18	n/a	n/a	0.0006867	NP Inter(NDs)
Chromium (mg/L)	n/a	0.01	n/a	110	n/a	n/a	78.18	n/a	n/a	0.003545	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.013	n/a	142	n/a	n/a	79.58	n/a	n/a	0.0006867	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	141	n/a	n/a	0	n/a	n/a	0.0007228	NP Inter(normality)
Fluoride (mg/L)	n/a	0.32	n/a	152	n/a	n/a	87.5	n/a	n/a	0.0004111	NP Inter(NDs)
Lead (mg/L)	n/a	0.005	n/a	126	n/a	n/a	86.51	n/a	n/a	0.00156	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	142	n/a	n/a	30.99	n/a	n/a	0.0006867	NP Inter(normality)
Mercury (mg/L)	n/a	0.0005	n/a	106	n/a	n/a	94.34	n/a	n/a	0.004352	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	110	n/a	n/a	80.91	n/a	n/a	0.003545	NP Inter(NDs)
Selenium (mg/L)	n/a	0.01	n/a	142	n/a	n/a	86.62	n/a	n/a	0.0006867	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	125	n/a	n/a	100	n/a	n/a	0.001642	NP Inter(NDs)

FIGURE F.

PLANT AMA-R6 GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.0035	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.067	2
Beryllium, Total (mg/L)	0.004	0.003	0.004
Cadmium, Total (mg/L)	0.005	0.0025	0.005
Chromium, Total (mg/L)	0.1	0.01	0.1
Cobalt, Total (mg/L)	n/a	0.013	0.013
Combined Radium, Total (pCi/L)	5	6.92	6.92
Fluoride, Total (mg/L)	4	0.32	4
Lead, Total (mg/L)	n/a	0.005	0.005
Lithium, Total (mg/L)	n/a	0.03	0.03
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)	n/a	0.01	0.01
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Grey cell indicates background is higher than MCL.*

**MCL = Maximum Contaminant Level*

FIGURE G.

Confidence Interval Summary Table - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-33S**	**0.01955**	**0.01454**	**0.004**	**Yes**	**15**	**0.01717**	**0.003916**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Beryllium (mg/L)	**YGWC-38**	**0.005717**	**0.004702**	**0.004**	**Yes**	**11**	**0.005209**	**0.000609**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**YGWC-33S**	**0.02603**	**0.01477**	**0.013**	**Yes**	**15**	**0.0204**	**0.008309**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.2511**	**0.1547**	**0.05**	**Yes**	**11**	**0.2029**	**0.05784**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06837**	**0.05309**	**0.05**	**Yes**	**11**	**0.05907**	**0.01451**	**0**	**None**	**x^3**	**0.01**	**Param.**

Confidence Interval Summary Table - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-23S	0.003	0.00029	0.006	No	13	0.002792	0.0007516	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-24S	0.003	0.0009	0.006	No	13	0.002838	0.0005824	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-33S	0.003	0.003	0.006	No	13	0.003	0	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36	0.002291	0.0004486	0.006	No	13	0.002738	0.001558	53.85	Kapla...	sqrt(x)	0.01	Param.
Antimony (mg/L)	YGWC-38	0.003	0.0015	0.006	No	10	0.002613	0.0008412	80	Kapla...	No	0.011	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.003	0.006	No	10	0.003	0	100	Kapla...	No	0.011	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.003	0.006	No	10	0.003	0	100	Kapla...	No	0.011	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.003	0.006	No	10	0.002731	0.0008507	90	Kapla...	No	0.011	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	10	0.002563	0.000931	80	Kapla...	No	0.011	NP (NDs)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	15	0.004747	0.0009812	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-24S	0.005	0.0015	0.01	No	15	0.004767	0.0009037	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-33S	0.004793	0.002861	0.01	No	15	0.003827	0.001426	6.667	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-36	0.005	0.00066	0.01	No	15	0.004124	0.001814	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.001615	0.0006536	0.01	No	11	0.001135	0.0005771	0	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00052	0.01	No	11	0.002302	0.00215	36.36	None	No	0.006	NP (normality)
Arsenic (mg/L)	YGWC-42	0.002574	0.001312	0.01	No	11	0.001943	0.0007573	0	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.0007	0.01	No	11	0.003836	0.001996	72.73	None	No	0.006	NP (normality)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	10	0.003746	0.002021	70	None	No	0.011	NP (normality)
Barium (mg/L)	YGWC-23S	0.04614	0.0268	2	No	15	0.03647	0.01427	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24S	0.01975	0.01865	2	No	15	0.01917	0.0008591	0	None	x^4	0.01	Param.
Barium (mg/L)	YGWC-33S	0.01741	0.01104	2	No	15	0.01441	0.005105	6.667	None	sqrt(x)	0.01	Param.
Barium (mg/L)	YGWC-36	0.04604	0.03306	2	No	15	0.0387	0.01078	0	None	x^2	0.01	Param.
Barium (mg/L)	YGWC-38	0.02507	0.02012	2	No	11	0.02259	0.00297	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.0325	0.02317	2	No	11	0.02784	0.005599	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.0505	0.0338	2	No	11	0.04215	0.01002	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03161	0.01352	2	No	11	0.02256	0.01086	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.08269	0.07093	2	No	10	0.07681	0.006586	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.003	0.000077	0.004	No	15	0.001058	0.001422	33.33	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-24S	0.003	0.0001	0.004	No	15	0.000698	0.001192	20	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-33S**	**0.01955**	**0.01454**	**0.004**	**Yes**	**15**	**0.01717**	**0.003916**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-36	0.00033	0.0002	0.004	No	15	0.000446	0.0007109	6.667	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005717**	**0.004702**	**0.004**	**Yes**	**11**	**0.005209**	**0.000609**	**0**	**None**	**No**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.003766	0.003074	0.004	No	11	0.003364	0.0005201	0	None	x^5	0.01	Param.
Beryllium (mg/L)	YGWC-42	0.003	0.00009	0.004	No	11	0.002207	0.001358	72.73	None	No	0.006	NP (normality)
Beryllium (mg/L)	YGWC-43	0.003	0.00029	0.004	No	11	0.001761	0.001425	54.55	None	No	0.006	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	10	0.000397	0.0009147	10	None	No	0.011	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0025	0.00007	0.005	No	15	0.002338	0.0006274	93.33	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-24S	0.0025	0.0025	0.005	No	15	0.0025	0	100	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-33S	0.003063	0.002068	0.005	No	15	0.002565	0.0007337	0	None	No	0.01	Param.
Cadmium (mg/L)	YGWC-36	0.0025	0.00015	0.005	No	15	0.000484	0.0008192	13.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-38	0.002911	0.002324	0.005	No	11	0.002609	0.0003807	0	None	x^2	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0025	0.00017	0.005	No	11	0.0006273	0.0009268	18.18	None	No	0.006	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0025	0.0002	0.005	No	11	0.001103	0.001116	36.36	None	No	0.006	NP (normality)
Cadmium (mg/L)	YGWC-43	0.0025	0.0025	0.005	No	11	0.0025	0	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	YGWC-49	0.0025	0.0025	0.005	No	10	0.002257	0.0007684	90	None	No	0.011	NP (NDs)
Chromium (mg/L)	YGWC-23S	0.01	0.0008	0.1	No	11	0.007582	0.004152	72.73	None	No	0.006	NP (normality)
Chromium (mg/L)	YGWC-24S	0.01	0.0011	0.1	No	11	0.008367	0.003633	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-33S	0.01	0.0012	0.1	No	11	0.006155	0.004431	54.55	None	No	0.006	NP (normality)
Chromium (mg/L)	YGWC-36	0.01	0.0035	0.1	No	11	0.008567	0.003247	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-38	0.01	0.00065	0.1	No	11	0.008286	0.003813	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-41	0.01	0.01	0.1	No	11	0.009126	0.002898	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-42	0.01	0.0006	0.1	No	11	0.007485	0.004313	72.73	None	No	0.006	NP (normality)
Chromium (mg/L)	YGWC-43	0.01	0.00062	0.1	No	11	0.007442	0.004382	72.73	None	No	0.006	NP (normality)
Chromium (mg/L)	YGWC-49	0.01	0.0013	0.1	No	9	0.002544	0.002804	11.11	None	No	0.002	NP (normality)
Cobalt (mg/L)	YGWC-23S	0.005	0.005	0.013	No	15	0.005	0	100	None	No	0.01	NP (NDs)

Confidence Interval Summary Table - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/5/2020, 4:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	YGWC-24S	0.005	0.005	0.013	No	15	0.005	0	100	None	No	0.01	NP (NDs)
Cobalt (mg/L)	**YGWC-33S**	**0.02603**	**0.01477**	**0.013**	**Yes**	**15**	**0.0204**	**0.008309**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	YGWC-36	0.005	0.0006	0.013	No	15	0.004097	0.001869	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-38	0.005	0.005	0.013	No	11	0.005	0	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	YGWC-41	0.005	0.0003	0.013	No	11	0.003399	0.002231	63.64	None	No	0.006	NP (normality)
Cobalt (mg/L)	YGWC-42	0.002884	0.001638	0.013	No	11	0.002309	0.0009864	9.091	None	ln(x)	0.01	Param.
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.013	No	11	0.003682	0.001656	54.55	None	No	0.006	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.013	No	10	0.00325	0.00226	60	None	No	0.011	NP (normality)
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8402	0.2935	6.92	No	15	0.5669	0.4034	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24S	0.8174	0.4518	6.92	No	15	0.6346	0.2697	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-33S	1.418	0.7125	6.92	No	15	1.065	0.5205	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36	1.114	0.5732	6.92	No	15	0.8437	0.3992	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.5	0.6416	6.92	No	11	1.071	0.5152	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.548	0.5806	6.92	No	11	1.082	0.6178	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	3.353	1.584	6.92	No	11	2.469	1.061	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	2.778	0.966	6.92	No	11	1.872	1.087	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.216	0.4762	6.92	No	10	0.846	0.4145	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.3	0.12	4	No	16	0.2562	0.09577	81.25	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-24S	0.3	0.098	4	No	16	0.2707	0.08097	87.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-33S	0.5075	0.2094	4	No	16	0.3881	0.3056	6.25	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	YGWC-36	0.3	0.05	4	No	16	0.2035	0.1181	56.25	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-38	0.2933	0.08603	4	No	12	0.277	0.1023	50	Kapla...	No	0.01	Param.
Fluoride (mg/L)	YGWC-41	0.3	0.11	4	No	12	0.2675	0.07593	83.33	Kapla...	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.3	0.041	4	No	12	0.2159	0.1247	66.67	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-43	0.1517	0.06199	4	No	12	0.1653	0.09893	25	Kapla...	No	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.3	0.06	4	No	11	0.19	0.1097	45.45	None	No	0.006	NP (normality)
Lead (mg/L)	YGWC-23S	0.005	0.00044	0.005	No	13	0.004275	0.001772	84.62	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-24S	0.005	0.000053	0.005	No	13	0.004619	0.001372	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-33S	0.001367	0.0006861	0.005	No	13	0.002108	0.001717	23.08	Kapla...	x^(1/3)	0.01	Param.
Lead (mg/L)	YGWC-36	0.0017	0.0002	0.005	No	13	0.001108	0.001774	15.38	None	No	0.01	NP (normality)
Lead (mg/L)	YGWC-38	0.005	0.0001	0.005	No	11	0.003664	0.002289	72.73	None	No	0.006	NP (normality)
Lead (mg/L)	YGWC-41	0.005	0.00007	0.005	No	11	0.003305	0.002368	63.64	None	No	0.006	NP (normality)
Lead (mg/L)	YGWC-42	0.005	0.00009	0.005	No	11	0.003667	0.002283	72.73	None	No	0.006	NP (normality)
Lead (mg/L)	YGWC-43	0.005	0.00008	0.005	No	11	0.004105	0.001991	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	YGWC-49	0.005	0.005	0.005	No	10	0.004506	0.001562	90	None	No	0.011	NP (NDs)
Lithium (mg/L)	YGWC-23S	0.0025	0.0017	0.03	No	15	0.003013	0.003363	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-24S	0.015	0.015	0.03	No	15	0.015	0	100	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-33S	0.02899	0.01907	0.03	No	15	0.02403	0.007318	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-36	0.006331	0.004669	0.03	No	15	0.005407	0.001354	0	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-38	0.0095	0.0081	0.03	No	11	0.008709	0.0006188	0	None	No	0.006	NP (normality)
Lithium (mg/L)	YGWC-41	0.0047	0.0032	0.03	No	11	0.004882	0.003398	9.091	None	No	0.006	NP (normality)
Lithium (mg/L)	YGWC-42	0.04238	0.02606	0.03	No	11	0.03422	0.009791	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.0167	0.01027	0.03	No	11	0.01348	0.003859	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0036	0.03	No	10	0.00372	0.0002741	0	None	No	0.011	NP (normality)
Mercury (mg/L)	YGWC-23S	0.0005	0.0005	0.002	No	11	0.0004635	0.0001212	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-24S	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-33S	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-36	0.0005	0.0005	0.002	No	11	0.0005	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0005	0.000037	0.002	No	9	0.0004019	0.000195	77.78	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0005	0.00006	0.002	No	9	0.0004511	0.0001467	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0005	0.000048	0.002	No	9	0.0004498	0.0001507	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0005	0.000052	0.002	No	9	0.0004502	0.0001493	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0005	0.000061	0.002	No	8	0.0004451	0.0001552	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	YGWC-23S	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-24S	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)

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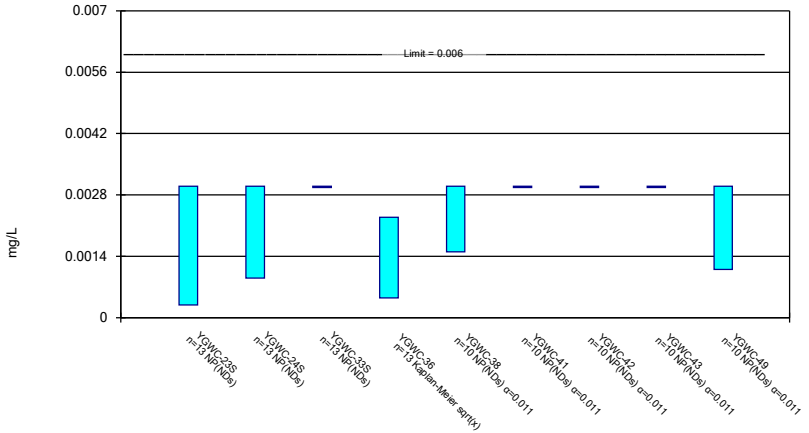
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	YGWC-33S	0.01	0.00095	0.01	No	11	0.008314	0.003753	81.82	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-36	0.01	0.0025	0.01	No	11	0.007045	0.003665	54.55	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-38	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-41	0.01	0.01	0.01	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YGWC-42	0.01	0.0017	0.01	No	11	0.006436	0.004119	54.55	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.01	No	11	0.006918	0.004284	63.64	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.01	No	9	0.008967	0.0031	88.89	None	No	0.002	NP (NDs)
Selenium (mg/L)	YGWC-23S	0.04108	0.02528	0.05	No	15	0.03318	0.01166	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-24S	0.01	0.01	0.05	No	15	0.01	0	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	YGWC-33S	0.01576	0.008984	0.05	No	15	0.01237	0.005001	6.667	None	No	0.01	Param.
Selenium (mg/L)	YGWC-36	0.01	0.0018	0.05	No	15	0.00392	0.003213	20	None	No	0.01	NP (normality)
Selenium (mg/L)	**YGWC-38**	**0.2511**	**0.1547**	**0.05**	**Yes**	**11**	**0.2029**	**0.05784**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06837**	**0.05309**	**0.05**	**Yes**	**11**	**0.05907**	**0.01451**	**0**	**None**	**x^3**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-42	0.06096	0.03852	0.05	No	11	0.04974	0.01347	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-43	0.01	0.01	0.05	No	11	0.01	0	100	None	No	0.006	NP (NDs)
Selenium (mg/L)	YGWC-49	0.00955	0.00727	0.05	No	10	0.00841	0.001278	10	None	No	0.01	Param.
Thallium (mg/L)	YGWC-23S	0.001	0.001	0.002	No	13	0.001	0	100	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-24S	0.001	0.001	0.002	No	13	0.001	0	100	None	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-33S	0.0002493	0.0001146	0.002	No	13	0.0004454	0.0003932	30.77	Kapla...	ln(x)	0.01	Param.
Thallium (mg/L)	YGWC-36	0.001	0.001	0.002	No	13	0.001	0	100	Kapla...	No	0.01	NP (NDs)
Thallium (mg/L)	YGWC-38	0.001	0.001	0.002	No	10	0.001	0	100	Kapla...	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-41	0.001	0.001	0.002	No	10	0.001	0	100	Kapla...	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-42	0.001	0.001	0.002	No	10	0.001	0	100	Kapla...	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-43	0.001	0.001	0.002	No	10	0.001	0	100	Kapla...	No	0.011	NP (NDs)
Thallium (mg/L)	YGWC-49	0.001	0.001	0.002	No	10	0.000909	0.0002878	90	Kapla...	No	0.011	NP (NDs)

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.

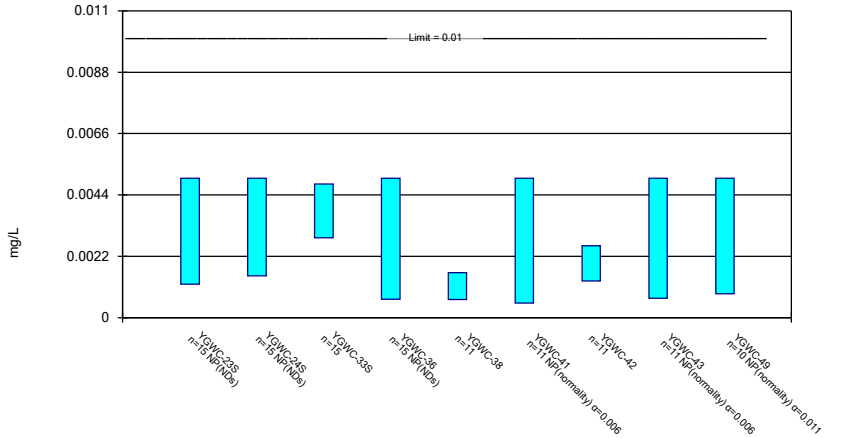


Constituent: Antimony Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by 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.

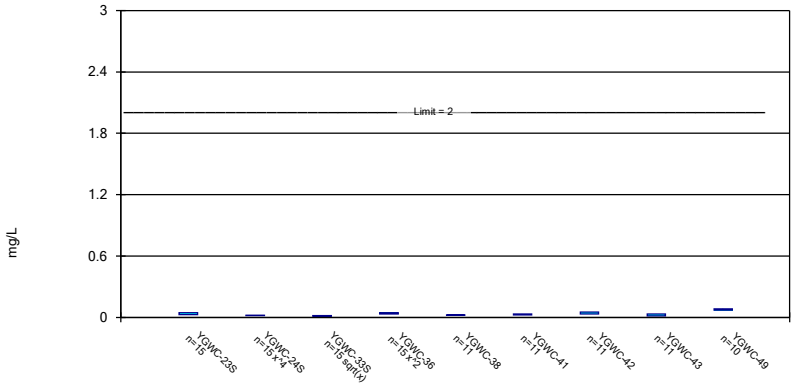


Constituent: Arsenic Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by 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.

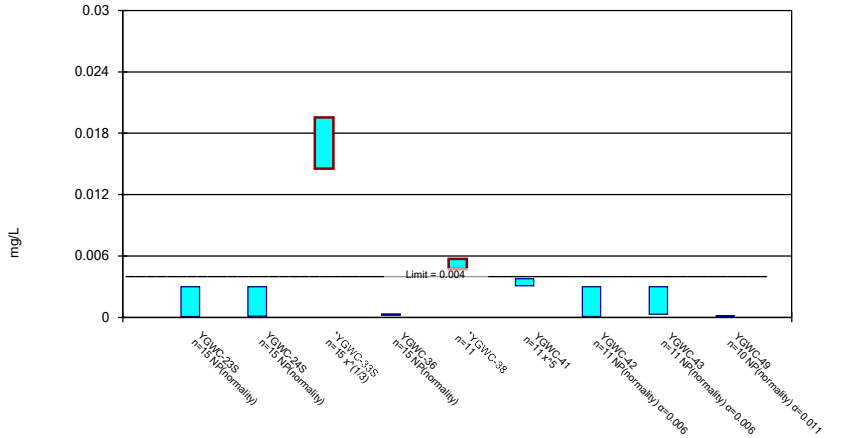


Constituent: Barium Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

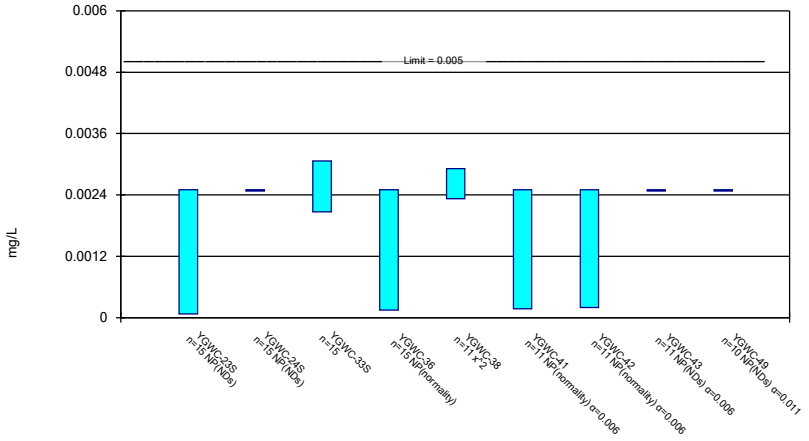
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
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.

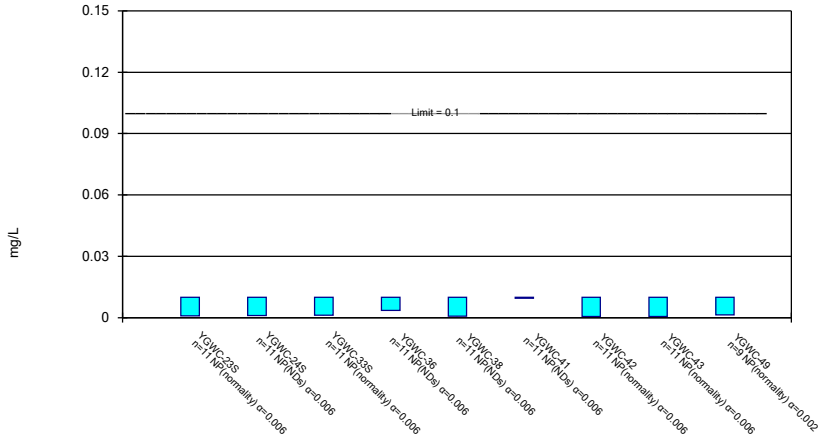


Constituent: Cadmium Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

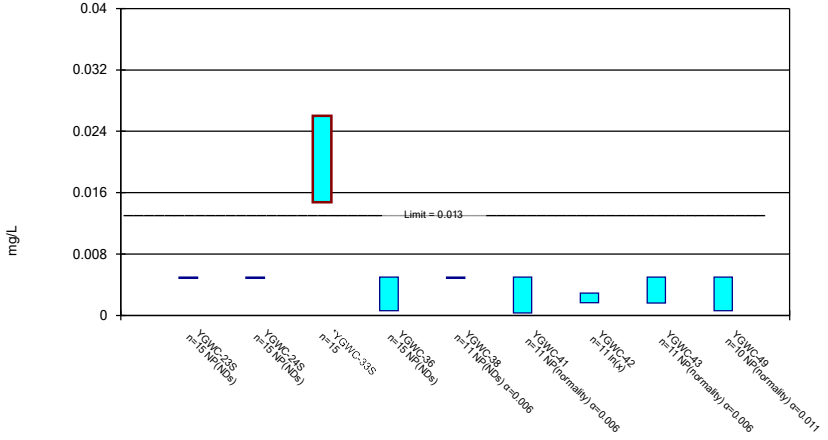


Constituent: Chromium Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by 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.

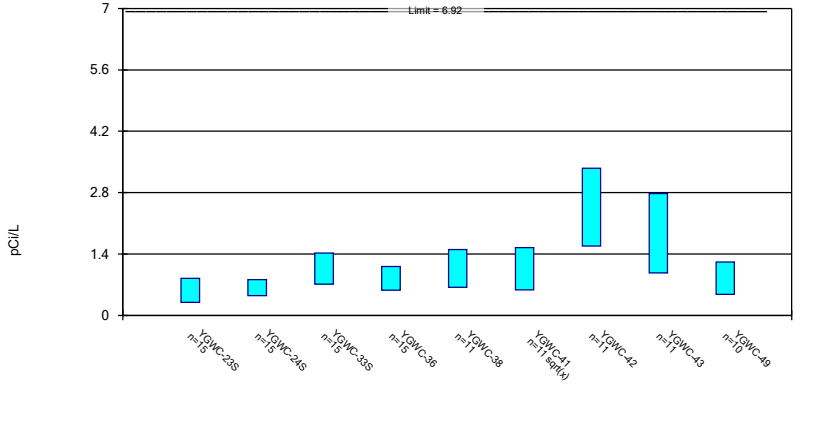


Constituent: Cobalt Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric Confidence Interval

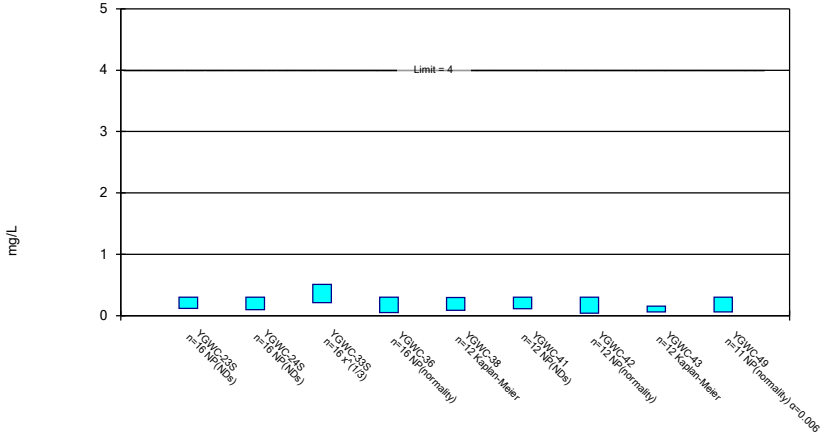
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
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.

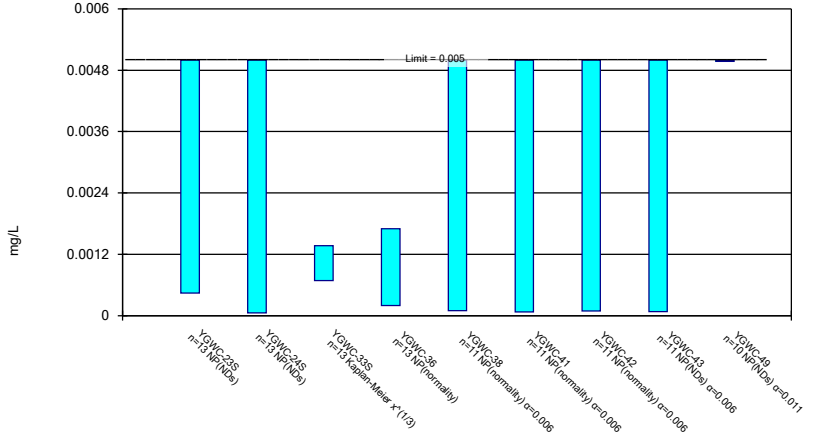


Constituent: Fluoride Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by 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.

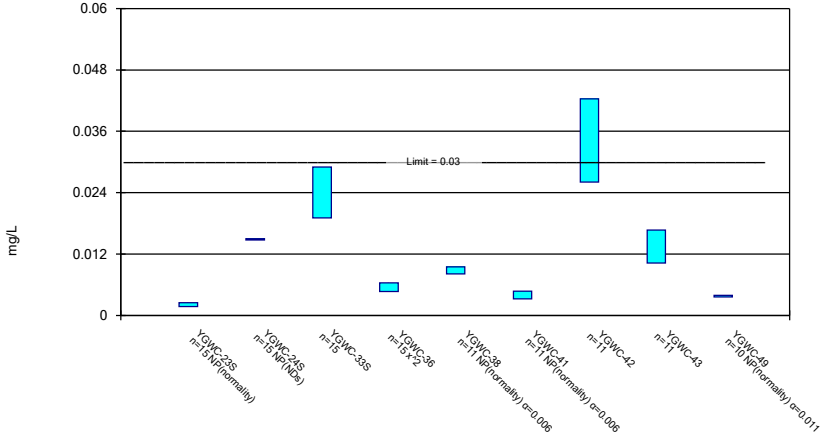


Constituent: Lead Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by 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.

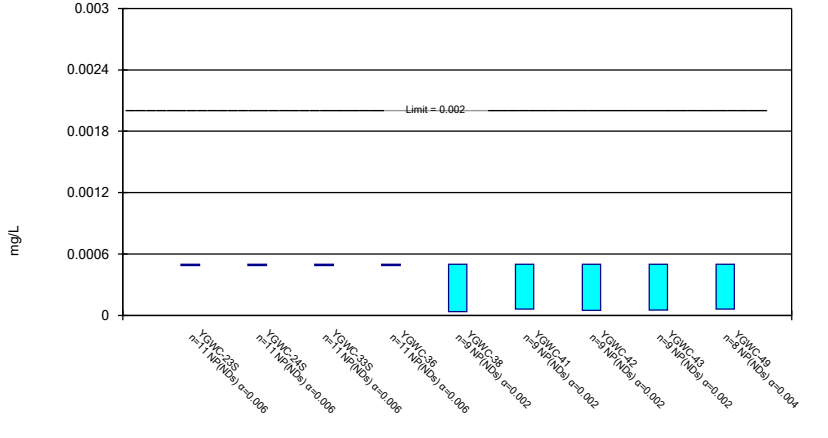


Constituent: Lithium Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.25a Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

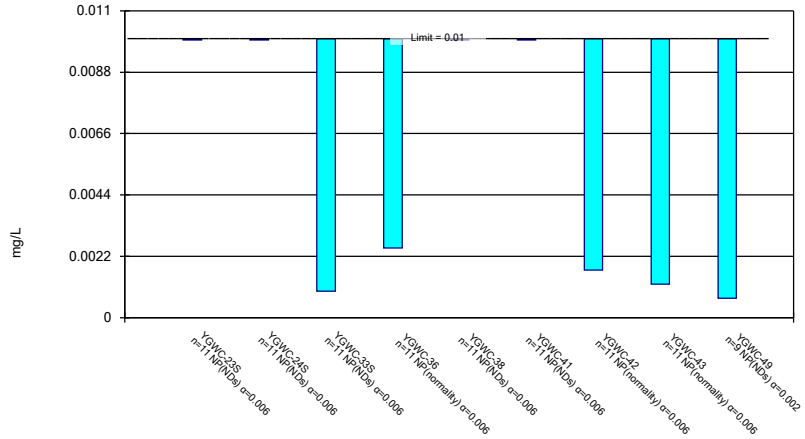
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



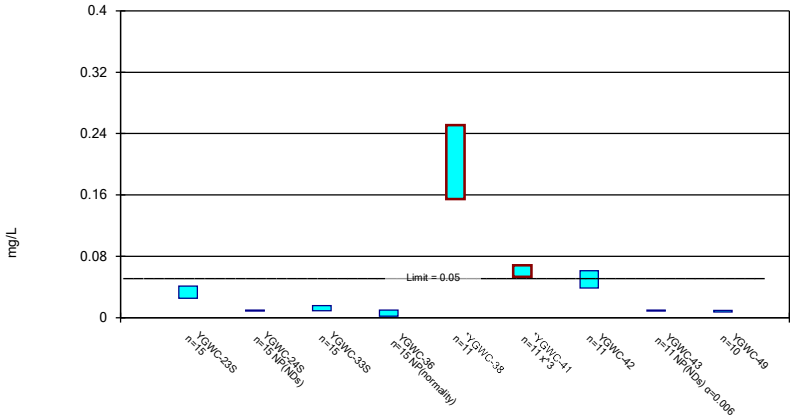
Constituent: Molybdenum Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals

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

Sanitas™ v.9.6.25a Sanitas software utilized by 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.



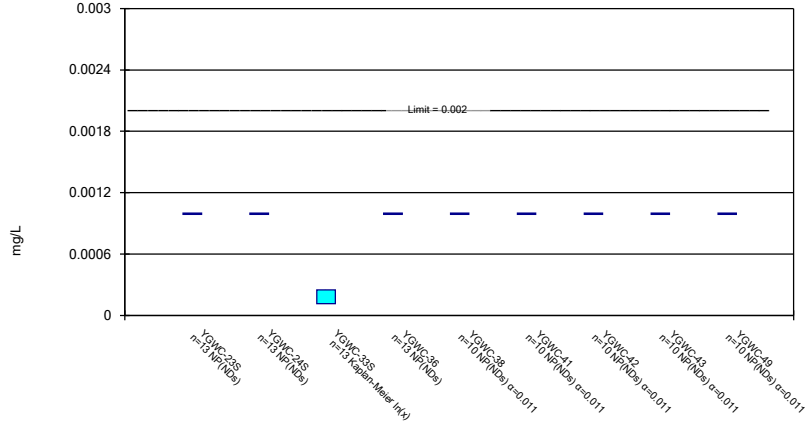
Constituent: Selenium Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals

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

Sanitas™ v.9.6.25a Sanitas software utilized by 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: Thallium Analysis Run 5/5/2020 4:42 PM View: Confidence Intervals

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

September 2020

Semiannual Event

GROUNDWATER STATS CONSULTING

January 27, 2021

Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, GA 30308-3374

Re: Plant Yates Ash Management Area (AMA) and R6 CCR Landfill
Statistical Analysis September 2020 2nd Semi-Annual Sample Event

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the September 2020 2nd Semi-Annual Groundwater Assessment Monitoring statistical summary of groundwater data 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 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-33S, 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

As requested by Georgia EPD, combined upgradient well data from all units at Plant Yates are utilized to construct background 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 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 both wells are statistically similar. 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 well/constituent pairs with 100% nondetects 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 2020, mercury was not detected, and therefore, was not required to be sampled during the September 2020 event. Since all units at Plant Yates utilize combined upgradient well data

from individual units, 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 event; therefore, upgradient wells at the units listed below were not sampled for that constituent:

- Yates Gypsum Landfill: molybdenum
- Yates AP-1: cadmium, mercury, selenium, and thallium
- Yates AP-2: mercury

For all constituents, a substitution of the most recent reporting limit is used for nondetect data. This generally gives the most conservative limit in each case and in the 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. However, in the case of cobalt, due to varying detection limits, the most recent reporting limits of 0.005 mg/L were substituted across all wells.

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

nondetects, 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 nondetects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect 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% nondetects.

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.

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 nondetects. 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, nondetects 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 – September 2020

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. High values for cobalt at upgradient well GWA-2, 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 and therefore, were flagged as outliers in order to maintain limits that were conservative from a regulatory perspective. However, since two observations were at this level, further study may indicate that the values should not be flagged. A single high pH value in upgradient well YGWA-47 from AP-1 that was originally flagged as an outlier since it was higher than the other measurements within this well. All upgradient samples will be re-screened for outliers during the 2021 1st Semi-Annual report. 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).

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical pooled upgradient well data through September 2020 (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).

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 and YGWC-36A
- Sulfate: YGWC-38, YGWC-41, 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, YGWA-21I, and GWA-2 (all upgradient)
- Chloride: YGWA-17S and YGWA-20S (both upgradient)
- Sulfate: YGWA-1D (upgradient), GWA-2 (upgradient), YGWA-5I (upgradient), and YGWC-43

- TDS: YGWC-43

Decreasing:

- Boron: YGWC-38
- Calcium: YGWA-18S (upgradient), YGWA-47 (upgradient), and YGWC-38
- Chloride: YGWA-5D (upgradient)
- Sulfate: YGWA-5D (upgradient), YGWA-40 (upgradient), YGWA-47 (upgradient), YGWC-38, and YGWC-41
- TDS: YGWA-5D (upgradient), YGWA-47 (upgradient), YGWC-41, and YGWC-42

Statistical Analysis of Appendix IV Parameters – September 2020

For analysis of Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Ground Water Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that have 100% ND or trace values below the reporting limits do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis. No new values were flagged and 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% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. 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 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 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, State and Federal GWPS were established for statistical comparison of Appendix IV constituents for the September 2020 sample event (Figure G). Delineation wells were included when a minimum of 4 samples were available. Note that while a GWPS is established for mercury, no statistical comparison with confidence intervals is required as there were no detections above the reporting limit for this constituent.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the detected Appendix IV constituents using data since 2016 in accordance with the federal and state requirements in each downgradient well (Figures H and I, respectively). 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. 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, YGWC-41, and PZ-37

State:

- Beryllium: YGWC-38
- Selenium: YGWC-38, YGWC-41, 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

Analysis Run 1/13/2021 11:18 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Antimony (mg/L)
YAMW-1, YAMW-2, YGWC-41, YGWC-42, PZ-35

Arsenic (mg/L)
YAMW-1, YAMW-2, YAMW-4

Beryllium (mg/L)
YAMW-2, YAMW-4

Cadmium (mg/L)
YAMW-2, YAMW-4, YGWC-43, YGWC-24SA

Chromium (mg/L)
YAMW-4, YAMW-5

Cobalt (mg/L)
YGWC-23S, YGWC-38, YGWC-24SA

Fluoride (mg/L)
YAMW-1, YAMW-2, YAMW-4, YAMW-5, PZ-35

Lead (mg/L)
YAMW-1, YAMW-2, 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 11/25/2020, 7:06 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	9/24/2020	1.1	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-38	0.16	n/a	9/25/2020	8	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-41	0.16	n/a	9/25/2020	6	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-42	0.16	n/a	9/24/2020	15.2	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-43	0.16	n/a	9/25/2020	3.9	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-38	37	n/a	9/25/2020	93.7	Yes	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-42	37	n/a	9/24/2020	84.3	Yes	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-24SA	7.9	n/a	9/23/2020	9.3	Yes	274	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	10/7/2020	8.7	Yes	274	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	9/25/2020	414	Yes	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-41	160	n/a	9/25/2020	175	Yes	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-42	160	n/a	9/24/2020	579	Yes	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-43	160	n/a	9/25/2020	281	Yes	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-38	221.3	n/a	9/25/2020	664	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-41	221.3	n/a	9/25/2020	307	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-42	221.3	n/a	9/24/2020	1060	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-43	221.3	n/a	9/25/2020	494	Yes	274	10.05	2.547	0.7299	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 11/25/2020, 7:06 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**	**9/24/2020**	**1.1**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**9/25/2020**	**8**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**9/25/2020**	**6**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**9/24/2020**	**15.2**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**9/25/2020**	**3.9**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-49	0.16	n/a	9/24/2020	0.062J	No	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-24SA	0.16	n/a	9/23/2020	0.1ND	No	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-36A	0.16	n/a	10/7/2020	0.018J	No	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	9/24/2020	7.9	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**9/25/2020**	**93.7**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-41	37	n/a	9/25/2020	20.5	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**9/24/2020**	**84.3**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-43	37	n/a	9/25/2020	19.8	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-49	37	n/a	9/24/2020	12	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24SA	37	n/a	9/23/2020	2.4	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-36A	37	n/a	10/7/2020	9.9	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-23S	7.9	n/a	9/24/2020	2	No	274	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	9/25/2020	4	No	274	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	9/25/2020	3	No	274	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	9/24/2020	3.3	No	274	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	9/25/2020	2.3	No	274	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	9/24/2020	4.6	No	274	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**	**9/23/2020**	**9.3**	**Yes**	**274**	**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**	**10/7/2020**	**8.7**	**Yes**	**274**	**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	9/24/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-38	0.68	n/a	9/25/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-41	0.68	n/a	9/25/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-42	0.68	n/a	9/24/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-43	0.68	n/a	9/25/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-49	0.68	n/a	9/24/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24SA	0.68	n/a	9/23/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36A	0.68	n/a	10/7/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-23S	7.91	4.86	9/24/2020	5.51	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-38	7.91	4.86	9/25/2020	4.9	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-41	7.91	4.86	9/25/2020	4.95	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-42	7.91	4.86	9/24/2020	5.55	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-43	7.91	4.86	9/25/2020	5.75	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-49	7.91	4.86	9/24/2020	5.62	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-24SA	7.91	4.86	9/23/2020	5.64	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-36A	7.91	4.86	10/7/2020	5.86	No	339	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	9/24/2020	52.5	No	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-38**	**160**	**n/a**	**9/25/2020**	**414**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-41**	**160**	**n/a**	**9/25/2020**	**175**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-42**	**160**	**n/a**	**9/24/2020**	**579**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-43**	**160**	**n/a**	**9/25/2020**	**281**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-49	160	n/a	9/24/2020	77	No	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-24SA	160	n/a	9/23/2020	0.5ND	No	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-36A	160	n/a	10/7/2020	18.2	No	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-23S	221.3	n/a	9/24/2020	129	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-38**	**221.3**	**n/a**	**9/25/2020**	**664**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**221.3**	**n/a**	**9/25/2020**	**307**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**221.3**	**n/a**	**9/24/2020**	**1060**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-43**	**221.3**	**n/a**	**9/25/2020**	**494**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-49	221.3	n/a	9/24/2020	187	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-24SA	221.3	n/a	9/23/2020	87	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-36A	221.3	n/a	10/7/2020	137	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWC-38	-4.054	-44	-38	Yes	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-43	0.7688	62	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.09147	-54	-53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	1.723	59	53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-38	-27.93	-52	-38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-2.267	-48	-38	Yes	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	4.326	50	43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.9112	54	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.1906	61	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.225	65	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.9674	-68	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-13.69	-44	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-4.083	-81	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.1006	59	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-38	-132.4	-55	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-41	-83.77	-50	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-43	53.39	44	38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-26.3	-61	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	22.54	53	43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.104	63	53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-16.16	-59	-53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-41	-124.6	-50	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-42	-147.2	-44	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-43	115.6	58	38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-14.88	-44	-38	Yes	12	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-17S (bg)	-0.0004068	-21	-53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-38	-53	No	15	73.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0005007	-21	-53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-17	-53	No	15	86.67	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	-0.006488	-47	-53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.003122	11	38	No	12	8.333	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.02578	-31	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-10	-53	No	15	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0006117	23	53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	-0.001168	-43	-53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-23S	-0.164	-44	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-38**	**-4.054**	**-44**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWC-41	-2.481	-32	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-42	-1.556	-25	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-43**	**0.7688**	**62**	**38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-47 (bg)	-0.001562	-37	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	0	-1	-43	No	13	53.85	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.002039	-30	-53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	-0.0002466	-14	-53	No	15	20	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-28	-53	No	15	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-22	-53	No	15	73.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-31	-53	No	15	80	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-15	-53	No	15	53.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-25	-53	No	15	86.67	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.1212	51	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18I (bg)	0.02072	8	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.09147**	**-54**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.1176	52	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**1.723**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-39 (bg)	0.05098	1	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-1.15	-37	-38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-4I (bg)	0.4056	50	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.054	-47	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5I (bg)	0.08295	38	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWC-38**	**-27.93**	**-52**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWC-42	-12.06	-34	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-47 (bg)**	**-2.267**	**-48**	**-38**	**Yes**	**12**	**8.333**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GWA-2 (bg)**	**4.326**	**50**	**43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-14S (bg)	-0.0442	-47	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-1D (bg)**	**0.9112**	**54**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-1I (bg)	-0.1082	-50	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-2I (bg)	0.7549	37	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	-0.01026	-12	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	0.9217	40	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.6083	28	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.1906**	**61**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18I (bg)	0.06048	32	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2113	40	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.225**	**65**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.06716	-15	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.02132	1	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.2281	23	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.1431	41	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.9674**	**-68**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-5I (bg)	0	1	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.504	-33	-38	No	12	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	GWA-2 (bg)	0.1924	33	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.1026	20	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	0	-25	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	0	-19	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.04955	-30	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	0	-10	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.06957	-46	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05476	-51	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-24SA	0.3315	41	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-36A	0.2005	22	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.1628	49	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2596	-42	-53	No	15	20	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.2017	-42	-53	No	15	13.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	18	53	No	15	60	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.3604	-21	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-4.02	-38	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-40 (bg)**	**-13.69**	**-44**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.2408	50	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-4.083**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.1006**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-38**	**-132.4**	**-55**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-41**	**-83.77**	**-50**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWC-42	-112.9	-37	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWC-43**	**53.39**	**44**	**38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-26.3**	**-61**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GWA-2 (bg)**	**22.54**	**53**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-14S (bg)	0.1735	30	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-1D (bg)**	**1.104**	**63**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.3029	-21	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.142	8	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.09481	-21	-53	No	15	13.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.6124	52	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3I (bg)	1.18	45	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	6.577	31	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-1.862	-14	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	7.897	34	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	5.975	37	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	22.56	45	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	12.16	18	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-16.26	-36	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	4.95	19	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-5D (bg)**	**-16.16**	**-59**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	0.4969	6	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-38	-170	-36	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-41**	**-124.6**	**-50**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-42**	**-147.2**	**-44**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-43**	**115.6**	**58**	**38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWA-47 (bg)**	**-14.88**	**-44**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GWA-2 (bg)	21.56	27	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-14S (bg)	0.8555	9	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1D (bg)	3.318	18	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1I (bg)	-3.416	-17	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-2I (bg)	-2.032	-19	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-30I (bg)	3.476	28	53	No	15	13.33	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3D (bg)	4.214	19	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3I (bg)	2.713	14	53	No	15	0	n/a	n/a	0.01	NP

Upper Tolerance Limit Summary Table

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:12 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	280	n/a	n/a	86.43	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	328	n/a	n/a	77.13	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.071	n/a	n/a	328	n/a	n/a	3.354	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.003	n/a	n/a	312	n/a	n/a	83.01	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	313	n/a	n/a	96.17	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.01	n/a	n/a	280	n/a	n/a	77.14	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	326	n/a	n/a	69.63	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	306	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	327	n/a	n/a	68.5	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.005	n/a	n/a	282	n/a	n/a	85.82	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	307	n/a	n/a	28.34	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0005	n/a	n/a	251	n/a	n/a	92.43	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	272	n/a	n/a	59.56	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.01	n/a	n/a	311	n/a	n/a	91	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	281	n/a	n/a	96.44	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		0.003	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005	0.005
Chromium, Total (mg/L)	0.1		0.01	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.9	6.9	6.9
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.005	0.015	0.005
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0005	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.01	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

**Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Federal Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005678**	**0.004422**	**0.004**	**Yes**	**12**	**0.00505**	**0.0008006**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.2443**	**0.1404**	**0.05**	**Yes**	**12**	**0.1923**	**0.06621**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06783**	**0.05001**	**0.05**	**Yes**	**12**	**0.05798**	**0.01434**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	**PZ-37**	**0.314**	**0.2065**	**0.05**	**Yes**	**9**	**0.2602**	**0.05567**	**0**	**None**	**No**	**0.01**	**Param.**

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	14	0.002653	0.0008892	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00063	0.006	No	11	0.002431	0.001001	72.73	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.003	0.006	No	11	0.002755	0.0008111	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	11	0.002603	0.000893	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	9	0.002822	0.0005333	88.89	None	No	0.002	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	14	0.00285	0.0005612	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0011	0.006	No	14	0.002757	0.001498	57.14	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	16	0.004762	0.00095	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.002081	0.000666	0.01	No	12	0.001457	0.001244	8.333	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00052	0.01	No	12	0.002527	0.002193	41.67	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-42	0.003092	0.001303	0.01	No	12	0.002197	0.00114	8.333	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.0007	0.01	No	12	0.003933	0.001932	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	11	0.00386	0.001955	72.73	None	No	0.006	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	4	0.003922	0.002155	75	None	No	0.0625	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0006	0.01	No	9	0.002338	0.00201	33.33	None	No	0.002	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	16	0.004781	0.000875	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00066	0.01	No	16	0.004179	0.001766	81.25	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.06167	0.01983	2	No	4	0.04075	0.009215	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04535	0.02741	2	No	16	0.03638	0.01379	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.02477	0.01915	2	No	12	0.02196	0.003581	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.03182	0.02188	2	No	12	0.02685	0.006338	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04914	0.03246	2	No	12	0.0408	0.01063	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03422	0.01481	2	No	12	0.02452	0.01237	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.0817	0.06995	2	No	11	0.07583	0.007047	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.0755	0.01971	2	No	4	0.04375	0.01305	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	PZ-37	0.06066	0.0438	2	No	9	0.05223	0.008732	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.02	0.0189	2	No	16	0.01959	0.001899	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04563	0.03361	2	No	16	0.03878	0.01042	0	None	x^2	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0007084	5.5e-8	0.004	No	4	0.001607	0.001614	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.003	0.000077	0.004	No	16	0.001001	0.001392	31.25	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005678**	**0.004422**	**0.004**	**Yes**	**12**	**0.00505**	**0.0008006**	**0**	**None**	**No**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.003727	0.002924	0.004	No	12	0.00325	0.0006332	0	None	x^4	0.01	Param.
Beryllium (mg/L)	YGWC-42	0.003	0.00009	0.004	No	12	0.002029	0.001434	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.003	0.00029	0.004	No	12	0.001659	0.001404	50	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	11	0.0003727	0.0008715	9.091	None	No	0.006	NP (normality)
Beryllium (mg/L)	PZ-35	0.003	0.00033	0.004	No	5	0.001442	0.001424	40	None	No	0.031	NP (normality)
Beryllium (mg/L)	PZ-37	0.003	0.0002	0.004	No	9	0.0009144	0.001184	22.22	None	No	0.002	NP (normality)
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	16	0.0006582	0.001162	18.75	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.00033	0.00014	0.004	No	16	0.0004269	0.000691	6.25	None	No	0.01	NP (normality)
Cadmium (mg/L)	YAMW-1	0.0025	0.00014	0.005	No	4	0.001327	0.001354	50	None	No	0.0625	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0025	0.00007	0.005	No	16	0.002348	0.0006075	93.75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.002879	0.002192	0.005	No	12	0.002517	0.000484	0	None	x^2	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0025	0.00015	0.005	No	12	0.0005867	0.0008948	16.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0025	0.00017	0.005	No	12	0.001022	0.0011	33.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0025	0.0025	0.005	No	11	0.002279	0.0007327	90.91	None	No	0.006	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0025	0.00016	0.005	No	4	0.001915	0.00117	75	None	No	0.0625	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0007433	0.0002497	0.005	No	9	0.0009444	0.0009163	22.22	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0002	0.00012	0.005	No	16	0.0004612	0.0007967	12.5	None	No	0.01	NP (normality)
Chromium (mg/L)	YGWC-23S	0.01	0.0008	0.1	No	12	0.007042	0.004379	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-38	0.01	0.00065	0.1	No	12	0.008429	0.003669	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.01	0.00039	0.1	No	12	0.009199	0.002774	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.01	0.0006	0.1	No	12	0.007694	0.004176	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.01	0.00062	0.1	No	12	0.006881	0.004608	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.0019	0.0014	0.1	No	10	0.00248	0.002652	10	None	No	0.011	NP (normality)
Chromium (mg/L)	PZ-37	0.01	0.001	0.1	No	9	0.007178	0.00424	66.67	None	No	0.002	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.01	0.0011	0.1	No	12	0.008503	0.003496	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.01	0.0013	0.1	No	12	0.007962	0.00374	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.03018	-0.003377	0.035	No	5	0.0134	0.01119	40	Kaplan-Meier	No	0.01	Param.

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	YGWC-41	0.005	0.0003	0.035	No	12	0.003532	0.002177	66.67	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.003	0.0017	0.035	No	12	0.002258	0.0009568	8.333	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	12	0.003525	0.00167	50	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	11	0.003409	0.002208	63.64	None	No	0.006	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	4	0.005225	0.00045	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	PZ-37	0.01448	0.005406	0.035	No	9	0.009944	0.0047	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	16	0.003895	0.001979	75	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8368	0.3246	6.9	No	16	0.5807	0.3936	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.43	0.5739	6.9	No	12	1.002	0.5459	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.466	0.5994	6.9	No	12	1.056	0.596	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	3.21	1.441	6.9	No	12	2.326	1.127	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	3.154	1.069	6.9	No	12	2.112	1.328	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.287	0.537	6.9	No	11	0.9118	0.4498	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	2.207	1.402	6.9	No	9	1.803	0.441	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.8154	0.4728	6.9	No	16	0.6441	0.2633	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.168	0.6117	6.9	No	16	0.8898	0.4274	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	17	0.09406	0.02136	82.35	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.41	0.034	4	No	13	0.1711	0.1243	53.85	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	13	0.1008	0.002774	84.62	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.041	4	No	13	0.08392	0.02742	69.23	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1271	0.05852	4	No	13	0.1141	0.05491	30.77	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.1059	0.05031	4	No	12	0.09917	0.02937	50	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	PZ-37	0.45	0.1	4	No	9	0.1944	0.1269	55.56	None	No	0.002	NP (NDs)
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	17	0.09594	0.01623	88.24	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.18	0.05	4	No	17	0.09153	0.03486	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-23S	0.005	0.00044	0.015	No	14	0.003973	0.002043	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.005	0.0001	0.015	No	12	0.003775	0.002216	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.005	0.00007	0.015	No	12	0.003446	0.00231	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.005	0.00009	0.015	No	12	0.003778	0.002211	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.005	0.00008	0.015	No	12	0.00418	0.001916	83.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.005	0.005	0.015	No	11	0.004551	0.00149	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	PZ-37	0.005	0.000085	0.015	No	9	0.002843	0.002558	55.56	None	No	0.002	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.005	0.000053	0.015	No	14	0.004647	0.001322	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.0017	0.0002	0.015	No	14	0.001084	0.001707	14.29	None	No	0.01	NP (normality)
Lithium (mg/L)	YAMW-1	0.01499	-0.003454	0.04	No	4	0.008075	0.006149	25	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0035	0.0018	0.04	No	16	0.003044	0.003251	6.25	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.009177	0.00794	0.04	No	12	0.008558	0.0007879	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0047	0.0029	0.04	No	12	0.004683	0.003312	8.333	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.04368	0.02738	0.04	No	12	0.03553	0.01039	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01692	0.01079	0.04	No	12	0.01386	0.003904	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0036	0.04	No	11	0.003718	0.0002601	0	None	No	0.006	NP (normality)
Lithium (mg/L)	PZ-35	0.01502	-0.006283	0.04	No	4	0.007025	0.00709	25	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	PZ-37	0.03141	0.02268	0.04	No	9	0.02697	0.005114	11.11	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006231	0.004408	0.04	No	16	0.005156	0.001647	0	None	x^2	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.0014	0.1	No	12	0.005976	0.004239	50	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.1	No	12	0.006433	0.004416	58.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-49	0.01	0.01	0.1	No	10	0.00907	0.002941	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0015	0.1	No	9	0.005444	0.004328	44.44	None	No	0.002	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0015	0.1	No	12	0.006583	0.003844	50	None	No	0.01	NP (normality)
Selenium (mg/L)	YAMW-1	0.005	0.0019	0.05	No	4	0.004225	0.00155	75	None	No	0.0625	NP (NDs)
Selenium (mg/L)	YGWC-23S	0.04038	0.02571	0.05	No	16	0.03304	0.01128	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.2443**	**0.1404**	**0.05**	**Yes**	**12**	**0.1923**	**0.06621**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06783**	**0.05001**	**0.05**	**Yes**	**12**	**0.05798**	**0.01434**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-42	0.05953	0.03932	0.05	No	12	0.04943	0.01288	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.00927	0.006766	0.05	No	11	0.008018	0.001503	9.091	None	No	0.01	Param.
Selenium (mg/L)	**PZ-37**	**0.314**	**0.2065**	**0.05**	**Yes**	**9**	**0.2602**	**0.05567**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.002733	0.001769	0.05	No	16	0.00305	0.001322	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Thallium (mg/L)	YGWC-49	0.001	0.001	0.002	No	11	0.0009173	0.0002744	90.91	None	No	0.006	NP (NDs)

State Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005678**	**0.004422**	**0.004**	**Yes**	**12**	**0.00505**	**0.0008006**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.2443**	**0.1404**	**0.05**	**Yes**	**12**	**0.1923**	**0.06621**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06783**	**0.05001**	**0.05**	**Yes**	**12**	**0.05798**	**0.01434**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	**PZ-37**	**0.314**	**0.2065**	**0.05**	**Yes**	**9**	**0.2602**	**0.05567**	**0**	**None**	**No**	**0.01**	**Param.**

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	14	0.002653	0.0008892	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00063	0.006	No	11	0.002431	0.001001	72.73	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.003	0.006	No	11	0.002755	0.0008111	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	11	0.002603	0.000893	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	9	0.002822	0.0005333	88.89	None	No	0.002	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	14	0.00285	0.0005612	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0011	0.006	No	14	0.002757	0.001498	57.14	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	16	0.004762	0.00095	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.002081	0.000666	0.01	No	12	0.001457	0.001244	8.333	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00052	0.01	No	12	0.002527	0.002193	41.67	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-42	0.003092	0.001303	0.01	No	12	0.002197	0.00114	8.333	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.0007	0.01	No	12	0.003933	0.001932	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	11	0.00386	0.001955	72.73	None	No	0.006	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	4	0.003922	0.002155	75	None	No	0.0625	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0006	0.01	No	9	0.002338	0.00201	33.33	None	No	0.002	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	16	0.004781	0.000875	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00066	0.01	No	16	0.004179	0.001766	81.25	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.06167	0.01983	2	No	4	0.04075	0.009215	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04535	0.02741	2	No	16	0.03638	0.01379	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.02477	0.01915	2	No	12	0.02196	0.003581	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.03182	0.02188	2	No	12	0.02685	0.006338	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04914	0.03246	2	No	12	0.0408	0.01063	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03422	0.01481	2	No	12	0.02452	0.01237	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.0817	0.06995	2	No	11	0.07583	0.007047	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.0755	0.01971	2	No	4	0.04375	0.01305	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	PZ-37	0.06066	0.0438	2	No	9	0.05223	0.008732	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.02	0.0189	2	No	16	0.01959	0.001899	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04563	0.03361	2	No	16	0.03878	0.01042	0	None	x^2	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0007084	5.5e-8	0.004	No	4	0.001607	0.001614	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.003	0.000077	0.004	No	16	0.001001	0.001392	31.25	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005678**	**0.004422**	**0.004**	**Yes**	**12**	**0.00505**	**0.0008006**	**0**	**None**	**No**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.003727	0.002924	0.004	No	12	0.00325	0.0006332	0	None	x^4	0.01	Param.
Beryllium (mg/L)	YGWC-42	0.003	0.00009	0.004	No	12	0.002029	0.001434	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.003	0.00029	0.004	No	12	0.001659	0.001404	50	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	11	0.0003727	0.0008715	9.091	None	No	0.006	NP (normality)
Beryllium (mg/L)	PZ-35	0.003	0.00033	0.004	No	5	0.001442	0.001424	40	None	No	0.031	NP (normality)
Beryllium (mg/L)	PZ-37	0.003	0.0002	0.004	No	9	0.0009144	0.001184	22.22	None	No	0.002	NP (normality)
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	16	0.0006582	0.001162	18.75	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.00033	0.00014	0.004	No	16	0.0004269	0.000691	6.25	None	No	0.01	NP (normality)
Cadmium (mg/L)	YAMW-1	0.0025	0.00014	0.005	No	4	0.001327	0.001354	50	None	No	0.0625	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0025	0.00007	0.005	No	16	0.002348	0.0006075	93.75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.002879	0.002192	0.005	No	12	0.002517	0.000484	0	None	x^2	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0025	0.00015	0.005	No	12	0.0005867	0.0008948	16.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0025	0.00017	0.005	No	12	0.001022	0.0011	33.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0025	0.0025	0.005	No	11	0.002279	0.0007327	90.91	None	No	0.006	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0025	0.00016	0.005	No	4	0.001915	0.00117	75	None	No	0.0625	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0007433	0.0002497	0.005	No	9	0.0009444	0.0009163	22.22	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0002	0.00012	0.005	No	16	0.0004612	0.0007967	12.5	None	No	0.01	NP (normality)
Chromium (mg/L)	YGWC-23S	0.01	0.0008	0.1	No	12	0.007042	0.004379	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-38	0.01	0.00065	0.1	No	12	0.008429	0.003669	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.01	0.00039	0.1	No	12	0.009199	0.002774	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.01	0.0006	0.1	No	12	0.007694	0.004176	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.01	0.00062	0.1	No	12	0.006881	0.004608	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.0019	0.0014	0.1	No	10	0.00248	0.002652	10	None	No	0.011	NP (normality)
Chromium (mg/L)	PZ-37	0.01	0.001	0.1	No	9	0.007178	0.00424	66.67	None	No	0.002	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.01	0.0011	0.1	No	12	0.008503	0.003496	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.01	0.0013	0.1	No	12	0.007962	0.00374	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.03018	-0.003377	0.035	No	5	0.0134	0.01119	40	Kaplan-Meier	No	0.01	Param.

State Confidence Intervals - All Results

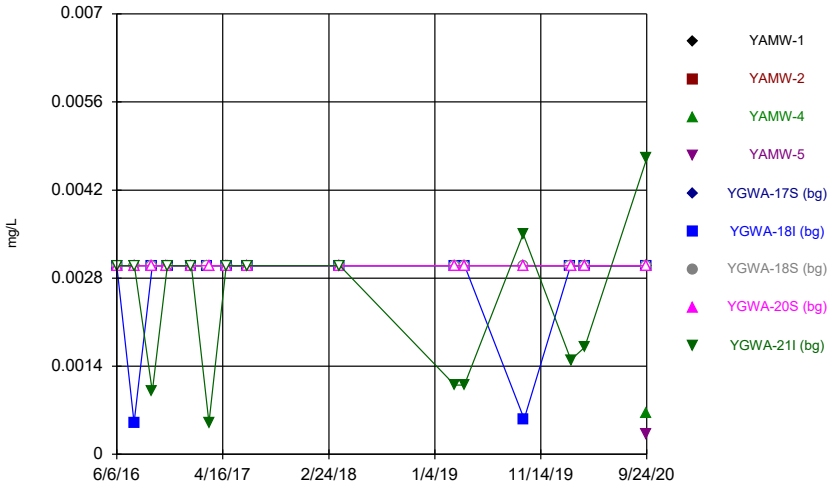
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	YGWC-41	0.005	0.0003	0.035	No	12	0.003532	0.002177	66.67	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.003	0.0017	0.035	No	12	0.002258	0.0009568	8.333	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	12	0.003525	0.00167	50	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	11	0.003409	0.002208	63.64	None	No	0.006	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	4	0.005225	0.00045	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	PZ-37	0.01448	0.005406	0.035	No	9	0.009944	0.0047	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	16	0.003895	0.001979	75	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8368	0.3246	6.9	No	16	0.5807	0.3936	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.43	0.5739	6.9	No	12	1.002	0.5459	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.466	0.5994	6.9	No	12	1.056	0.596	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	3.21	1.441	6.9	No	12	2.326	1.127	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	3.154	1.069	6.9	No	12	2.112	1.328	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.287	0.537	6.9	No	11	0.9118	0.4498	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	2.207	1.402	6.9	No	9	1.803	0.441	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.8154	0.4728	6.9	No	16	0.6441	0.2633	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.168	0.6117	6.9	No	16	0.8898	0.4274	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	17	0.09406	0.02136	82.35	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.41	0.034	4	No	13	0.1711	0.1243	53.85	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	13	0.1008	0.002774	84.62	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.041	4	No	13	0.08392	0.02742	69.23	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1271	0.05852	4	No	13	0.1141	0.05491	30.77	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.1059	0.05031	4	No	12	0.09917	0.02937	50	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	PZ-37	0.45	0.1	4	No	9	0.1944	0.1269	55.56	None	No	0.002	NP (NDs)
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	17	0.09594	0.01623	88.24	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.18	0.05	4	No	17	0.09153	0.03486	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-23S	0.005	0.00044	0.005	No	14	0.003973	0.002043	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.005	0.0001	0.005	No	12	0.003775	0.002216	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.005	0.00007	0.005	No	12	0.003446	0.00231	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.005	0.00009	0.005	No	12	0.003778	0.002211	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.005	0.00008	0.005	No	12	0.00418	0.001916	83.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.005	0.005	0.005	No	11	0.004551	0.00149	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	PZ-37	0.005	0.000085	0.005	No	9	0.002843	0.002558	55.56	None	No	0.002	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.005	0.000053	0.005	No	14	0.004647	0.001322	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.0017	0.0002	0.005	No	14	0.001084	0.001707	14.29	None	No	0.01	NP (normality)
Lithium (mg/L)	YAMW-1	0.01499	-0.003454	0.03	No	4	0.008075	0.006149	25	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0035	0.0018	0.03	No	16	0.003044	0.003251	6.25	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.009177	0.00794	0.03	No	12	0.008558	0.0007879	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0047	0.0029	0.03	No	12	0.004683	0.003312	8.333	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.04368	0.02738	0.03	No	12	0.03553	0.01039	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01692	0.01079	0.03	No	12	0.01386	0.003904	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0036	0.03	No	11	0.003718	0.0002601	0	None	No	0.006	NP (normality)
Lithium (mg/L)	PZ-35	0.01502	-0.006283	0.03	No	4	0.007025	0.00709	25	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	PZ-37	0.03141	0.02268	0.03	No	9	0.02697	0.005114	11.11	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006231	0.004408	0.03	No	16	0.005156	0.001647	0	None	x^2	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.0014	0.014	No	12	0.005976	0.004239	50	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.014	No	12	0.006433	0.004416	58.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-49	0.01	0.01	0.014	No	10	0.00907	0.002941	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0015	0.014	No	9	0.005444	0.004328	44.44	None	No	0.002	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0015	0.014	No	12	0.006583	0.003844	50	None	No	0.01	NP (normality)
Selenium (mg/L)	YAMW-1	0.005	0.0019	0.05	No	4	0.004225	0.00155	75	None	No	0.0625	NP (NDs)
Selenium (mg/L)	YGWC-23S	0.04038	0.02571	0.05	No	16	0.03304	0.01128	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.2443**	**0.1404**	**0.05**	**Yes**	**12**	**0.1923**	**0.06621**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06783**	**0.05001**	**0.05**	**Yes**	**12**	**0.05798**	**0.01434**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-42	0.05953	0.03932	0.05	No	12	0.04943	0.01288	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.00927	0.006766	0.05	No	11	0.008018	0.001503	9.091	None	No	0.01	Param.
Selenium (mg/L)	**PZ-37**	**0.314**	**0.2065**	**0.05**	**Yes**	**9**	**0.2602**	**0.05567**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.002733	0.001769	0.05	No	16	0.00305	0.001322	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Thallium (mg/L)	YGWC-49	0.001	0.001	0.002	No	11	0.0009173	0.0002744	90.91	None	No	0.006	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

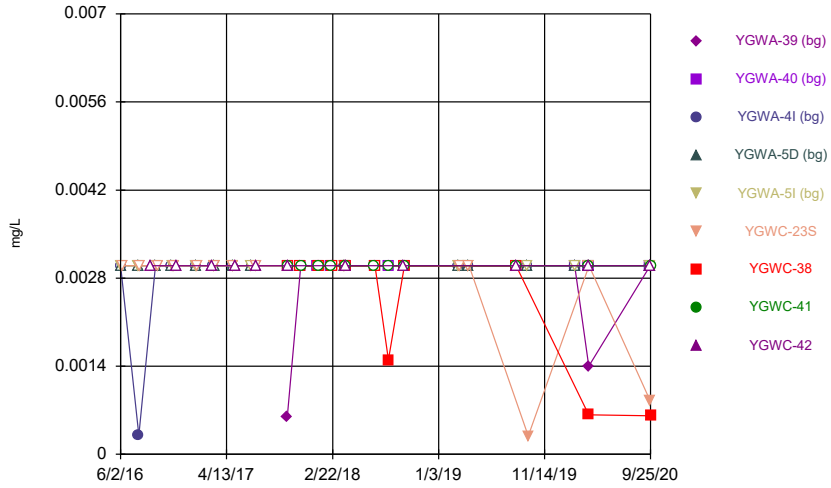
Time Series



Constituent: Antimony Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

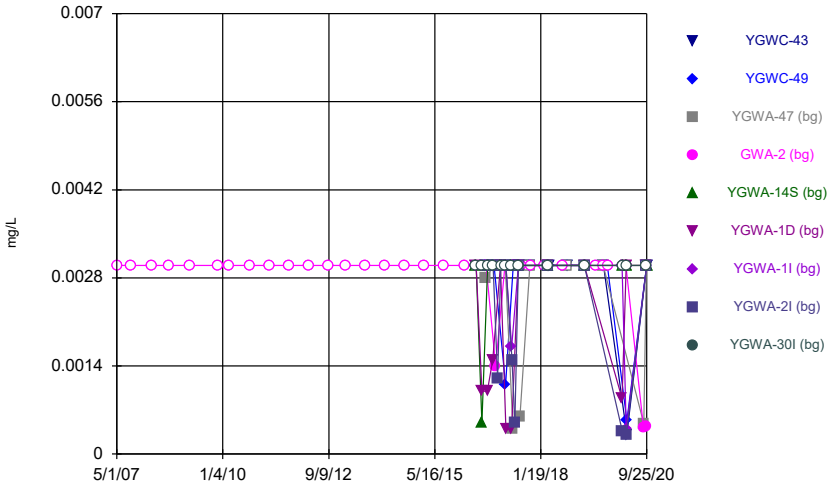
Time Series



Constituent: Antimony Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

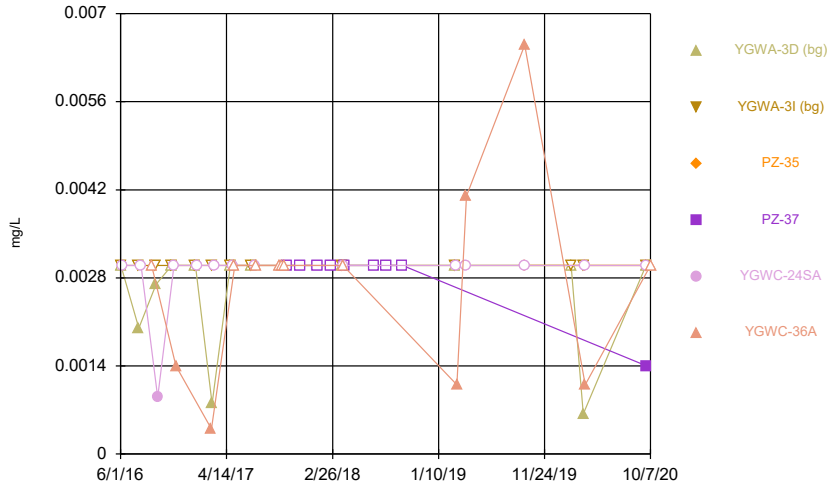
Time Series



Constituent: Antimony Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

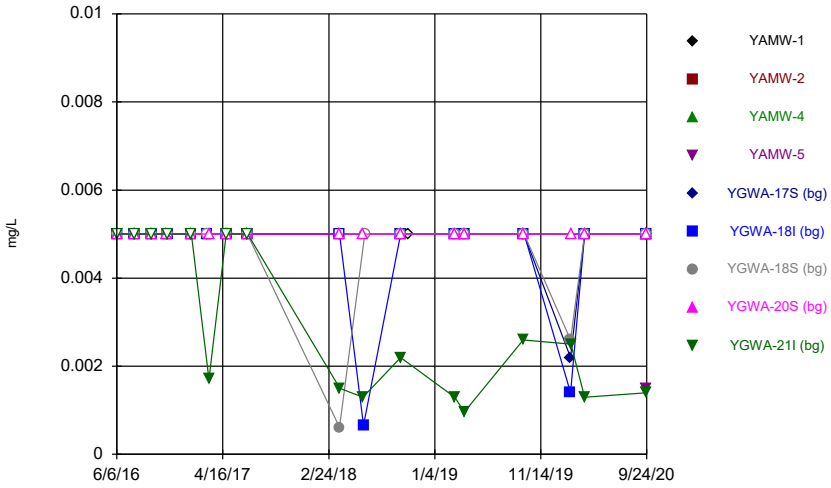
Time Series



Constituent: Antimony Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

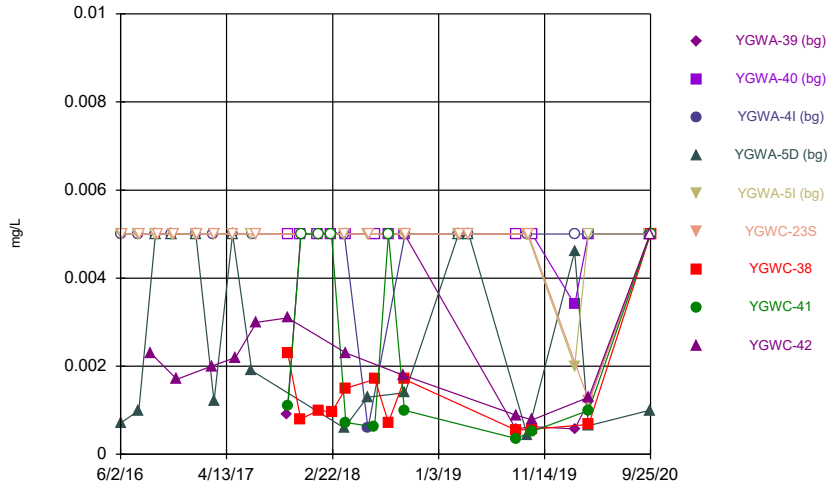
Time Series



Constituent: Arsenic Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

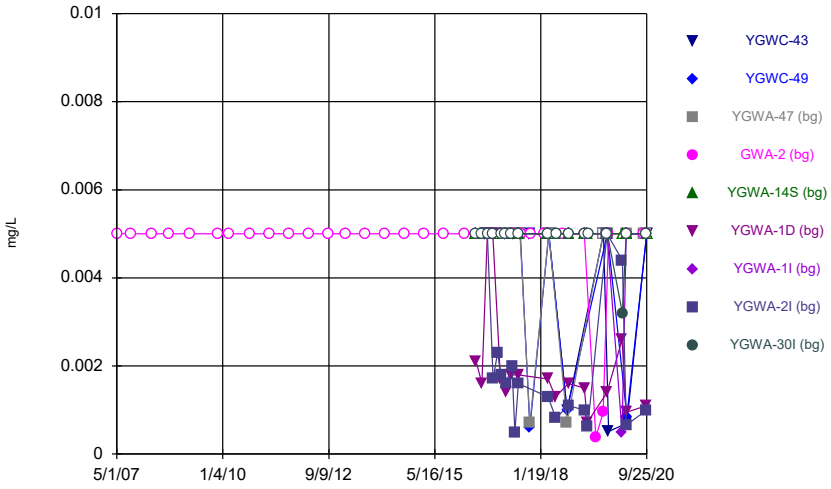
Time Series



Constituent: Arsenic Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

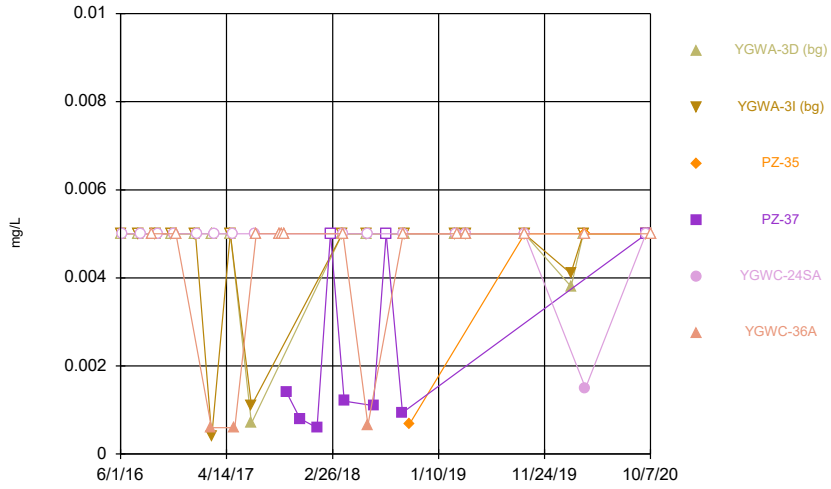
Time Series



Constituent: Arsenic Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

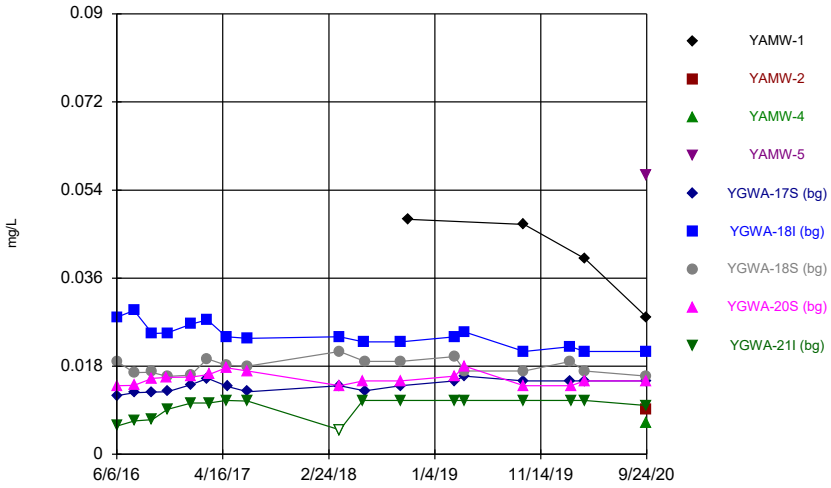
Time Series



Constituent: Arsenic Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

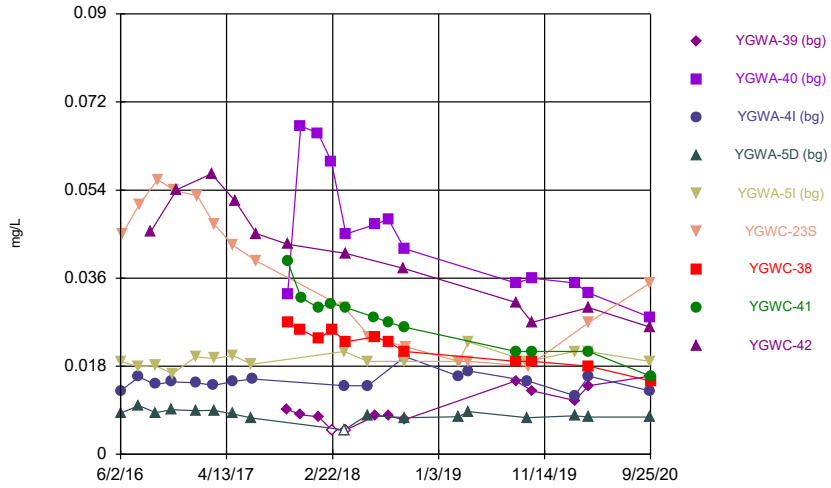
Time Series



Constituent: Barium Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

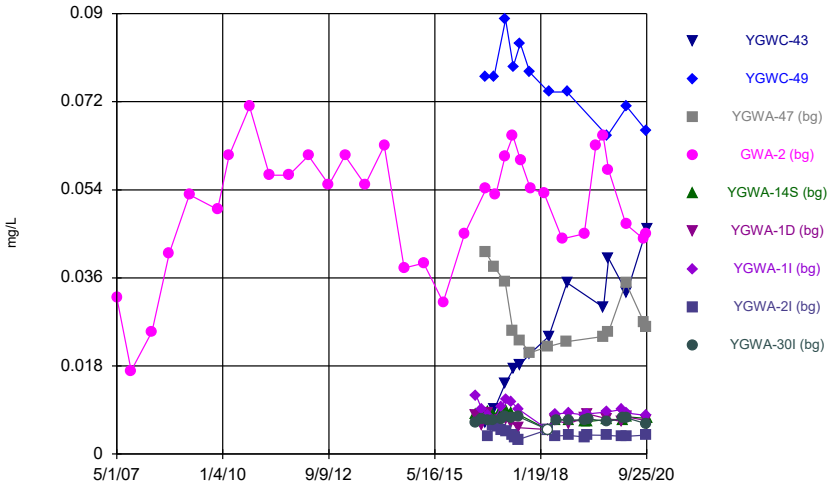
Time Series



Constituent: Barium Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

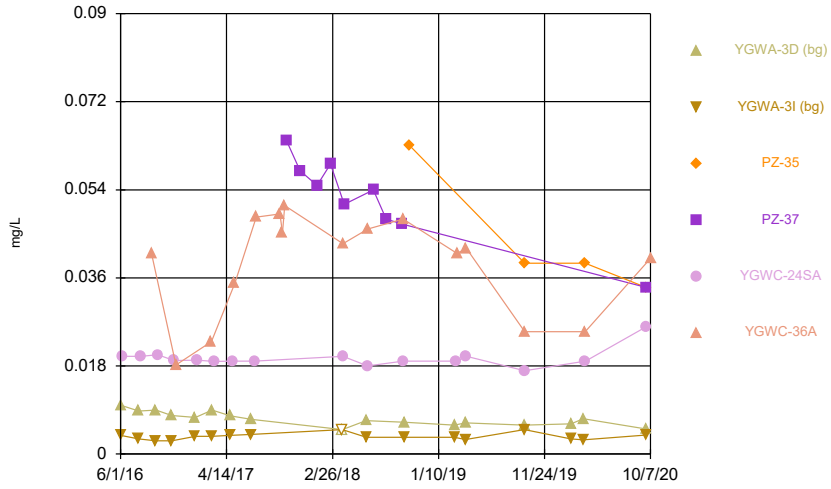
Time Series



Constituent: Barium Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

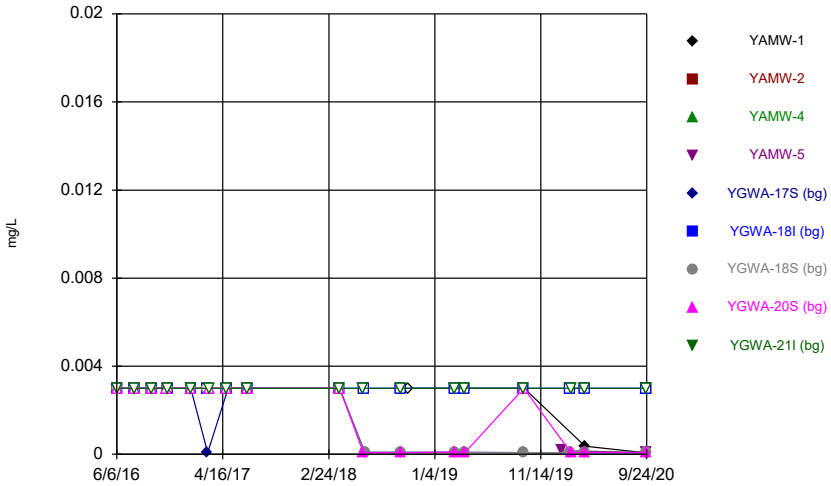
Time Series



Constituent: Barium Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

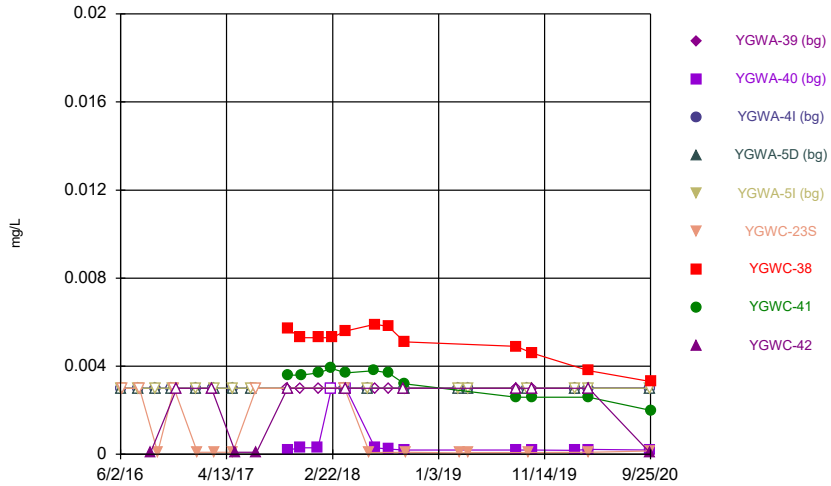
Time Series



Constituent: Beryllium Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

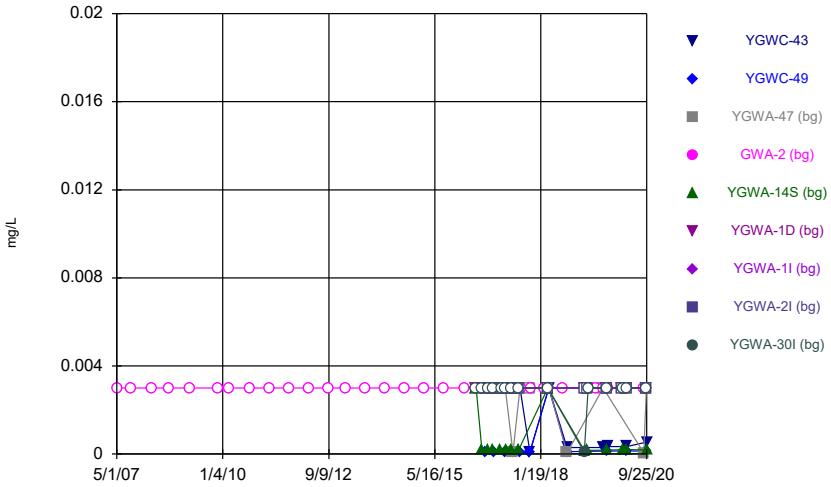
Time Series



Constituent: Beryllium Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

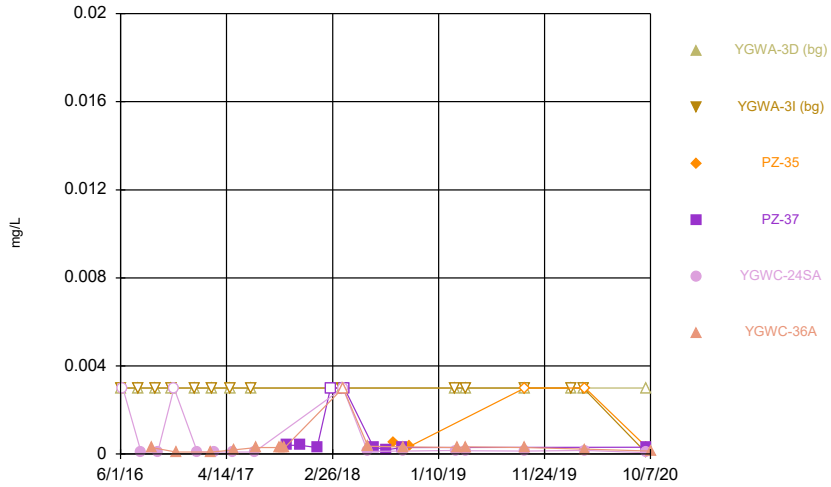
Time Series



Constituent: Beryllium Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

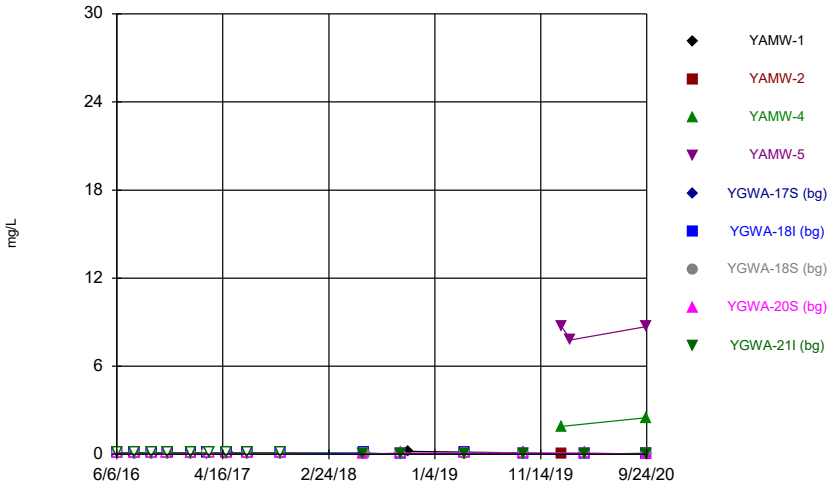
Time Series



Constituent: Beryllium Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

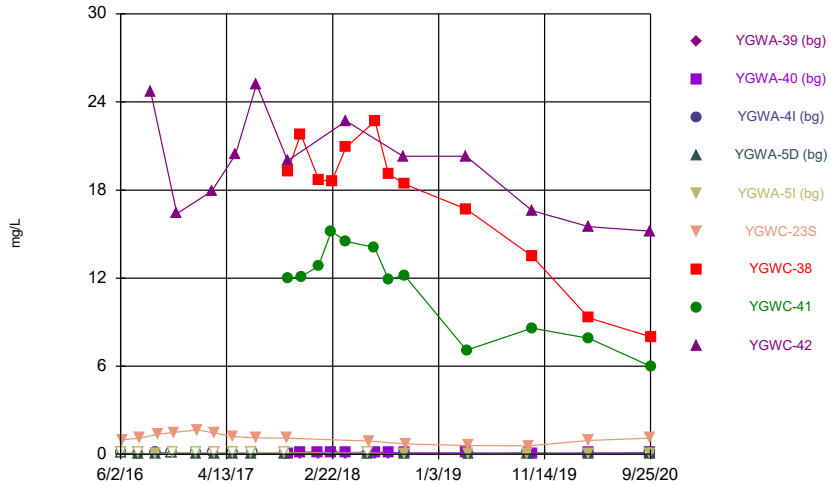
Time Series



Constituent: Boron Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

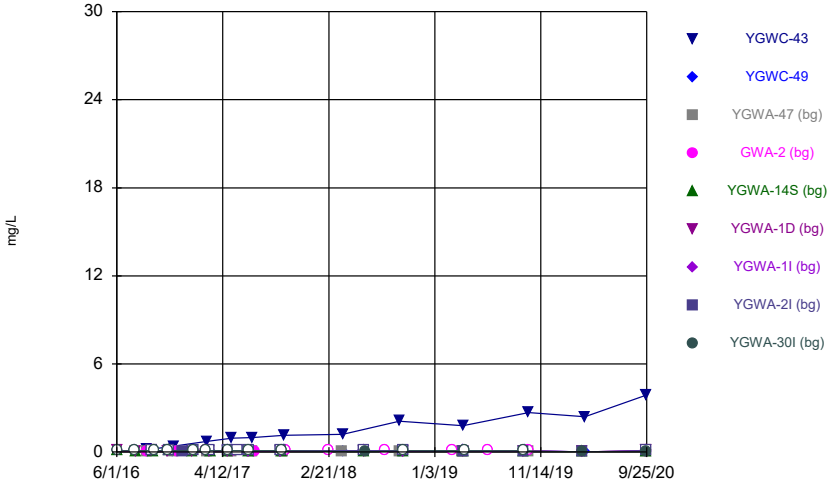
Time Series



Constituent: Boron Analysis Run 1/13/2021 11:01 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

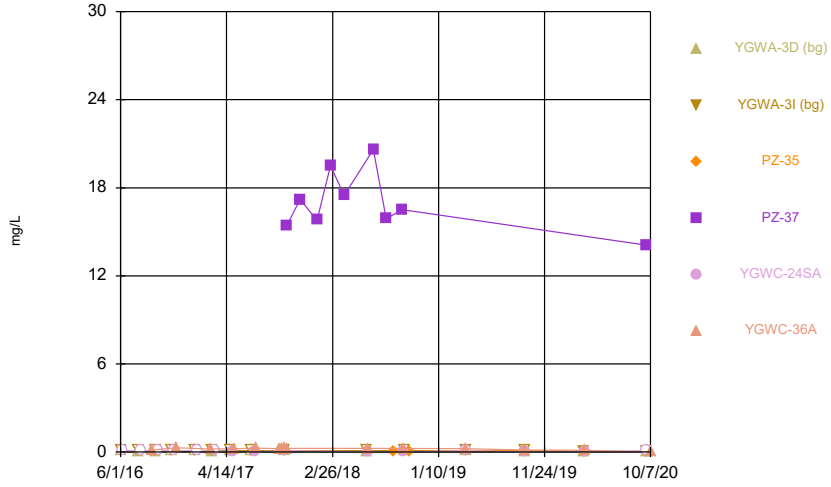
Time Series



Constituent: Boron Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

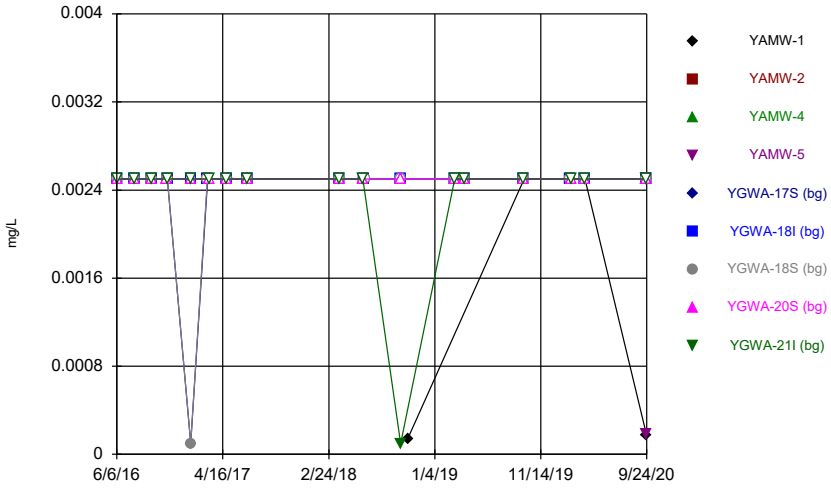
Time Series



Constituent: Boron Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

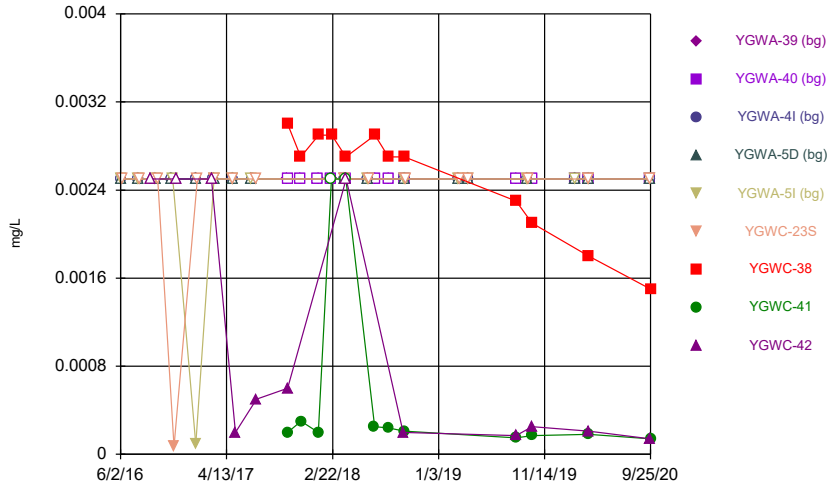
Time Series



Constituent: Cadmium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

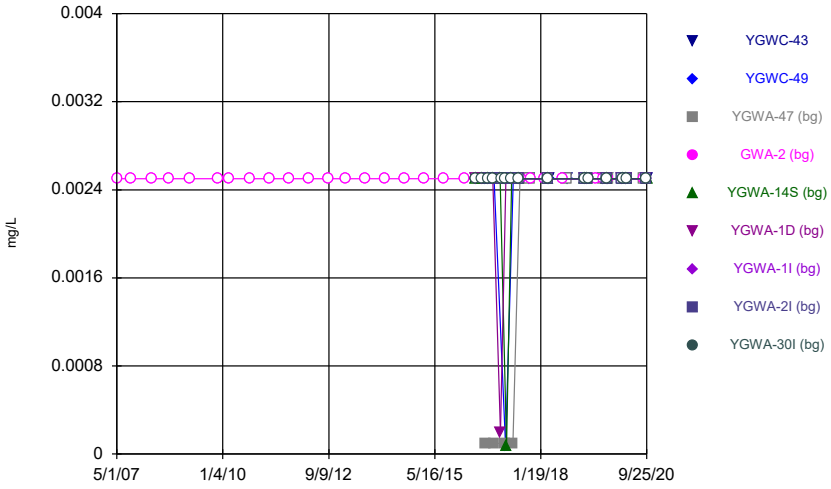
Time Series



Constituent: Cadmium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

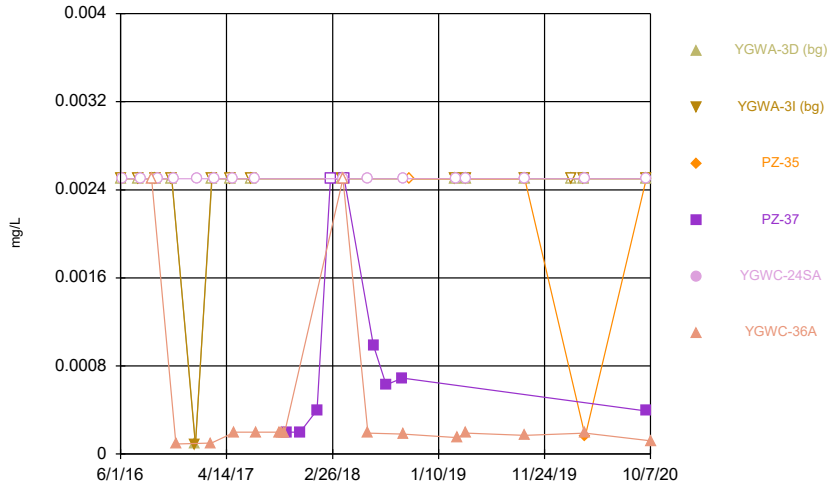
Time Series



Constituent: Cadmium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

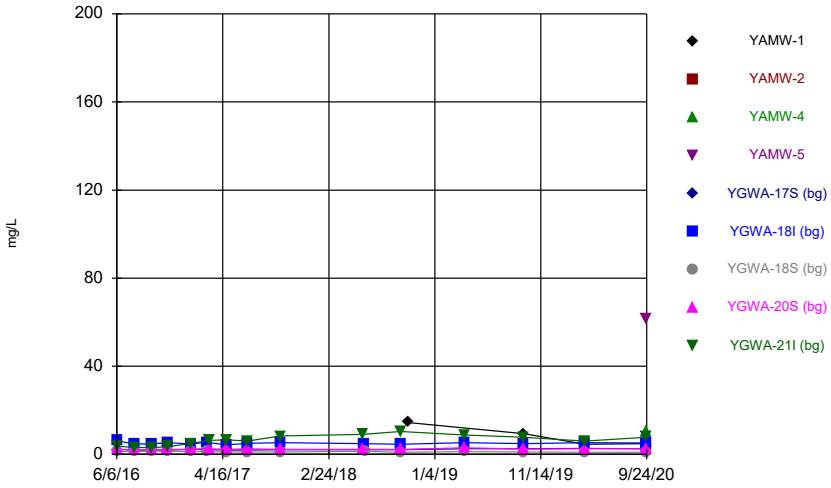
Time Series



Constituent: Cadmium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series



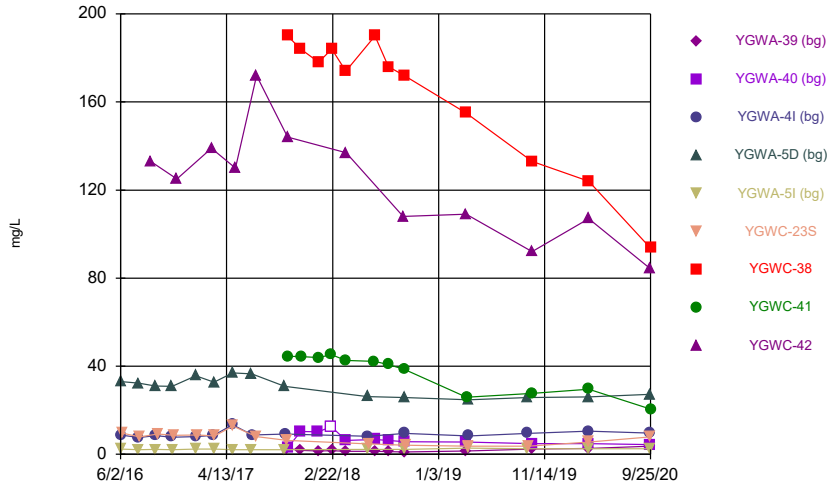
Constituent: Calcium Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



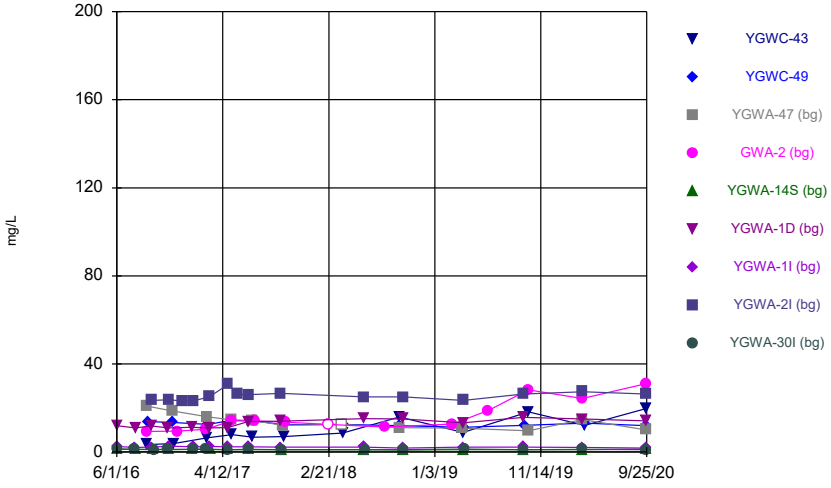
Constituent: Calcium Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

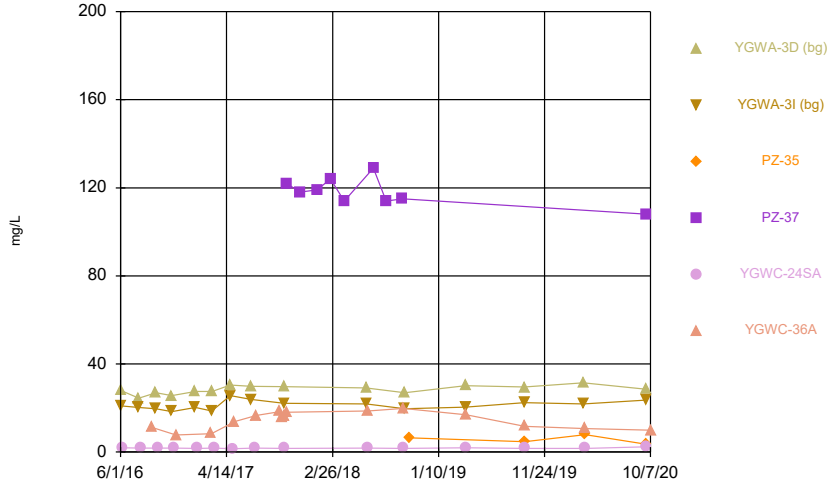


Constituent: Calcium Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

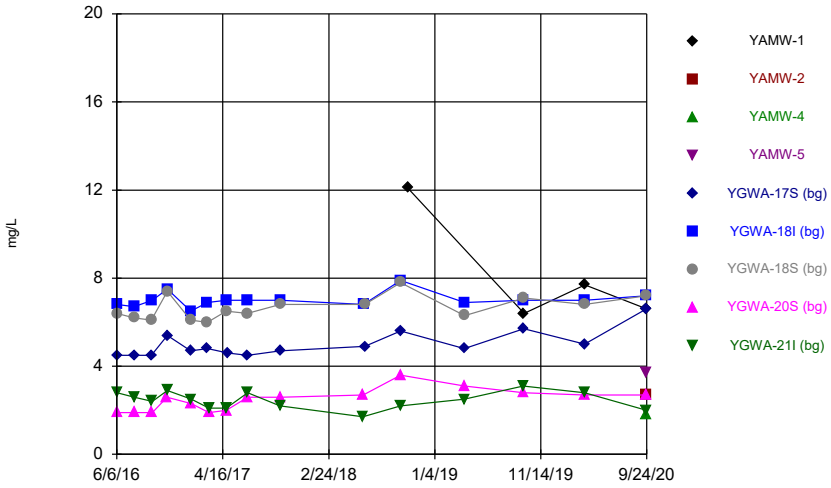


Constituent: Calcium Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

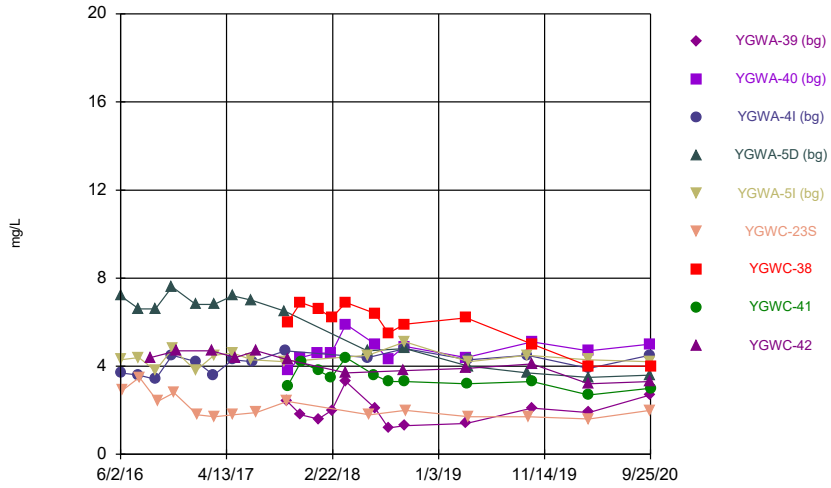


Constituent: Chloride Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

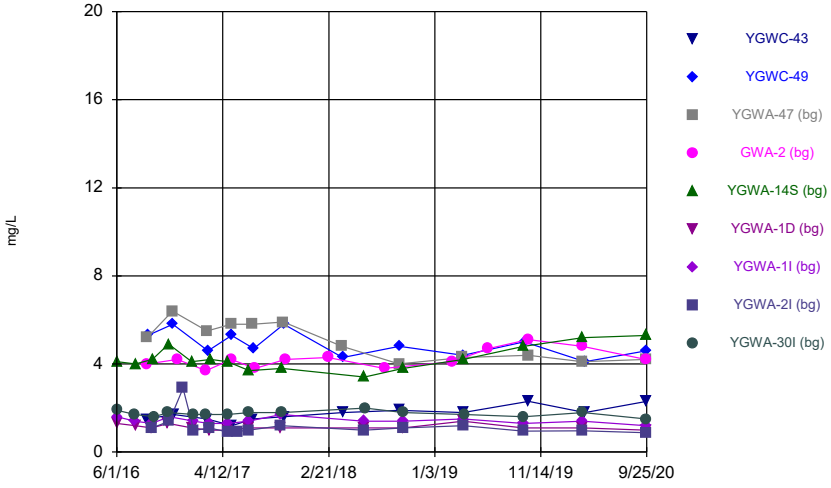


Constituent: Chloride Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

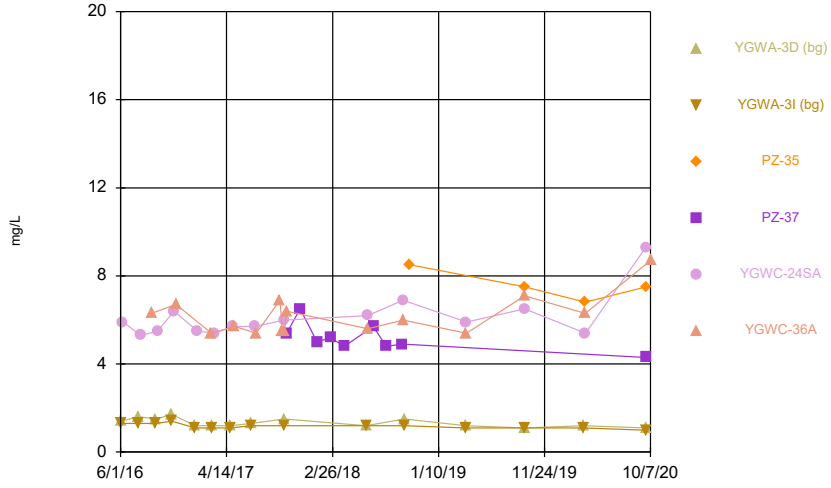


Constituent: Chloride Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

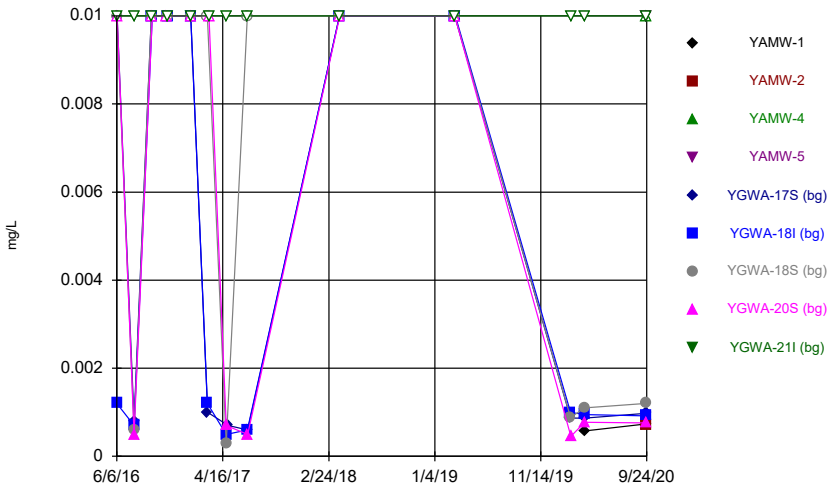


Constituent: Chloride Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

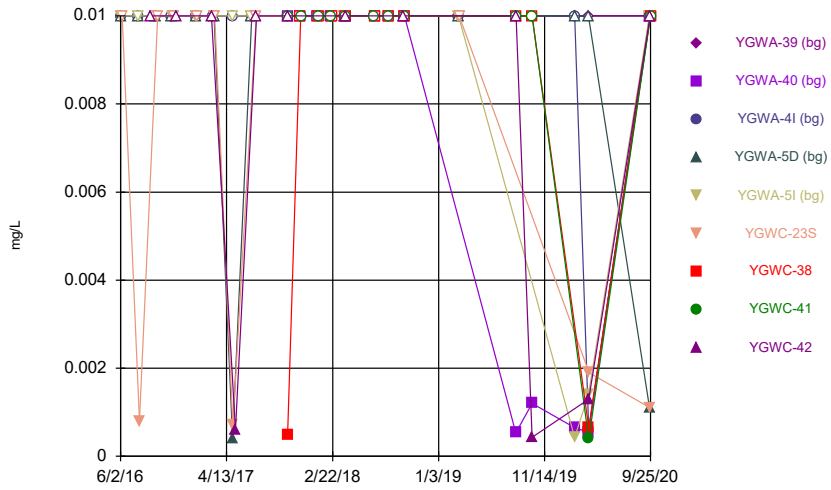
Time Series



Constituent: Chromium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

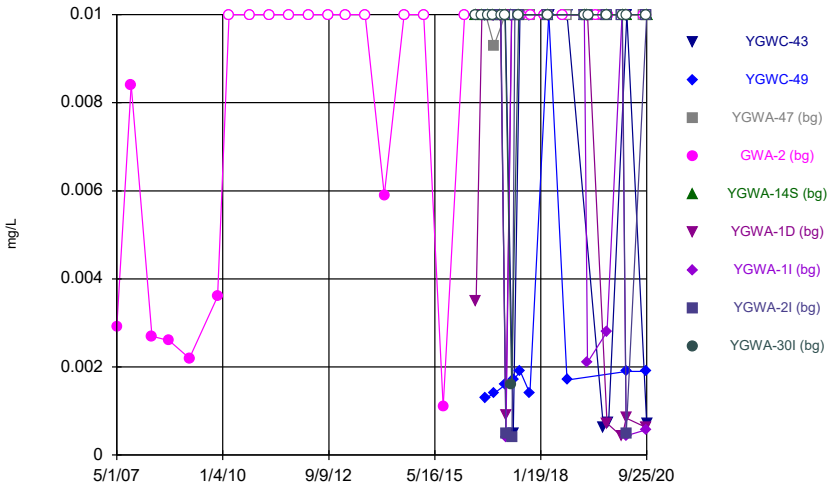
Time Series



Constituent: Chromium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

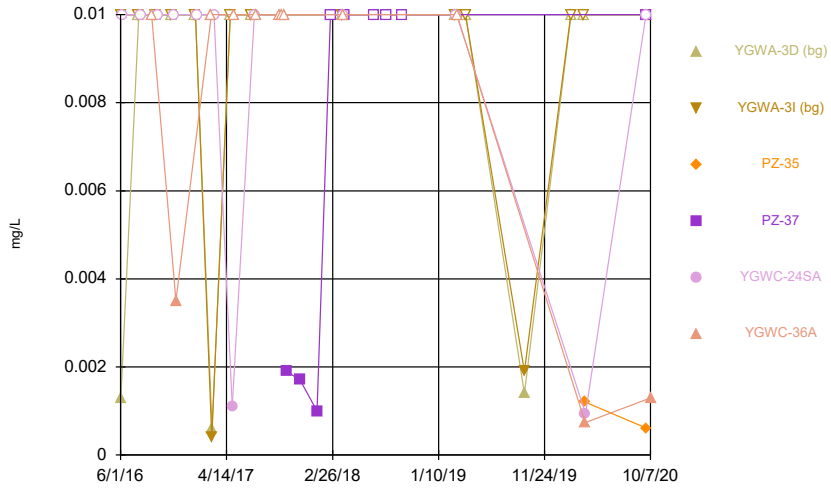
Time Series



Constituent: Chromium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

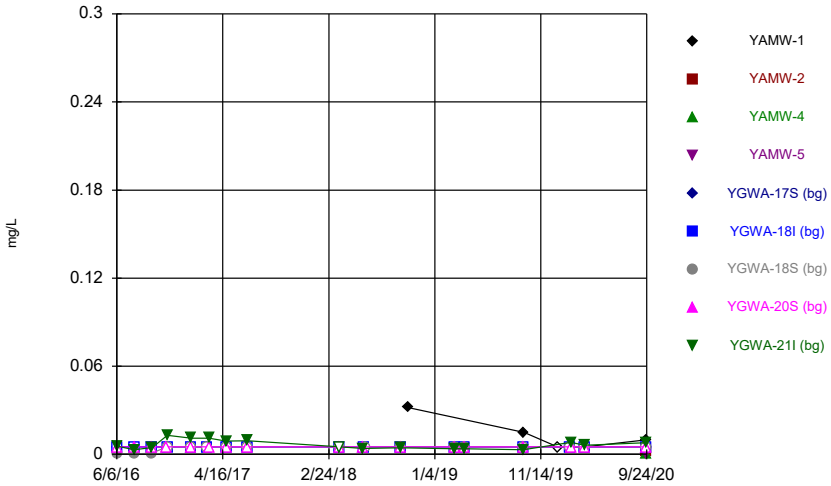
Time Series



Constituent: Chromium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

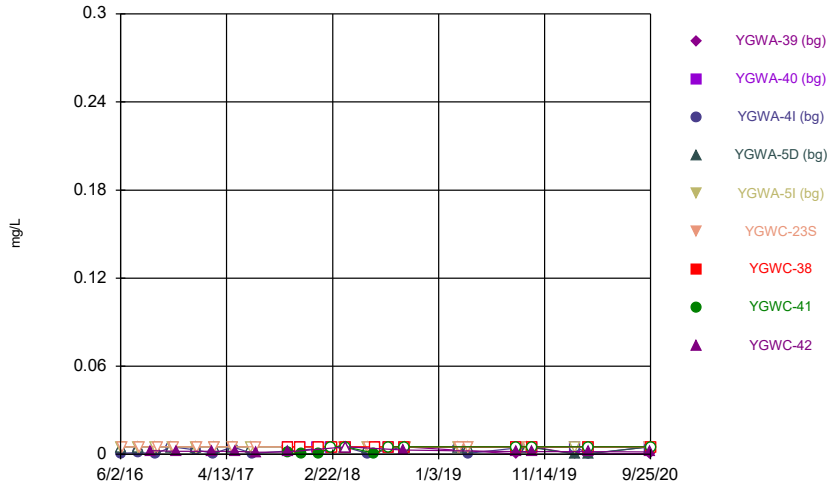
Time Series



Constituent: Cobalt Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

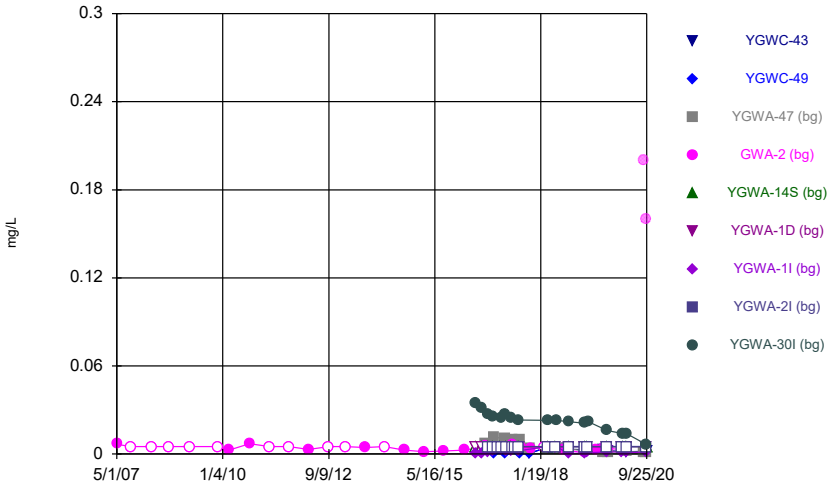
Time Series



Constituent: Cobalt Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

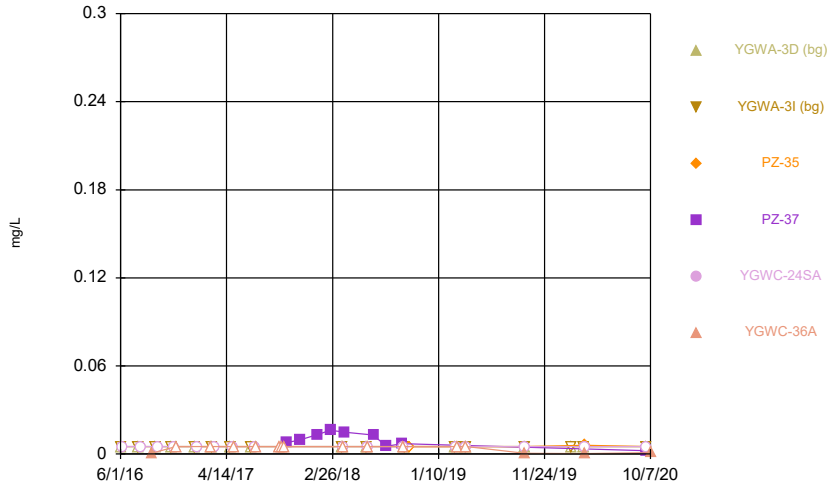
Time Series



Constituent: Cobalt Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

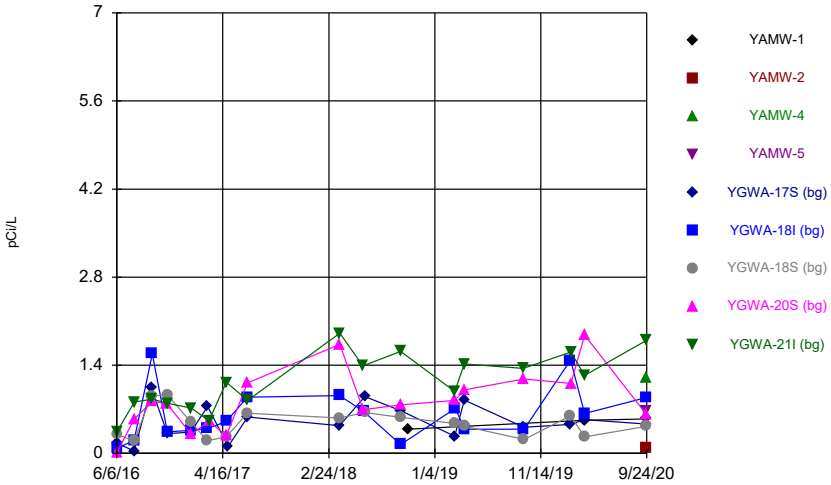
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

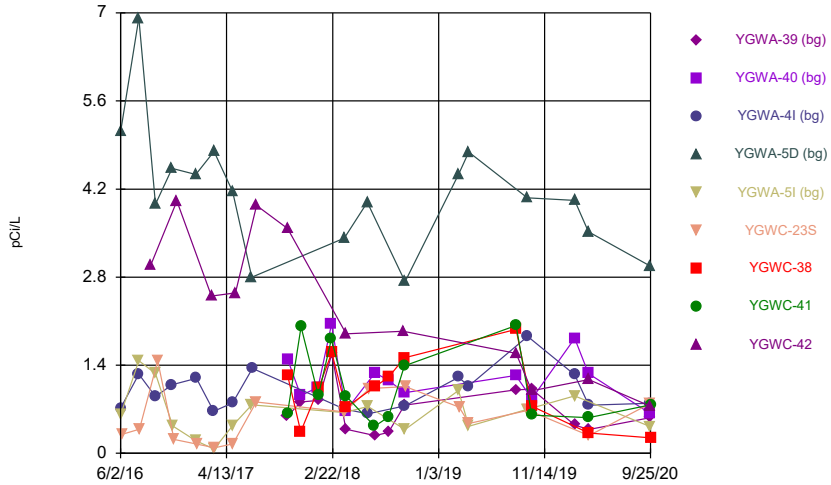
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

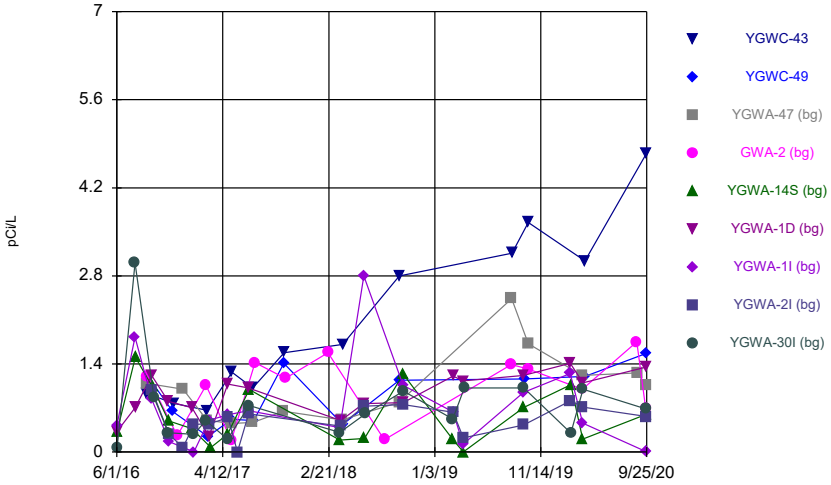
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

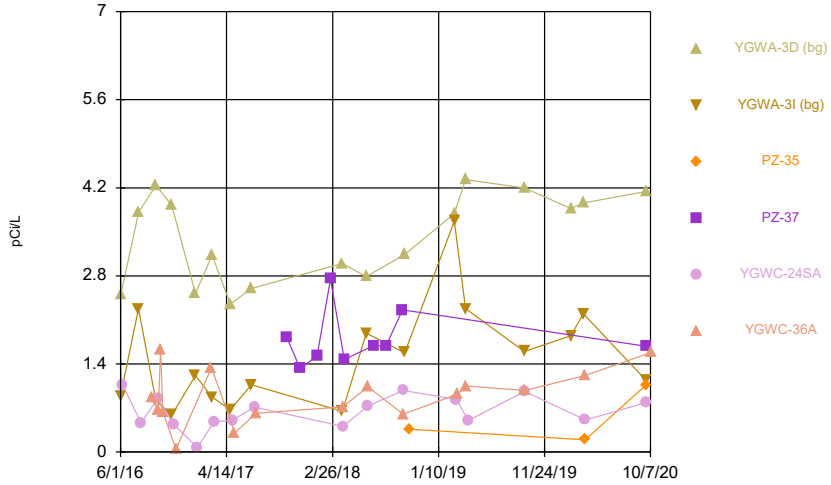
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

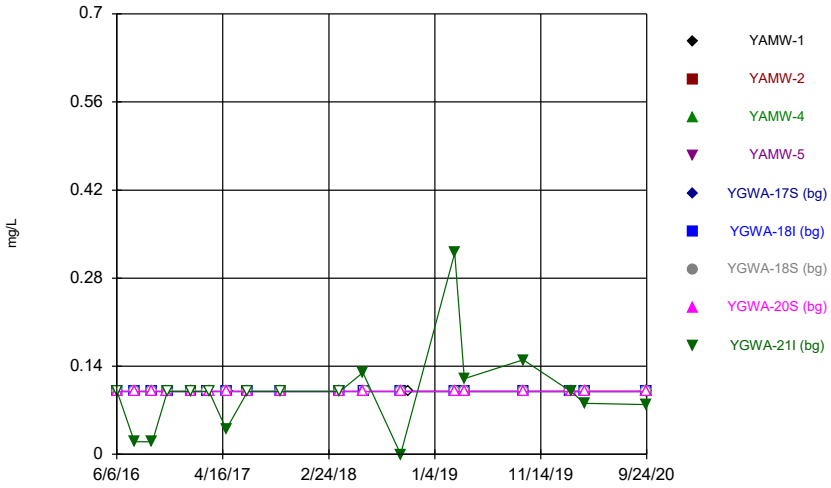
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

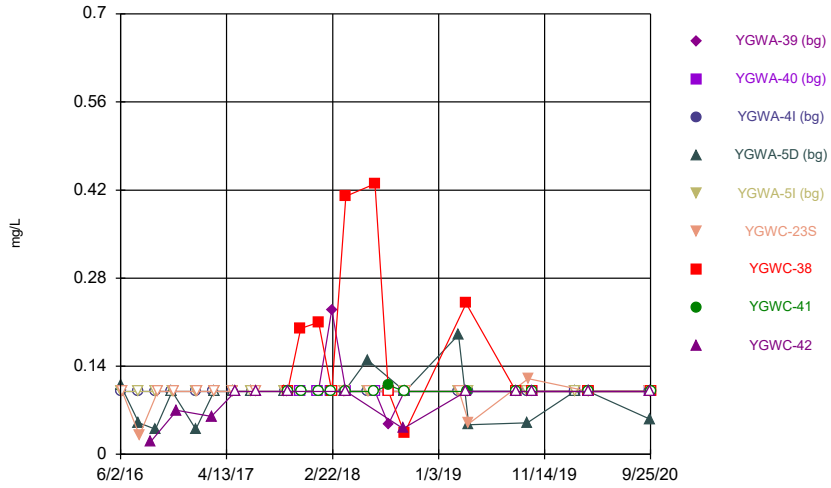
Time Series



Constituent: Fluoride Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

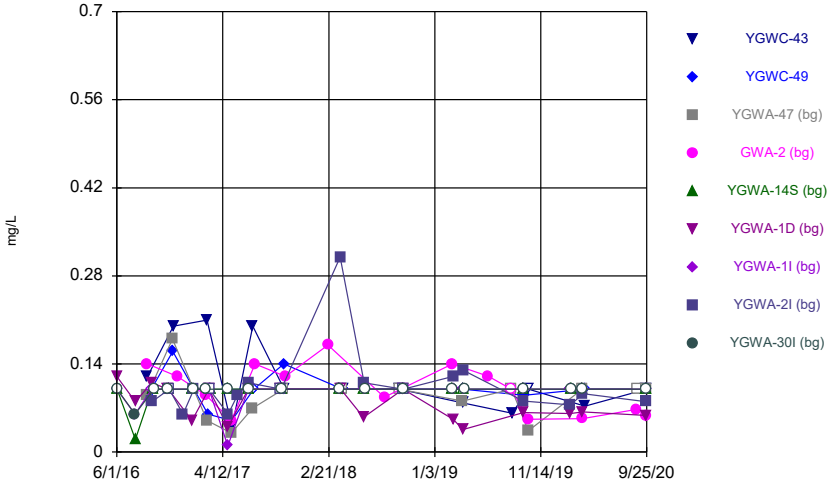
Time Series



Constituent: Fluoride Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

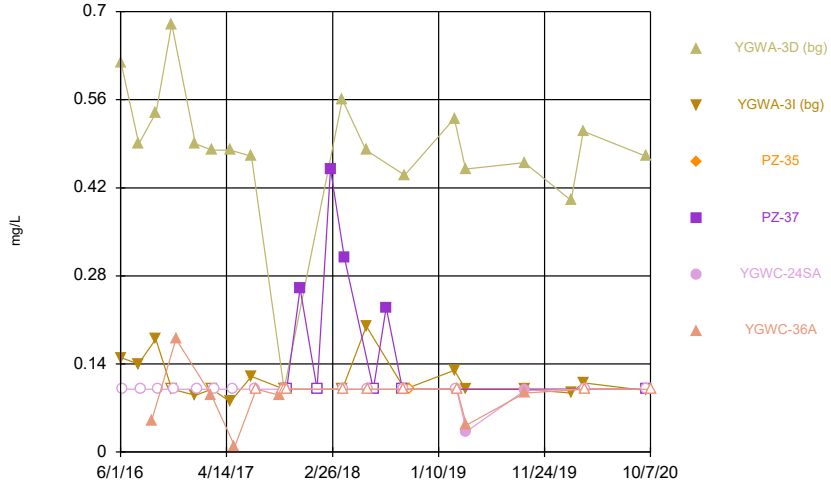
Time Series



Constituent: Fluoride Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

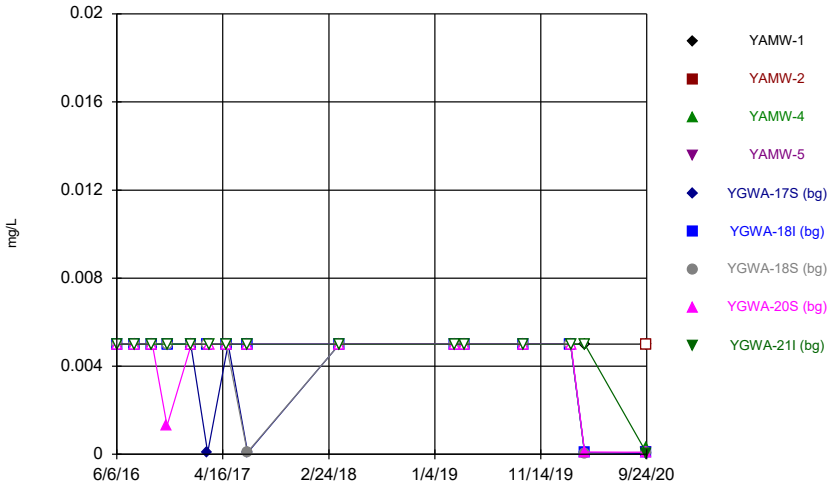
Time Series



Constituent: Fluoride Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

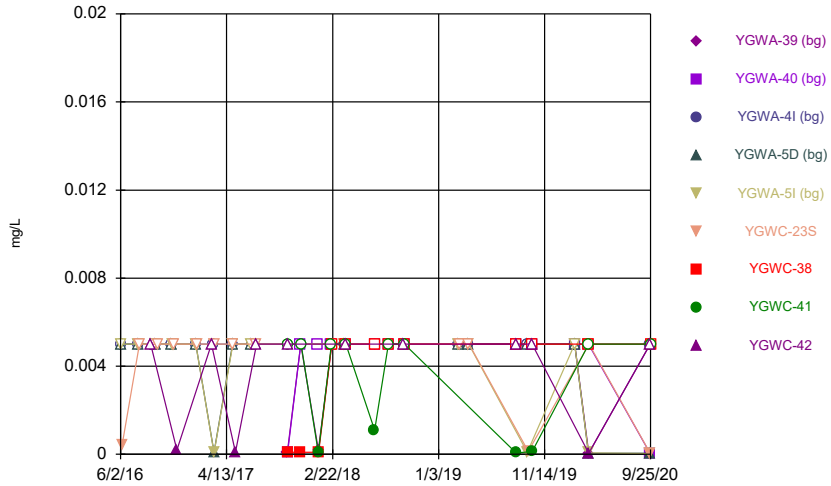
Time Series



Constituent: Lead Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

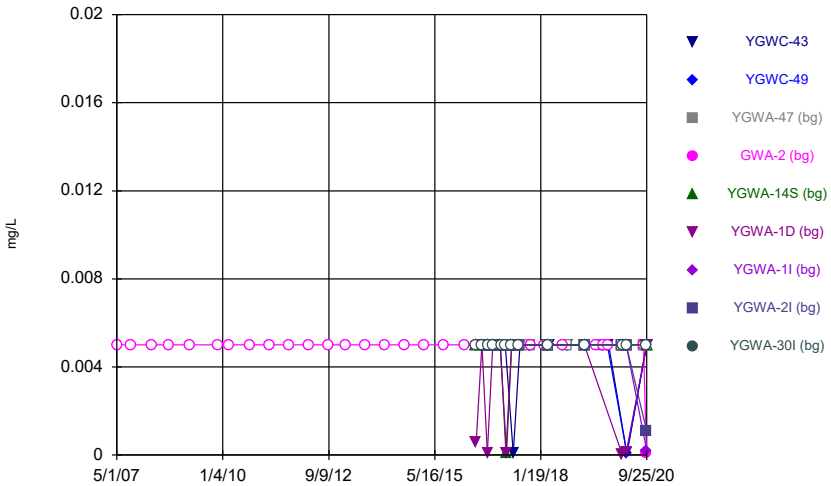
Time Series



Constituent: Lead Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

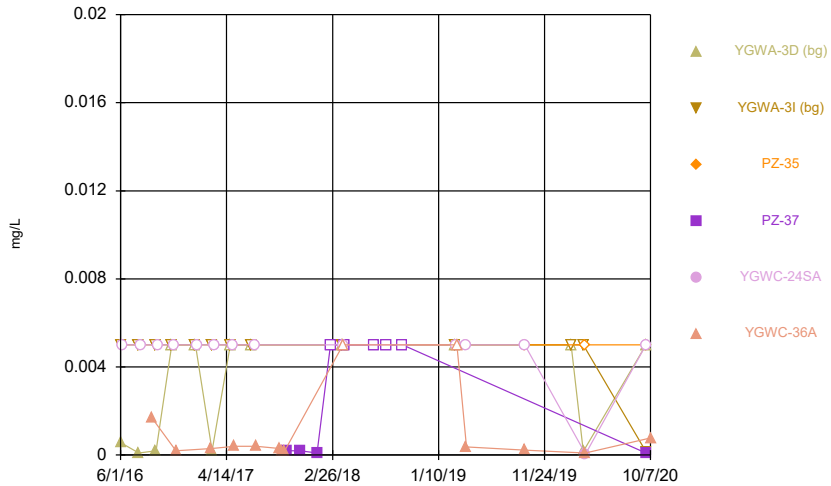
Time Series



Constituent: Lead Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

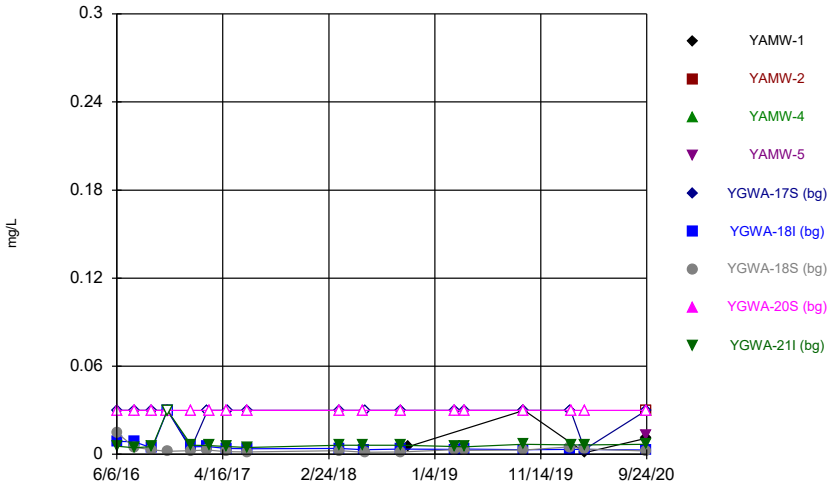
Time Series



Constituent: Lead Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

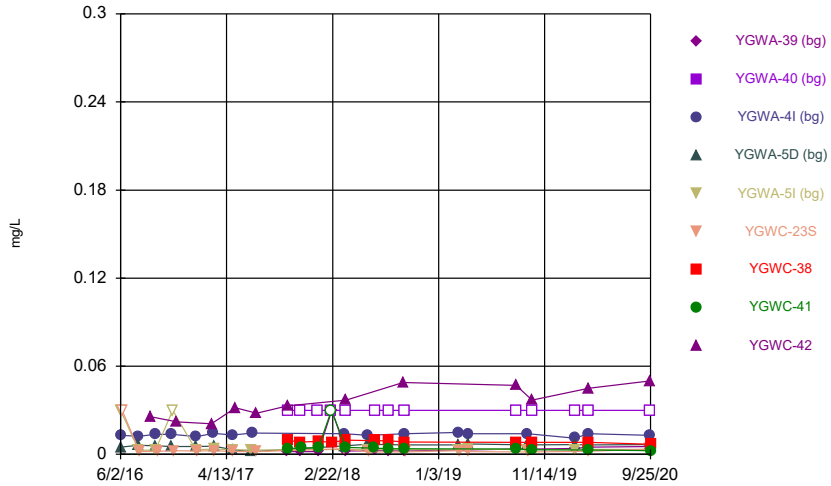
Time Series



Constituent: Lithium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

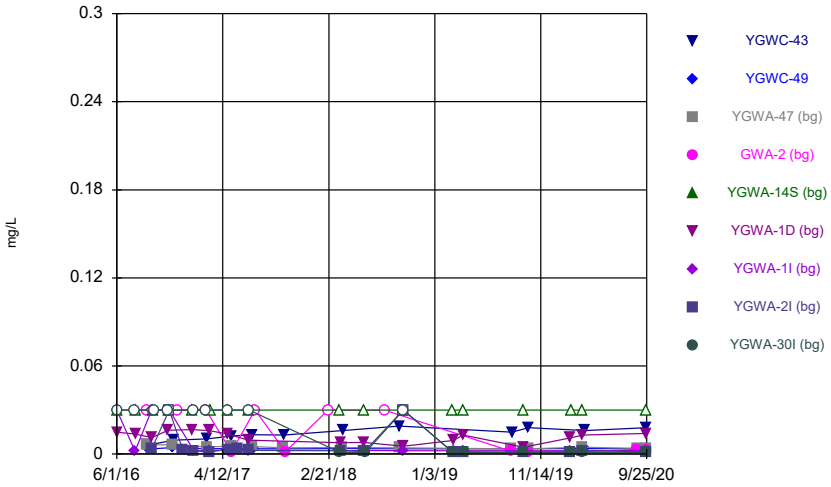
Time Series



Constituent: Lithium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

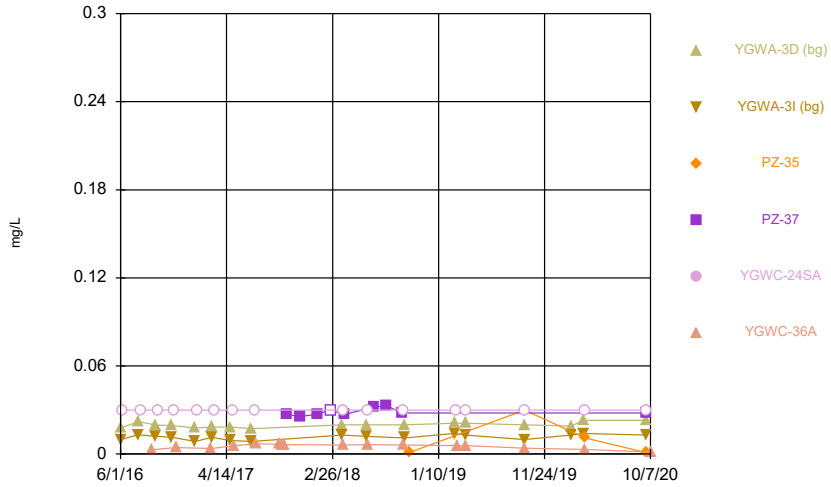
Time Series



Constituent: Lithium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

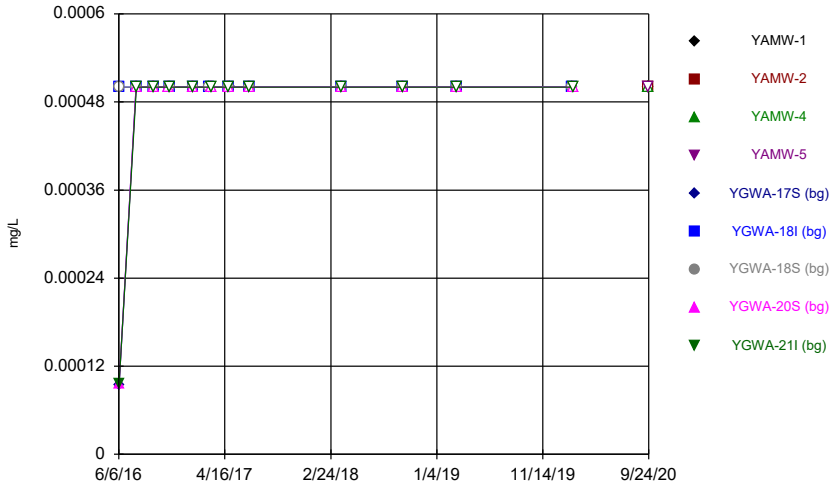
Time Series



Constituent: Lithium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

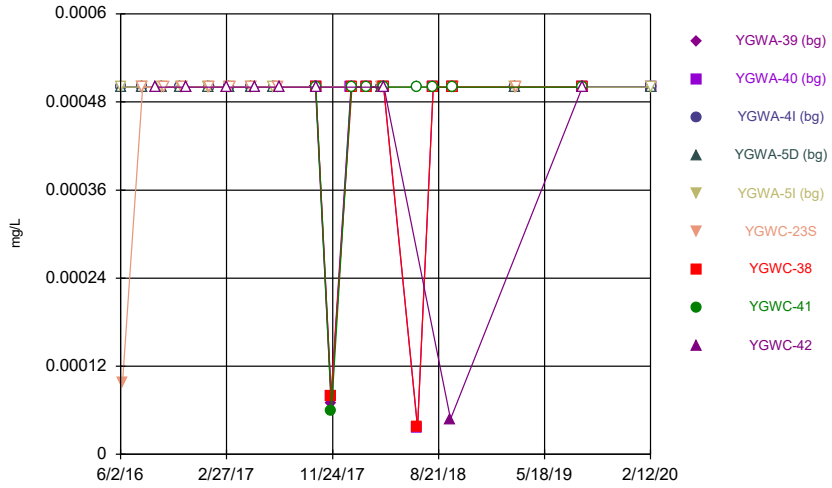
Time Series



Constituent: Mercury Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

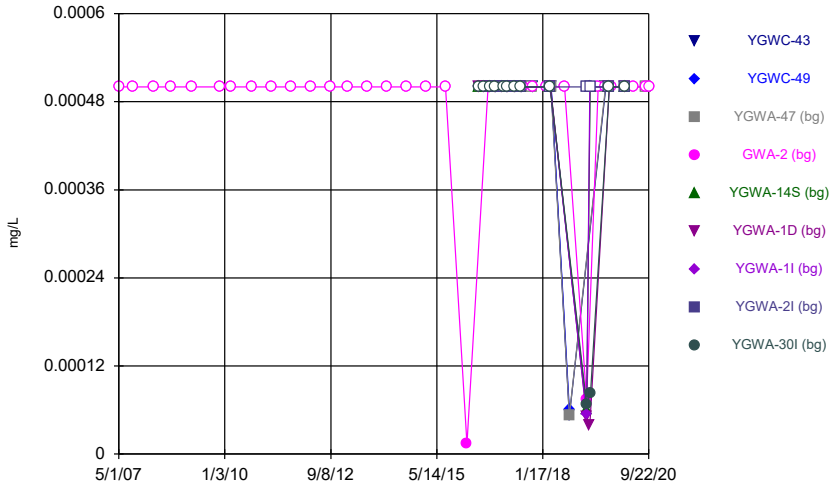
Time Series



Constituent: Mercury Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

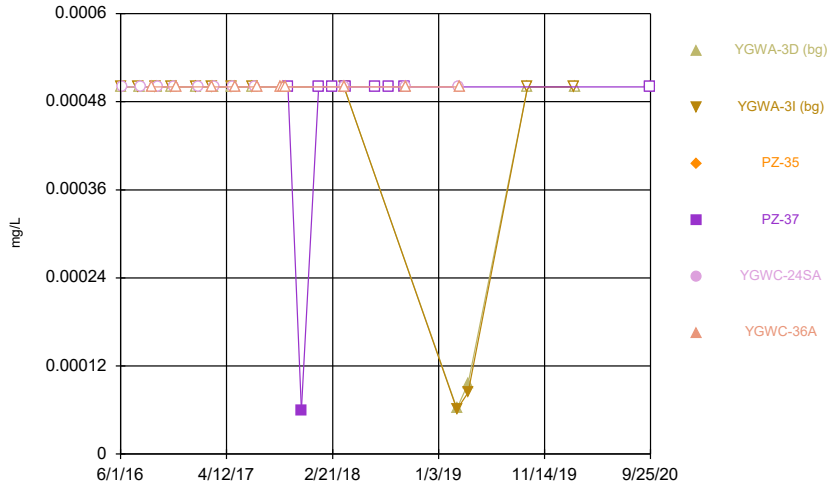
Time Series



Constituent: Mercury Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

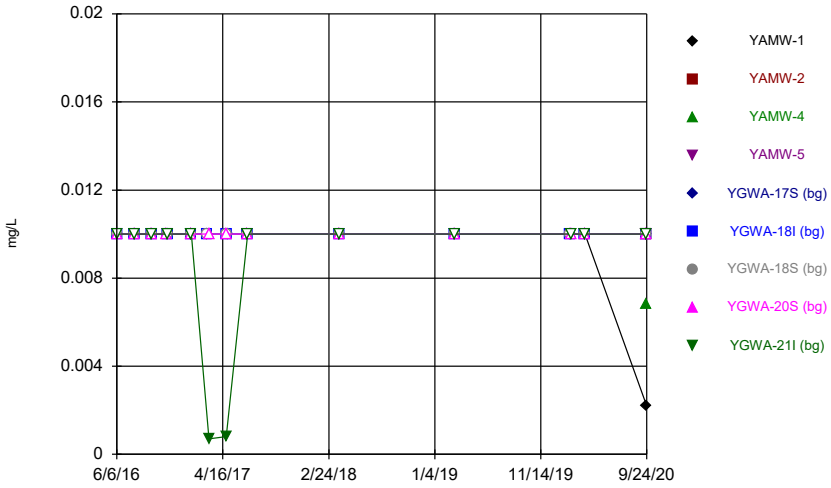
Time Series



Constituent: Mercury Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

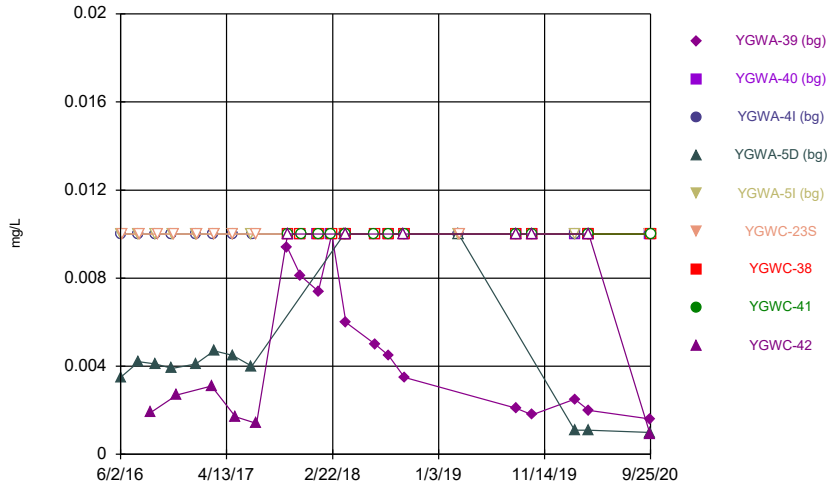
Time Series



Constituent: Molybdenum Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
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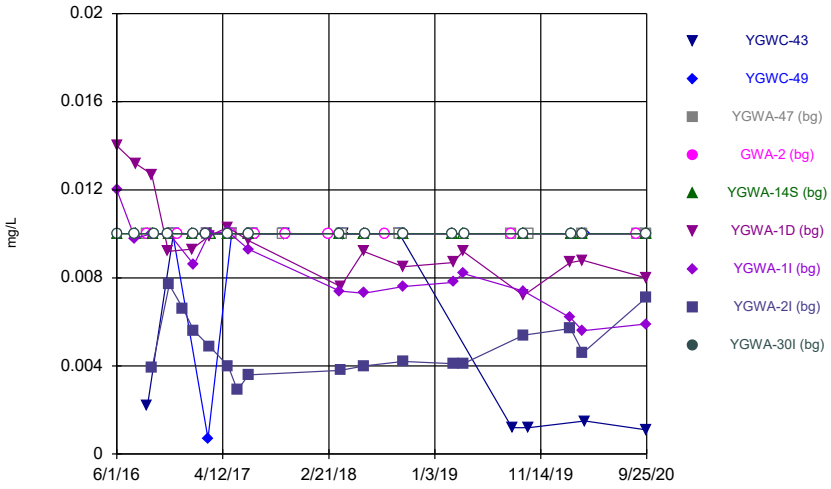
Time Series



Constituent: Molybdenum Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
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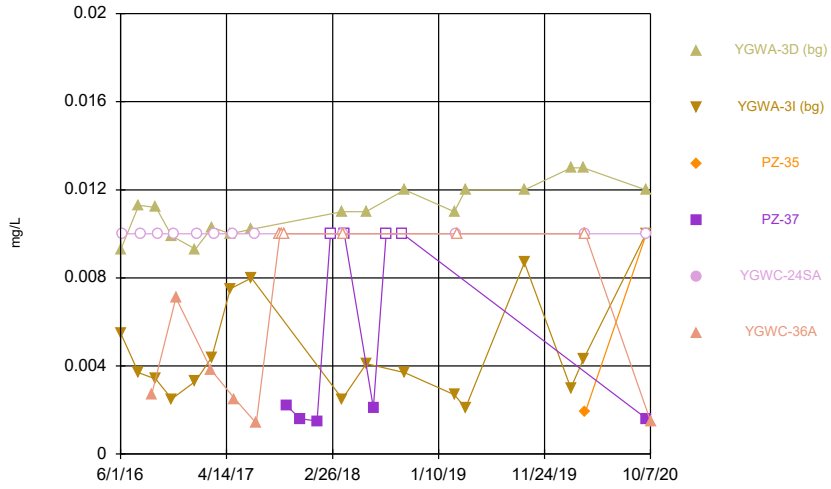
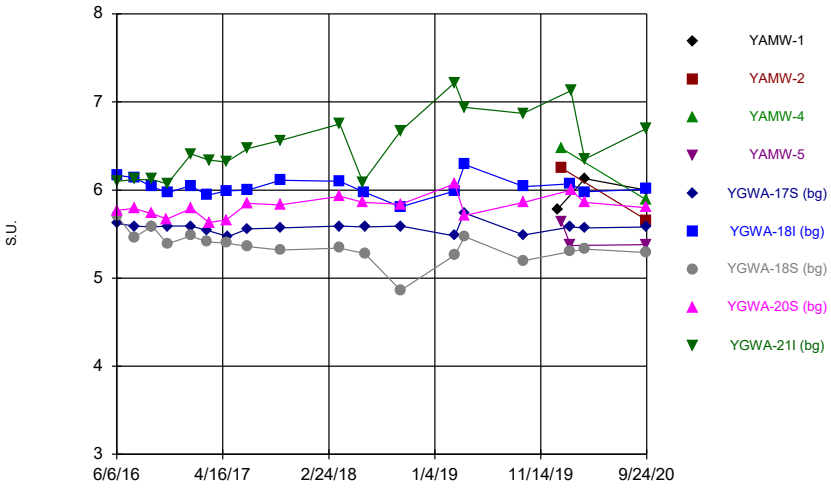
Time Series



Constituent: Molybdenum Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

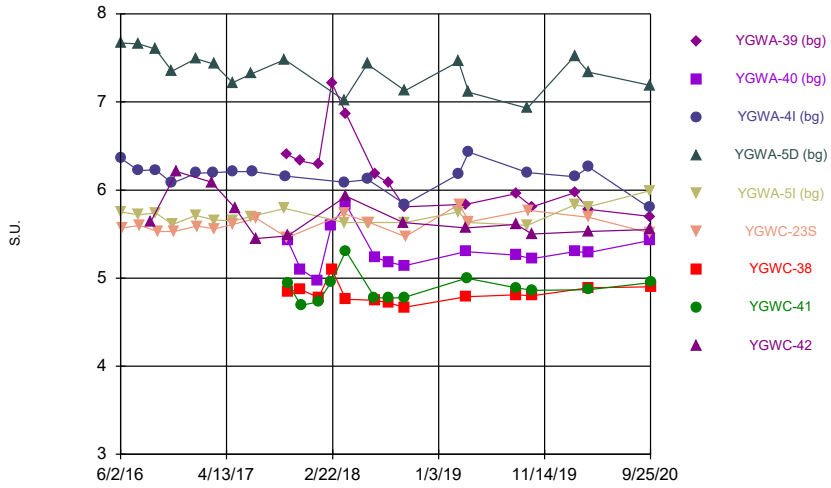


Constituent: pH Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

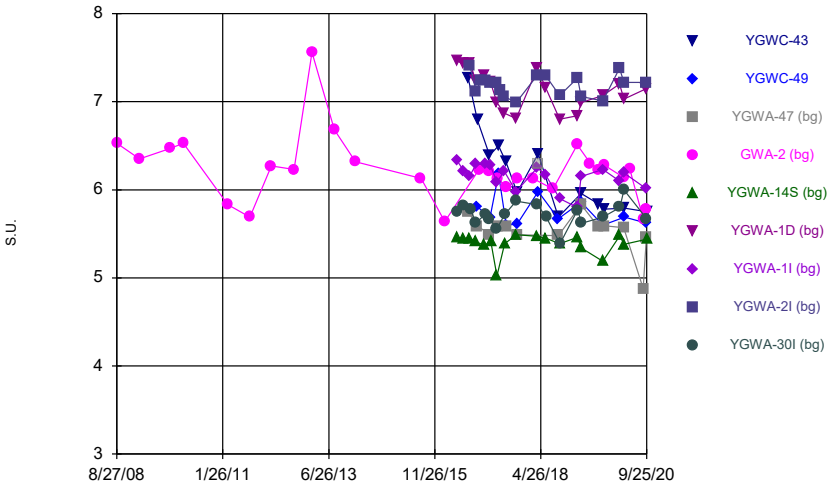


Constituent: pH Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

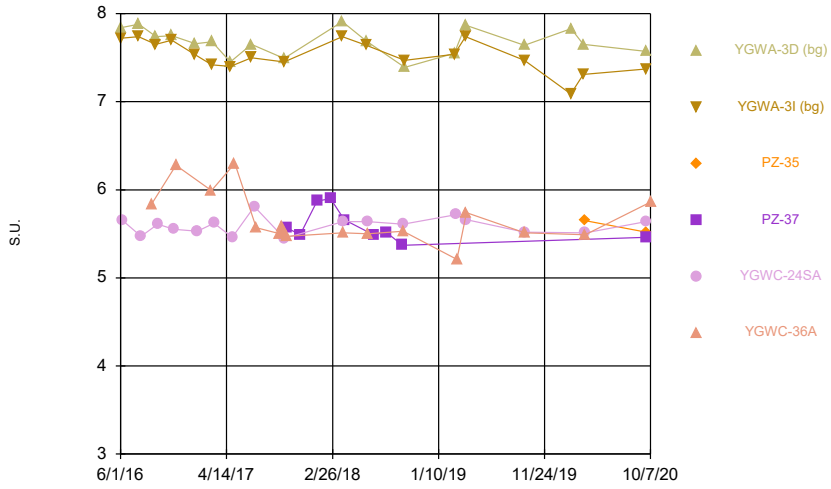


Constituent: pH Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

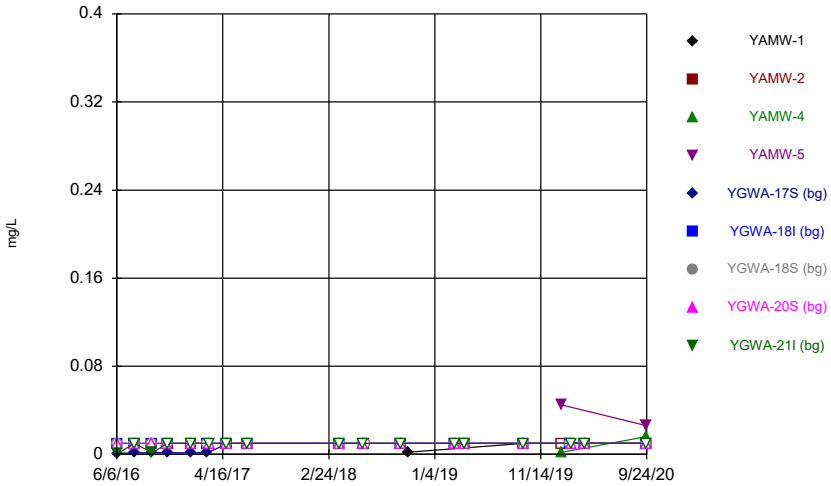


Constituent: pH Analysis Run 1/13/2021 11:02 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

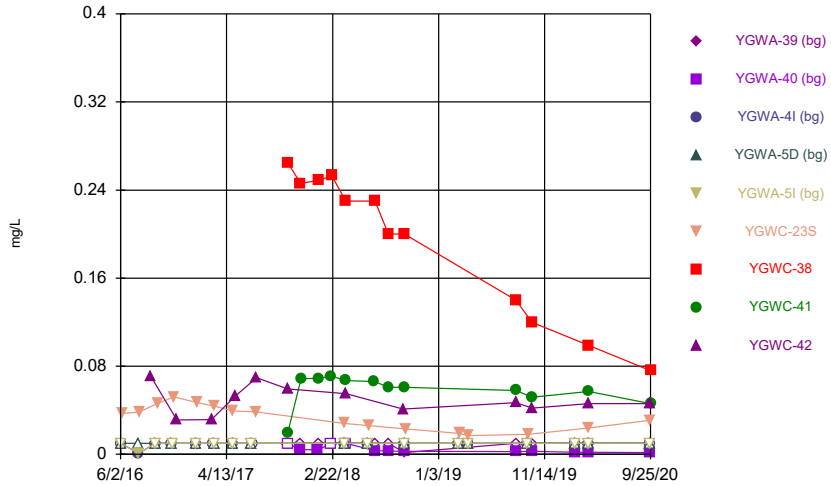
Time Series



Constituent: Selenium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
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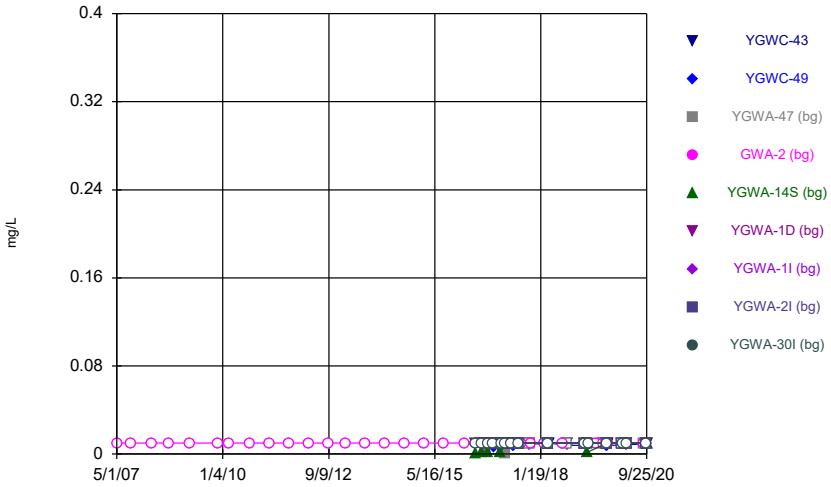
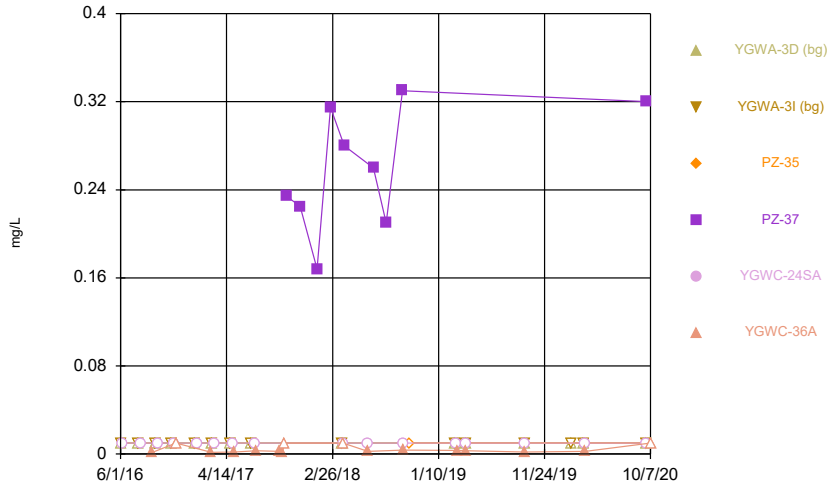
Time Series



Constituent: Selenium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

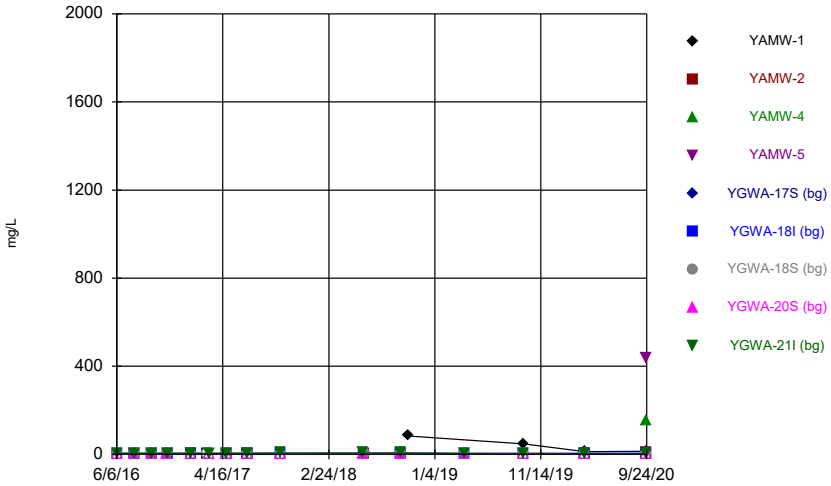
Time Series



Constituent: Selenium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

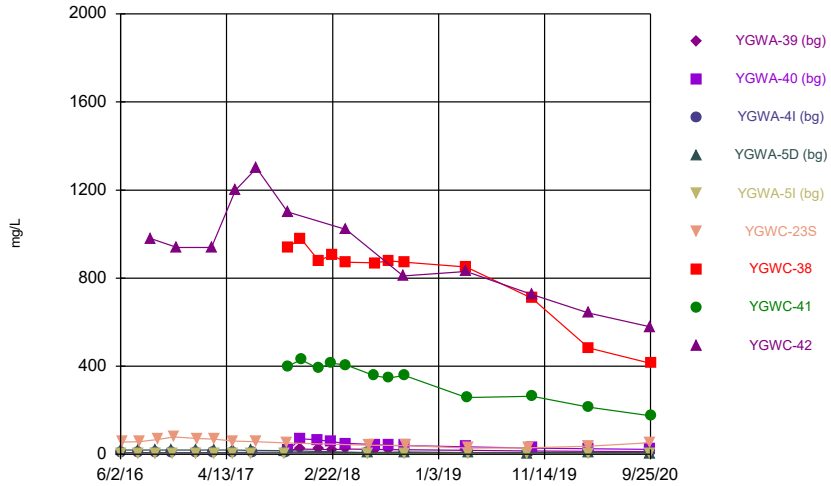
Time Series



Constituent: Sulfate Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series



Constituent: Sulfate Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
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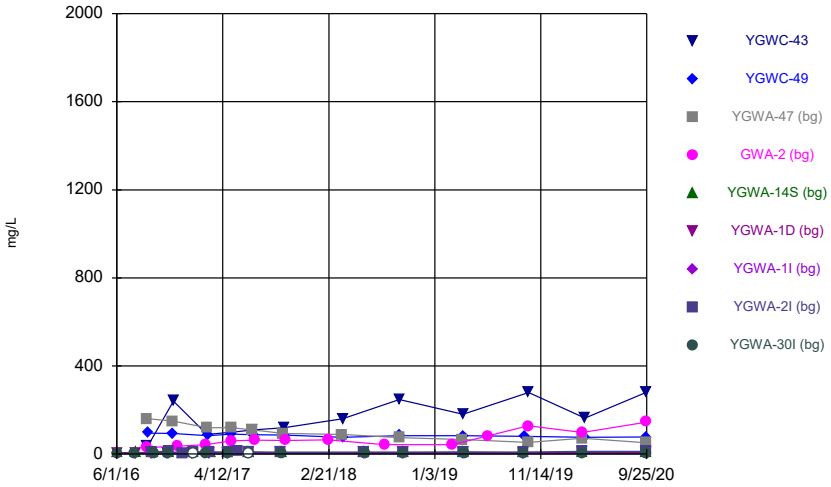
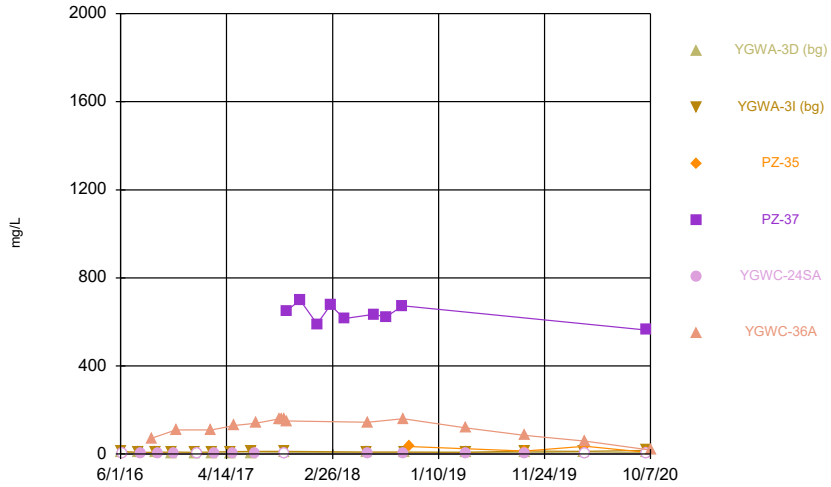
Time Series



Constituent: Sulfate Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

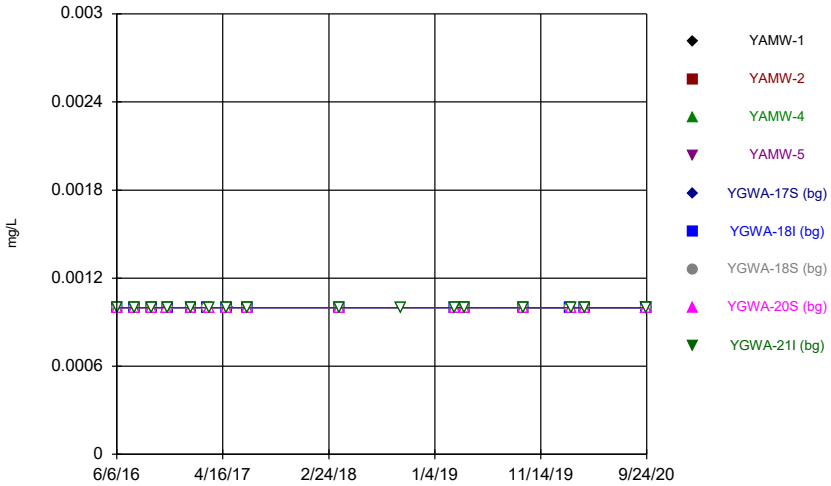
Time Series



Constituent: Sulfate Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

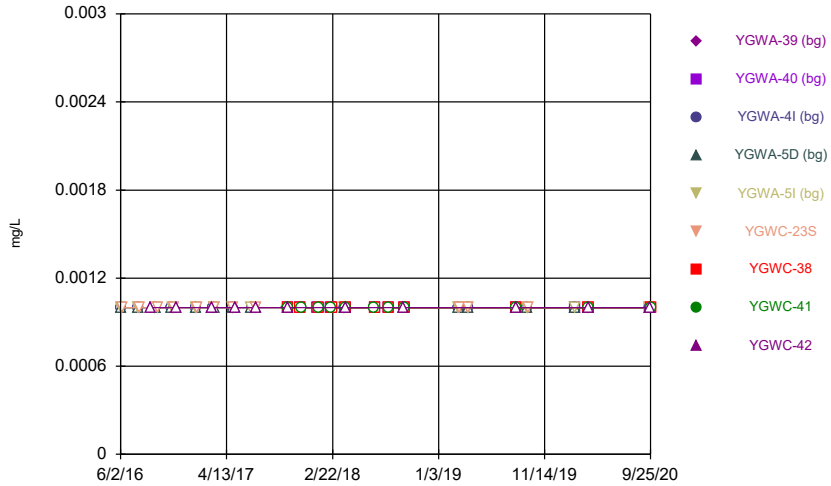
Time Series



Constituent: Thallium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

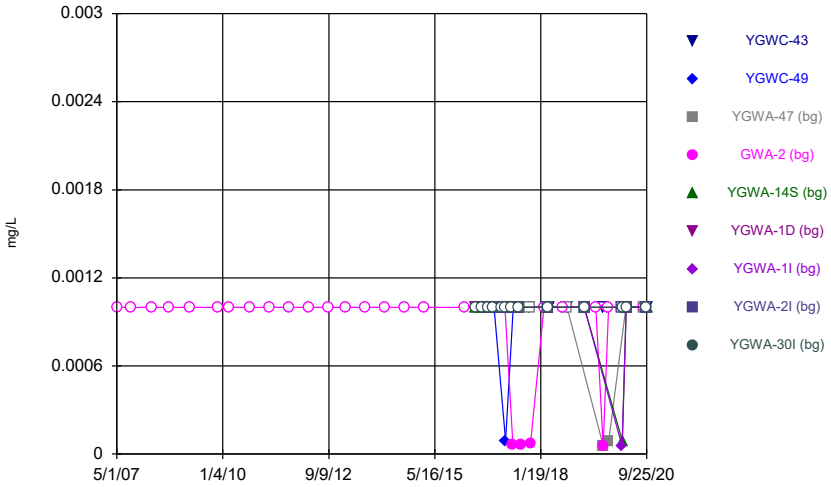
Time Series



Constituent: Thallium Analysis Run 1/13/2021 11:02 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

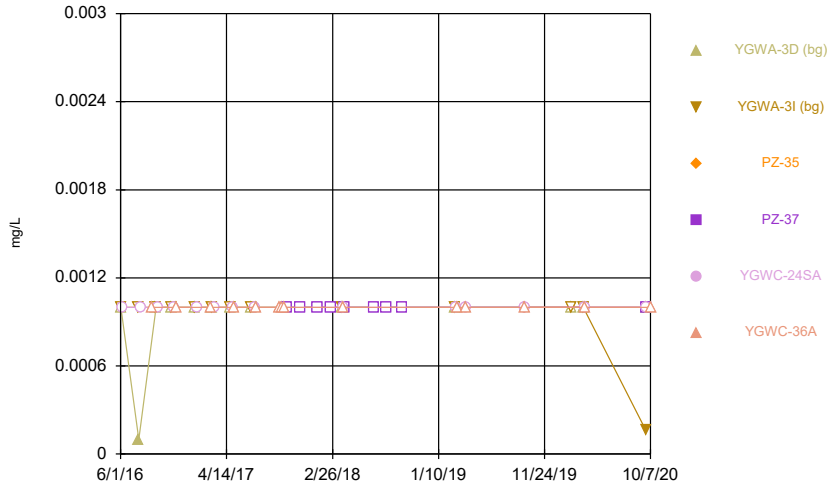
Time Series



Constituent: Thallium Analysis Run 1/13/2021 11:03 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

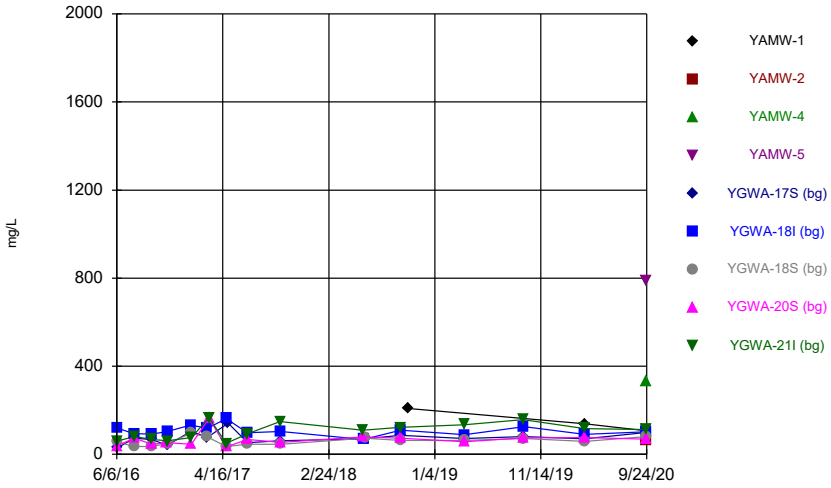
Time Series



Constituent: Thallium Analysis Run 1/13/2021 11:03 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

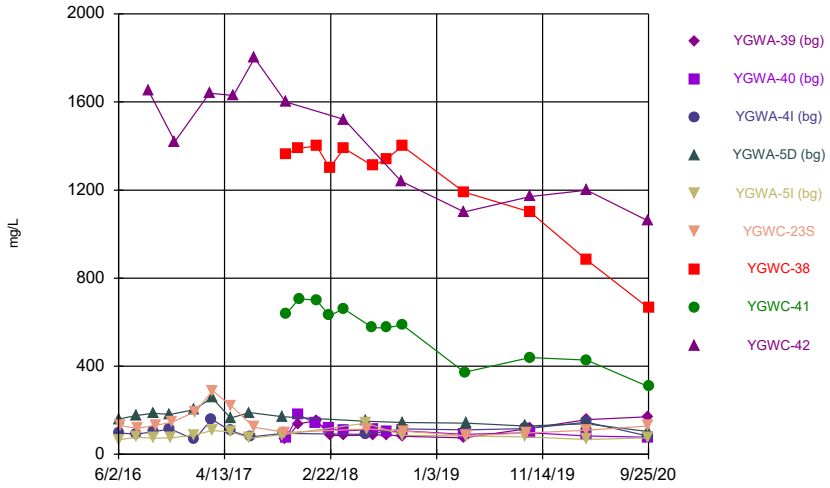


Constituent: Total Dissolved Solids Analysis Run 1/13/2021 11:03 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series

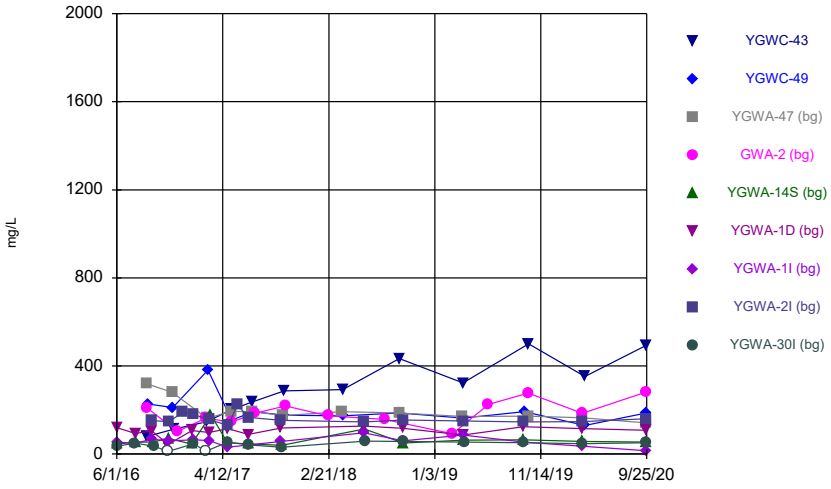


Constituent: Total Dissolved Solids Analysis Run 1/13/2021 11:03 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

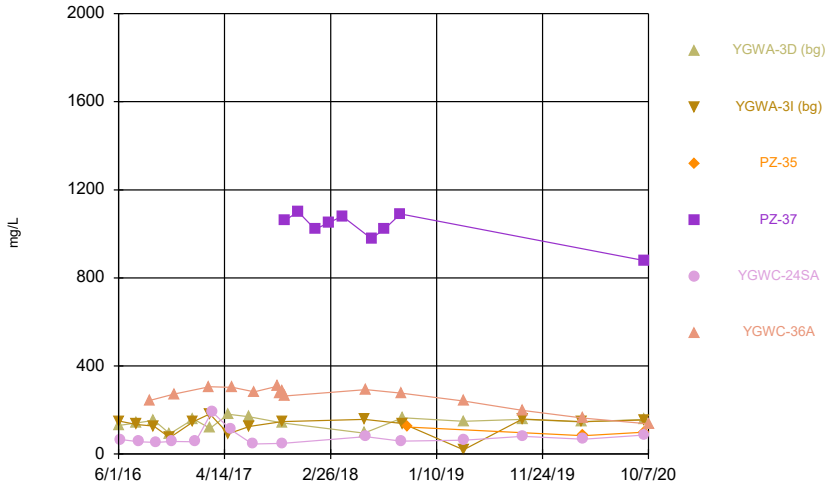


Constituent: Total Dissolved Solids Analysis Run 1/13/2021 11:03 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2021 11:03 AM

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					

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2021 11:03 AM

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				

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2021 11:03 AM

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)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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)				

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.003	<0.003	<0.003	
7/28/2016									<0.003
9/16/2016					<0.003		<0.003		
9/19/2016						<0.003		<0.003	<0.003
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					8E-05 (J)				
3/6/2017								<0.003	<0.003
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
6/5/2018									<0.003
6/6/2018								8E-05 (J)	
6/7/2018						<0.003			
6/11/2018					9E-05 (J)		5.7E-05 (J)		
9/25/2018					8.9E-05 (J)	<0.003	8.2E-05 (J)	6.1E-05 (J)	<0.003
10/16/2018	<0.003								
3/5/2019					9.1E-05 (J)		7.9E-05 (J)	0.00011 (J)	<0.003
3/6/2019						<0.003			
4/2/2019					9E-05 (J)				<0.003
4/3/2019						<0.003	7.5E-05 (J)	6.4E-05 (J)	
9/24/2019									<0.003
9/25/2019					8.1E-05 (J)			<0.003	
9/26/2019	<0.003					<0.003	8.4E-05 (J)		
1/15/2020				0.00017 (J)					
2/11/2020					7.8E-05 (J)	<0.003	7.6E-05 (J)		
2/12/2020								7.8E-05 (J)	<0.003
3/24/2020					8E-05 (J)	<0.003	8.9E-05 (J)	7.6E-05 (J)	<0.003
3/25/2020	0.00037 (J)								
9/23/2020		<0.003	<0.003		8.1E-05 (J)	<0.003	8.8E-05 (J)		
9/24/2020	5.8E-05 (J)			8.6E-05 (J)				8.3E-05 (J)	<0.003

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2021 11:03 AM

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			<0.003	<0.003	<0.003				
7/28/2016						<0.003			
8/30/2016									9E-05 (J)
9/14/2016			<0.003	<0.003	<0.003				
9/20/2016						0.0001 (J)			
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						0.0001 (J)			
2/27/2017									<0.003
3/6/2017			<0.003						
3/7/2017				<0.003	<0.003				
3/9/2017						0.0001 (J)			
5/1/2017			<0.003	<0.003					
5/2/2017					<0.003	9E-05 (J)			
5/10/2017									9E-05 (J)
6/27/2017				<0.003	<0.003				
6/29/2017			<0.003						
7/10/2017						<0.003			
7/11/2017									0.0001 (J)
10/11/2017	<0.003								
10/12/2017		0.0002 (J)					0.0057	0.0036	<0.003
11/20/2017	<0.003	0.0003 (J)					0.0053		
11/21/2017								0.0036	
1/10/2018		0.0003 (J)							
1/11/2018	<0.003							0.0037	
1/12/2018							0.0053		
2/19/2018		<0.003						0.0039	
2/20/2018	<0.003						0.0053		
3/29/2018			<0.003	<0.003	<0.003				
3/30/2018						<0.003			
4/3/2018	<0.003	<0.003					0.0056	0.0037	
4/4/2018									<0.003
6/6/2018				<0.003					
6/7/2018			<0.003		<0.003				
6/12/2018						8.1E-05 (J)			
6/27/2018								0.0038	
6/28/2018	<0.003	0.00029 (J)					0.0059		
8/7/2018	<0.003	0.00024 (J)					0.0058	0.0037	
9/20/2018									<0.003
9/24/2018	<0.003	0.00019 (J)					0.0051	0.0032	
9/26/2018			<0.003	<0.003	<0.003				
9/27/2018						9E-05 (J)			
3/4/2019			<0.003	<0.003	<0.003				
3/6/2019						6.6E-05 (J)			
4/3/2019			<0.003	<0.003	<0.003				
4/4/2019						7.2E-05 (J)			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.003	0.0002 (J)							
8/22/2019							0.0049	0.0026 (J)	<0.003
9/24/2019				<0.003	<0.003				
9/25/2019			<0.003						
9/27/2019						7.7E-05 (J)			
10/9/2019	<0.003	0.0002 (J)					0.0046	0.0026 (J)	<0.003
2/12/2020	<0.003	0.00018 (J)	<0.003	<0.003	<0.003				
3/24/2020		0.00022 (J)		<0.003	<0.003				
3/25/2020	<0.003		<0.003				0.0038	0.0026 (J)	<0.003
3/26/2020						9E-05 (J)			
9/22/2020			<0.003	<0.003	<0.003				
9/24/2020	<0.003	0.0002 (J)				0.00015 (J)			6.7E-05 (J)
9/25/2020							0.0033	0.002 (J)	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2021 11:03 AM

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					0.0002 (J)	<0.003			
8/30/2016			<0.003						
8/31/2016	<0.003			<0.003					
9/1/2016		0.0001 (J)							
9/13/2016						<0.003	<0.003		
9/14/2016								<0.003	
9/15/2016					0.0002 (J)				
9/19/2016									<0.003
11/1/2016						<0.003			<0.003
11/2/2016					0.0002 (J)				
11/4/2016							<0.003	<0.003	
11/14/2016			<0.003						
11/15/2016		0.0001 (J)							
11/16/2016	<0.003								
11/28/2016				<0.003					
12/15/2016								<0.003	
1/10/2017					0.0002 (J)				
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		0.0001 (J)							
3/2/2017						<0.003	<0.003		
3/3/2017								<0.003	
3/8/2017					0.0002 (J)				
4/26/2017					0.0002 (J)				<0.003
4/27/2017						<0.003	<0.003		
4/28/2017								<0.003	
5/8/2017			7E-05 (J)	<0.003					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.003								
5/26/2017								<0.003	
6/27/2017						<0.003	<0.003		
6/28/2017								<0.003	
6/30/2017					0.0002 (J)				<0.003
7/11/2017	<0.003		<0.003						
7/13/2017		0.0001 (J)							
7/17/2017				<0.003					
10/10/2017			<0.003						
10/11/2017		0.0001 (J)							
10/12/2017	0.0001 (J)								
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			5.7E-05 (J)						
9/20/2018	0.00029 (J)	0.00011 (J)							
2/25/2019				<0.003					
2/26/2019					0.00016 (J)				7.2E-05 (J)
2/27/2019						<0.003	<0.003	<0.003	
3/28/2019						<0.003	<0.003		
3/29/2019					0.00017 (J)			<0.003	
4/1/2019									<0.003
6/12/2019				<0.003					
8/19/2019				<0.003					
8/20/2019			<0.003						
8/21/2019	0.0003 (J)								
9/24/2019						<0.003	<0.003	<0.003	
9/25/2019					0.00018 (J)				<0.003
9/26/2019		0.00013 (J)							
10/8/2019				<0.003					
10/9/2019	0.00034 (J)								
2/10/2020						<0.003	<0.003		
2/11/2020								<0.003	
2/12/2020					0.00019 (J)				<0.003
3/17/2020				<0.003					
3/18/2020					0.00021 (J)		<0.003		
3/19/2020						<0.003		<0.003	<0.003
3/25/2020	0.00034 (J)	0.00013 (J)							
8/26/2020				<0.003					
8/27/2020			4.7E-05 (J)						
9/22/2020			<0.003	<0.003					
9/23/2020						<0.003	<0.003	<0.003	
9/24/2020		0.00013 (J)							<0.003
9/25/2020	0.00054 (J)				0.00018 (J)				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.003					
8/1/2016					0.0001 (J)	
9/2/2016						0.0003 (J)
9/14/2016		<0.003				
9/15/2016	<0.003					
9/20/2016					0.0001 (J)	
11/1/2016	<0.003	<0.003				
11/8/2016					<0.003	
11/14/2016						9E-05 (J)
1/11/2017	<0.003	<0.003				
1/17/2017					0.0001 (J)	
2/28/2017						0.0001 (J)
3/1/2017		<0.003				
3/2/2017	<0.003					
3/8/2017					0.0001 (J)	
4/26/2017	<0.003	<0.003				
5/2/2017					0.0001 (J)	
5/9/2017						0.0002 (J)
6/28/2017	<0.003	<0.003				
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				<0.003		
3/28/2018	<0.003	<0.003				
3/30/2018					<0.003	<0.003
4/3/2018				<0.003		
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	<0.003	<0.003				
3/5/2019					0.00016 (J)	
3/6/2019						0.00029 (J)
4/1/2019	<0.003	<0.003				
4/4/2019					0.00015 (J)	0.00033 (J)
9/25/2019	<0.003	<0.003				
9/26/2019			<0.003		0.00014 (J)	0.00029 (J)
2/11/2020		<0.003				
2/12/2020	<0.003					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.003	<0.003				
3/25/2020			<0.003			0.00022 (J)
3/26/2020					0.00016 (J)	
9/23/2020	<0.003	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)

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2021 11:03 AM

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					0.008 (J)	<0.1	0.0059 (J)	<0.1	
7/28/2016									<0.1
9/16/2016					0.0086 (J)		0.0079 (J)		
9/19/2016						<0.1		<0.1	<0.1
11/2/2016								<0.1	
11/3/2016					0.0077 (J)	<0.1	0.0082 (J)		<0.1
1/11/2017					0.0092 (J)	<0.1	0.0096 (J)		
1/13/2017								<0.1	<0.1
3/1/2017						<0.1	<0.1		
3/2/2017					0.0095 (J)				
3/6/2017								<0.1	<0.1
4/26/2017						<0.1	0.0091 (J)	<0.1	<0.1
5/2/2017					<0.1				
6/28/2017						<0.1	0.0079 (J)		
6/29/2017					0.0074 (J)			<0.1	<0.1
10/3/2017									<0.1
10/4/2017					0.0077 (J)		0.009 (J)	<0.1	
10/5/2017						<0.1			
6/5/2018									0.0092 (J)
6/6/2018								0.0049 (J)	
6/7/2018						<0.1			
6/11/2018					0.01 (J)		0.0093 (J)		
9/25/2018					0.0096 (J)	0.0046 (J)	0.007 (J)	<0.1	0.0054 (J)
10/16/2018	0.2								
4/2/2019					0.0066 (J)				0.011 (J)
4/3/2019						<0.1	0.0053 (J)	<0.1	
9/24/2019									0.018 (J)
9/25/2019					0.0081 (J)			<0.1	
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)	<0.1	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)

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.1	<0.1				
6/7/2016						0.99			
7/26/2016			0.0047 (J)	0.0052 (J)	<0.1				
7/28/2016						1.09			
8/30/2016									24.7
9/14/2016			<0.1	0.0071 (J)	0.01 (J)				
9/20/2016						1.35			
11/2/2016			<0.1	<0.1					
11/4/2016					<0.1				
11/8/2016						1.5			
11/16/2016									16.4
1/12/2017				0.0076 (J)	<0.1				
1/13/2017			<0.1						
1/16/2017						1.67			
2/27/2017									17.9
3/6/2017			<0.1						
3/7/2017				0.0089 (J)	<0.1				
3/9/2017						1.44			
5/1/2017			<0.1	0.0061 (J)					
5/2/2017					<0.1	1.2			
5/10/2017									20.4
6/27/2017				0.0079 (J)	<0.1				
6/29/2017			<0.1						
7/10/2017						1.12			
7/11/2017									25.2
10/3/2017				0.0094 (J)	<0.1				
10/5/2017			<0.1						
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	<0.1						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)		<0.1				
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 1/13/2021 11:03 AM

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			<0.1						
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			<0.1	0.0079 (J)	0.0053 (J)				
9/24/2020	0.037 (J)	0.087 (J)				1.1			15.2
9/25/2020							8	6	

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2021 11:03 AM

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						<0.1	<0.1		
6/2/2016					<0.1				<0.1
7/25/2016							<0.1		<0.1
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						<0.1	<0.1		
9/14/2016								<0.1	
9/15/2016					0.0214 (J)				
9/19/2016									<0.1
11/1/2016						0.0086 (J)			<0.1
11/2/2016					<0.1				
11/4/2016							<0.1	<0.1	
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							<0.1	<0.1	<0.1
2/21/2017									<0.1
2/22/2017				<0.1					
2/24/2017	0.725		0.0145 (J)						
2/27/2017		<0.1							
3/2/2017						0.008 (J)	<0.1		
3/3/2017								<0.1	
3/8/2017					0.0189 (J)				
4/26/2017					0.0161 (J)				<0.1
4/27/2017						0.0066 (J)	<0.1		
4/28/2017								<0.1	
5/8/2017			0.0141 (J)	0.0084 (J)					
5/9/2017		<0.1							
5/10/2017	0.955								
5/26/2017								<0.1	
6/27/2017						0.0087 (J)	0.006 (J)		
6/28/2017								<0.1	
6/30/2017					0.0173 (J)				<0.1
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)	<0.1	
10/4/2017									<0.1
10/5/2017					0.0173 (J)				
10/10/2017			0.0124 (J)						
10/11/2017		<0.1							
10/12/2017	1.15								
10/16/2017				<0.1					
2/19/2018				<0.1					
4/2/2018			0.013 (J)						
4/4/2018	1.2	0.0041 (J)							

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2021 11:03 AM

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							<0.1		
6/7/2018								<0.1	
6/8/2018					0.013 (J)				
6/11/2018									0.014 (J)
8/6/2018				<0.1					
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)	<0.1	
10/2/2018									<0.1
2/25/2019				<0.1					
3/27/2019			0.013 (J)						
3/28/2019	1.8	<0.1				0.005 (J)	<0.1		
3/29/2019					0.014 (J)			0.0065 (J)	
4/1/2019									<0.1
6/12/2019				<0.1					
9/24/2019						0.0064 (J)	0.0055 (J)	0.0076 (J)	
9/25/2019					0.018 (J)				<0.1
9/26/2019		<0.1							
10/8/2019			0.012 (J)	<0.1					
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						<0.1	<0.1	<0.1	
9/24/2020		0.062 (J)							0.0075 (J)
9/25/2020	3.9				0.02 (J)				

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2021 11:03 AM

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		<0.1				
6/2/2016	<0.1					
6/8/2016					<0.1	
7/25/2016		<0.1				
7/26/2016	0.0097 (J)					
8/1/2016					<0.1	
9/2/2016						0.133
9/14/2016		<0.1				
9/15/2016	0.0102 (J)					
9/20/2016					<0.1	
11/1/2016	<0.1	<0.1				
11/8/2016					<0.1	
11/14/2016						0.287
1/11/2017	<0.1	<0.1				
1/17/2017					<0.1	
2/28/2017						0.215
3/1/2017		<0.1				
3/2/2017	0.0084 (J)					
3/8/2017					<0.1	
4/26/2017	<0.1	<0.1				
5/2/2017					0.0099 (J)	
5/9/2017						0.233
6/28/2017	<0.1	<0.1				
7/7/2017					0.0076 (J)	
7/13/2017						0.262
9/22/2017						0.238
9/29/2017						0.235
10/4/2017	<0.1	<0.1				
10/5/2017					<0.1	
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		<0.1				
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	<0.1	<0.1				
10/16/2018			0.031 (J)			
4/1/2019	<0.1	<0.1				
4/4/2019					<0.1	0.22
9/25/2019	0.0054 (J)	<0.1				
9/26/2019			<0.1		0.0068 (J)	0.13
3/19/2020	0.0073 (J)	0.0053 (J)				

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2021 11:03 AM

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)			<0.1	
9/24/2020			0.017 (J)			
9/25/2020				14.1		
10/7/2020						0.018 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2021 11:03 AM

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						<0.0025	<0.0025		
6/7/2016					<0.0025			<0.0025	<0.0025
7/27/2016					<0.0025	<0.0025	<0.0025	<0.0025	
7/28/2016									<0.0025
9/16/2016					<0.0025		<0.0025		
9/19/2016						<0.0025		<0.0025	<0.0025
11/2/2016								<0.0025	
11/3/2016					<0.0025	<0.0025	<0.0025		<0.0025
1/11/2017					0.0001 (J)	<0.0025	0.0001 (J)		
1/13/2017								<0.0025	<0.0025
3/1/2017						<0.0025	<0.0025		
3/2/2017					<0.0025				
3/6/2017								<0.0025	<0.0025
4/26/2017						<0.0025	<0.0025	<0.0025	<0.0025
5/2/2017					<0.0025				
6/28/2017						<0.0025	<0.0025		
6/29/2017					<0.0025			<0.0025	<0.0025
3/28/2018					<0.0025	<0.0025	<0.0025		
3/29/2018								<0.0025	<0.0025
6/5/2018									<0.0025
6/6/2018								<0.0025	
6/7/2018						<0.0025			
6/11/2018					<0.0025		<0.0025		
9/25/2018					<0.0025	<0.0025	<0.0025	<0.0025	9.6E-05 (J)
10/16/2018	0.00014 (J)								
3/5/2019					<0.0025		<0.0025	<0.0025	<0.0025
3/6/2019						<0.0025			
4/2/2019					<0.0025				<0.0025
4/3/2019						<0.0025	<0.0025	<0.0025	
9/24/2019									<0.0025
9/25/2019					<0.0025			<0.0025	
9/26/2019	<0.0025					<0.0025	<0.0025		
2/11/2020					<0.0025	<0.0025	<0.0025		
2/12/2020								<0.0025	<0.0025
3/24/2020					<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
3/25/2020	<0.0025								
9/23/2020		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025		
9/24/2020	0.00017 (J)			0.00018 (J)				<0.0025	<0.0025

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2021 11:03 AM

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			<0.0025	<0.0025	<0.0025				
6/7/2016						<0.0025			
7/26/2016			<0.0025	<0.0025	<0.0025				
7/28/2016						<0.0025			
8/30/2016									<0.0025
9/14/2016			<0.0025	<0.0025	<0.0025				
9/20/2016						<0.0025			
11/2/2016			<0.0025	<0.0025					
11/4/2016					<0.0025				
11/8/2016						7E-05 (J)			
11/16/2016									<0.0025
1/12/2017				<0.0025	9E-05 (J)				
1/13/2017			<0.0025						
1/16/2017						<0.0025			
2/27/2017									<0.0025
3/6/2017			<0.0025						
3/7/2017				<0.0025	<0.0025				
3/9/2017						<0.0025			
5/1/2017			<0.0025	<0.0025					
5/2/2017					<0.0025	<0.0025			
5/10/2017									0.0002 (J)
6/27/2017				<0.0025	<0.0025				
6/29/2017			<0.0025						
7/10/2017						<0.0025			
7/11/2017									0.0005 (J)
10/11/2017	<0.0025								
10/12/2017		<0.0025					0.003	0.0002 (J)	0.0006 (J)
11/20/2017	<0.0025	<0.0025					0.0027		
11/21/2017								0.0003 (J)	
1/10/2018		<0.0025							
1/11/2018	<0.0025							0.0002 (J)	
1/12/2018							0.0029		
2/19/2018		<0.0025						<0.0025	
2/20/2018	<0.0025						0.0029		
3/29/2018			<0.0025	<0.0025	<0.0025				
3/30/2018						<0.0025			
4/3/2018	<0.0025	<0.0025					0.0027	<0.0025	
4/4/2018									<0.0025
6/6/2018				<0.0025					
6/7/2018			<0.0025		<0.0025				
6/12/2018						<0.0025			
6/27/2018								0.00025 (J)	
6/28/2018	<0.0025	<0.0025					0.0029		
8/7/2018	<0.0025	<0.0025					0.0027	0.00024 (J)	
9/20/2018									0.0002 (J)
9/24/2018	<0.0025	<0.0025					0.0027	0.00021 (J)	
9/26/2018			<0.0025	<0.0025	<0.0025				
9/27/2018						<0.0025			
3/4/2019			<0.0025	<0.0025	<0.0025				
3/6/2019						<0.0025			
4/3/2019			<0.0025	<0.0025	<0.0025				
4/4/2019						<0.0025			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.0025	<0.0025							
8/22/2019							0.0023 (J)	0.00015 (J)	0.00017 (J)
9/24/2019				<0.0025	<0.0025				
9/25/2019			<0.0025						
9/27/2019						<0.0025			
10/9/2019	<0.0025	<0.0025					0.0021 (J)	0.00017 (J)	0.00025 (J)
2/12/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025				
3/24/2020		<0.0025		<0.0025	<0.0025				
3/25/2020	<0.0025		<0.0025				0.0018 (J)	0.00018 (J)	0.00021 (J)
3/26/2020						<0.0025			
9/22/2020			<0.0025	<0.0025	<0.0025				
9/24/2020	<0.0025	<0.0025				<0.0025			0.00014 (J)
9/25/2020							0.0015 (J)	0.00014 (J)	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2021 11:03 AM

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				<0.0025					
9/11/2007				<0.0025					
3/20/2008				<0.0025					
8/27/2008				<0.0025					
3/3/2009				<0.0025					
11/18/2009				<0.0025					
3/3/2010				<0.0025					
9/8/2010				<0.0025					
3/10/2011				<0.0025					
9/8/2011				<0.0025					
3/5/2012				<0.0025					
9/10/2012				<0.0025					
2/6/2013				<0.0025					
8/12/2013				<0.0025					
2/5/2014				<0.0025					
8/5/2014				<0.0025					
2/4/2015				<0.0025					
8/3/2015				<0.0025					
2/16/2016				<0.0025					
6/1/2016						<0.0025	<0.0025		
6/2/2016					<0.0025				<0.0025
7/25/2016							<0.0025		<0.0025
7/26/2016					<0.0025	<0.0025			
8/30/2016			0.0001 (J)						
8/31/2016	<0.0025			<0.0025					
9/1/2016		<0.0025							
9/13/2016						<0.0025	<0.0025		
9/14/2016								<0.0025	
9/15/2016					<0.0025				
9/19/2016									<0.0025
11/1/2016						<0.0025			<0.0025
11/2/2016					<0.0025				
11/4/2016							<0.0025	<0.0025	
11/14/2016			0.0001 (J)						
11/15/2016		<0.0025							
11/16/2016	<0.0025								
11/28/2016				<0.0025					
12/15/2016								<0.0025	
1/10/2017					<0.0025				
1/11/2017						0.0002 (J)			
1/16/2017							<0.0025	<0.0025	<0.0025
2/21/2017									<0.0025
2/22/2017				<0.0025					
2/24/2017	<0.0025		9E-05 (J)						
2/27/2017		7E-05 (J)							
3/2/2017						<0.0025	<0.0025		
3/3/2017								<0.0025	
3/8/2017					7E-05 (J)				
4/26/2017					<0.0025				<0.0025
4/27/2017						<0.0025	<0.0025		
4/28/2017								<0.0025	
5/8/2017			0.0001 (J)	<0.0025					

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2021 11:03 AM

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		<0.0025							
5/10/2017	<0.0025								
5/26/2017								<0.0025	
6/27/2017						<0.0025	<0.0025		
6/28/2017								<0.0025	
6/30/2017					<0.0025				<0.0025
7/11/2017	<0.0025		<0.0025						
7/13/2017		<0.0025							
7/17/2017				<0.0025					
10/10/2017			<0.0025						
10/11/2017		<0.0025							
10/12/2017	<0.0025								
10/16/2017				<0.0025					
2/19/2018				<0.0025					
3/27/2018					<0.0025		<0.0025		<0.0025
3/28/2018								<0.0025	
3/29/2018						<0.0025			
4/2/2018			<0.0025						
4/4/2018	<0.0025	<0.0025							
8/6/2018				<0.0025					
9/19/2018			<0.0025						
9/20/2018	<0.0025	<0.0025							
2/25/2019				<0.0025					
2/26/2019					<0.0025				<0.0025
2/27/2019						<0.0025	<0.0025	<0.0025	
3/28/2019						<0.0025	<0.0025		
3/29/2019					<0.0025			<0.0025	
4/1/2019									<0.0025
6/12/2019				<0.0025					
8/19/2019				<0.0025					
8/20/2019			<0.0025						
8/21/2019	<0.0025								
9/24/2019						<0.0025	<0.0025	<0.0025	
9/25/2019					<0.0025				<0.0025
9/26/2019		<0.0025							
10/8/2019			<0.0025	<0.0025					
10/9/2019	<0.0025								
2/10/2020						<0.0025	<0.0025		
2/11/2020								<0.0025	
2/12/2020					<0.0025				<0.0025
3/17/2020			<0.0025	<0.0025					
3/18/2020					<0.0025		<0.0025		
3/19/2020						<0.0025		<0.0025	<0.0025
3/25/2020	<0.0025	<0.0025							
8/26/2020				<0.0025					
8/27/2020			<0.0025						
9/22/2020				<0.0025					
9/23/2020						<0.0025	<0.0025	<0.0025	
9/24/2020		<0.0025							<0.0025
9/25/2020	<0.0025				<0.0025				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2021 11:03 AM

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		<0.0025				
6/2/2016	<0.0025					
6/8/2016					<0.0025	
7/25/2016		<0.0025				
7/26/2016	<0.0025					
8/1/2016					<0.0025	
9/2/2016						<0.0025
9/14/2016		<0.0025				
9/15/2016	<0.0025					
9/20/2016					<0.0025	
11/1/2016	<0.0025	<0.0025				
11/8/2016					<0.0025	
11/14/2016						9E-05 (J)
1/11/2017	0.0001 (J)	8E-05 (J)				
1/17/2017					<0.0025	
2/28/2017						0.0001 (J)
3/1/2017		<0.0025				
3/2/2017	<0.0025					
3/8/2017					<0.0025	
4/26/2017	<0.0025	<0.0025				
5/2/2017					<0.0025	
5/9/2017						0.0002 (J)
6/28/2017	<0.0025	<0.0025				
7/7/2017					<0.0025	
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				<0.0025		
3/28/2018	<0.0025	<0.0025				
3/30/2018					<0.0025	<0.0025
4/3/2018				<0.0025		
6/12/2018					<0.0025	
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					<0.0025	0.00018 (J)
10/16/2018			<0.0025			
2/27/2019	<0.0025	<0.0025				
3/5/2019					<0.0025	
3/6/2019						0.00015 (J)
4/1/2019	<0.0025	<0.0025				
4/4/2019					<0.0025	0.00019 (J)
9/25/2019	<0.0025	<0.0025				
9/26/2019			<0.0025		<0.0025	0.00017 (J)
2/11/2020		<0.0025				
2/12/2020	<0.0025					
3/19/2020	<0.0025	<0.0025				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2021 11:03 AM

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					<0.0025	
9/23/2020	<0.0025	<0.0025			<0.0025	
9/24/2020			<0.0025			
9/25/2020				0.00039 (J)		
10/7/2020						0.00012 (J)

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2021 11:03 AM

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)	<0.01		
6/7/2016					<0.01			<0.01	<0.01
7/27/2016					0.0008 (J)	0.0007 (J)	0.0006 (J)	0.0005 (J)	
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						0.0012 (J)	<0.01		
3/2/2017					0.001 (J)				
3/6/2017								<0.01	<0.01
4/26/2017						0.0005 (J)	0.0003 (J)	0.0007 (J)	<0.01
5/2/2017					0.0007 (J)				
6/28/2017						0.0006 (J)	<0.01		
6/29/2017					0.0006 (J)			0.0005 (J)	<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					0.00087 (J)	0.001 (J)	0.00088 (J)		
2/12/2020								0.00045 (J)	<0.01
3/24/2020					0.00087 (J)	0.00095 (J)	0.0011 (J)	0.00077 (J)	<0.01
3/25/2020	0.00058 (J)								
9/23/2020		0.00071 (J)	<0.01		0.00098 (J)	0.00092 (J)	0.0012 (J)		
9/24/2020	0.00074 (J)			<0.01				0.00076 (J)	<0.01

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.01	<0.01				
6/7/2016						<0.01			
7/26/2016			<0.01	<0.01	<0.01				
7/28/2016						0.0008 (J)			
8/30/2016									<0.01
9/14/2016			<0.01	<0.01	<0.01				
9/20/2016						<0.01			
11/2/2016			<0.01	<0.01					
11/4/2016					<0.01				
11/8/2016						<0.01			
11/16/2016									<0.01
1/12/2017				<0.01	<0.01				
1/13/2017			<0.01						
1/16/2017						<0.01			
2/27/2017									<0.01
3/6/2017			<0.01						
3/7/2017				<0.01	<0.01				
3/9/2017						<0.01			
5/1/2017			<0.01	0.0004 (J)					
5/2/2017					<0.01	0.0007 (J)			
5/10/2017									0.0006 (J)
6/27/2017				<0.01	<0.01				
6/29/2017			<0.01						
7/10/2017						<0.01			
7/11/2017									<0.01
10/11/2017	<0.01								
10/12/2017		<0.01					0.0005 (J)	<0.01	<0.01
11/20/2017	<0.01	<0.01					<0.01		
11/21/2017								<0.01	
1/10/2018		<0.01							
1/11/2018	<0.01							<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	<0.01	<0.01					<0.01	<0.01	
4/4/2018									<0.01
6/27/2018								<0.01	
6/28/2018	<0.01	<0.01					<0.01		
8/7/2018	<0.01	<0.01					<0.01	<0.01	
9/20/2018									<0.01
9/24/2018	<0.01	<0.01					<0.01	<0.01	
3/4/2019			<0.01	<0.01	<0.01				
3/6/2019						<0.01			
8/21/2019	<0.01	0.00053 (J)							
8/22/2019							<0.01	<0.01	<0.01
10/9/2019	<0.01	0.0012 (J)					<0.01	<0.01	0.00043 (J)
2/12/2020	<0.01	0.00065 (J)	<0.01	<0.01	0.00043 (J)				
3/24/2020		0.00055 (J)		<0.01	0.0014 (J)				
3/25/2020	<0.01		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 1/13/2021 11:03 AM

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	0.0011 (J)	<0.01				
9/24/2020	<0.01	<0.01				0.0011 (J)			<0.01
9/25/2020							<0.01	<0.01	

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2021 11:03 AM

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				<0.01					
9/8/2010				<0.01					
3/10/2011				<0.01					
9/8/2011				<0.01					
3/5/2012				<0.01					
9/10/2012				<0.01					
2/6/2013				<0.01					
8/12/2013				<0.01					
2/5/2014				0.0059					
8/5/2014				<0.01					
2/4/2015				<0.01					
8/3/2015				0.0011 (J)					
2/16/2016				<0.01					
6/1/2016						0.0035	<0.01		
6/2/2016					<0.01				<0.01
7/25/2016							<0.01		<0.01
7/26/2016					<0.01	<0.01			
8/30/2016			<0.01						
8/31/2016	<0.01			<0.01					
9/1/2016		0.0013 (J)							
9/13/2016						<0.01	<0.01		
9/14/2016								<0.01	
9/15/2016					<0.01				
9/19/2016									<0.01
11/1/2016						<0.01			<0.01
11/2/2016					<0.01				
11/4/2016							<0.01	<0.01	
11/14/2016			0.0093 (J)						
11/15/2016		0.0014 (J)							
11/16/2016	<0.01								
11/28/2016				<0.01					
12/15/2016								<0.01	
1/10/2017					<0.01				
1/11/2017						<0.01			
1/16/2017							<0.01	<0.01	<0.01
2/21/2017									<0.01
2/22/2017				<0.01					
2/24/2017	<0.01		<0.01						
2/27/2017		0.0016 (J)							
3/2/2017						0.0009 (J)	0.0004 (J)		
3/3/2017								0.0005 (J)	
3/8/2017					<0.01				
4/26/2017					<0.01				0.0016 (J)
4/27/2017						<0.01	<0.01		
4/28/2017								0.0004 (J)	
5/8/2017			<0.01	<0.01					

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2021 11:03 AM

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								<0.01	
6/27/2017						<0.01	<0.01		
6/28/2017								<0.01	
6/30/2017					<0.01				<0.01
7/11/2017	<0.01		<0.01						
7/13/2017		0.0019 (J)							
7/17/2017				<0.01					
10/10/2017			<0.01						
10/11/2017		0.0014 (J)							
10/12/2017	<0.01								
10/16/2017				<0.01					
2/19/2018				<0.01					
3/27/2018					<0.01		<0.01		<0.01
3/28/2018								<0.01	
3/29/2018						<0.01			
4/2/2018			<0.01						
4/4/2018	<0.01	<0.01							
8/6/2018				<0.01					
9/19/2018			<0.01						
9/20/2018	<0.01	0.0017 (J)							
2/25/2019				<0.01					
2/26/2019					<0.01				<0.01
2/27/2019						<0.01	<0.01	<0.01	
3/28/2019						<0.01	0.0021 (J)		
3/29/2019					<0.01			<0.01	
4/1/2019									<0.01
6/12/2019				<0.01					
8/19/2019				<0.01					
8/20/2019			<0.01						
8/21/2019	0.00062 (J)								
9/24/2019						0.00072 (J)	0.0028 (J)	<0.01	
9/25/2019					<0.01				<0.01
10/8/2019				<0.01					
10/9/2019	0.00074 (J)								
2/10/2020						0.00042 (J)	<0.01		
2/11/2020								<0.01	
2/12/2020					<0.01				<0.01
3/17/2020				<0.01					
3/18/2020					<0.01		0.00044 (J)		
3/19/2020						0.00084 (J)		0.00048 (J)	<0.01
3/25/2020	<0.01	0.0019 (J)							
8/26/2020				<0.01					
8/27/2020			<0.01						
9/22/2020			<0.01	<0.01					
9/23/2020						0.00062 (J)	0.00058 (J)	<0.01	
9/24/2020		0.0019 (J)							<0.01
9/25/2020	0.00071 (J)				<0.01				

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	0.0013 (J)					
6/8/2016					<0.01	
7/25/2016		<0.01				
7/26/2016	<0.01					
8/1/2016					<0.01	
9/2/2016						<0.01
9/14/2016		<0.01				
9/15/2016	<0.01					
9/20/2016					<0.01	
11/1/2016	<0.01	<0.01				
11/8/2016					<0.01	
11/14/2016						0.0035
1/11/2017	<0.01	<0.01				
1/17/2017					<0.01	
2/28/2017						<0.01
3/1/2017		0.0004 (J)				
3/2/2017	0.0006 (J)					
3/8/2017					<0.01	
4/26/2017	<0.01	<0.01				
5/2/2017					0.0011 (J)	
5/9/2017						<0.01
6/28/2017	<0.01	<0.01				
7/7/2017					<0.01	
7/13/2017						<0.01
9/22/2017						<0.01
9/29/2017						<0.01
10/6/2017						<0.01
10/12/2017				0.0019 (J)		
11/21/2017				0.0017 (J)		
1/11/2018				0.001 (J)		
2/20/2018				<0.01		
3/28/2018	<0.01	<0.01				
3/30/2018					<0.01	<0.01
4/3/2018				<0.01		
6/29/2018				<0.01		
8/6/2018				<0.01		
9/24/2018				<0.01		
2/27/2019	<0.01	<0.01				
3/5/2019					<0.01	
3/6/2019						<0.01
4/1/2019	<0.01	<0.01				
9/25/2019	0.0014 (J)	0.0019 (J)				
2/11/2020		<0.01				
2/12/2020	<0.01					
3/19/2020	<0.01	<0.01				
3/25/2020			0.0012 (J)			0.00074 (J)
3/26/2020					0.00094 (J)	
9/23/2020	<0.01	<0.01			<0.01	
9/24/2020			0.00061 (J)			
9/25/2020				<0.01		
10/7/2020						0.0013 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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)				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2021 11:03 AM

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)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2021 11:03 AM

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)				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2021 11:03 AM

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								0.0013 (J)	
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					8E-05 (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	0.0001 (J)		
6/29/2017					8E-05 (J)			<0.005	<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			
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		
2/11/2020					<0.005	<0.005	<0.005		
2/12/2020								<0.005	<0.005
3/24/2020					6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)	0.00011 (J)	<0.005
3/25/2020	<0.005								
9/23/2020		<0.005	0.00028 (J)		4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)		
9/24/2020	<0.005			0.00011 (J)				9.2E-05 (J)	4.6E-05 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2021 11:03 AM

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						0.00044 (J)			
7/26/2016			<0.005	<0.005	<0.005				
7/28/2016						<0.005			
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									0.0002 (J)
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				0.0001 (J)	7E-05 (J)				
3/9/2017						<0.005			
5/1/2017			<0.005	<0.005					
5/2/2017					<0.005	<0.005			
5/10/2017									9E-05 (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	0.0001 (J)								
10/12/2017		9E-05 (J)					0.0001 (J)	<0.005	<0.005
11/20/2017	<0.005	<0.005					0.0001 (J)		
11/21/2017								<0.005	
1/10/2018		<0.005							
1/11/2018	0.0002 (J)							7E-05 (J)	
1/12/2018							0.0001 (J)		
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								0.0011 (J)	
6/28/2018	<0.005	<0.005					<0.005		
8/7/2018	<0.005	<0.005					<0.005	<0.005	
9/20/2018									<0.005
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			
4/3/2019			<0.005	<0.005	<0.005				
4/4/2019						<0.005			
8/21/2019	<0.005	<0.005							
8/22/2019							<0.005	6.7E-05 (J)	<0.005
9/24/2019				<0.005	9E-05 (J)				
9/25/2019			<0.005						
9/27/2019						0.00013 (J)			

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.005	<0.005					<0.005	0.00012 (J)	<0.005
2/12/2020	<0.005	<0.005	<0.005	<0.005	<0.005				
3/24/2020		<0.005		5.4E-05 (J)	6.8E-05 (J)				
3/25/2020	5.1E-05 (J)		<0.005				<0.005	<0.005	4.7E-05 (J)
3/26/2020						<0.005			
9/22/2020			<0.005	4.5E-05 (J)	4.2E-05 (J)				
9/24/2020	<0.005	3.8E-05 (J)				4.6E-05 (J)			<0.005
9/25/2020							<0.005	<0.005	

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2021 11:03 AM

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						0.00056 (J)	<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		<0.005							
9/13/2016						0.0001 (J)	<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			<0.005						
11/15/2016		<0.005							
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		<0.005							
3/2/2017						0.0001 (J)	<0.005		
3/3/2017								<0.005	
3/8/2017					0.0001 (J)				
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: Lead (mg/L) Analysis Run 1/13/2021 11:03 AM

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	8E-05 (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		<0.005							
7/17/2017				<0.005					
10/10/2017			<0.005						
10/11/2017		<0.005							
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	<0.005							
2/25/2019				<0.005					
2/26/2019					<0.005				<0.005
2/27/2019						<0.005	<0.005	<0.005	
6/12/2019				<0.005					
8/19/2019				<0.005					
8/20/2019			<0.005						
8/21/2019	<0.005								
9/26/2019		<0.005							
10/8/2019				<0.005					
10/9/2019	<0.005								
2/10/2020						4.9E-05 (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		<0.005		
3/19/2020						0.00012 (J)		<0.005	<0.005
3/25/2020	7.5E-05 (J)	5.9E-05 (J)							
8/26/2020				<0.005					
8/27/2020			<0.005						
9/22/2020			<0.005	0.0001 (J)					
9/23/2020						<0.005	0.00021 (J)	0.0011 (J)	
9/24/2020		<0.005							<0.005
9/25/2020	<0.005				<0.005				

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2021 11:03 AM

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	0.00056 (J)					
6/8/2016					<0.005	
7/25/2016		<0.005				
7/26/2016	0.0001 (J)					
8/1/2016					<0.005	
9/2/2016						0.0017 (J)
9/14/2016		<0.005				
9/15/2016	0.0002 (J)					
9/20/2016					<0.005	
11/1/2016	<0.005	<0.005				
11/8/2016					<0.005	
11/14/2016						0.0002 (J)
1/11/2017	<0.005	<0.005				
1/17/2017					<0.005	
2/28/2017						0.0003 (J)
3/1/2017		<0.005				
3/2/2017	0.0002 (J)					
3/8/2017					<0.005	
4/26/2017	<0.005	<0.005				
5/2/2017					<0.005	
5/9/2017						0.0004 (J)
6/28/2017	<0.005	<0.005				
7/7/2017					<0.005	
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				<0.005		
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
4/4/2019					<0.005	0.00037 (J)
9/26/2019			<0.005		<0.005	0.00023 (J)
2/11/2020		<0.005				
2/12/2020	<0.005					
3/19/2020	0.00017 (J)	<0.005				
3/25/2020			<0.005			0.0001 (J)
3/26/2020					5.3E-05 (J)	
9/23/2020	<0.005	0.00015 (J)			<0.005	
9/24/2020			<0.005			
9/25/2020				8.5E-05 (J)		
10/7/2020						0.00077 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2021 11:03 AM

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)

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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)

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2021 11:03 AM

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					9.5E-05 (J)			9.6E-05 (J)	9.6E-05 (J)
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					<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
9/25/2018					<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/5/2019					<0.0005		<0.0005	<0.0005	<0.0005
3/6/2019						<0.0005			
2/11/2020					<0.0005	<0.0005	<0.0005		
2/12/2020								<0.0005	<0.0005
9/23/2020		<0.0005	<0.0005						
9/24/2020	<0.0005			<0.0005					

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2021 11:03 AM

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						9.8E-05 (J)			
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						<0.0005			
11/16/2016									<0.0005
1/12/2017				<0.0005	<0.0005				
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									<0.0005
6/27/2017				<0.0005	<0.0005				
6/29/2017			<0.0005						
7/10/2017						<0.0005			
7/11/2017									<0.0005
10/11/2017	<0.0005								
10/12/2017		<0.0005					<0.0005	<0.0005	<0.0005
11/20/2017	7E-05 (J)	8E-05 (J)					8E-05 (J)		
11/21/2017								6E-05 (J)	
1/10/2018		<0.0005							
1/11/2018	<0.0005							<0.0005	
1/12/2018							<0.0005		
2/19/2018		<0.0005						<0.0005	
2/20/2018	<0.0005						<0.0005		
3/29/2018			<0.0005	<0.0005	<0.0005				
3/30/2018						<0.0005			
4/3/2018	<0.0005	<0.0005					<0.0005	<0.0005	
4/4/2018									<0.0005
6/27/2018								<0.0005	
6/28/2018	<0.0005	3.6E-05 (J)					3.7E-05 (J)		
8/7/2018	<0.0005	<0.0005					<0.0005	<0.0005	
9/20/2018									4.8E-05 (J)
9/24/2018	<0.0005	<0.0005					<0.0005	<0.0005	
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			
8/21/2019	<0.0005	<0.0005							
8/22/2019							<0.0005	<0.0005	<0.0005
2/12/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2021 11:03 AM

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				1.36E-05 (J)					
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			<0.0005						
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			<0.0005						
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						<0.0005			
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		<0.0005							
3/2/2017						<0.0005	<0.0005		
3/3/2017								<0.0005	
3/8/2017					<0.0005				
4/26/2017					<0.0005				<0.0005
4/27/2017						<0.0005	<0.0005		
4/28/2017								<0.0005	
5/8/2017			<0.0005	<0.0005					

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2021 11:03 AM

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			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)	<0.0005	
3/28/2019						4E-05 (J)	<0.0005		
3/29/2019					<0.0005			<0.0005	
4/1/2019									8.2E-05 (J)
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
10/8/2019				<0.0005					
2/10/2020						<0.0005	<0.0005		
2/11/2020								<0.0005	
2/12/2020					<0.0005				<0.0005
5/6/2020				<0.0005					
8/26/2020				<0.0005					
8/27/2020			<0.0005						
9/22/2020				<0.0005					

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2021 11:03 AM

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						<0.0005
1/11/2017	<0.0005	<0.0005				
1/17/2017					<0.0005	
2/28/2017						<0.0005
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						<0.0005
6/28/2017	<0.0005	<0.0005				
7/7/2017					<0.0005	
7/13/2017						<0.0005
9/22/2017						<0.0005
9/29/2017						<0.0005
10/6/2017						<0.0005
10/12/2017				<0.0005		
11/21/2017				6E-05 (J)		
1/11/2018				<0.0005		
2/20/2018				<0.0005		
3/28/2018	<0.0005	<0.0005				
3/30/2018					<0.0005	<0.0005
4/3/2018				<0.0005		
6/29/2018				<0.0005		
8/6/2018				<0.0005		
9/24/2018				<0.0005		
9/26/2018					<0.0005	<0.0005
2/27/2019	6.2E-05 (J)	6.1E-05 (J)				
3/5/2019					<0.0005	
3/6/2019						<0.0005
4/1/2019	9.6E-05 (J)	8.4E-05 (J)				
9/25/2019	<0.0005	<0.0005				
2/11/2020		<0.0005				
2/12/2020	<0.0005					
9/24/2020			<0.0005			
9/25/2020				<0.0005		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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)

Time Series

Constituent: pH (S.U.) Analysis Run 1/13/2021 11:03 AM

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)

Time Series

Constituent: pH (S.U.) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: pH (S.U.) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: pH (S.U.) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2021 11:03 AM

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					0.001 (J)			<0.01	0.00048 (J)
7/27/2016					0.0012 (J)	<0.01	<0.01	<0.01	
7/28/2016									<0.01
9/16/2016					0.0015 (J)		<0.01		
9/19/2016						<0.01		<0.01	0.0014 (J)
11/2/2016								<0.01	
11/3/2016					0.0015 (J)	<0.01	<0.01		<0.01
1/11/2017					0.0014 (J)	<0.01	<0.01		
1/13/2017								<0.01	<0.01
3/1/2017						<0.01	<0.01		
3/2/2017					0.0017 (J)				
3/6/2017								<0.01	<0.01
4/26/2017						<0.01	<0.01	<0.01	<0.01
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
6/5/2018									<0.01
6/6/2018								<0.01	
6/7/2018						<0.01			
6/11/2018					<0.01		<0.01		
9/25/2018					<0.01	<0.01	<0.01	<0.01	<0.01
10/16/2018	0.0019 (J)								
3/5/2019					<0.01		<0.01	<0.01	<0.01
3/6/2019						<0.01			
4/2/2019					<0.01				<0.01
4/3/2019						<0.01	<0.01	<0.01	
9/24/2019									<0.01
9/25/2019					<0.01			<0.01	
9/26/2019	<0.01					<0.01	<0.01		
1/15/2020		<0.01		0.045					
1/16/2020			0.0018 (J)						
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	0.016		<0.01	<0.01	<0.01		
9/24/2020	<0.01			0.026				<0.01	<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.01	<0.01				
6/7/2016						0.037			
7/26/2016			0.0009 (J)	<0.01	0.0009 (J)				
7/28/2016						0.0385			
8/30/2016									0.0711
9/14/2016			<0.01	<0.01	<0.01				
9/20/2016						0.0464			
11/2/2016			<0.01	<0.01					
11/4/2016					<0.01				
11/8/2016						0.0521			
11/16/2016									0.0313
1/12/2017				<0.01	<0.01				
1/13/2017			<0.01						
1/16/2017						0.0469			
2/27/2017									0.0316
3/6/2017			<0.01						
3/7/2017				<0.01	<0.01				
3/9/2017						0.0437			
5/1/2017			<0.01	<0.01					
5/2/2017					<0.01	0.0395			
5/10/2017									0.053
6/27/2017				<0.01	<0.01				
6/29/2017			<0.01						
7/10/2017						0.0386			
7/11/2017									0.0697
10/11/2017	<0.01								
10/12/2017		<0.01					0.265	0.0191	0.0594
11/20/2017	<0.01	0.0042 (J)					0.246		
11/21/2017								0.0687	
1/10/2018		0.0043 (J)							
1/11/2018	<0.01							0.069	
1/12/2018							0.249		
2/19/2018		<0.01						0.071	
2/20/2018	<0.01						0.253		
3/29/2018			<0.01	<0.01	<0.01				
3/30/2018						0.028			
4/3/2018	<0.01	<0.01					0.23	0.067	
4/4/2018									0.055
6/6/2018				<0.01					
6/7/2018			<0.01		<0.01				
6/12/2018						0.026			
6/27/2018								0.066	
6/28/2018	<0.01	0.0032 (J)					0.23		
8/7/2018	<0.01	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			<0.01	<0.01	<0.01				
9/27/2018						0.023			
3/4/2019			<0.01	<0.01	<0.01				
3/6/2019						0.019			
4/3/2019			<0.01	<0.01	<0.01				
4/4/2019						0.017			

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.01	0.0024 (J)							
8/22/2019							0.14	0.058	0.047
9/24/2019				<0.01	<0.01				
9/25/2019			<0.01						
9/27/2019						0.018			
10/9/2019	<0.01	0.0026 (J)					0.12	0.052	0.042
2/12/2020	<0.01	0.002 (J)	<0.01	<0.01	<0.01				
3/24/2020		0.002 (J)		<0.01	<0.01				
3/25/2020	<0.01		<0.01				0.099	0.057	0.046
3/26/2020						0.024			
9/22/2020			<0.01	<0.01	<0.01				
9/24/2020	<0.01	0.0016 (J)				0.031			0.046
9/25/2020							0.076	0.046	

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2021 11:03 AM

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				<0.01					
9/11/2007				<0.01					
3/20/2008				<0.01					
8/27/2008				<0.01					
3/3/2009				<0.01					
11/18/2009				<0.01					
3/3/2010				<0.01					
9/8/2010				<0.01					
3/10/2011				<0.01					
9/8/2011				<0.01					
3/5/2012				<0.01					
9/10/2012				<0.01					
2/6/2013				<0.01					
8/12/2013				<0.01					
2/5/2014				<0.01					
8/5/2014				<0.01					
2/4/2015				<0.01					
8/3/2015				<0.01					
2/16/2016				<0.01					
6/1/2016						<0.01	<0.01		
6/2/2016					0.0011 (J)				<0.01
7/25/2016							<0.01		<0.01
7/26/2016					0.0016 (J)	<0.01			
8/30/2016			0.0017 (J)						
8/31/2016	<0.01			<0.01					
9/1/2016		0.0086 (J)							
9/13/2016						<0.01	<0.01		
9/14/2016								<0.01	
9/15/2016					0.0014 (J)				
9/19/2016									<0.01
11/1/2016						<0.01			<0.01
11/2/2016					<0.01				
11/4/2016							<0.01	<0.01	
11/14/2016			<0.01						
11/15/2016		0.0056 (J)							
11/16/2016	<0.01								
11/28/2016				<0.01					
12/15/2016								<0.01	
1/10/2017					0.0012 (J)				
1/11/2017						<0.01			
1/16/2017							<0.01	<0.01	<0.01
2/21/2017									<0.01
2/22/2017				<0.01					
2/24/2017	<0.01		0.0011 (J)						
2/27/2017		0.0098 (J)							
3/2/2017						<0.01	<0.01		
3/3/2017								<0.01	
3/8/2017					<0.01				
4/26/2017					<0.01				<0.01
4/27/2017						<0.01	<0.01		
4/28/2017								<0.01	
5/8/2017			<0.01	<0.01					

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.01								
5/26/2017								<0.01	
6/27/2017						<0.01	<0.01		
6/28/2017								<0.01	
6/30/2017					<0.01				<0.01
7/11/2017	<0.01		<0.01						
7/13/2017		0.0093 (J)							
7/17/2017				<0.01					
10/10/2017			<0.01						
10/11/2017		0.0089 (J)							
10/12/2017	<0.01								
10/16/2017				<0.01					
2/19/2018				<0.01					
3/27/2018					<0.01		<0.01		<0.01
3/28/2018								<0.01	
3/29/2018						<0.01			
4/2/2018			<0.01						
4/4/2018	<0.01	<0.01							
8/6/2018				<0.01					
9/19/2018			<0.01						
9/20/2018	<0.01	0.0081 (J)							
2/25/2019				<0.01					
2/26/2019					<0.01				<0.01
2/27/2019						<0.01	<0.01	<0.01	
3/28/2019						<0.01	<0.01		
3/29/2019					0.0019 (J)			<0.01	
4/1/2019									<0.01
6/12/2019				<0.01					
8/19/2019				<0.01					
8/20/2019			<0.01						
8/21/2019	<0.01								
9/24/2019						<0.01	<0.01	<0.01	
9/25/2019					<0.01				<0.01
9/26/2019		0.0077 (J)							
10/8/2019				<0.01					
10/9/2019	<0.01								
2/10/2020						<0.01	<0.01		
2/11/2020								<0.01	
2/12/2020					<0.01				<0.01
3/17/2020				<0.01					
3/18/2020					<0.01		<0.01		
3/19/2020						<0.01		<0.01	<0.01
3/25/2020	<0.01	0.0085 (J)							
8/26/2020				<0.01					
8/27/2020			<0.01						
9/22/2020				<0.01					
9/23/2020						<0.01	<0.01	<0.01	
9/24/2020		0.0091 (J)							<0.01
9/25/2020	<0.01				<0.01				

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2021 11:03 AM

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	<0.01					
6/8/2016					<0.01	
7/25/2016		<0.01				
7/26/2016	<0.01					
8/1/2016					<0.01	
9/2/2016						0.0012 (J)
9/14/2016		<0.01				
9/15/2016	<0.01					
9/20/2016					<0.01	
11/1/2016	<0.01	<0.01				
11/8/2016					<0.01	
11/14/2016						<0.01
1/11/2017	<0.01	<0.01				
1/17/2017					<0.01	
2/28/2017						0.0017 (J)
3/1/2017		<0.01				
3/2/2017	<0.01					
3/8/2017					<0.01	
4/26/2017	<0.01	<0.01				
5/2/2017					<0.01	
5/9/2017						0.0018 (J)
6/28/2017	<0.01	<0.01				
7/7/2017					<0.01	
7/13/2017						0.0031 (J)
9/22/2017						0.0024 (J)
9/29/2017						0.002 (J)
10/6/2017						<0.01
10/12/2017				0.234		
11/21/2017				0.225		
1/11/2018				0.168		
2/20/2018				0.315		
3/28/2018	<0.01	<0.01				
3/30/2018					<0.01	<0.01
4/3/2018				0.28		
6/12/2018					<0.01	
6/13/2018						0.0024 (J)
6/29/2018				0.26		
8/6/2018				0.21		
9/24/2018				0.33		
9/26/2018					<0.01	0.0037 (J)
10/16/2018			<0.01			
2/27/2019	<0.01	<0.01				
3/5/2019					<0.01	
3/6/2019						0.0033 (J)
4/1/2019	<0.01	<0.01				
4/4/2019					<0.01	0.0029 (J)
9/25/2019	<0.01	<0.01				
9/26/2019			<0.01		<0.01	0.0019 (J)
2/11/2020		<0.01				
2/12/2020	<0.01					
3/19/2020	<0.01	<0.01				

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2021 11:03 AM

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			<0.01			0.0024 (J)
3/26/2020					<0.01	
9/23/2020	<0.01	<0.01			<0.01	
9/24/2020			<0.01			
9/25/2020				0.32		
10/7/2020						<0.01

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2021 11:03 AM

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: Total Dissolved Solids (mg/L) Analysis Run 1/13/2021 11:03 AM

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

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2021 11:03 AM

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 1/13/2021 11:03 AM

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				

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2021 11:03 AM

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

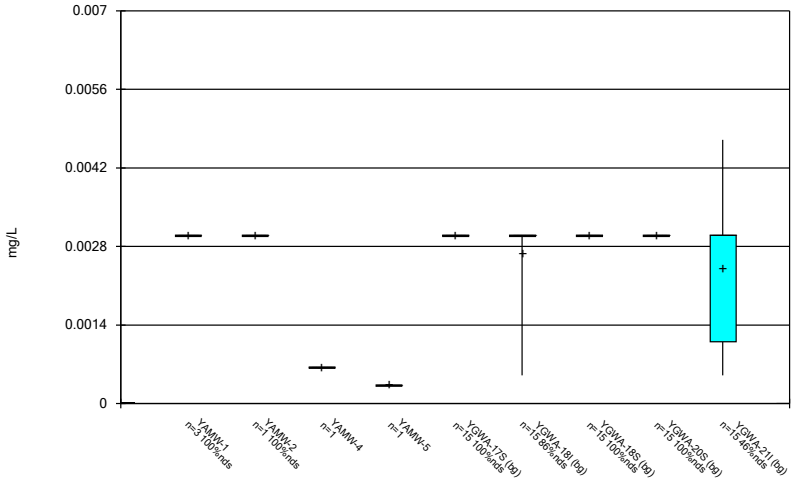
Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2021 11:03 AM

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

FIGURE B.

Box & Whiskers Plot

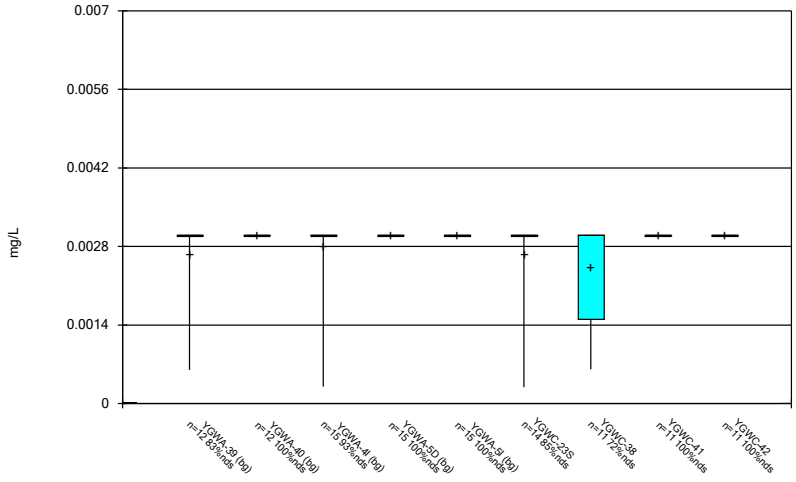


Constituent: Antimony Analysis Run 1/13/2021 11:06 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

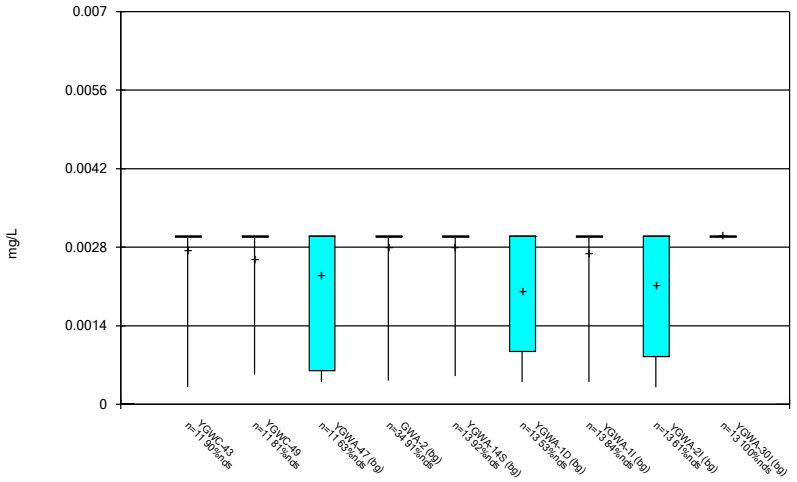


Constituent: Antimony Analysis Run 1/13/2021 11:06 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

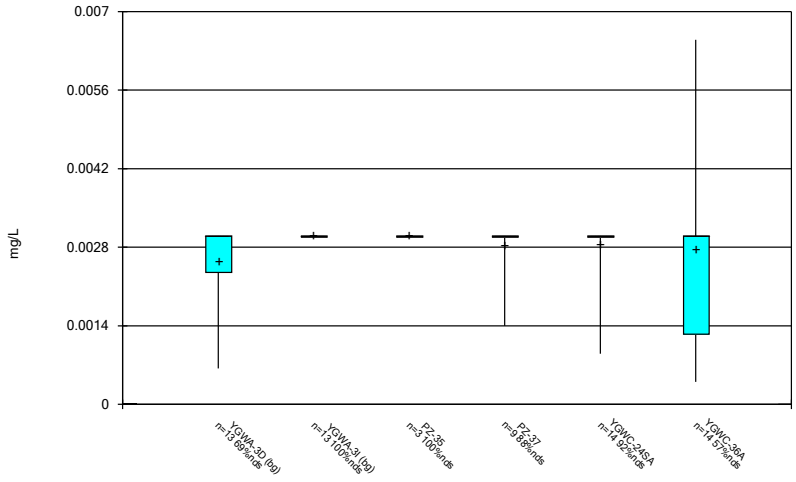


Constituent: Antimony Analysis Run 1/13/2021 11:06 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

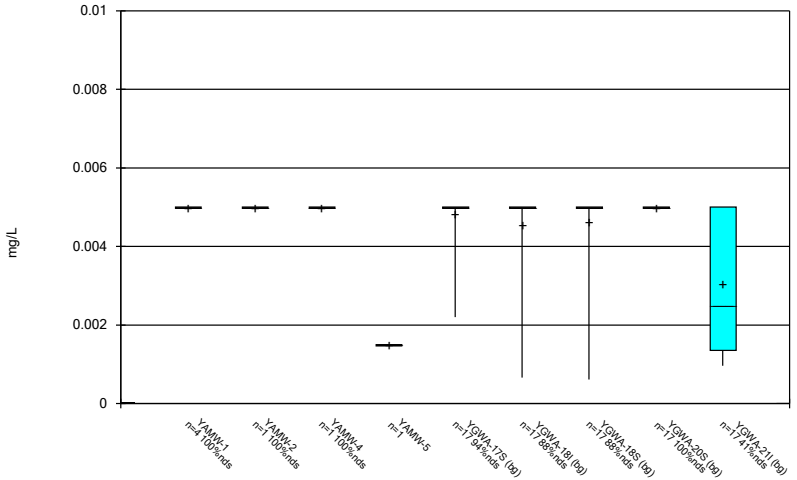
Box & Whiskers Plot



Constituent: Antimony Analysis Run 1/13/2021 11:06 AM

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

Box & Whiskers Plot

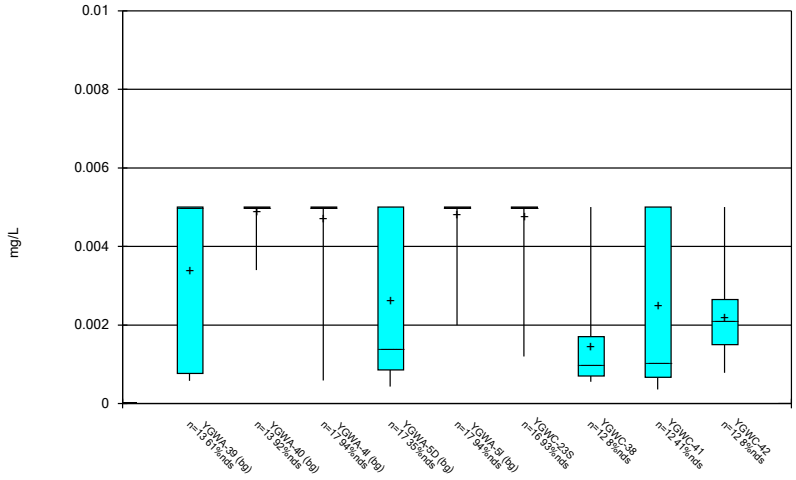


Constituent: Arsenic Analysis Run 1/13/2021 11:06 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

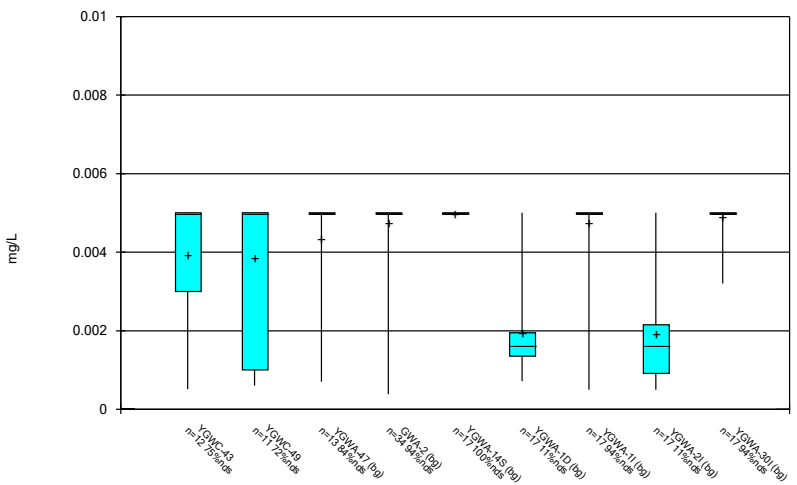


Constituent: Arsenic Analysis Run 1/13/2021 11:06 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

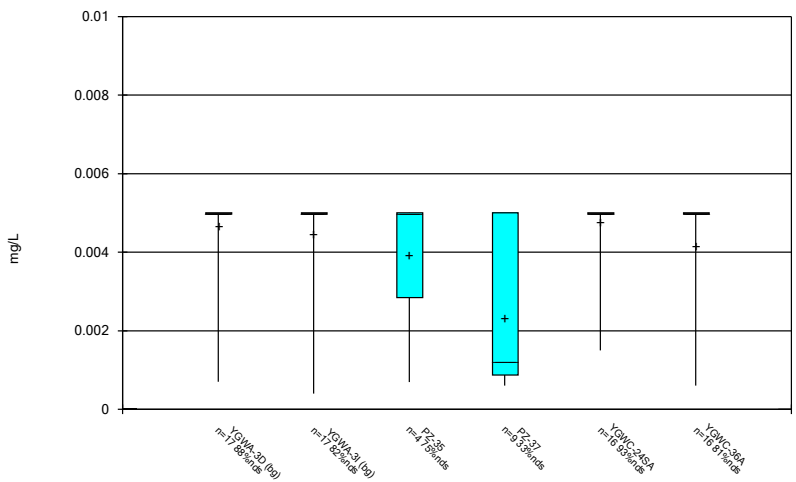


Constituent: Arsenic Analysis Run 1/13/2021 11:06 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

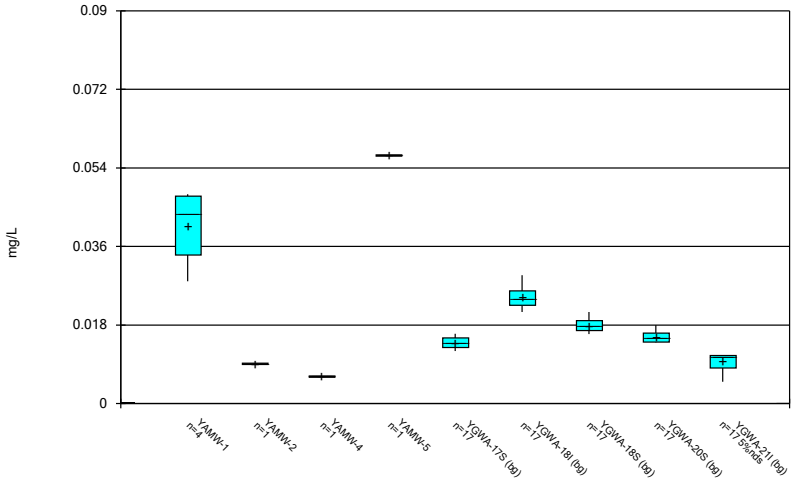


Constituent: Arsenic Analysis Run 1/13/2021 11:06 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

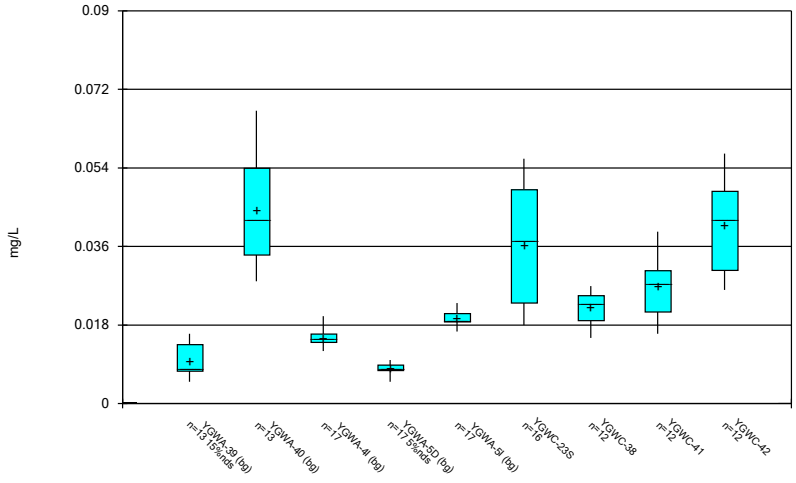


Constituent: Barium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

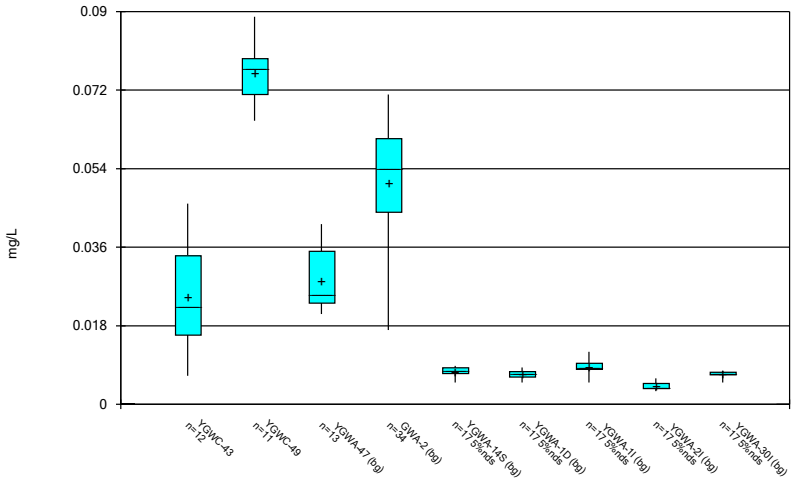


Constituent: Barium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

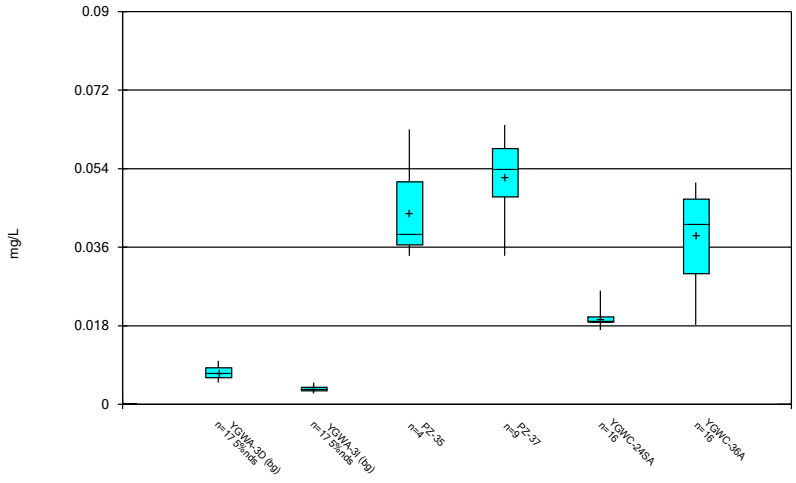


Constituent: Barium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

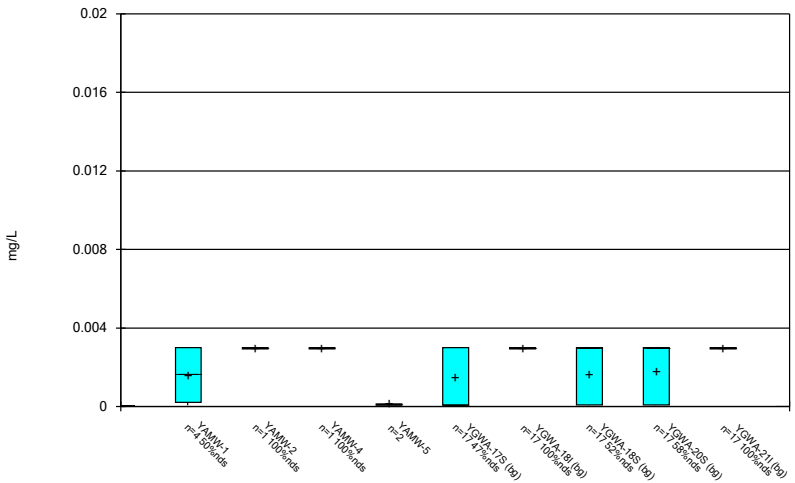
Box & Whiskers Plot



Constituent: Barium Analysis Run 1/13/2021 11:07 AM

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

Box & Whiskers Plot

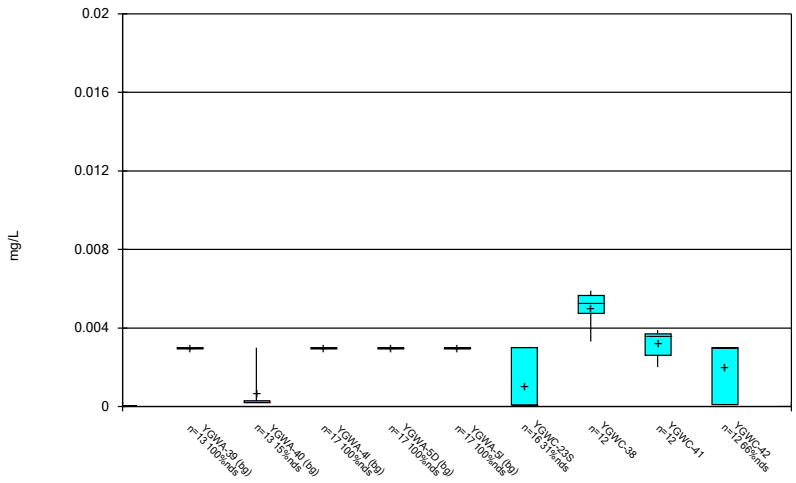


Constituent: Beryllium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

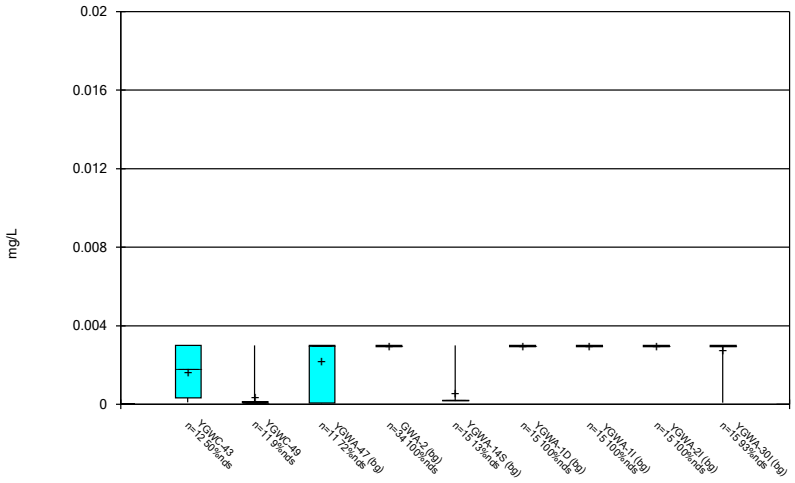


Constituent: Beryllium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

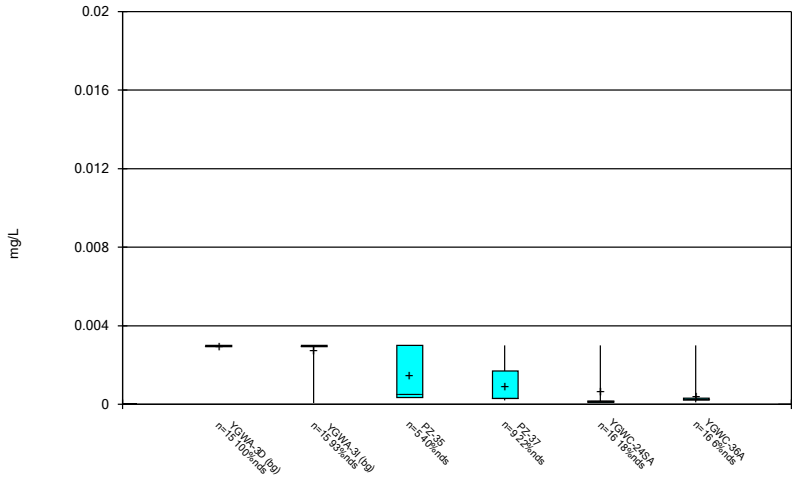


Constituent: Beryllium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

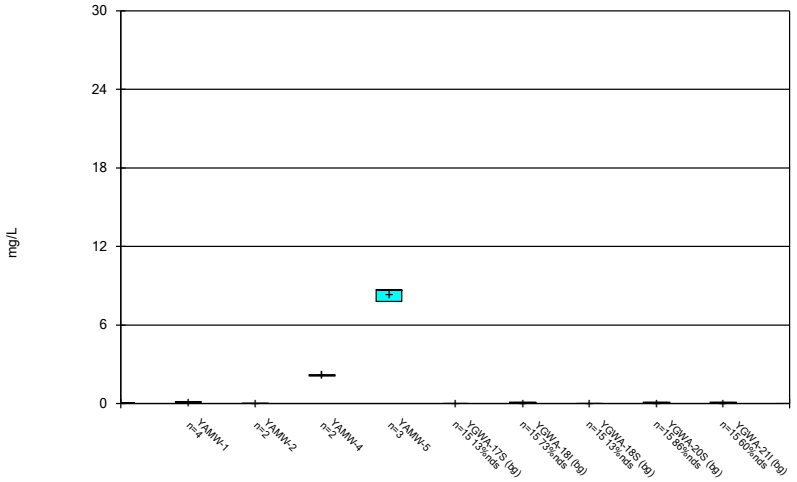
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 1/13/2021 11:07 AM

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

Box & Whiskers Plot

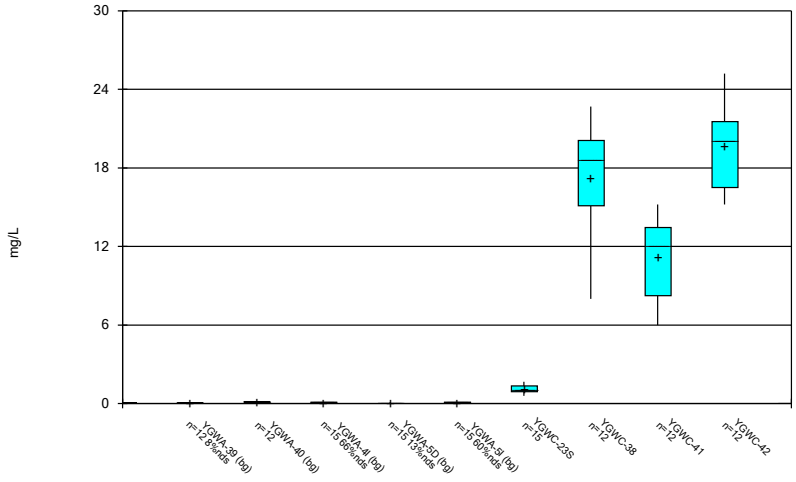


Constituent: Boron Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

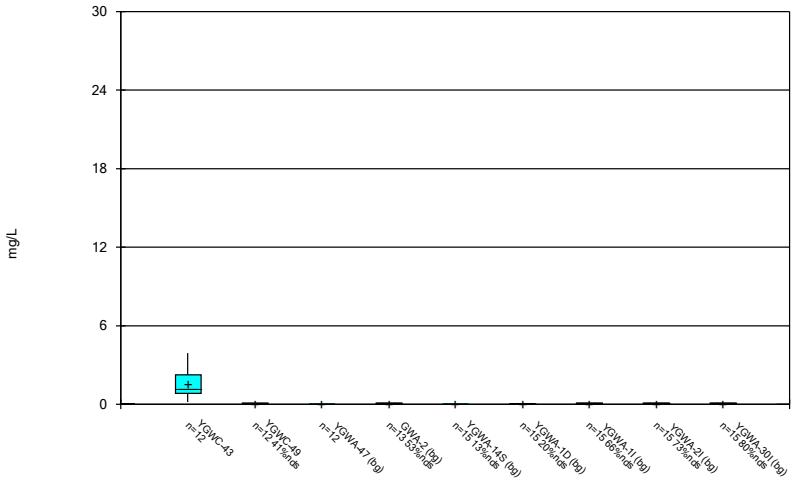


Constituent: Boron Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

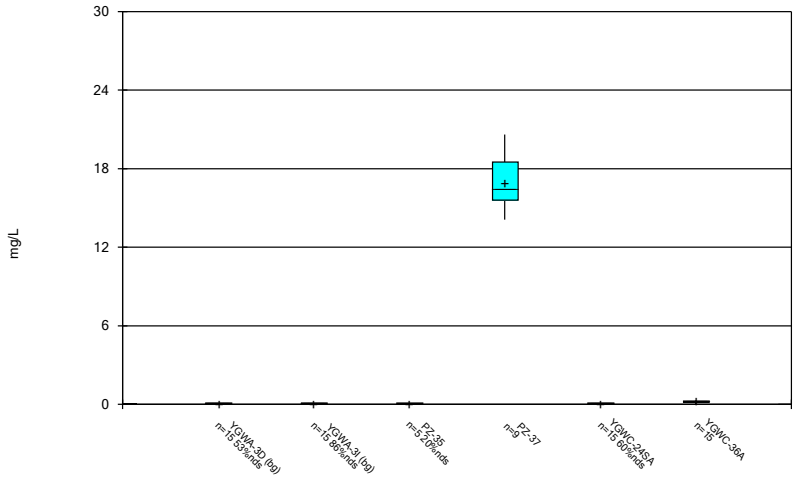


Constituent: Boron Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

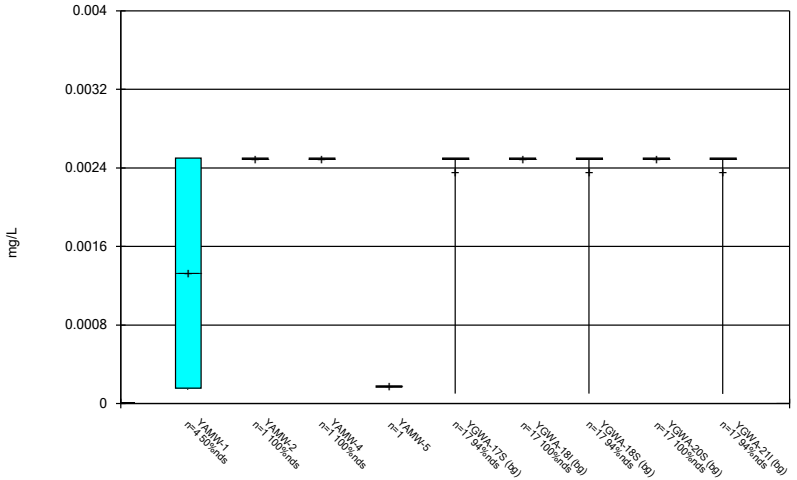
Box & Whiskers Plot



Constituent: Boron Analysis Run 1/13/2021 11:07 AM

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

Box & Whiskers Plot

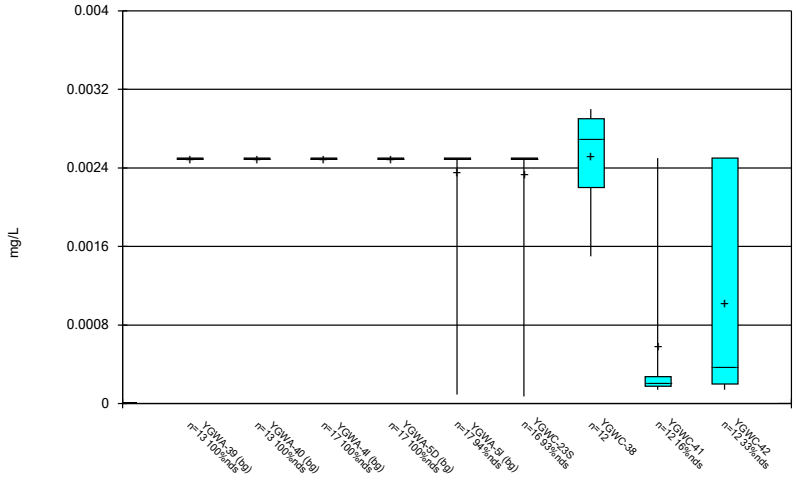


Constituent: Cadmium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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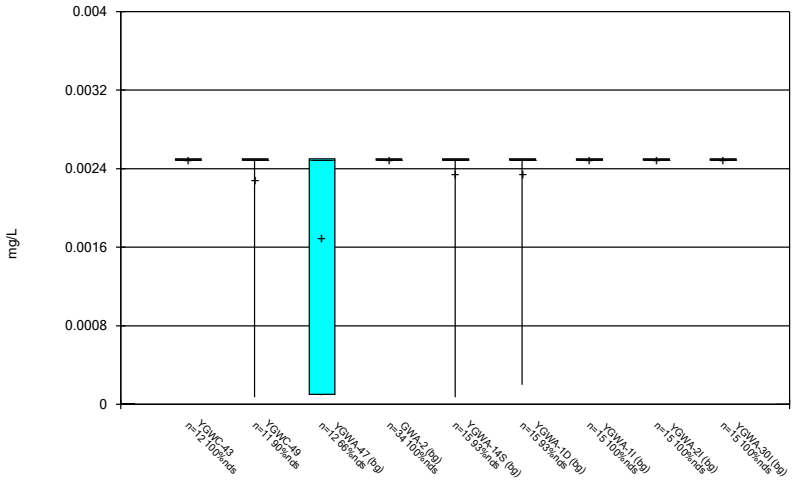
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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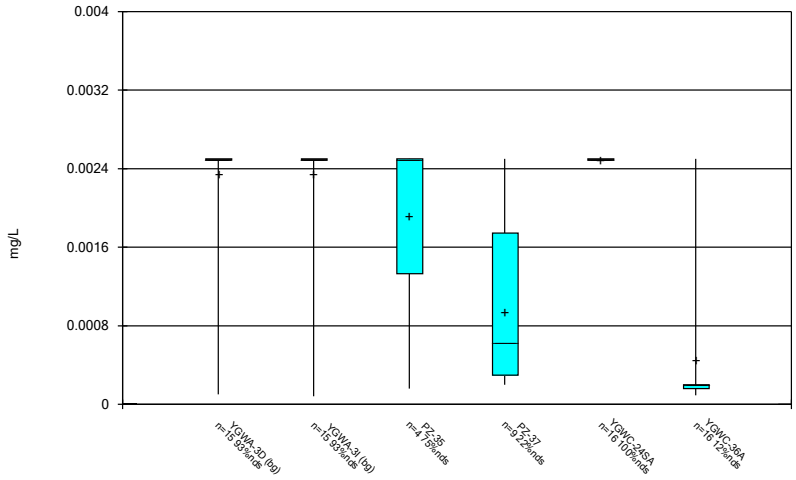
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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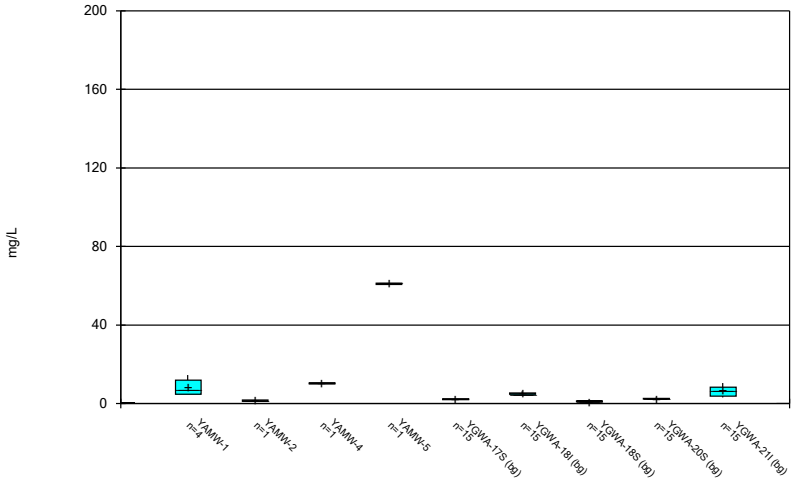
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

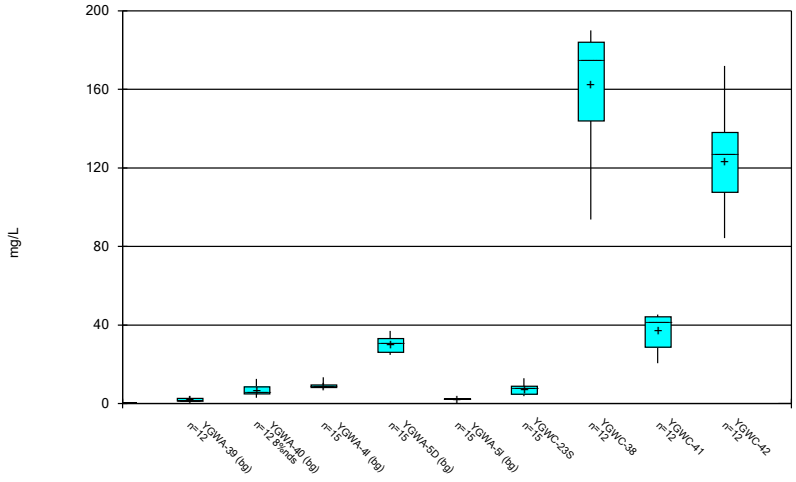


Constituent: Calcium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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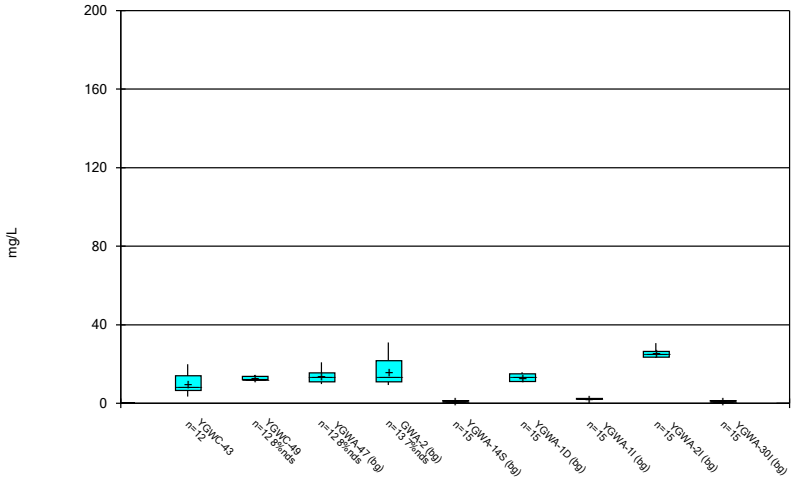
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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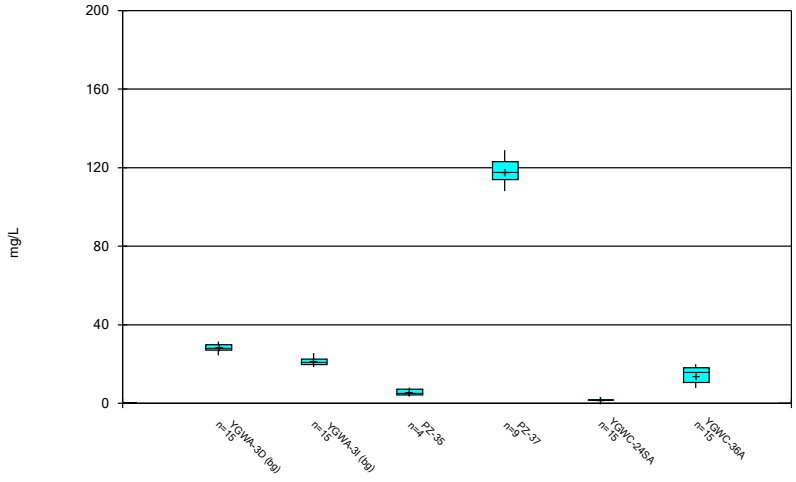
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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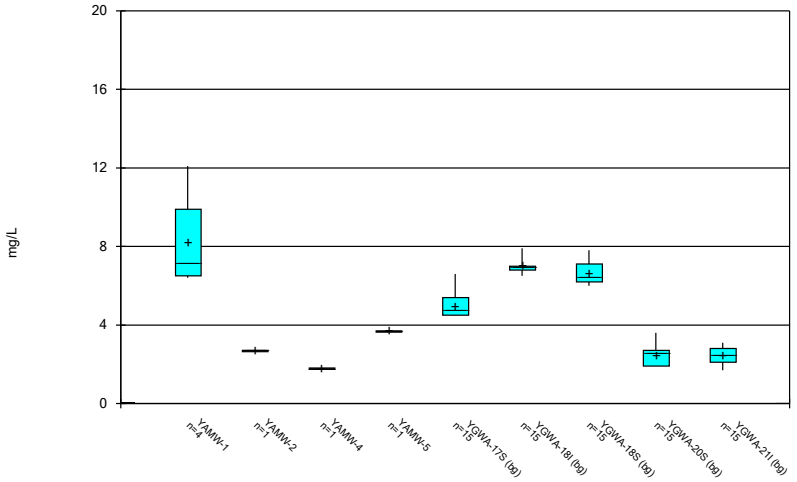
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

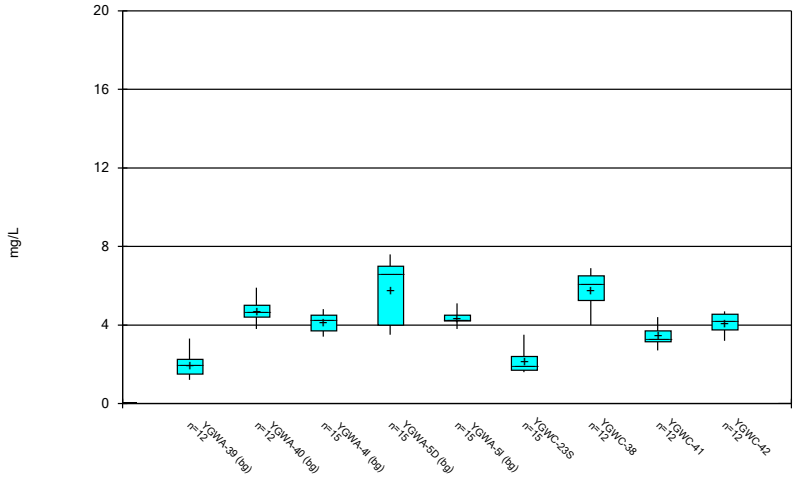


Constituent: Chloride Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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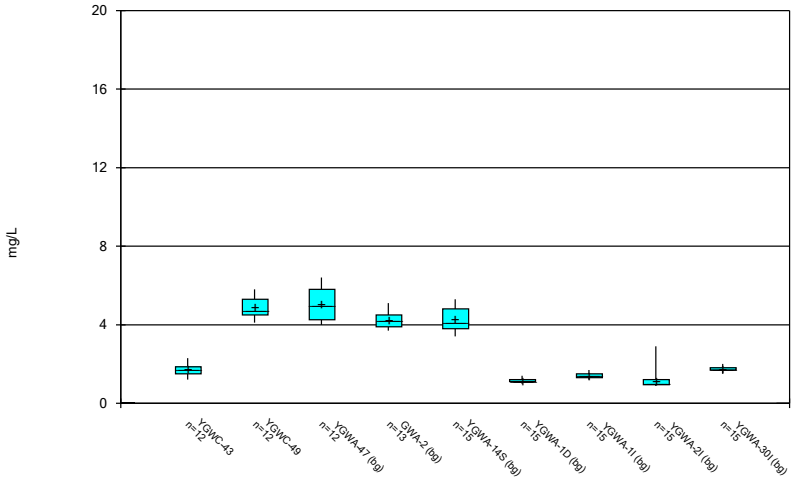
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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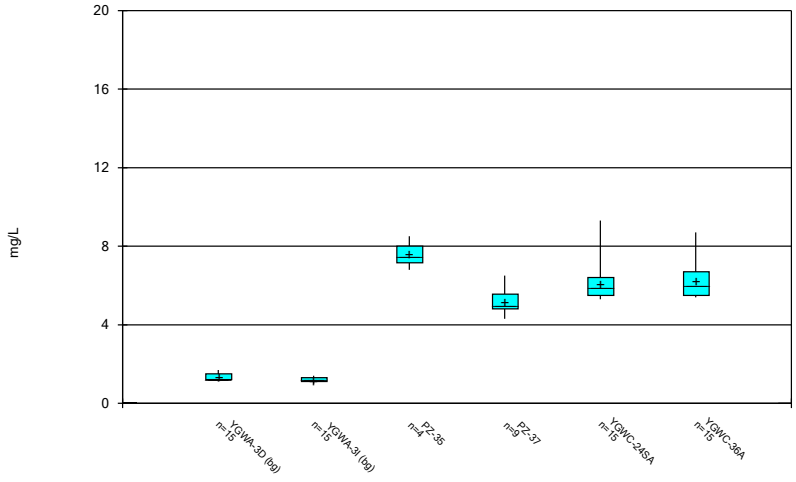
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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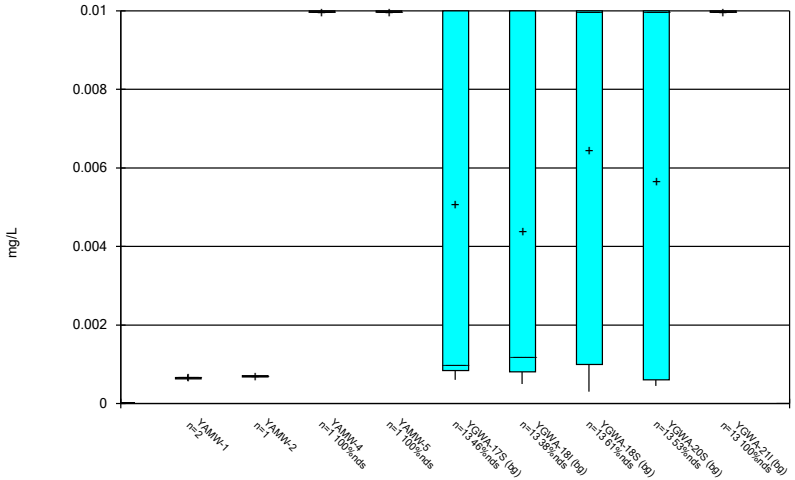
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

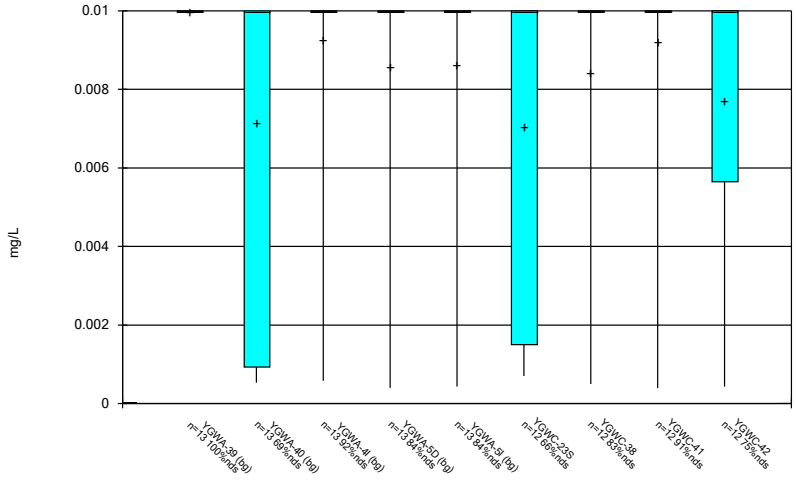


Constituent: Chromium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

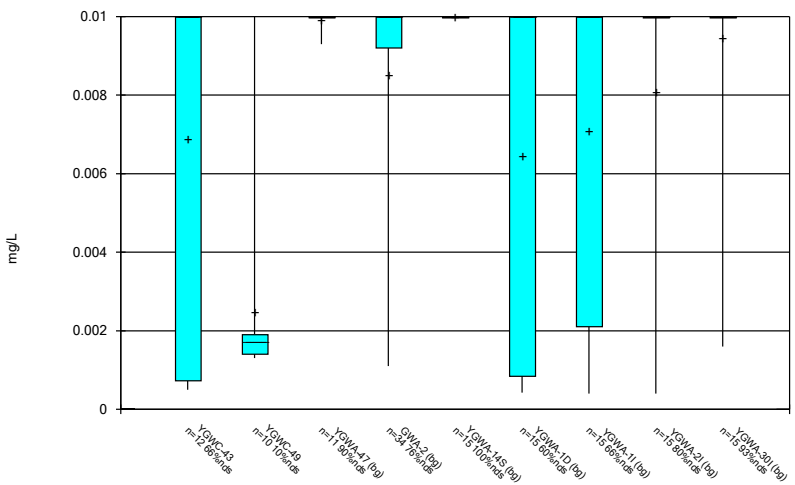


Constituent: Chromium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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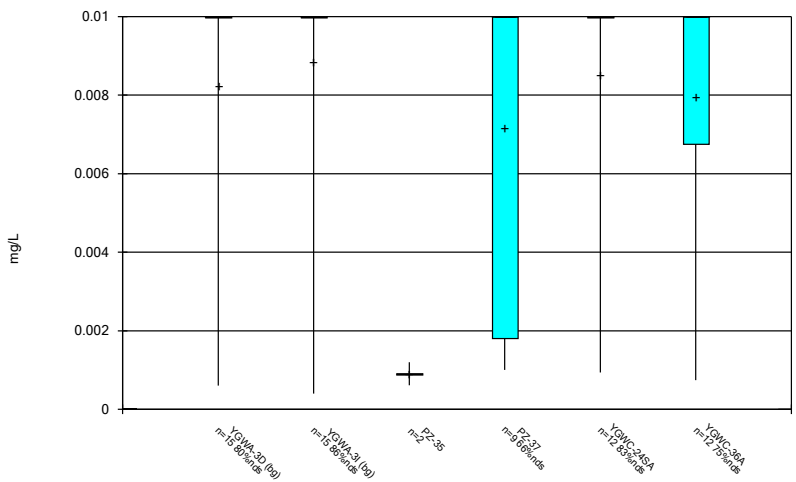
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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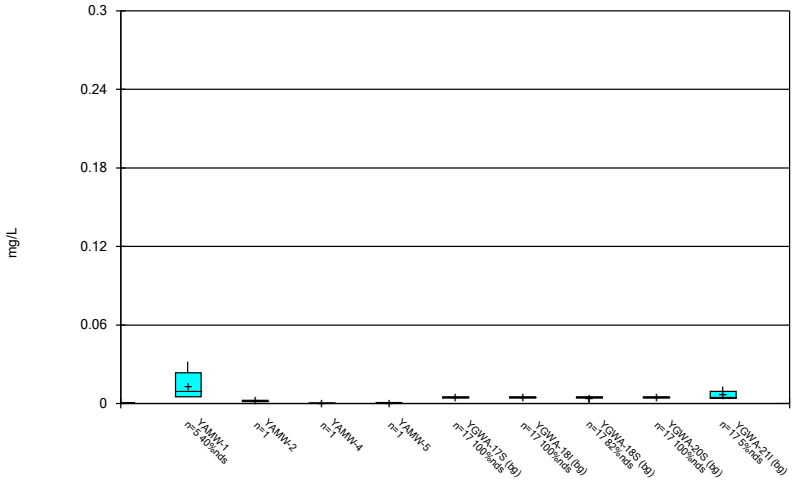
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

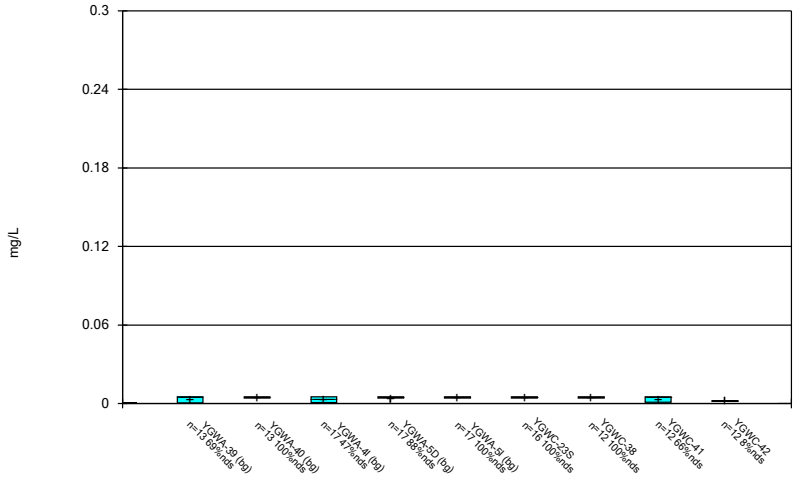


Constituent: Cobalt Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

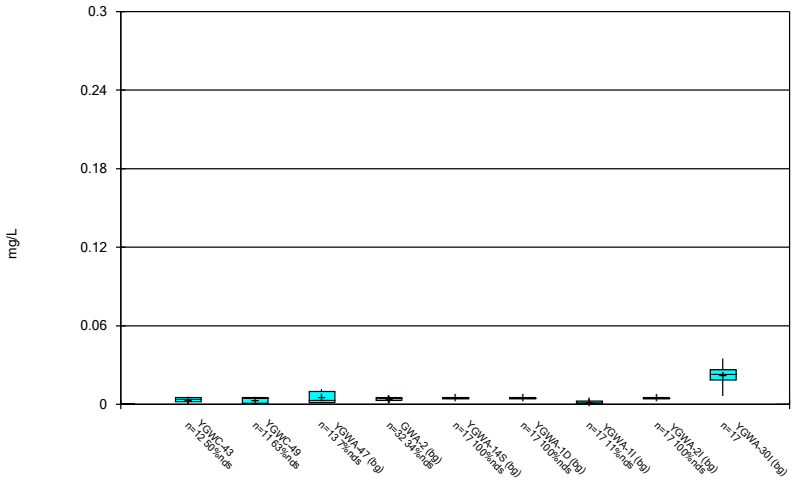


Constituent: Cobalt Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

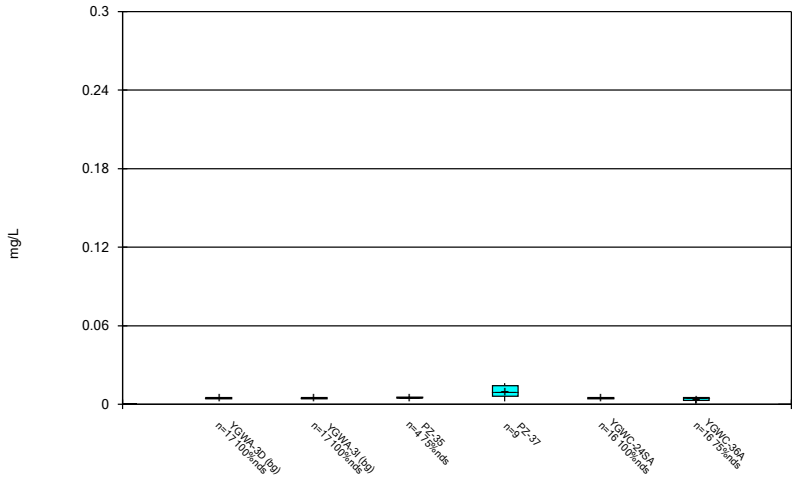


Constituent: Cobalt Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

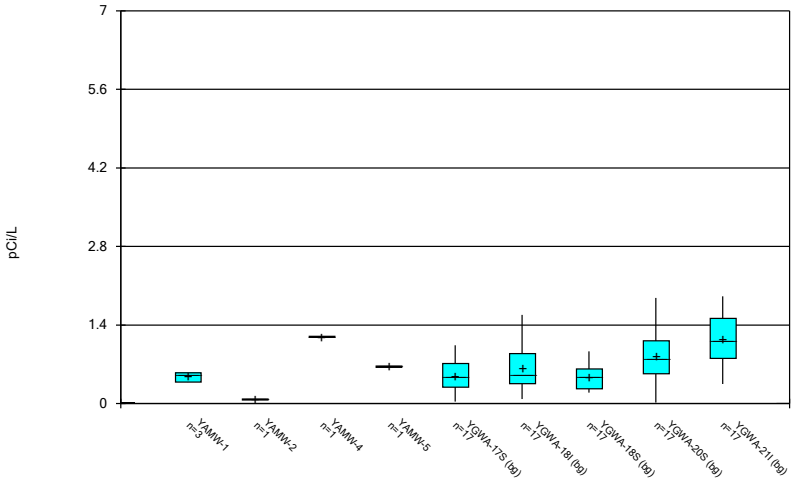
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 1/13/2021 11:07 AM

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

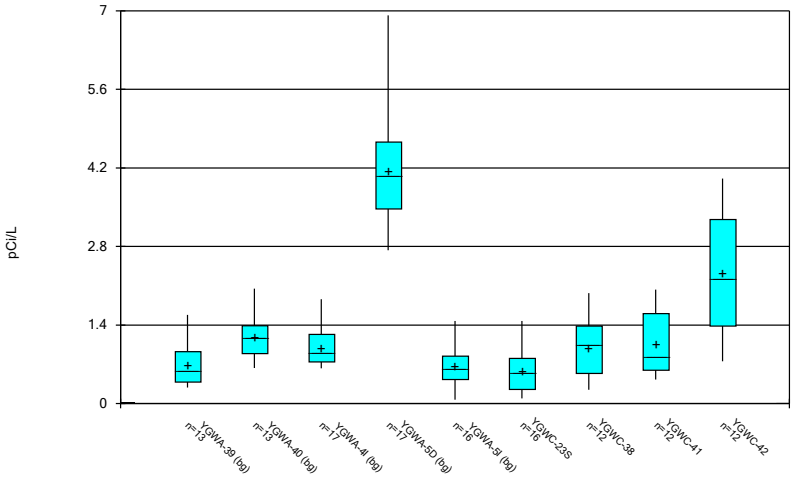
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 11:07 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

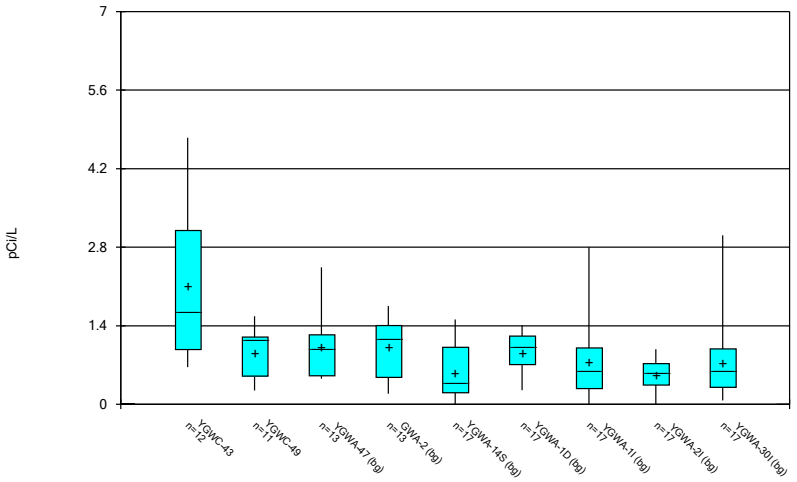
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 11:07 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

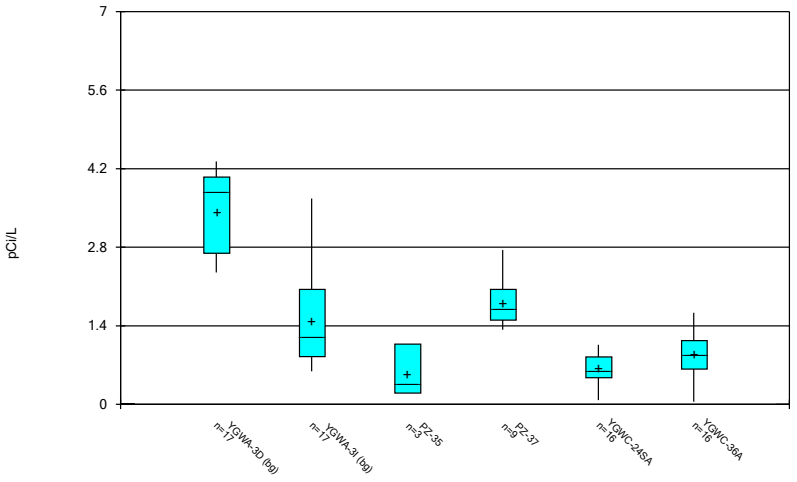
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 11:07 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

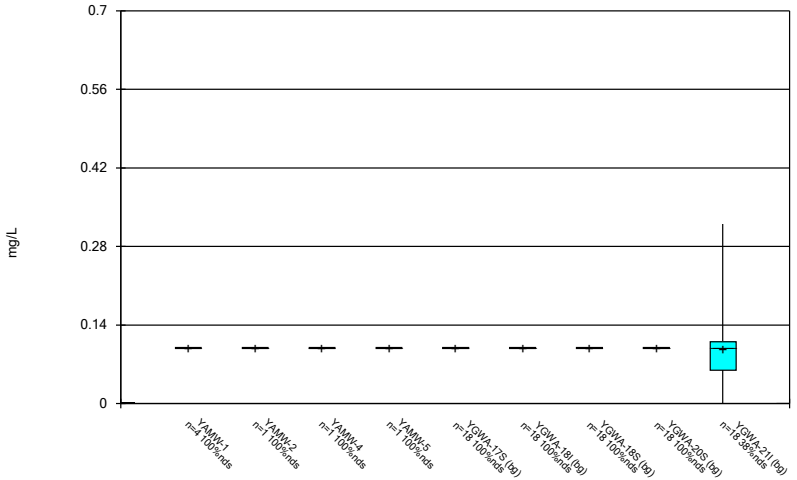
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 11:07 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

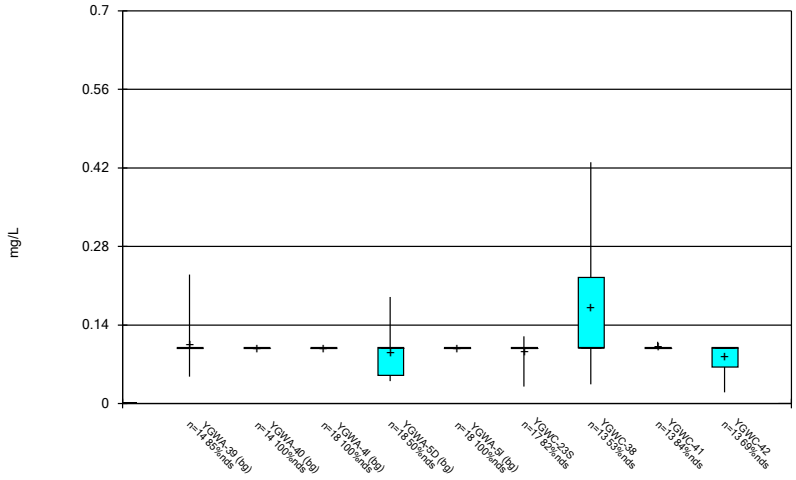


Constituent: Fluoride Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

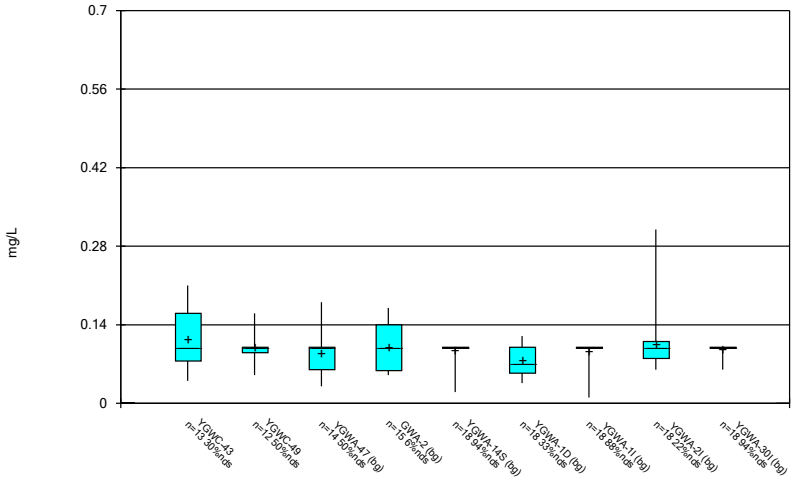


Constituent: Fluoride Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

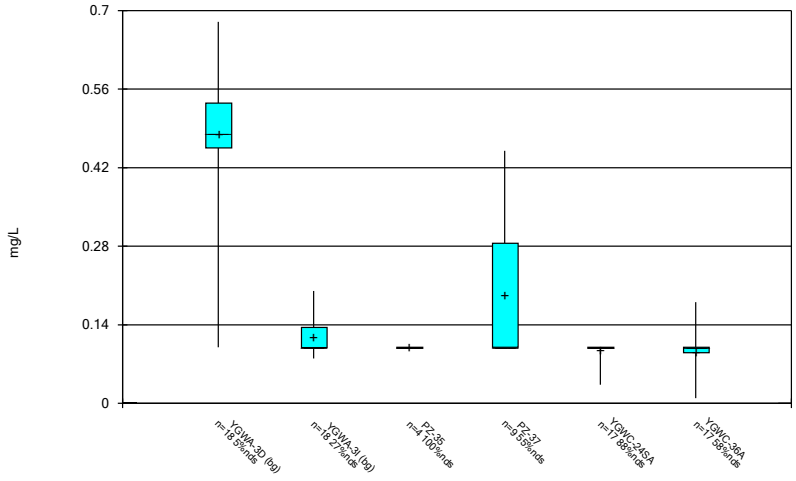


Constituent: Fluoride Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

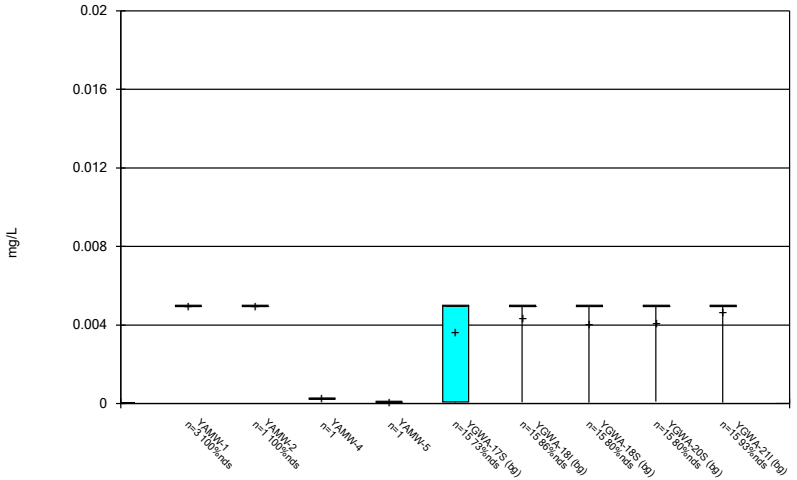
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 1/13/2021 11:07 AM

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

Box & Whiskers Plot

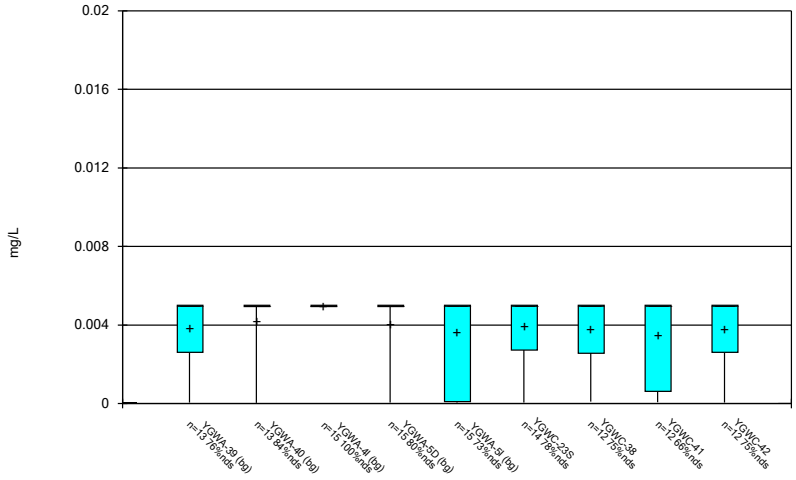


Constituent: Lead Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

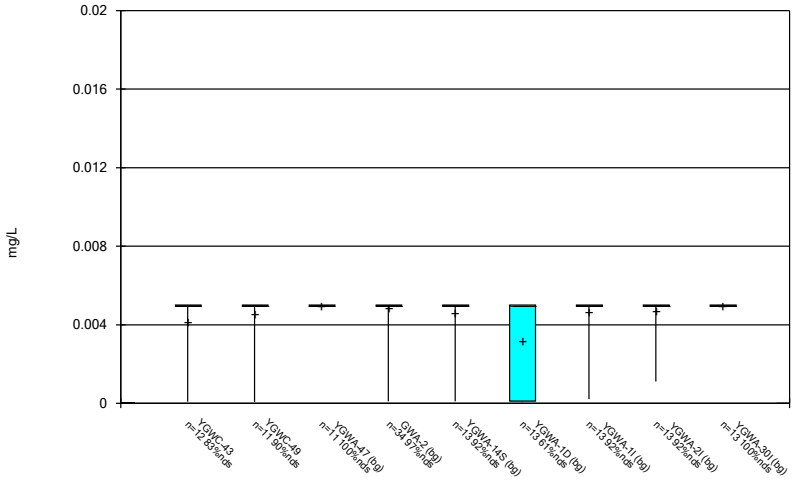


Constituent: Lead Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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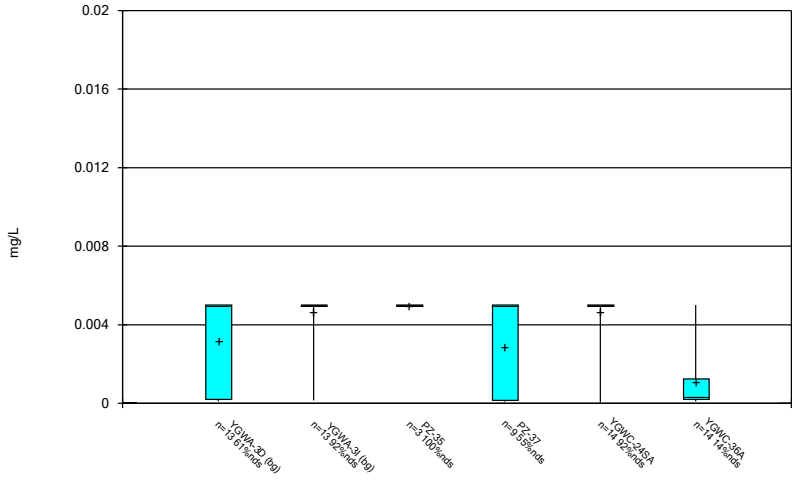
Box & Whiskers Plot

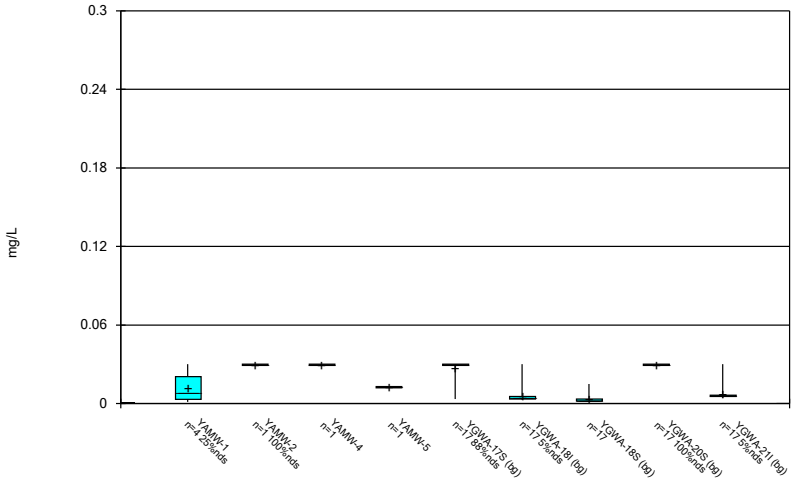


Constituent: Lead Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

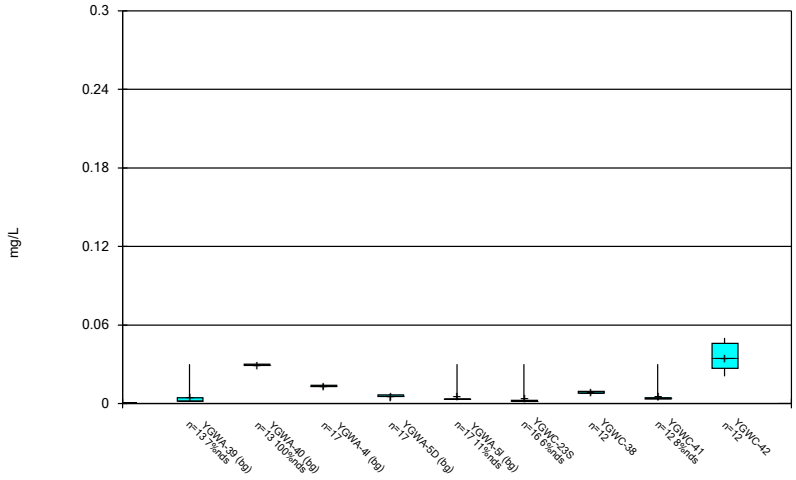


Constituent: Lithium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

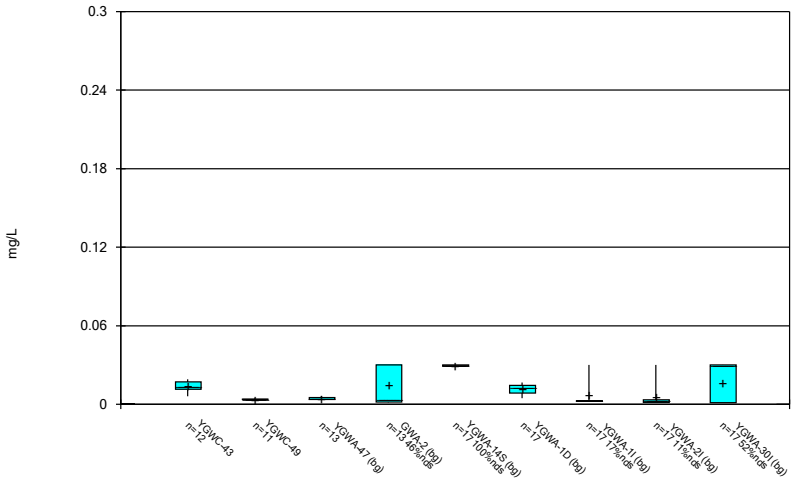


Constituent: Lithium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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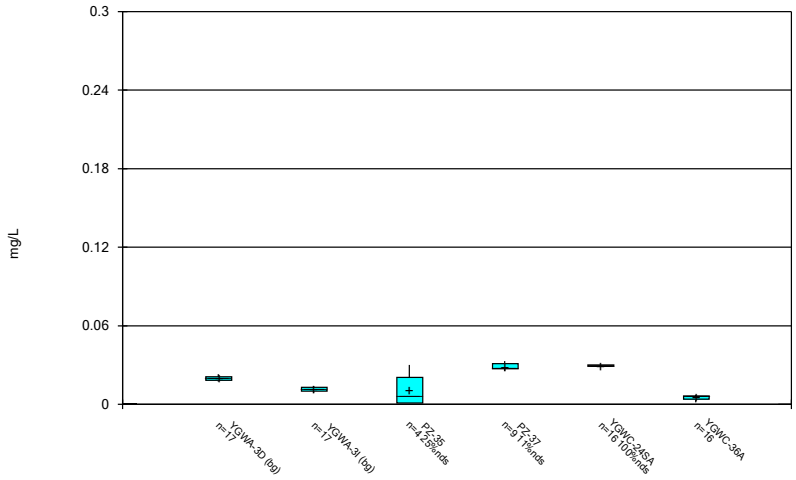

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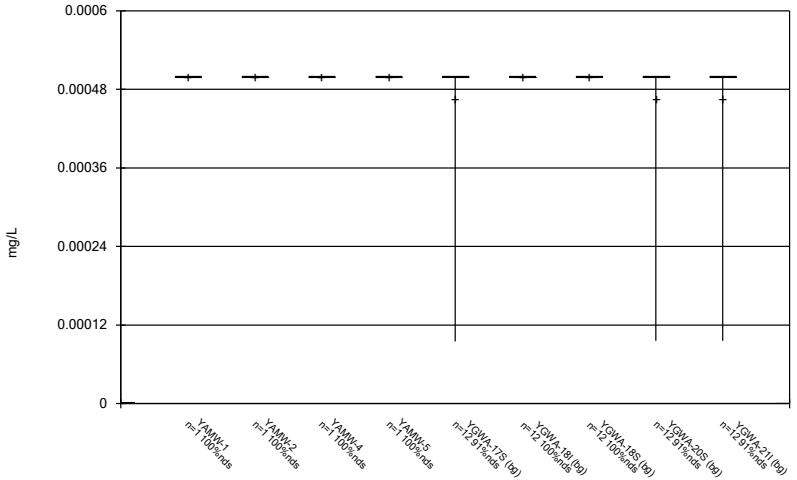
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

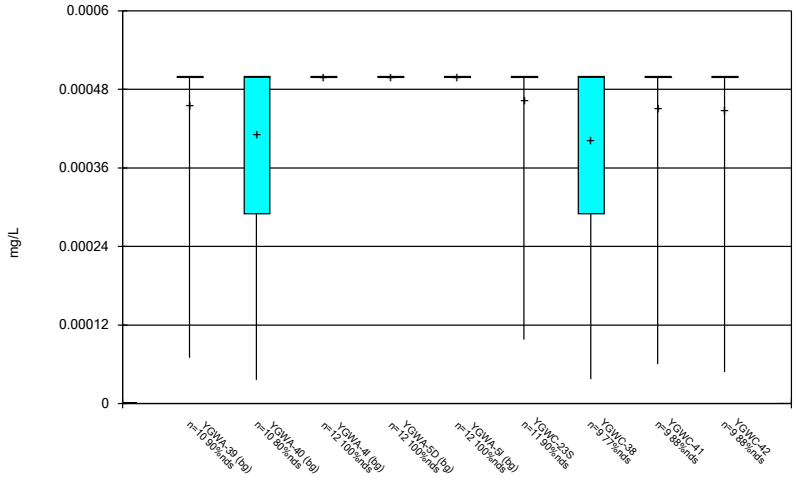


Constituent: Mercury Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

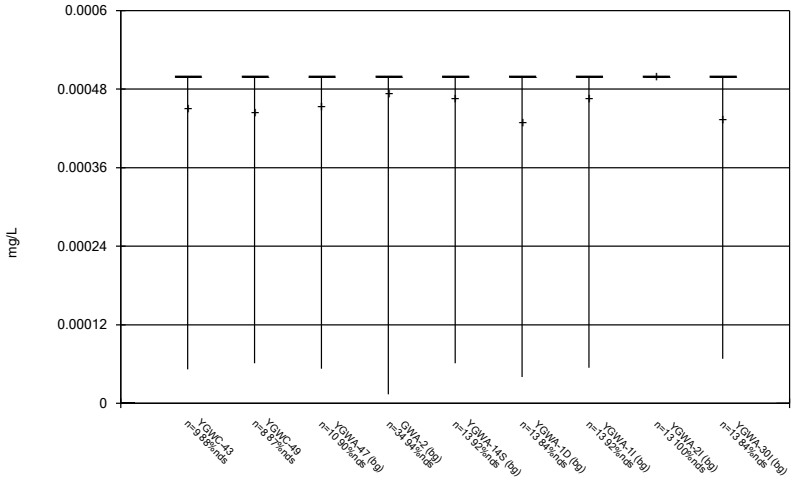


Constituent: Mercury Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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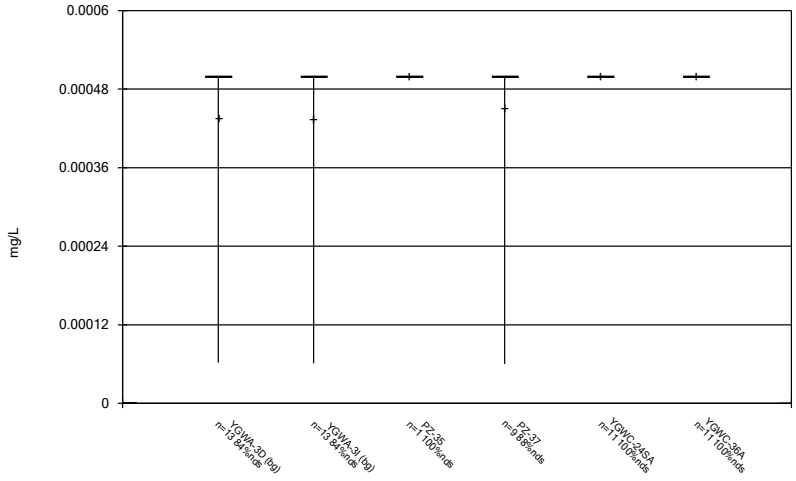
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

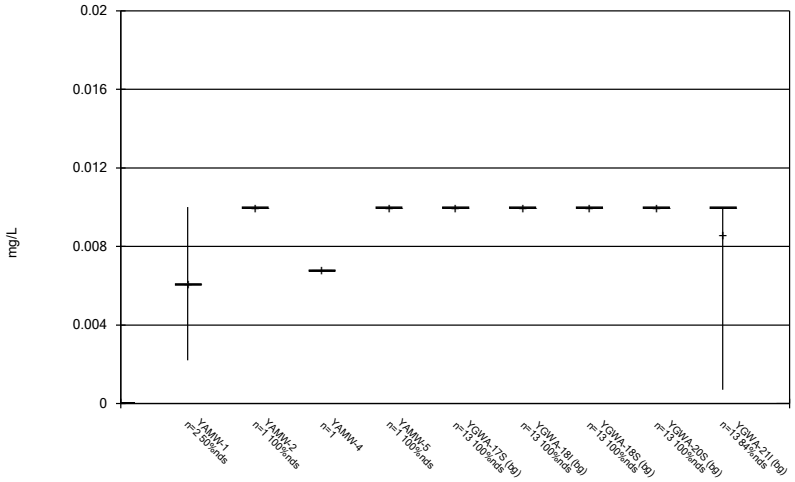
Box & Whiskers Plot



Constituent: Mercury Analysis Run 1/13/2021 11:07 AM

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

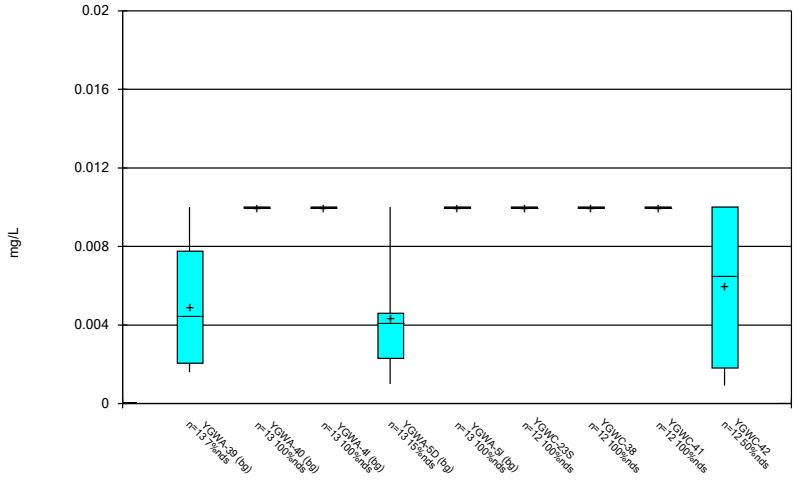
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 1/13/2021 11:07 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

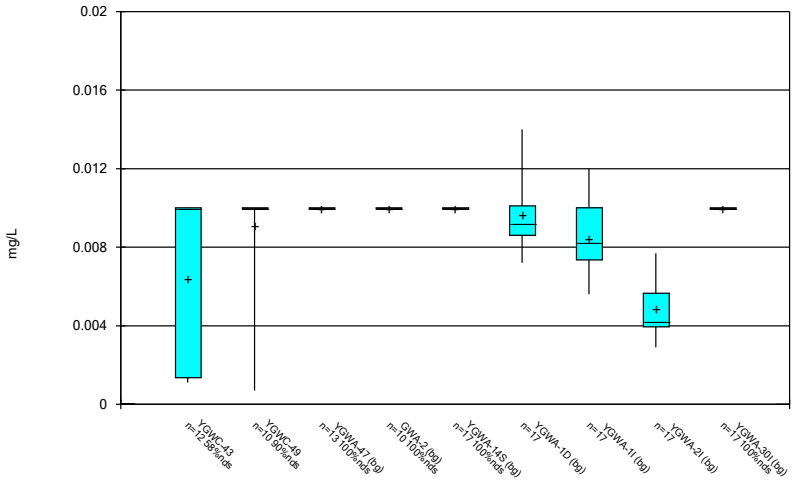
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 1/13/2021 11:07 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

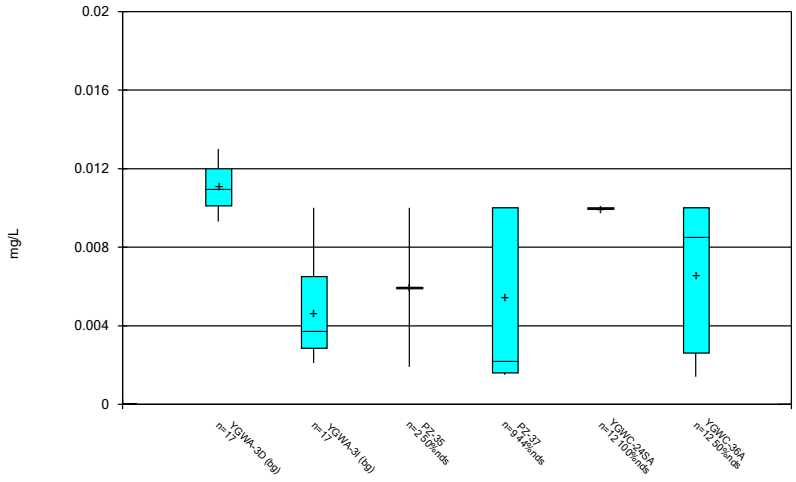
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 1/13/2021 11:07 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

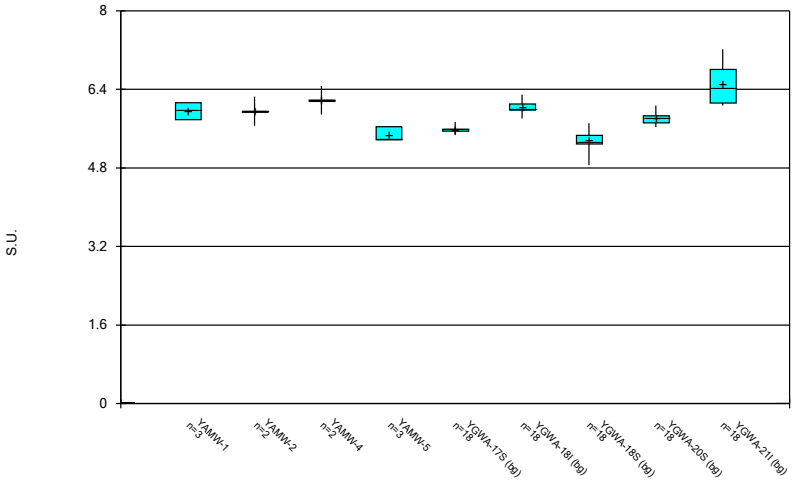
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 1/13/2021 11:07 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

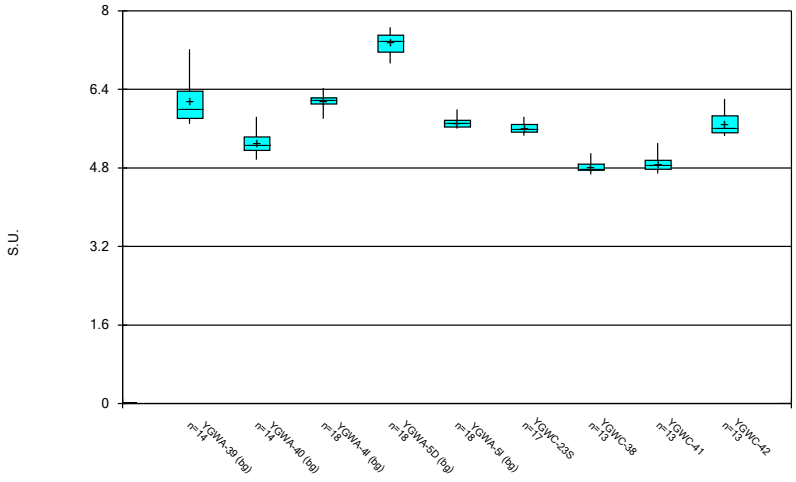


Constituent: pH Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

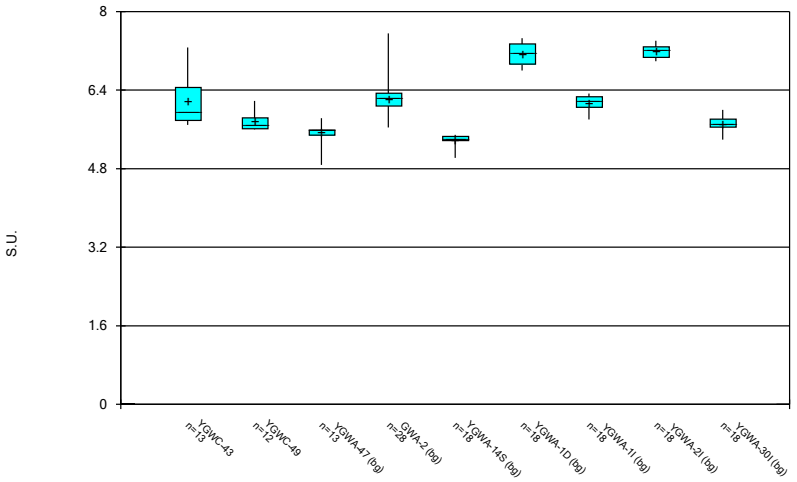


Constituent: pH Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

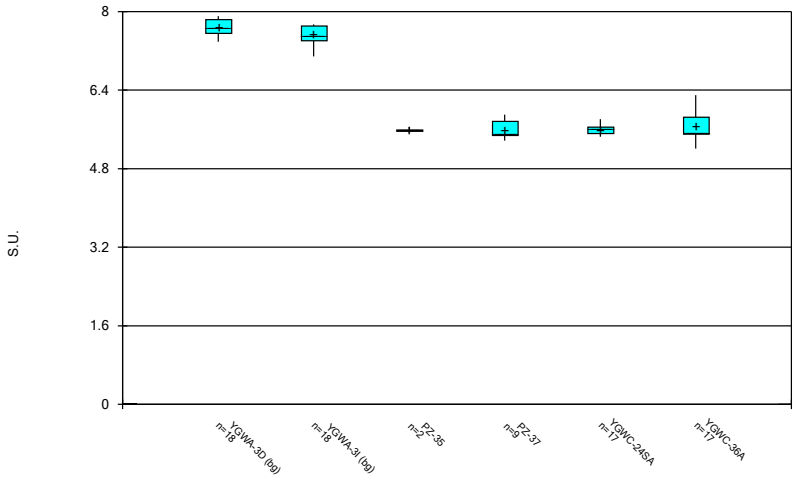


Constituent: pH Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

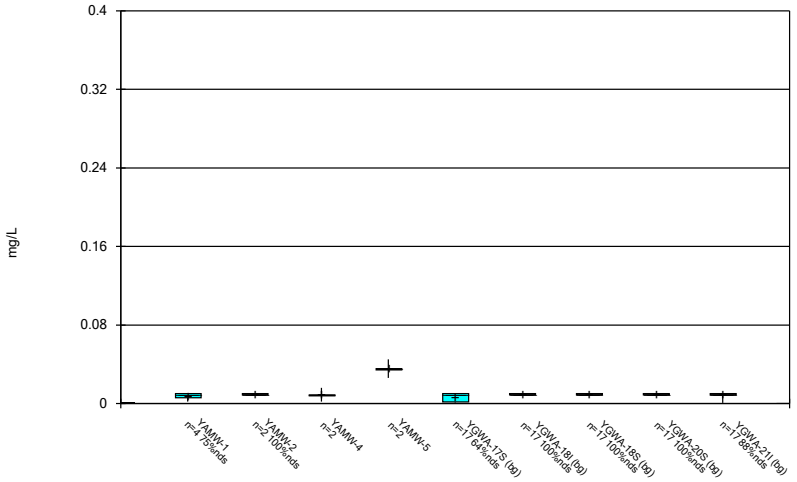
Box & Whiskers Plot



Constituent: pH Analysis Run 1/13/2021 11:07 AM

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

Box & Whiskers Plot

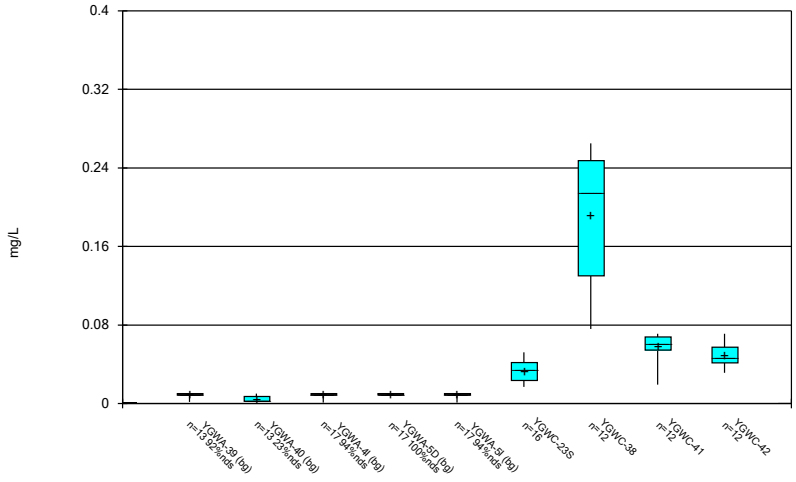


Constituent: Selenium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

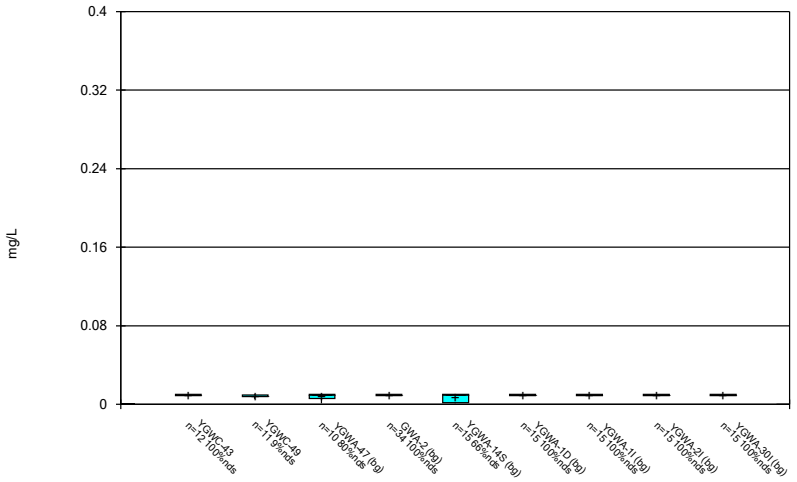


Constituent: Selenium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

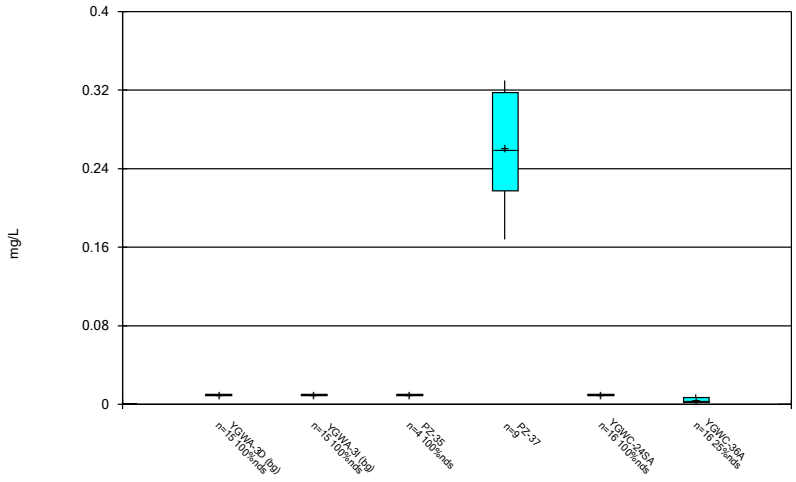


Constituent: Selenium Analysis Run 1/13/2021 11:07 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



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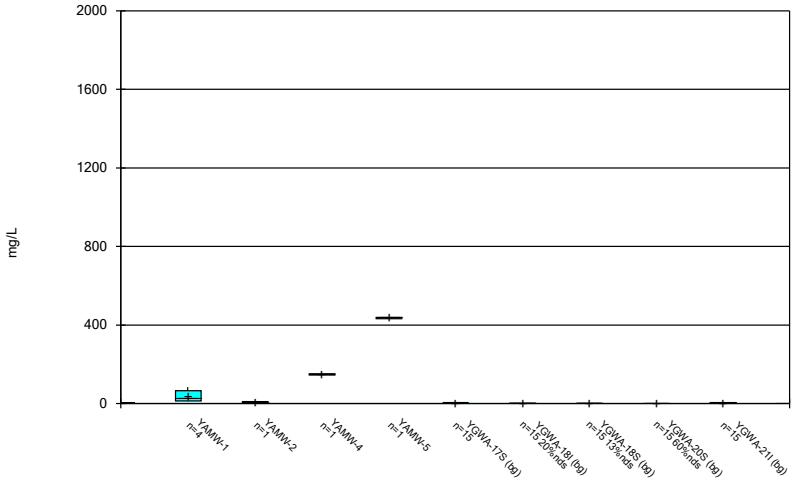
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

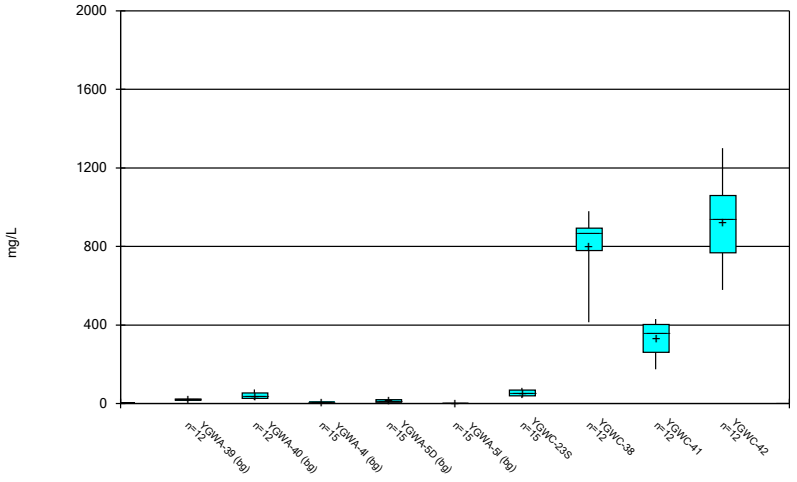


Constituent: Sulfate Analysis Run 1/13/2021 11:08 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

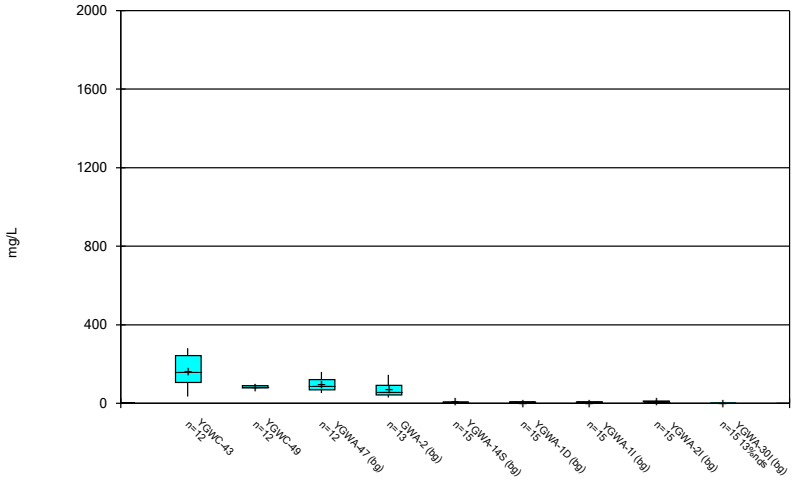


Constituent: Sulfate Analysis Run 1/13/2021 11:08 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

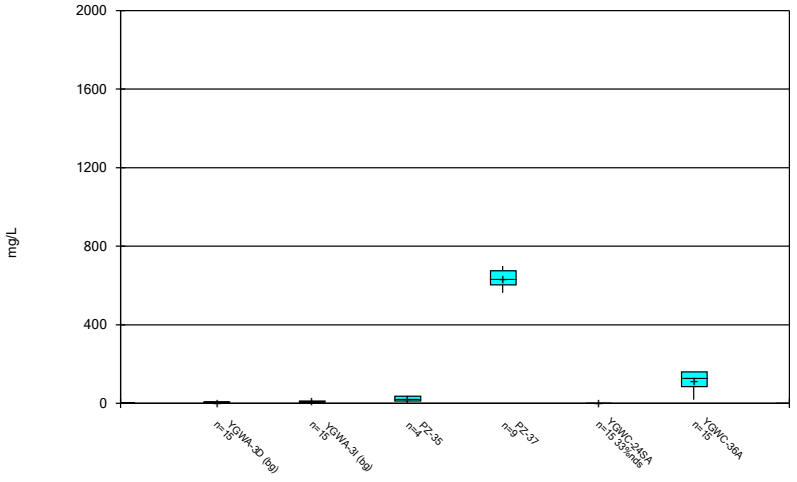


Constituent: Sulfate Analysis Run 1/13/2021 11:08 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

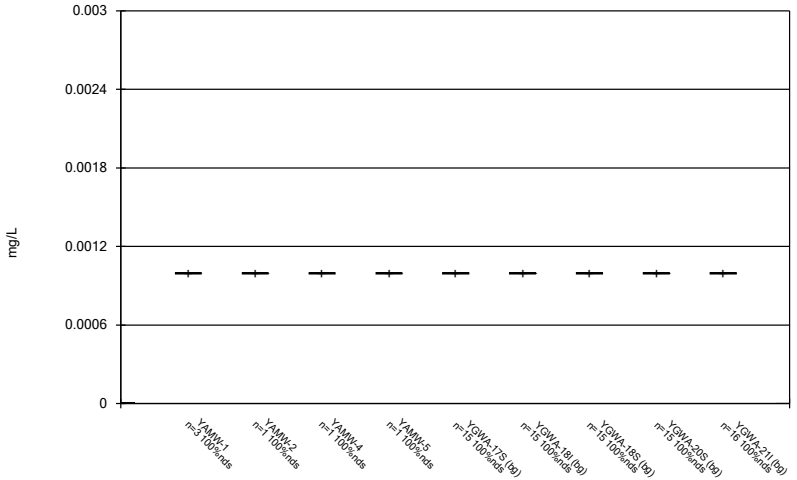
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 1/13/2021 11:08 AM

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

Box & Whiskers Plot

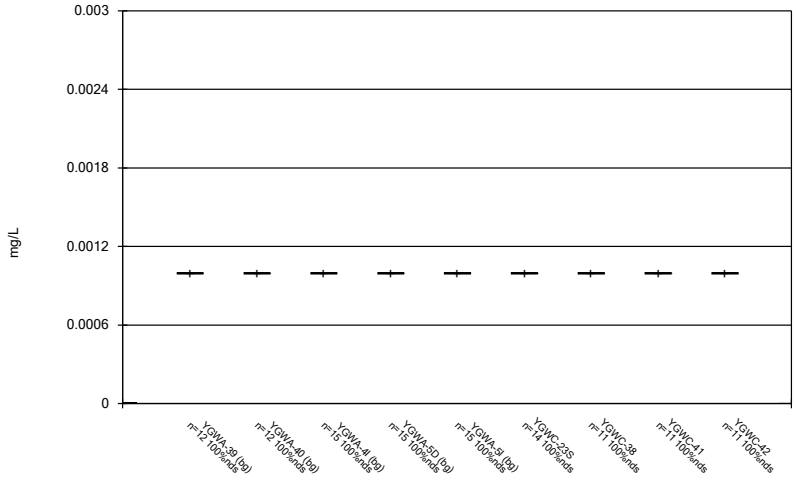


Constituent: Thallium Analysis Run 1/13/2021 11:08 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

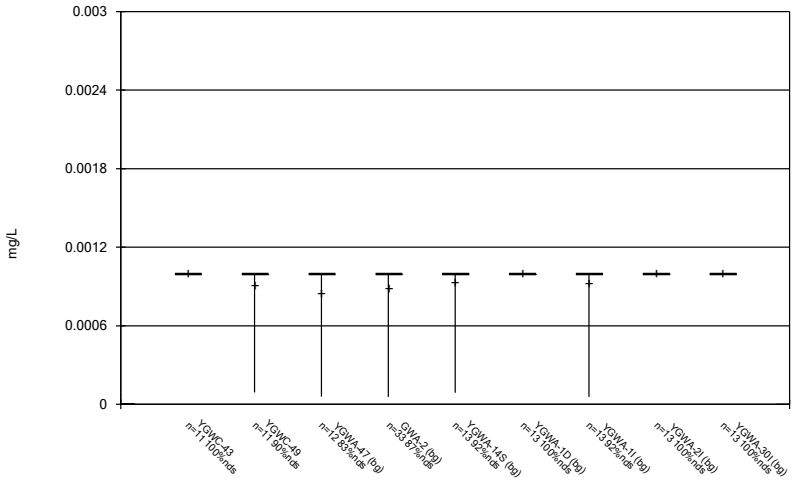


Constituent: Thallium Analysis Run 1/13/2021 11:08 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

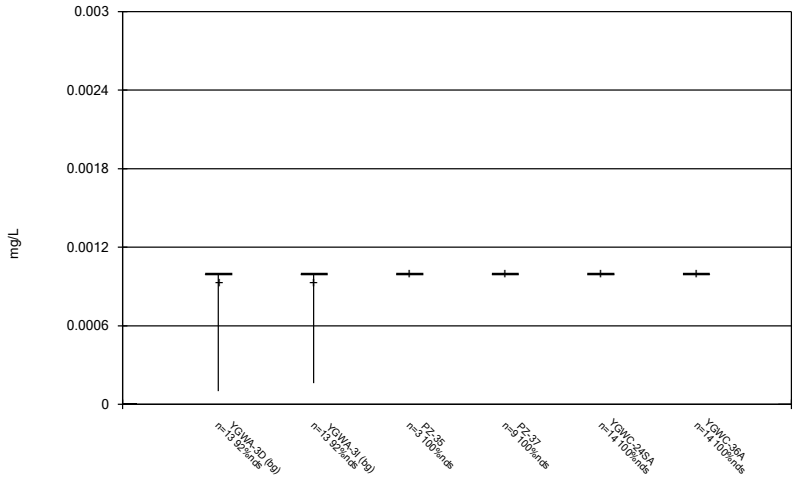


Constituent: Thallium Analysis Run 1/13/2021 11:08 AM

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

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

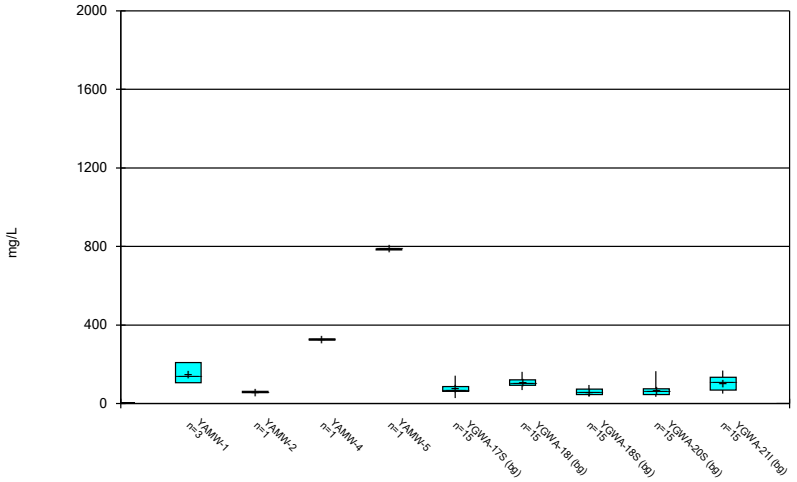
Box & Whiskers Plot



Constituent: Thallium Analysis Run 1/13/2021 11:08 AM

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

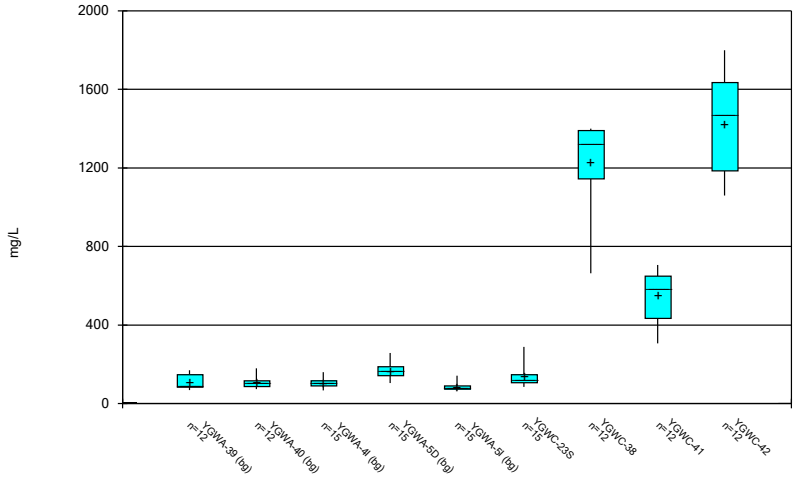
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2021 11:08 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

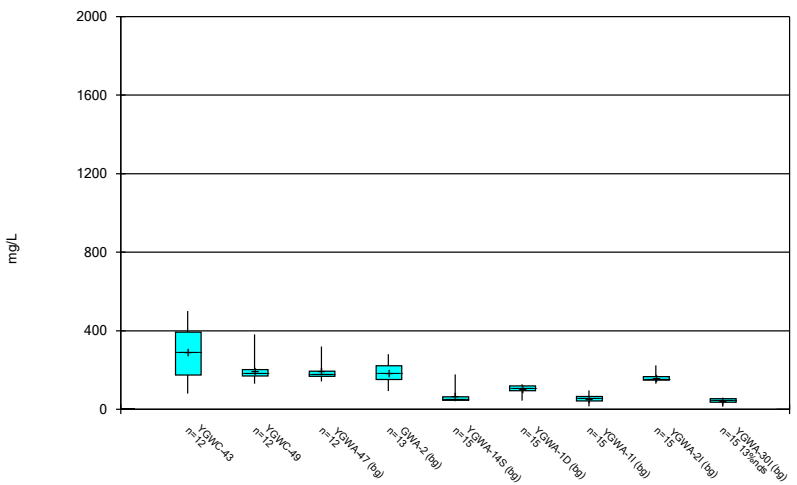
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2021 11:08 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

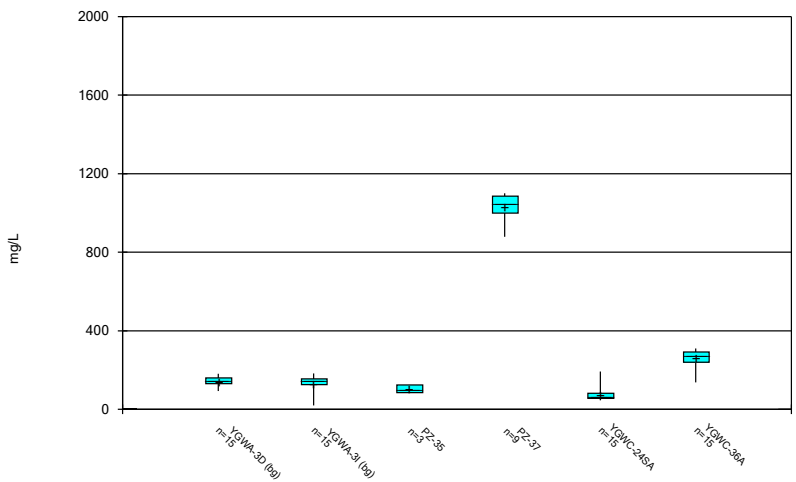
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2021 11:08 AM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2021 11:08 AM
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 1/13/2021, 11:10 AM

	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)	

FIGURE D.

Appendix III - Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:06 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	9/24/2020	1.1	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-38	0.16	n/a	9/25/2020	8	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-41	0.16	n/a	9/25/2020	6	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-42	0.16	n/a	9/24/2020	15.2	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-43	0.16	n/a	9/25/2020	3.9	Yes	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-38	37	n/a	9/25/2020	93.7	Yes	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-42	37	n/a	9/24/2020	84.3	Yes	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-24SA	7.9	n/a	9/23/2020	9.3	Yes	274	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	10/7/2020	8.7	Yes	274	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	9/25/2020	414	Yes	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-41	160	n/a	9/25/2020	175	Yes	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-42	160	n/a	9/24/2020	579	Yes	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-43	160	n/a	9/25/2020	281	Yes	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-38	221.3	n/a	9/25/2020	664	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-41	221.3	n/a	9/25/2020	307	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-42	221.3	n/a	9/24/2020	1060	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-43	221.3	n/a	9/25/2020	494	Yes	274	10.05	2.547	0.7299	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 11/25/2020, 7:06 PM

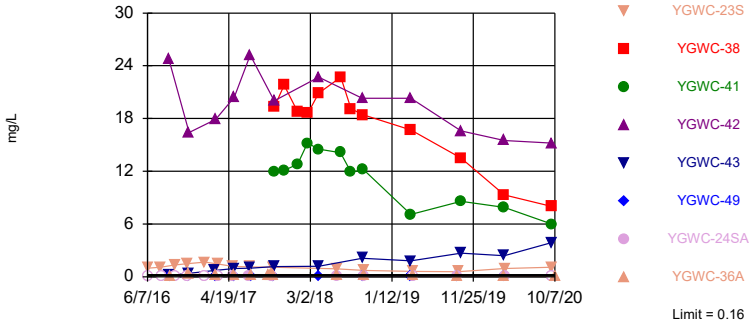
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**9/24/2020**	**1.1**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**9/25/2020**	**8**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**9/25/2020**	**6**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**9/24/2020**	**15.2**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**9/25/2020**	**3.9**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-49	0.16	n/a	9/24/2020	0.062J	No	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-24SA	0.16	n/a	9/23/2020	0.1ND	No	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-36A	0.16	n/a	10/7/2020	0.018J	No	274	n/a	n/a	45.62	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	9/24/2020	7.9	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**9/25/2020**	**93.7**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-41	37	n/a	9/25/2020	20.5	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**9/24/2020**	**84.3**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-43	37	n/a	9/25/2020	19.8	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-49	37	n/a	9/24/2020	12	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24SA	37	n/a	9/23/2020	2.4	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-36A	37	n/a	10/7/2020	9.9	No	274	n/a	n/a	1.095	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-23S	7.9	n/a	9/24/2020	2	No	274	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	9/25/2020	4	No	274	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	9/25/2020	3	No	274	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	9/24/2020	3.3	No	274	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	9/25/2020	2.3	No	274	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	9/24/2020	4.6	No	274	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**	**9/23/2020**	**9.3**	**Yes**	**274**	**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**	**10/7/2020**	**8.7**	**Yes**	**274**	**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	9/24/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-38	0.68	n/a	9/25/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-41	0.68	n/a	9/25/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-42	0.68	n/a	9/24/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-43	0.68	n/a	9/25/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-49	0.68	n/a	9/24/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24SA	0.68	n/a	9/23/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36A	0.68	n/a	10/7/2020	0.1ND	No	327	n/a	n/a	68.5	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-23S	7.91	4.86	9/24/2020	5.51	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-38	7.91	4.86	9/25/2020	4.9	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-41	7.91	4.86	9/25/2020	4.95	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-42	7.91	4.86	9/24/2020	5.55	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-43	7.91	4.86	9/25/2020	5.75	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-49	7.91	4.86	9/24/2020	5.62	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-24SA	7.91	4.86	9/23/2020	5.64	No	339	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-36A	7.91	4.86	10/7/2020	5.86	No	339	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	9/24/2020	52.5	No	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-38**	**160**	**n/a**	**9/25/2020**	**414**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-41**	**160**	**n/a**	**9/25/2020**	**175**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-42**	**160**	**n/a**	**9/24/2020**	**579**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-43**	**160**	**n/a**	**9/25/2020**	**281**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-49	160	n/a	9/24/2020	77	No	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-24SA	160	n/a	9/23/2020	0.5ND	No	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-36A	160	n/a	10/7/2020	18.2	No	274	n/a	n/a	5.839	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-23S	221.3	n/a	9/24/2020	129	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-38**	**221.3**	**n/a**	**9/25/2020**	**664**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**221.3**	**n/a**	**9/25/2020**	**307**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**221.3**	**n/a**	**9/24/2020**	**1060**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-43**	**221.3**	**n/a**	**9/25/2020**	**494**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-49	221.3	n/a	9/24/2020	187	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-24SA	221.3	n/a	9/23/2020	87	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-36A	221.3	n/a	10/7/2020	137	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Sanitas™ v.9.6.27 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 274 background values. 45.62% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

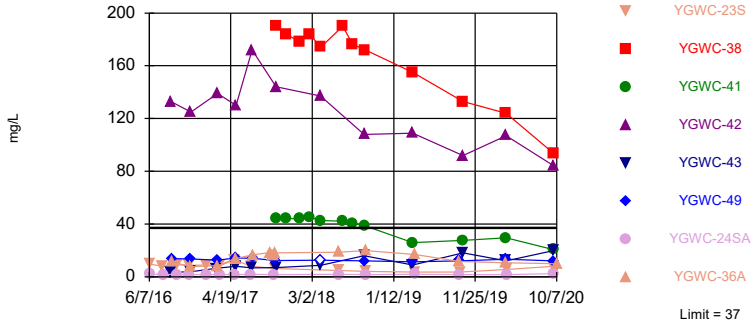
Constituent: Boron Analysis Run 11/25/2020 7:05 PM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 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 274 background values. 1.095% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

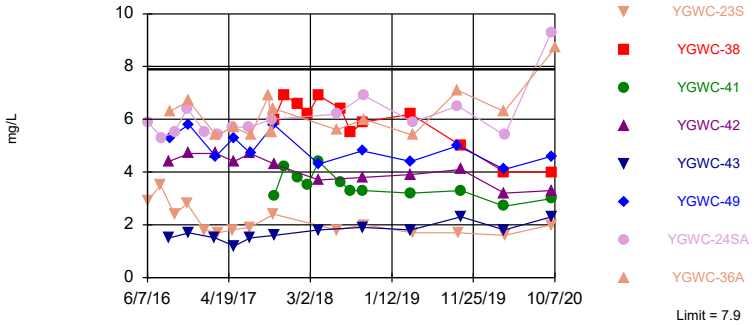
Constituent: Calcium Analysis Run 11/25/2020 7:05 PM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Exceeds Limit: YGWC-24SA, YGWC-36A

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 274 background values. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

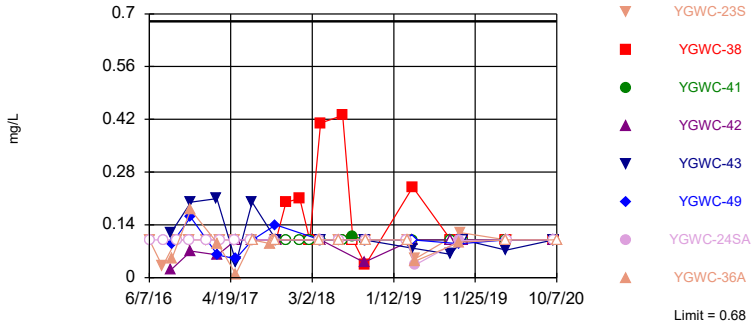
Constituent: Chloride Analysis Run 11/25/2020 7:05 PM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 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 327 background values. 68.5% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

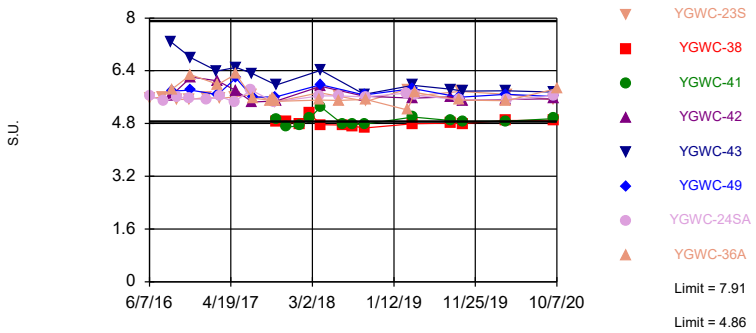
Constituent: Fluoride Analysis Run 11/25/2020 7:05 PM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 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 339 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 11/25/2020 7:05 PM View: Appendix III

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

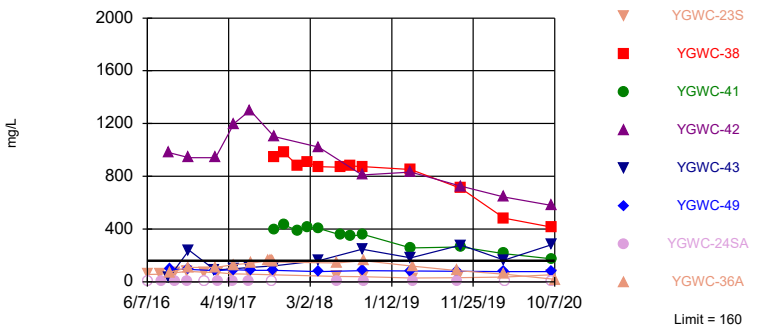
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: 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 274 background values. 5.839% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Sulfate Analysis Run 11/25/2020 7:05 PM View: Appendix III

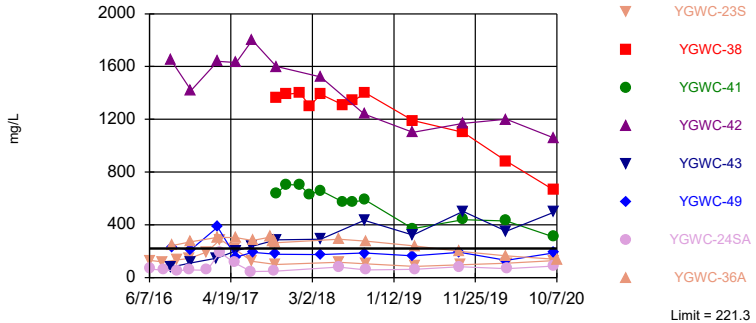
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 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=10.05, Std. Dev.=2.547, n=274, 0.7299% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.86, 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 11/25/2020 7:05 PM View: Appendix III

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

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

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

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
6/1/2016	<0.1	<0.1	<0.1						
6/2/2016				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	<0.1		<0.1					<0.1	
7/26/2016		0.0055 (J)		<0.1	0.0177 (J)	0.0097 (J)	0.0047 (J)		0.0052 (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	<0.1						
9/14/2016	<0.1			0.01 (J)			<0.1		0.0071 (J)
9/15/2016					0.0214 (J)	0.0102 (J)			
9/16/2016									
9/19/2016								<0.1	
9/20/2016									
11/1/2016	<0.1	0.0086 (J)				<0.1		<0.1	
11/2/2016					<0.1		<0.1		<0.1
11/3/2016									
11/4/2016			<0.1	<0.1					
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017					0.0198 (J)				
1/11/2017	<0.1	0.0074 (J)				<0.1			
1/12/2017				<0.1					0.0076 (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		0.008 (J)	<0.1			0.0084 (J)			
3/3/2017									
3/6/2017							<0.1		
3/7/2017				<0.1					0.0089 (J)
3/8/2017					0.0189 (J)				
3/9/2017									
4/26/2017	<0.1				0.0161 (J)	<0.1		<0.1	
4/27/2017		0.0066 (J)	<0.1						
4/28/2017									
5/1/2017							<0.1		0.0061 (J)

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

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

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
5/2/2017				<0.1					
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		0.0087 (J)	0.006 (J)	<0.1					0.0079 (J)
6/28/2017	<0.1					<0.1			
6/29/2017							<0.1		
6/30/2017					0.0173 (J)			<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		0.0072 (J)	0.0071 (J)	<0.1					0.0094 (J)
10/4/2017	<0.1					<0.1		<0.1	
10/5/2017					0.0173 (J)		<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									
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018		0.0052 (J)							
6/6/2018			<0.1						0.0098 (J)
6/7/2018				<0.1		0.004 (J)	0.0045 (J)		
6/8/2018	<0.1				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				0.0057 (J)			0.005 (J)		0.01 (J)
9/27/2018									
10/1/2018	<0.1	0.021 (J)	0.0049 (J)		0.015 (J)	<0.1			

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

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

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
10/2/2018								<0.1	
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019		0.005 (J)	<0.1						
3/29/2019					0.014 (J)				
4/1/2019	<0.1					<0.1		<0.1	
4/2/2019									
4/3/2019				0.0044 (J)			0.0055 (J)		0.0076 (J)
4/4/2019									
6/12/2019									
9/24/2019		0.0064 (J)	0.0055 (J)	0.0049 (J)					0.01 (J)
9/25/2019	<0.1				0.018 (J)	0.0054 (J)	<0.1	<0.1	
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				0.0068 (J)					0.011 (J)
3/25/2020							0.011 (J)		
3/26/2020									
9/22/2020				0.0053 (J)			<0.1		0.0079 (J)
9/23/2020	0.0073 (J)	<0.1	<0.1			0.012 (J)			
9/24/2020								0.0075 (J)	
9/25/2020					0.02 (J)				
10/7/2020									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

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

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (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	0.99	<0.1	<0.1			
6/8/2016							<0.1		
7/25/2016									
7/26/2016									
7/27/2016	0.0059 (J)	<0.1	0.008 (J)		<0.1				
7/28/2016				1.09		<0.1			
8/1/2016							<0.1		
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		<0.1			<0.1	<0.1			
9/20/2016				1.35			<0.1		
11/1/2016									
11/2/2016					<0.1				
11/3/2016	0.0082 (J)	<0.1	0.0077 (J)			<0.1			
11/4/2016									
11/8/2016				1.5			<0.1		
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)	<0.1	0.0092 (J)						
1/12/2017									
1/13/2017					<0.1	<0.1			
1/16/2017				1.67					
1/17/2017							<0.1		
2/21/2017									
2/22/2017									
2/24/2017									0.0145 (J)
2/27/2017								17.9	
2/28/2017									
3/1/2017	<0.1	<0.1							
3/2/2017			0.0095 (J)						
3/3/2017									
3/6/2017					<0.1	<0.1			
3/7/2017									
3/8/2017							<0.1		
3/9/2017				1.44					
4/26/2017	0.0091 (J)	<0.1			<0.1	<0.1			
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
5/2/2017			<0.1	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)	<0.1							
6/29/2017			0.0074 (J)		<0.1	<0.1			
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						<0.1			
10/4/2017	0.009 (J)		0.0077 (J)		<0.1				
10/5/2017		<0.1					<0.1		
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		<0.1							
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)	0.0096 (J)		<0.1	0.0054 (J)			
9/26/2018							0.0055 (J)		
9/27/2018				0.71					
10/1/2018									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			0.0066 (J)			0.011 (J)			
4/3/2019	0.0053 (J)	<0.1			<0.1				
4/4/2019				0.6			<0.1		
6/12/2019									
9/24/2019						0.018 (J)			
9/25/2019			0.0081 (J)		<0.1				
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)	0.0092 (J)		<0.1	0.016 (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)				<0.1		
9/24/2020				1.1	0.0094 (J)	0.013 (J)		15.2	
9/25/2020									
10/7/2020									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	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	0.169	0.0315 (J)							
9/1/2016			0.0113 (J)						
9/2/2016				0.133					
9/13/2016									
9/14/2016					<0.1				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					<0.1				
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					<0.1				
1/17/2017									
2/21/2017									
2/22/2017		<0.1							
2/24/2017	0.725								
2/27/2017			<0.1						
2/28/2017				0.215					
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					<0.1				
5/1/2017									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
5/2/2017									
5/8/2017		0.0084 (J)							
5/9/2017			<0.1	0.233					
5/10/2017	0.955								
5/26/2017					<0.1				
6/27/2017									
6/28/2017					<0.1				
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					<0.1				
10/4/2017									
10/5/2017									
10/6/2017				0.256					
10/10/2017									
10/11/2017			<0.1	0.245		0.0135 (J)			
10/12/2017	1.15						19.3	0.0401	12
10/16/2017		<0.1							
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		<0.1						0.146	15.2
2/20/2018						<0.1	18.6		
4/2/2018									
4/3/2018						0.033 (J)	20.9	0.12	14.5
4/4/2018	1.2		0.0041 (J)						
6/5/2018									
6/6/2018									
6/7/2018					<0.1				
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		<0.1							
8/7/2018						0.024 (J)	19.1	0.12	11.9
9/19/2018									
9/20/2018	2.1		0.0042 (J)						
9/24/2018						0.028 (J)	18.4	0.099	12.2
9/25/2018									
9/26/2018				0.24					
9/27/2018									
10/1/2018					<0.1				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
10/2/2018									
2/25/2019		<0.1							
3/26/2019								0.096	
3/27/2019						0.017 (J)	16.7		
3/28/2019	1.8		<0.1						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		<0.1							
9/24/2019					0.0076 (J)				
9/25/2019									
9/26/2019			<0.1	0.13					
9/27/2019									
10/8/2019		<0.1							
10/9/2019	2.7					0.017 (J)	13.5	0.079	8.6
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					<0.1				
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)					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
6/1/2016	21	12	2.5						
6/2/2016				2.4	1.3	28	8.8	1.3	33
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	20.3		2.16					1.17	
7/26/2016		11		2.12	1.24	24.5	7.69		32.3
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			2.18			8.49		31
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				2.37					35.7
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				2.34					32.7
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (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	2.13					36.5
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	2.15					30.9
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				2.3		29.1	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				2.3			9.5 (J)		25.8
9/27/2018									
10/1/2018	19.7	15.1	1.8		0.99	26.9			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (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				2.8			8.4		24.7 (J)
4/4/2019									
6/12/2019									
9/24/2019		15.8	2.3	2.5					25.8
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				2.5					26.1
3/25/2020							10.5		
3/26/2020									
9/22/2020				2.6			9.6		27.2
9/23/2020	23.6	14.1	1.8			28.6			
9/24/2020								1.1	
9/25/2020					1.3				
10/7/2020									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	1.4	6.2							
6/7/2016			2.2	9.6	2.3	3.7			
6/8/2016							1.9		
7/25/2016									
7/26/2016									
7/27/2016	1.19	4.73	2		2.08				
7/28/2016				7.87		3.15			
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	1.99			3.4			
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			2.02		2.54	6.04			
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		2.03		2.25				
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	2.1		2.3	10.4 (J)			
9/26/2018							1.7		
9/27/2018				4.1					
10/1/2018									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			2.5			8.8			
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			2.6		2.4				
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	2.7		2.6	6			
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				7.9	2.6	7.8		84.3	
9/25/2020									
10/7/2020									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	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	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 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
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	2.9	44.5
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						<25	45.3
2/20/2018						1.71	184		
4/2/2018									
4/3/2018						1.4	174	6.3	42.7
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	6.3	40.7
9/19/2018									
9/20/2018	15.9 (J)		12 (J)						
9/24/2018						1.1	172	5.7	38.5
9/25/2018									
9/26/2018				19.8 (J)					
9/27/2018									
10/1/2018					25				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
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	4.9	27.6
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					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
6/1/2016	1.3	1.3	1.6						
6/2/2016				4.3	4.1	1.4	3.7	1.9	7.2
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	1.3		1.4					1.7	
7/26/2016		1.2		4.4	4	1.6	3.6		6.6
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			3.8			3.4		6.6
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				3.8					6.8
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				4.5					6.8
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (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	4.3					7
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	4.2					6.5
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				4.5		1.2	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				5.1			4.8		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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (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				4.2			4.3		4
4/4/2019									
6/12/2019									
9/24/2019		1.1	1.3	4.5					3.7
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				4.3					3.5
3/25/2020							3.9		
3/26/2020									
9/22/2020				4.2			4.5		3.6
9/23/2020	1	0.99 (J)	1.2			1.1			
9/24/2020								1.5	
9/25/2020					5.3				
10/7/2020									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	6.4	6.8							
6/7/2016			4.5	2.9	1.9	2.8			
6/8/2016							5.9		
7/25/2016									
7/26/2016									
7/27/2016	6.2	6.7	4.5		1.9				
7/28/2016				3.5		2.6			
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	5.4			2.9			
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			4.5		2.6	2.8			
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		4.7		2.6				
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	5.6		3.6	2.2			
9/26/2018							6.9		
9/27/2018				2					
10/1/2018									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			4.8			2.5			
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			5.7		2.8				
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	5		2.7	2.8			
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	2.7	2		3.3	
9/25/2020									
10/7/2020									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	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	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 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
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	3.8	3.1
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						4.6	3.5
2/20/2018						2	6.2		
4/2/2018									
4/3/2018						3.3	6.9	5.9	4.4
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	4.3	3.3
9/19/2018									
9/20/2018	1.9		4.8						
9/24/2018						1.3	5.9	4.9	3.3
9/25/2018									
9/26/2018				6					
9/27/2018									
10/1/2018					1.1				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
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	5.1	3.3
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					

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	0.12 (J)	<0.1	0.15 (J)						
6/2/2016				<0.1	<0.1	<0.1	0.62	0.11 (J)	<0.1
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		0.02 (J)	0.49	0.05 (J)	<0.1
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)	<0.1				0.04 (J)	<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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (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			0.48		<0.1
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (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				<0.1				0.19 (J)	<0.1
3/5/2019									
3/6/2019									
3/26/2019									
3/27/2019									
3/28/2019	0.036 (J)	<0.1							
3/29/2019						<0.1			
4/1/2019			0.1 (J)		<0.1		0.45		
4/2/2019									
4/3/2019				<0.1				0.047 (J)	<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	0.4	<0.1	<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				0.056 (J)	<0.1
9/23/2020	0.058 (J)	<0.1	0.098 (J)				0.47		
9/24/2020					<0.1				
9/25/2020						<0.1			
10/7/2020									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
9/25/2018	<0.1	<0.1	<0.1	0 (J)		<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		<0.1	0.32		<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			<0.1	0.12 (J)					
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	<0.1	0.081 (J)		<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									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-41	YGWA-40 (bg)	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 11/25/2020 7:06 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)	YGWC-41	YGWA-40 (bg)	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)	0.11 (J)	<0.1	<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 11/25/2020 7:06 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)	YGWC-41	YGWA-40 (bg)	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					

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-4I (bg)
8/27/2008	6.53								
3/3/2009	6.35								
11/18/2009	6.47								
3/3/2010	6.53								
3/10/2011	5.83								
9/8/2011	5.69								
3/5/2012	6.27								
9/10/2012	6.23								
2/6/2013	7.56								
8/12/2013	6.68								
2/5/2014	6.32								
8/3/2015	6.13 (D)								
2/16/2016	5.64								
6/1/2016		6.33	7.72	7.46					
6/2/2016					5.75	5.75	7.84	7.67	6.36
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016		6.21	7.74		5.82				
7/26/2016				7.43		5.72	7.88	7.66	6.22
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		6.16		7.44					
9/14/2016			7.65			5.74		7.6	6.23
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								7.35	6.08
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						5.71		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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-4I (bg)
2/27/2017									
2/28/2017									
3/1/2017			7.42						
3/2/2017		6.28		7.23			7.68		
3/3/2017									
3/6/2017									6.2
3/7/2017						5.66		7.43	
3/8/2017									
3/9/2017									
4/26/2017			7.4		5.56		7.45		
4/27/2017		6.09		6.99					
4/28/2017									
5/1/2017								7.22	6.21
5/2/2017						5.65			
5/8/2017	6.12								
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		6.21		6.87		5.7		7.32	
6/28/2017			7.5				7.65		
6/29/2017									6.21
6/30/2017					5.72				
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		5.98		6.81		5.79		7.48	
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		5.63		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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-4I (bg)
6/6/2018		6.17						7.43	
6/7/2018						5.63	7.69		6.12
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						5.63		7.13	5.84
9/27/2018									
10/1/2018		5.9	7.47	6.8			7.39		
10/2/2018					5.39				
2/25/2019	6.51								
2/26/2019					5.77				
2/27/2019		5.8	7.54	6.84			7.55		
3/4/2019						5.75		7.46	6.18
3/5/2019									
3/6/2019									
3/26/2019									
3/27/2019									
3/28/2019		6.15		6.99					
3/29/2019									
4/1/2019			7.74		5.62		7.87		
4/2/2019									
4/3/2019						5.63		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		6.23		7.07		5.6		6.93	
9/25/2019			7.47		5.69		7.64		6.2
9/26/2019									
9/27/2019									
10/8/2019	6.28								
10/9/2019									
2/10/2020		6.1		7.2					
2/11/2020			7.09						
2/12/2020					5.8	5.83	7.83	7.52	6.15
3/17/2020	6.14								
3/18/2020		6.19							
3/19/2020			7.31	7.03	6		7.65		
3/24/2020						5.81		7.34	
3/25/2020									6.26
3/26/2020									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-4I (bg)
5/6/2020	6.24								
8/26/2020	5.67								
8/27/2020									
9/22/2020	5.78					5.99 (D)		7.19 (D)	5.8 (D)
9/23/2020		6.01	7.37	7.15			7.57		
9/24/2020					5.67				
9/25/2020									
10/7/2020									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-14S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-17S (bg)	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		6.17	5.71						
6/7/2016				6.1	5.77	5.57	5.62		
6/8/2016								5.65	
7/25/2016									
7/26/2016	5.45								
7/27/2016		6.14	5.46		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		6.04	5.59	6.12	5.73				
9/20/2016						5.53		5.61	
11/1/2016									
11/2/2016	5.41				5.67				
11/3/2016		5.97	5.39	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		6.05	5.48				5.59		
1/12/2017									
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-14S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)
2/27/2017									
2/28/2017									
3/1/2017		5.94	5.41						
3/2/2017							5.54		
3/3/2017									
3/6/2017				6.34	5.63				
3/7/2017									
3/8/2017	5.41							5.62	
3/9/2017						5.56			
4/26/2017	5.02	5.99	5.4	6.32	5.66				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017						5.61	5.47	5.46	
5/8/2017									5.58
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017									
6/28/2017		6	5.36						
6/29/2017				6.47	5.85		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		6.1	5.34				5.59		
3/29/2018				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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-14S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-17S (bg)	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		5.81	4.86	6.67	5.84		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	7.22	6.07		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		6.29	5.47		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		6.04	5.2					5.52	
9/27/2019						5.77			
10/8/2019									5.59
10/9/2019									
2/10/2020									
2/11/2020		6.07	5.3				5.58		
2/12/2020	5.48			7.13	6				
3/17/2020									5.57
3/18/2020	5.38								
3/19/2020									
3/24/2020		5.98	5.33	6.35	5.86		5.57		
3/25/2020									
3/26/2020						5.69		5.51	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-14S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)
5/6/2020									
8/26/2020									
8/27/2020									4.88
9/22/2020									5.46
9/23/2020		6.01 (D)	5.29 (D)				5.58 (D)	5.64	
9/24/2020				6.7 (D)	5.8 (D)	5.51			
9/25/2020	5.44								
10/7/2020									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/25/2020 7:06 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)	YGWA-40 (bg)	YGWC-38	YGWC-41
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 11/25/2020 7:06 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)	YGWA-40 (bg)	YGWC-38	YGWC-41
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					5.43	4.85	4.94
10/16/2017									
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	
3/27/2018									
3/28/2018					7.3				
3/29/2018									
3/30/2018				5.51					
4/2/2018									
4/3/2018						6.87	5.84	4.76	5.31
4/4/2018	5.93	6.41	5.98						
6/5/2018									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/25/2020 7:06 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)	YGWA-40 (bg)	YGWC-38	YGWC-41
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	5.24	4.75	
8/6/2018									
8/7/2018						6.08	5.18	4.72	4.77
9/19/2018									
9/20/2018	5.63	5.69	5.67						
9/24/2018						5.81	5.14	4.67	4.78
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							4.81	4.89
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	5.22	4.8	4.86
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		4.89	4.87
3/26/2020									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 11/25/2020 7:06 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)	YGWA-40 (bg)	YGWC-38	YGWC-41
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						4.9	4.95
10/7/2020				5.86					

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
6/1/2016	12	5	4.2						
6/2/2016				1.9	6.6	5.8	8	1.3	20
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	8.4		3.7					1.2	
7/26/2016		5.4		1.8	6.1	6.7	7.7		20
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			1.8			7.5		19
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				1.9					19
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				2.1					20
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
5/2/2017				2					
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		5.9	6.4	2.1					18
6/28/2017	12					5.4			
6/29/2017							9.2		
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	2.3					16
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				2		6.7	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				2.3			10.2		7.9
9/27/2018									
10/1/2018	9.1	5.6	4		6.8	7.1			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (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				2.1			8.5		7
4/4/2019									
6/12/2019									
9/24/2019		5.3	4.3	2.4					5.5
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				2.1					5.9
3/25/2020							8.8		
3/26/2020									
9/22/2020				2.1			8.2		5.5
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									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	1.8	1.2							
6/7/2016			4.4	56	<1	5.2			
6/8/2016							<1		
7/25/2016									
7/26/2016									
7/27/2016	1.9	1.7	4.7		0.08 (J)				
7/28/2016				57		5.1			
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)	5.3			5			
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			5.2		<1	5.5			
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		5.3		<1				
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	6.1		0.13 (J)	7			
9/26/2018							0.28 (J)		
9/27/2018				39.6					
10/1/2018									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			5.1			3.8			
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			5.5		<1				
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	5.4		<1	3			
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				52.5	<1	3.6		579	
9/25/2020									
10/7/2020									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	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	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 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
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	17	400
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						57.2	414
2/20/2018						20.6	905		
4/2/2018									
4/3/2018						24.5	872	49.4	406
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	40.5	346
9/19/2018									
9/20/2018	247		84.1						
9/24/2018						21.2	872	39.7	358
9/25/2018									
9/26/2018				160					
9/27/2018									
10/1/2018					9.1				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
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	27.9	263
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					

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
6/1/2016	150	120	54						
6/2/2016				66	46	130	96	36	160
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	135		48					50	
7/26/2016		94		78	54	141	92		177
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			73			102		187
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				86					202
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				108					257
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)
5/2/2017				103					
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		89	42	73					189
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	89					170
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				142		95	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				86			116		144
9/27/2018									
10/1/2018	138	117	60		50	165			

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (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				83			111		142
4/4/2019									
6/12/2019									
9/24/2019		124	54	79					129
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				68					139
3/25/2020							146		
3/26/2020									
9/22/2020				75			83		104
9/23/2020	155	108	15			157			
9/24/2020								51	
9/25/2020					54				
10/7/2020									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	58	120							
6/7/2016			28	130	38	60			
6/8/2016							66		
7/25/2016									
7/26/2016									
7/27/2016	35	94	74		74				
7/28/2016				119		81			
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	41			61			
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 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			53		68	94			
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		61		54				
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	86		73	122			
9/26/2018							59		
9/27/2018				105					
10/1/2018									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/25/2020 7:06 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-21I (bg)	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			72			134			
4/3/2019	63	89			57				
4/4/2019				85			63		
6/12/2019									
9/24/2019						157			
9/25/2019			81		75				
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	71		76	117			
3/25/2020								1200	
3/26/2020				110			67		
9/22/2020									141
9/23/2020	81	103	99				87		
9/24/2020				129	69	113		1060	
9/25/2020									
10/7/2020									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	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	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 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
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	74	636
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						119	630
2/20/2018						87	1300		
4/2/2018									
4/3/2018						85	1390	106	660
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	103	574
9/19/2018									
9/20/2018	434		186						
9/24/2018						82	1400	107	588
9/25/2018									
9/26/2018				277					
9/27/2018									
10/1/2018					155				

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/25/2020 7:06 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)	YGWC-38	YGWA-40 (bg)	YGWC-41
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	98	440
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					

FIGURE E.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWC-38	-4.054	-44	-38	Yes	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-43	0.7688	62	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.09147	-54	-53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	1.723	59	53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-38	-27.93	-52	-38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-2.267	-48	-38	Yes	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	4.326	50	43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.9112	54	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.1906	61	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.225	65	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.9674	-68	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-13.69	-44	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-4.083	-81	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.1006	59	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-38	-132.4	-55	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-41	-83.77	-50	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-43	53.39	44	38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-26.3	-61	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	22.54	53	43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.104	63	53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-16.16	-59	-53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-41	-124.6	-50	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-42	-147.2	-44	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-43	115.6	58	38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-14.88	-44	-38	Yes	12	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-17S (bg)	-0.0004068	-21	-53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-38	-53	No	15	73.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0005007	-21	-53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-17	-53	No	15	86.67	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	-0.006488	-47	-53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.003122	11	38	No	12	8.333	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.02578	-31	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-10	-53	No	15	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0006117	23	53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	-0.001168	-43	-53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-23S	-0.164	-44	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-38**	**-4.054**	**-44**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWC-41	-2.481	-32	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-42	-1.556	-25	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-43**	**0.7688**	**62**	**38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-47 (bg)	-0.001562	-37	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	0	-1	-43	No	13	53.85	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.002039	-30	-53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	-0.0002466	-14	-53	No	15	20	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-28	-53	No	15	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-22	-53	No	15	73.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-31	-53	No	15	80	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-15	-53	No	15	53.33	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-25	-53	No	15	86.67	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.1212	51	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18I (bg)	0.02072	8	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.09147**	**-54**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.1176	52	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**1.723**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-39 (bg)	0.05098	1	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-1.15	-37	-38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-4I (bg)	0.4056	50	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.054	-47	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5I (bg)	0.08295	38	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWC-38**	**-27.93**	**-52**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWC-42	-12.06	-34	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-47 (bg)**	**-2.267**	**-48**	**-38**	**Yes**	**12**	**8.333**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GWA-2 (bg)**	**4.326**	**50**	**43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-14S (bg)	-0.0442	-47	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-1D (bg)**	**0.9112**	**54**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-1I (bg)	-0.1082	-50	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-2I (bg)	0.7549	37	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	-0.01026	-12	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	0.9217	40	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.6083	28	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.1906**	**61**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18I (bg)	0.06048	32	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2113	40	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.225**	**65**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.06716	-15	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.02132	1	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.2281	23	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.1431	41	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.9674**	**-68**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-5I (bg)	0	1	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.504	-33	-38	No	12	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

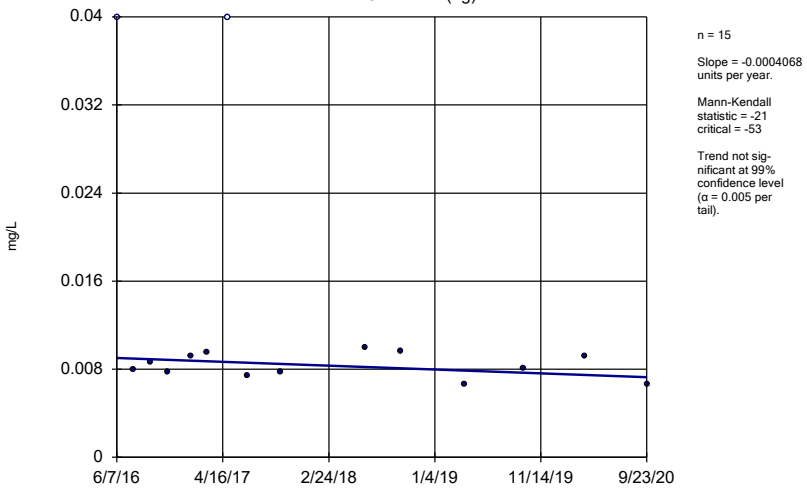
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	GWA-2 (bg)	0.1924	33	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.1026	20	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	0	-25	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	0	-19	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.04955	-30	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	0	-10	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.06957	-46	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05476	-51	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-24SA	0.3315	41	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-36A	0.2005	22	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.1628	49	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2596	-42	-53	No	15	20	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.2017	-42	-53	No	15	13.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	18	53	No	15	60	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.3604	-21	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-4.02	-38	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-40 (bg)**	**-13.69**	**-44**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.2408	50	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-4.083**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.1006**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-38**	**-132.4**	**-55**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-41**	**-83.77**	**-50**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWC-42	-112.9	-37	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWC-43**	**53.39**	**44**	**38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-26.3**	**-61**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GWA-2 (bg)**	**22.54**	**53**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-14S (bg)	0.1735	30	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-1D (bg)**	**1.104**	**63**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.3029	-21	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.142	8	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.09481	-21	-53	No	15	13.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.6124	52	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3I (bg)	1.18	45	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	6.577	31	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-1.862	-14	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	7.897	34	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	5.975	37	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	22.56	45	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	12.16	18	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-16.26	-36	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	4.95	19	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-5D (bg)**	**-16.16**	**-59**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	0.4969	6	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-38	-170	-36	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-41**	**-124.6**	**-50**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-42**	**-147.2**	**-44**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-43**	**115.6**	**58**	**38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWA-47 (bg)**	**-14.88**	**-44**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GWA-2 (bg)	21.56	27	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-14S (bg)	0.8555	9	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1D (bg)	3.318	18	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1I (bg)	-3.416	-17	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-2I (bg)	-2.032	-19	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-30I (bg)	3.476	28	53	No	15	13.33	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3D (bg)	4.214	19	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3I (bg)	2.713	14	53	No	15	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 15

Slope = -0.0004068 units per year.

Mann-Kendall statistic = -21
critical = -53

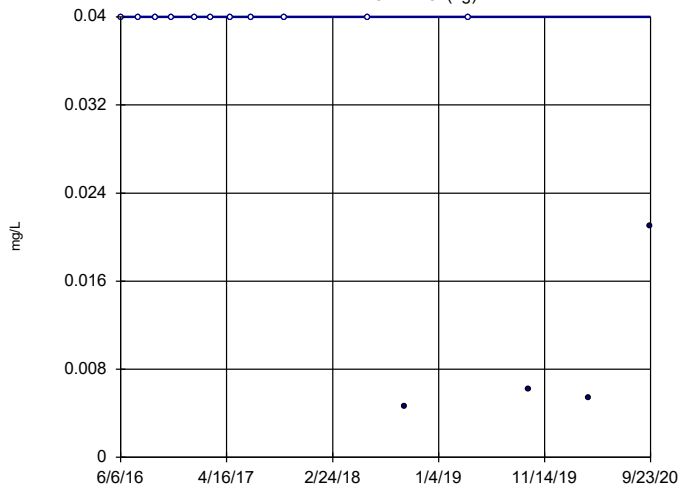
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -38
critical = -53

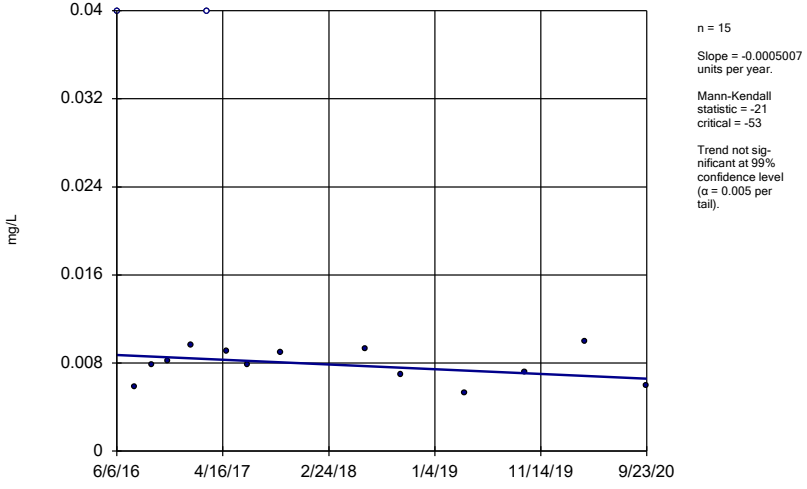
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 15

Slope = -0.0005007 units per year.

Mann-Kendall statistic = -21
critical = -53

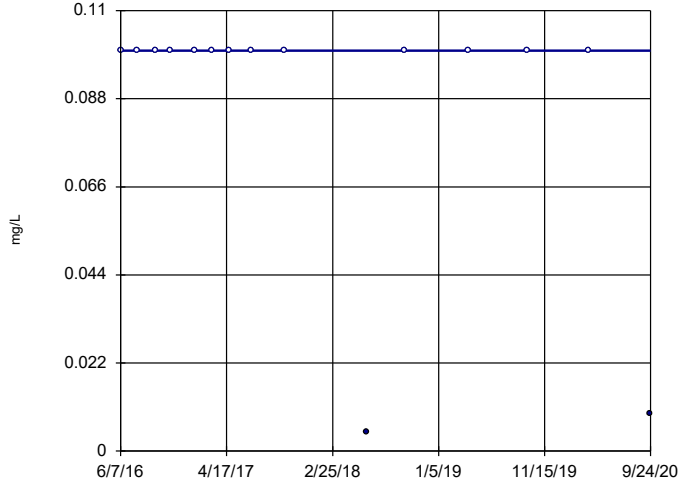
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -17
critical = -53

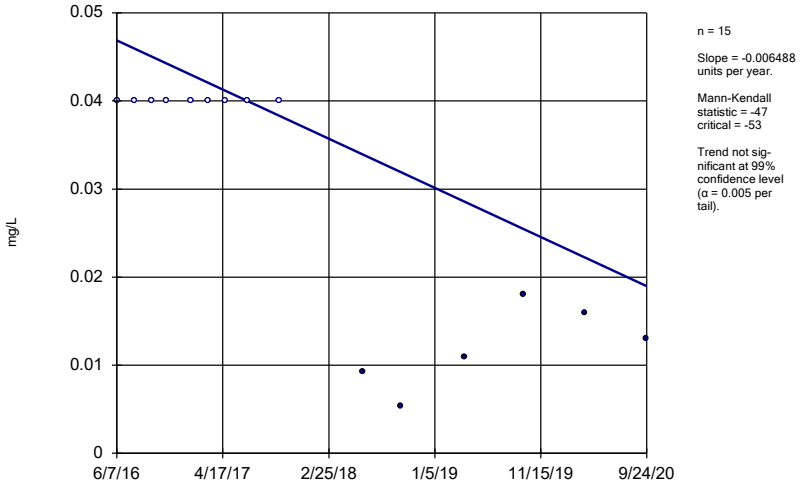
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 15

Slope = -0.006488 units per year.

Mann-Kendall statistic = -47
critical = -53

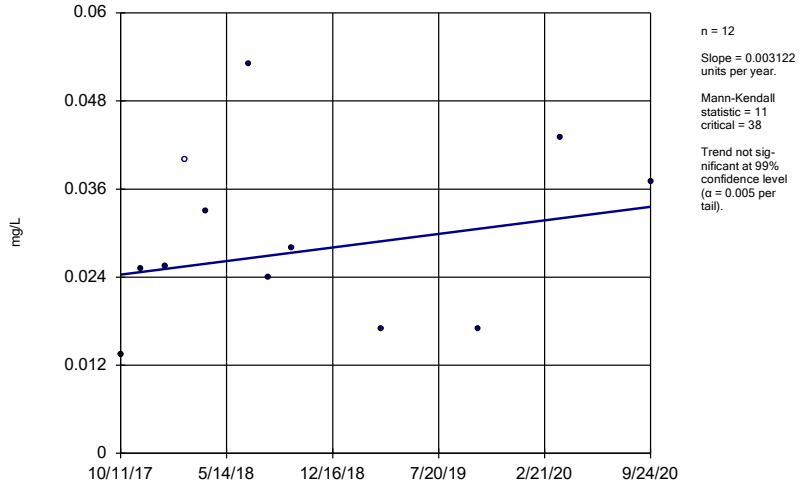
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 12

Slope = 0.003122 units per year.

Mann-Kendall statistic = 11
critical = 38

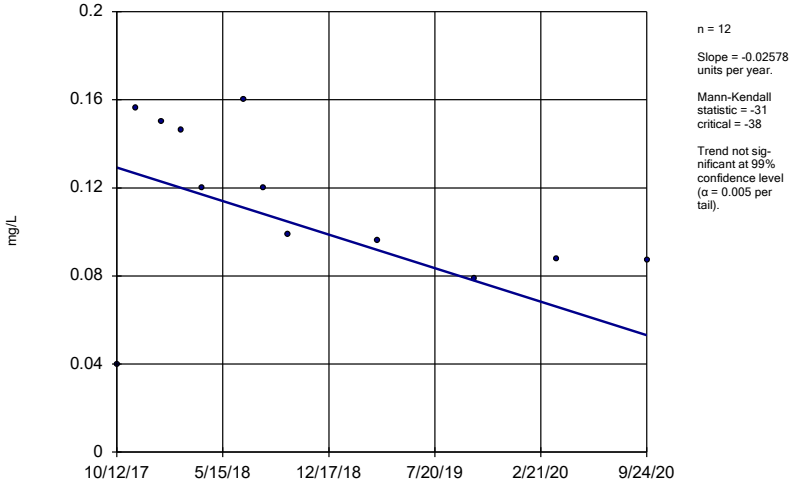
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 12

Slope = -0.02578 units per year.

Mann-Kendall statistic = -31
critical = -38

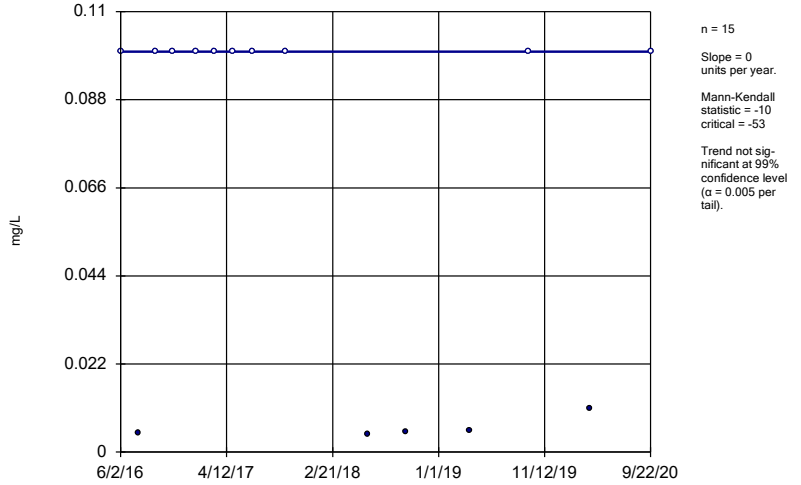
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -10
critical = -53

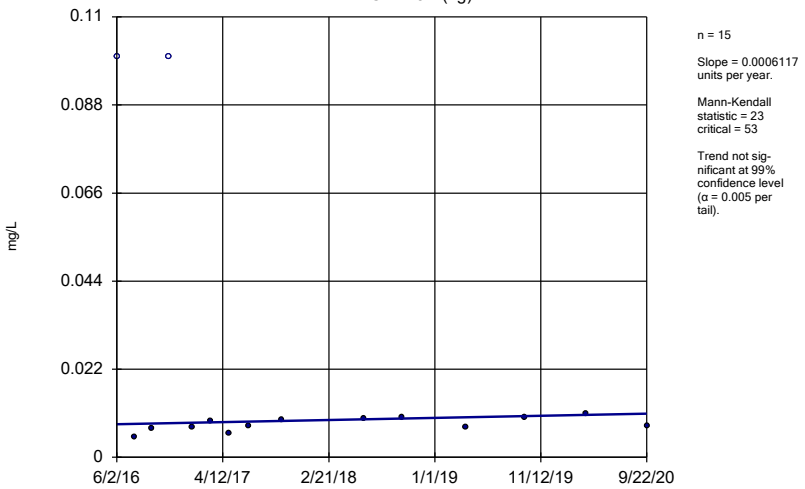
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 15

Slope = 0.0006117 units per year.

Mann-Kendall statistic = 23
critical = 53

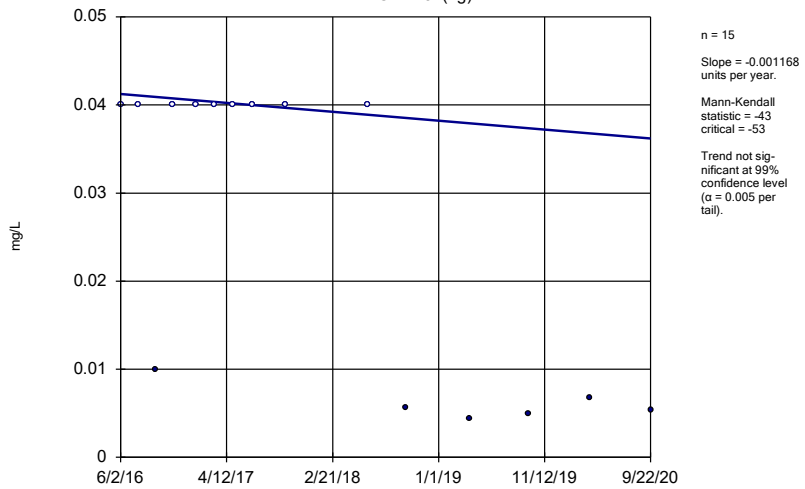
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 15

Slope = -0.001168 units per year.

Mann-Kendall statistic = -43
critical = -53

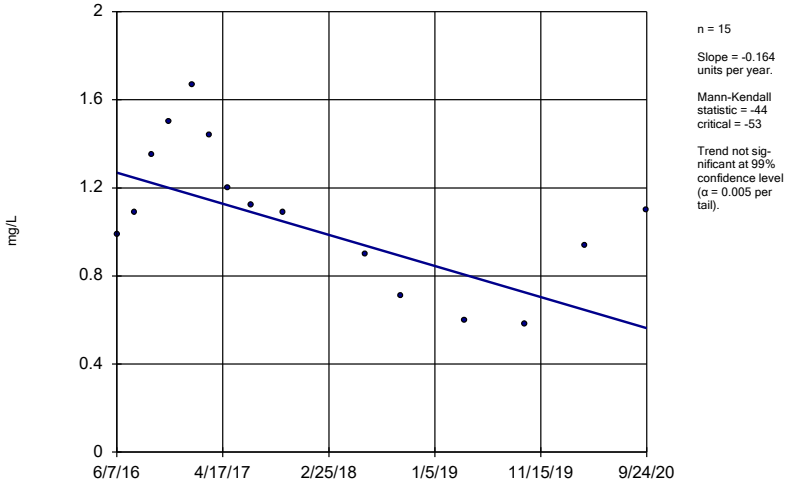
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-23S



n = 15

Slope = -0.164 units per year.

Mann-Kendall statistic = -44
critical = -53

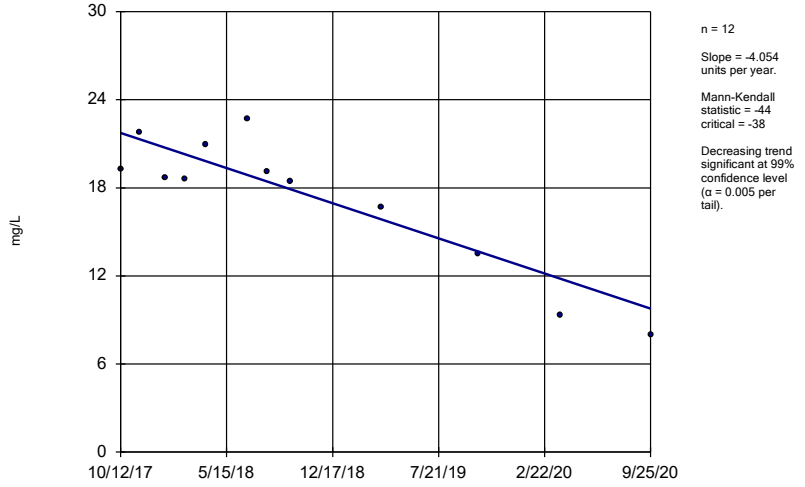
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 12

Slope = -4.054 units per year.

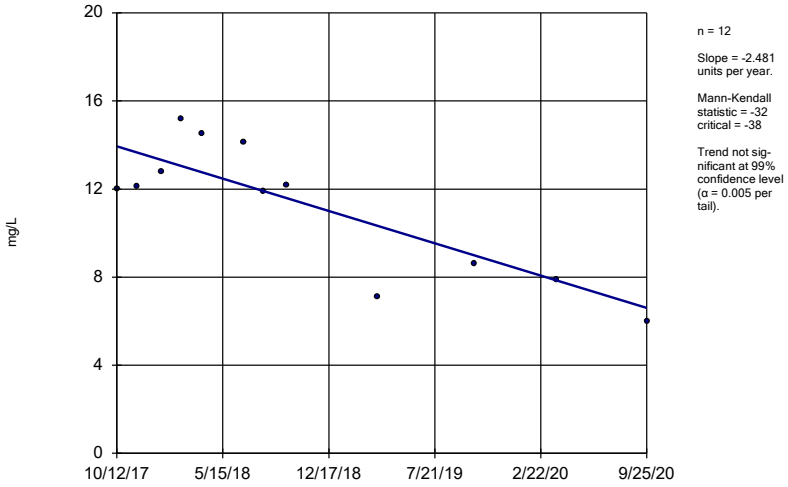
Mann-Kendall statistic = -44
critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-41



n = 12

Slope = -2.481 units per year.

Mann-Kendall statistic = -32 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

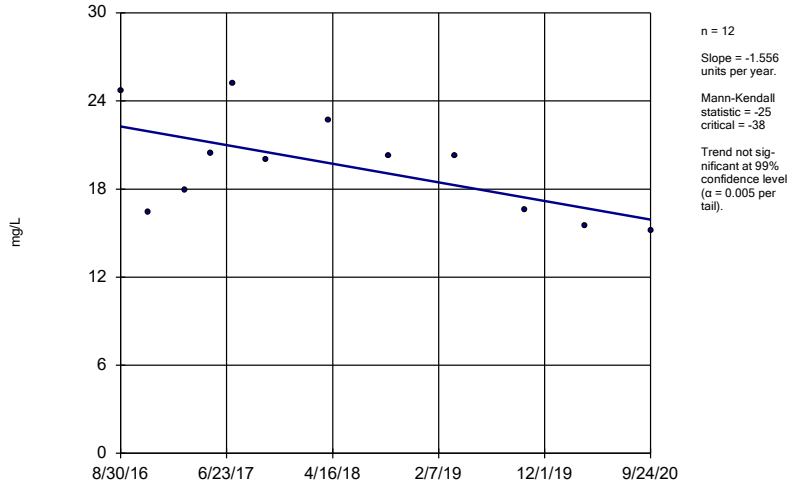
Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 12

Slope = -1.556 units per year.

Mann-Kendall statistic = -25 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

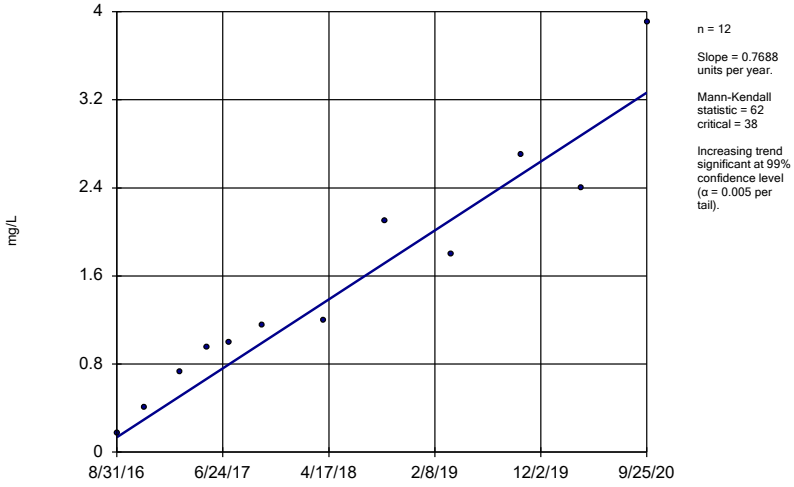
Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 12

Slope = 0.7688 units per year.

Mann-Kendall statistic = 62 critical = 38

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

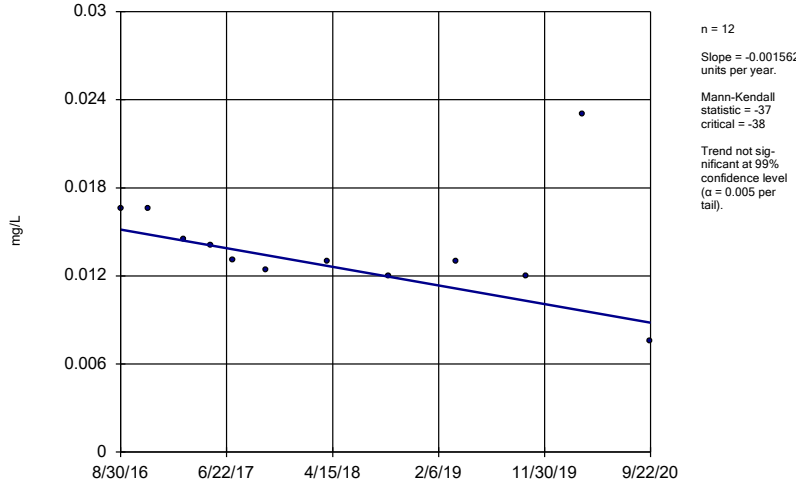
Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 12

Slope = -0.001562 units per year.

Mann-Kendall statistic = -37 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

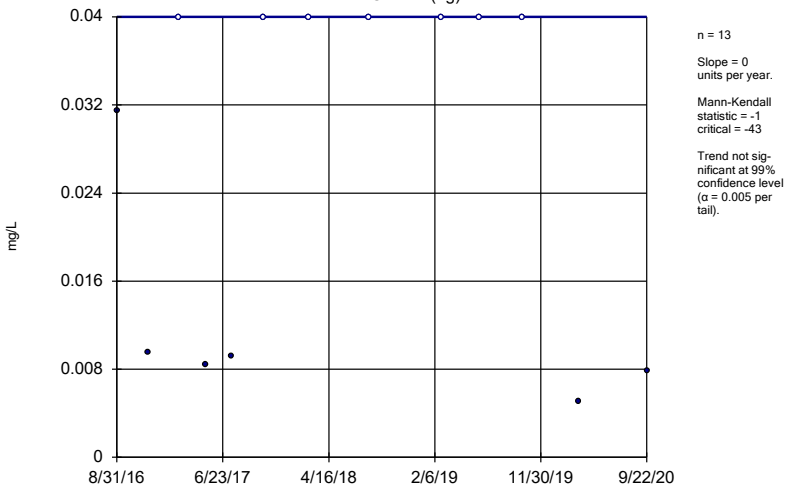
Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -43

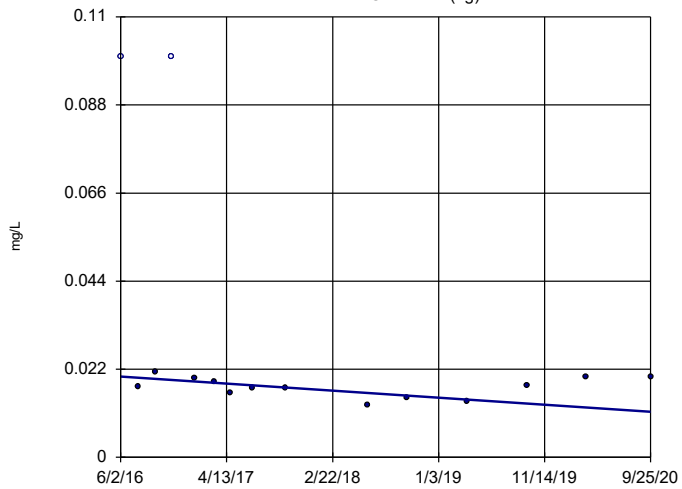
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 15

Slope = -0.002039 units per year.

Mann-Kendall statistic = -30
critical = -53

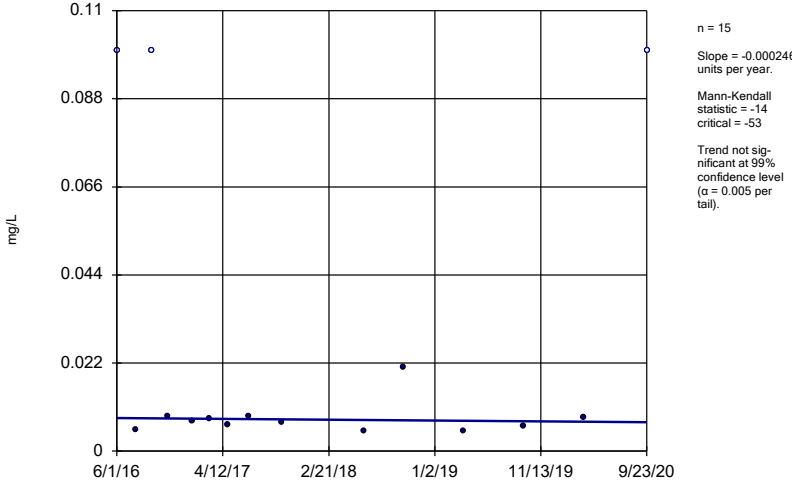
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 15

Slope = -0.0002466 units per year.

Mann-Kendall statistic = -14
critical = -53

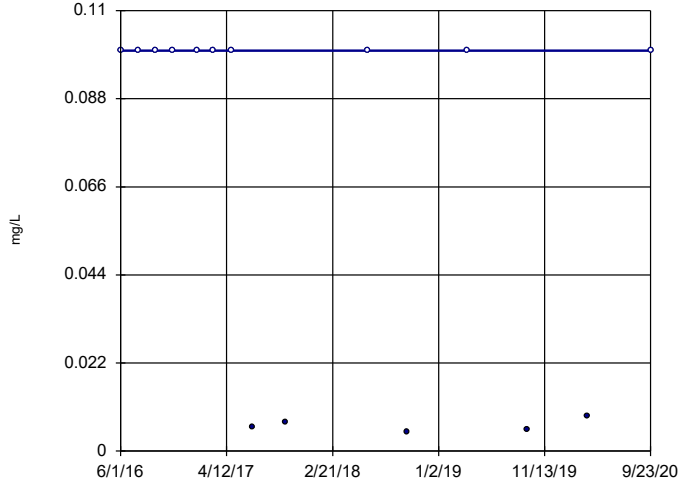
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -28
critical = -53

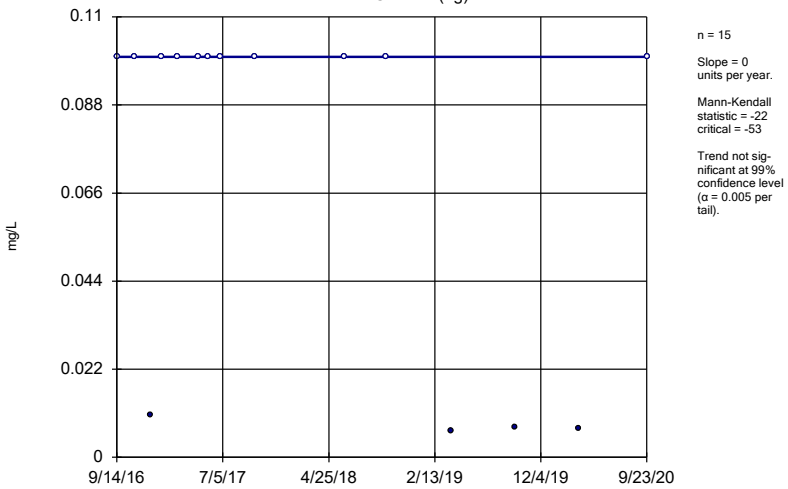
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -22
critical = -53

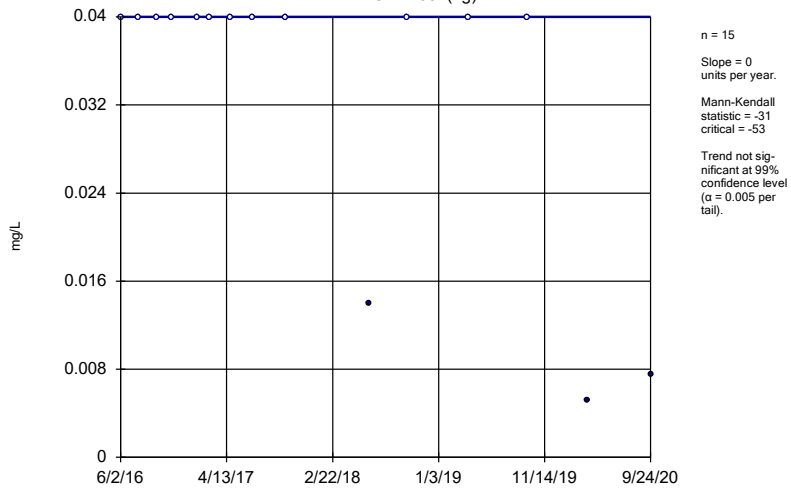
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -31
critical = -53

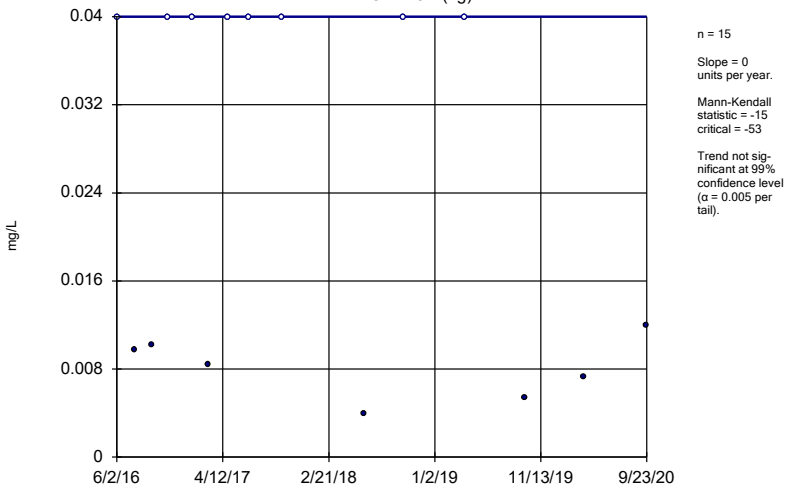
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -15
critical = -53

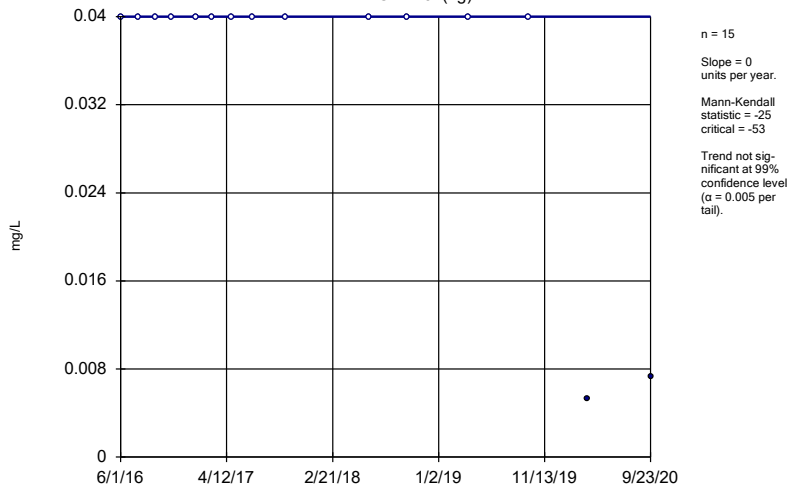
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 15

Slope = 0 units per year.

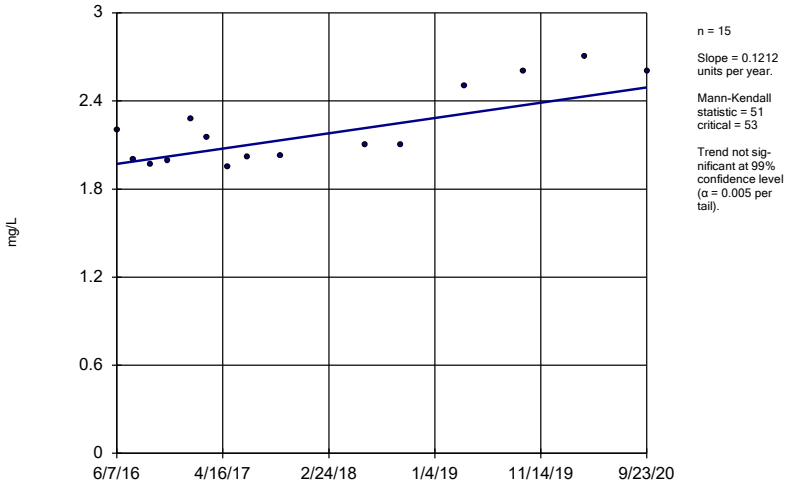
Mann-Kendall statistic = -25
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-17S (bg)



n = 15

Slope = 0.1212 units per year.

Mann-Kendall statistic = 51
critical = 53

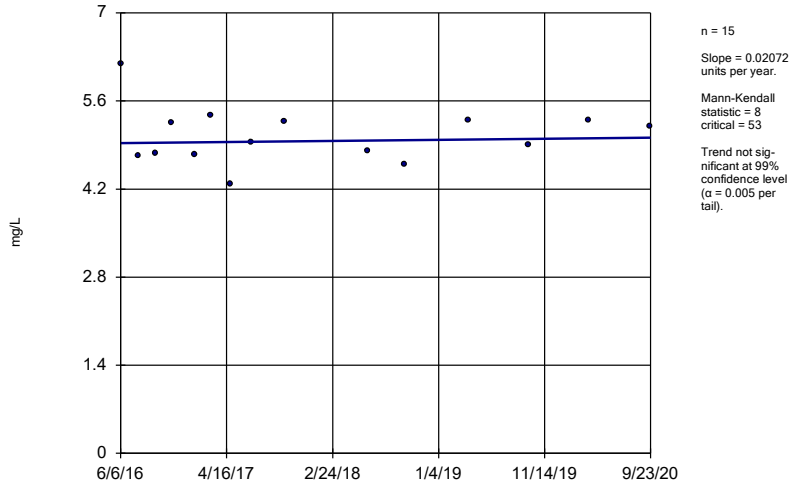
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 15

Slope = 0.02072 units per year.

Mann-Kendall statistic = 8
critical = 53

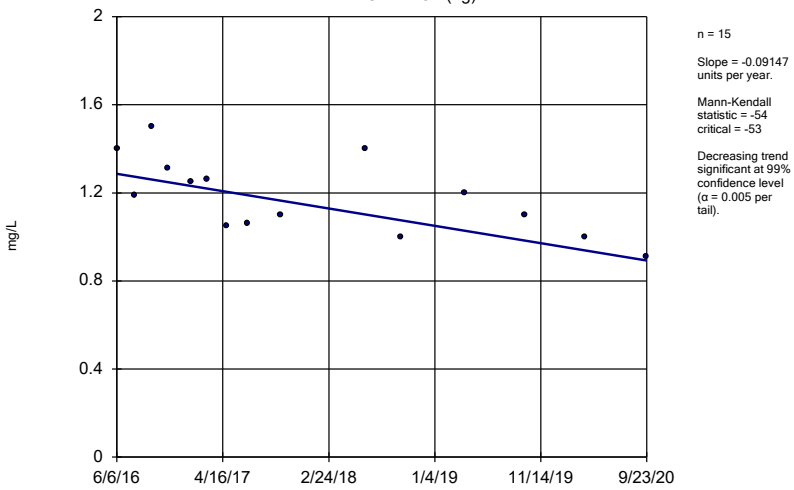
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 15

Slope = -0.09147 units per year.

Mann-Kendall statistic = -54
critical = -53

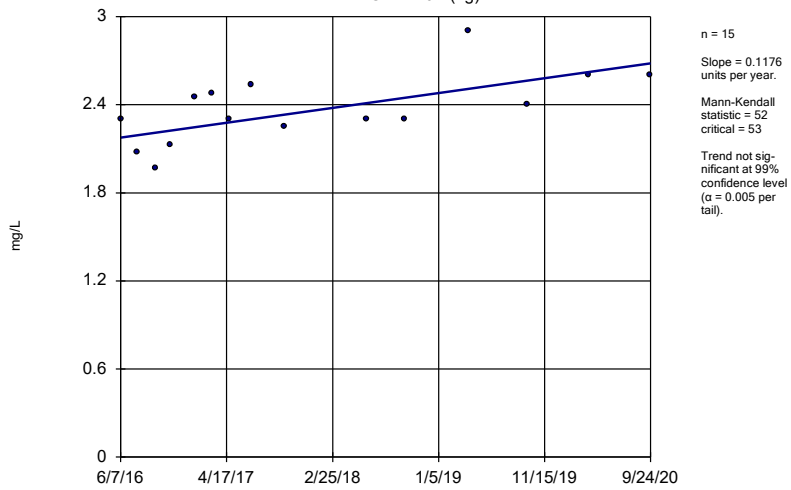
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 15

Slope = 0.1176 units per year.

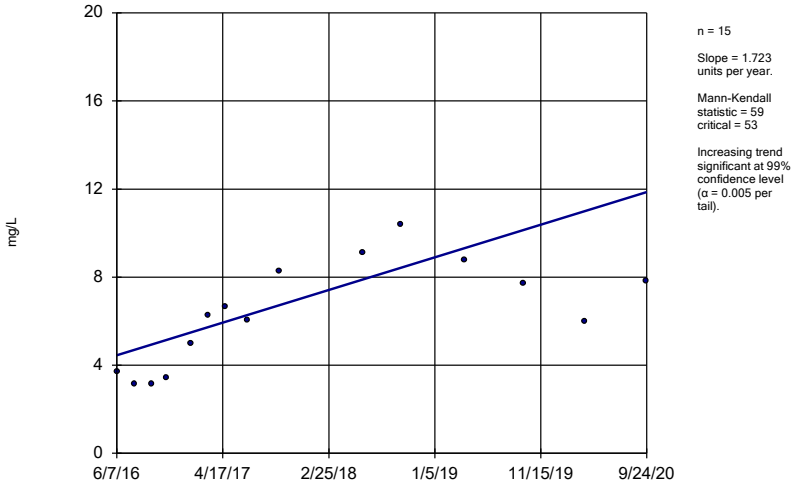
Mann-Kendall statistic = 52
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-21I (bg)



n = 15

Slope = 1.723 units per year.

Mann-Kendall statistic = 59 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

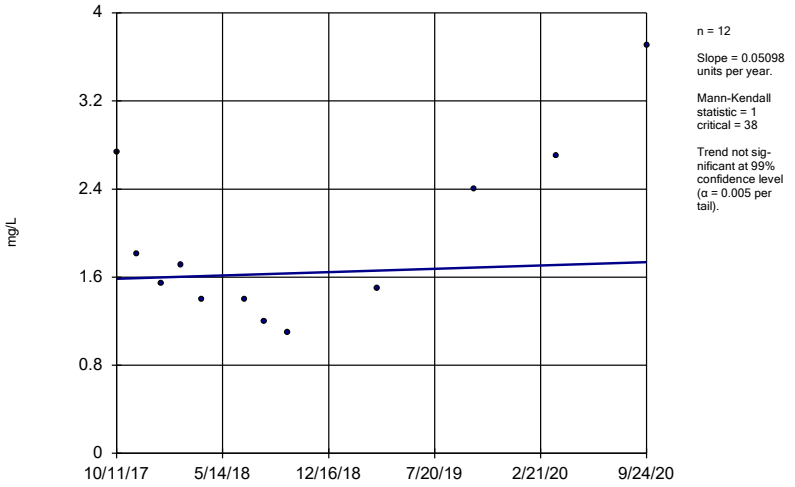
Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 12

Slope = 0.05098 units per year.

Mann-Kendall statistic = 1 critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

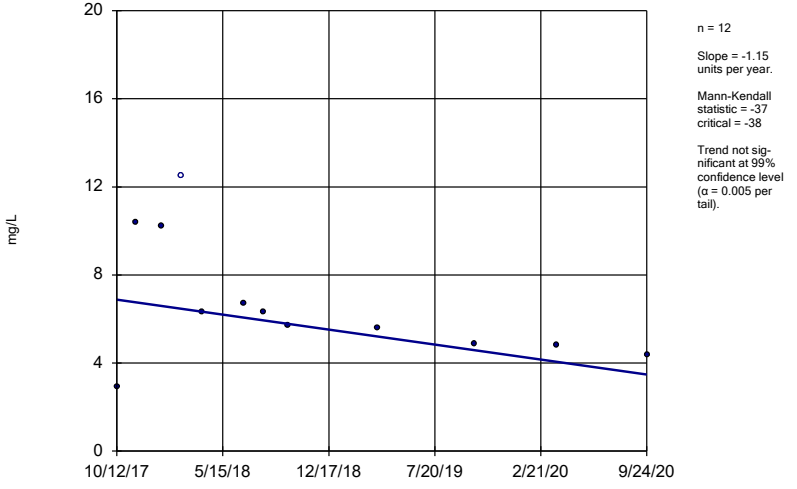
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 12

Slope = -1.15 units per year.

Mann-Kendall statistic = -37 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

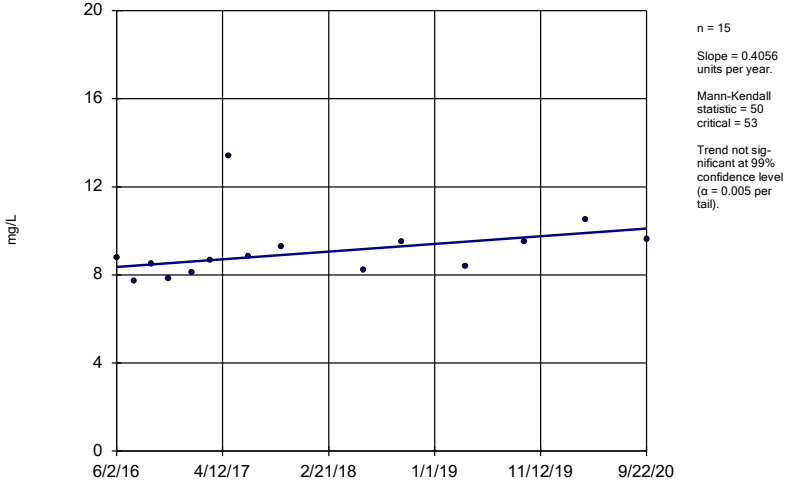
Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 15

Slope = 0.4056 units per year.

Mann-Kendall statistic = 50 critical = 53

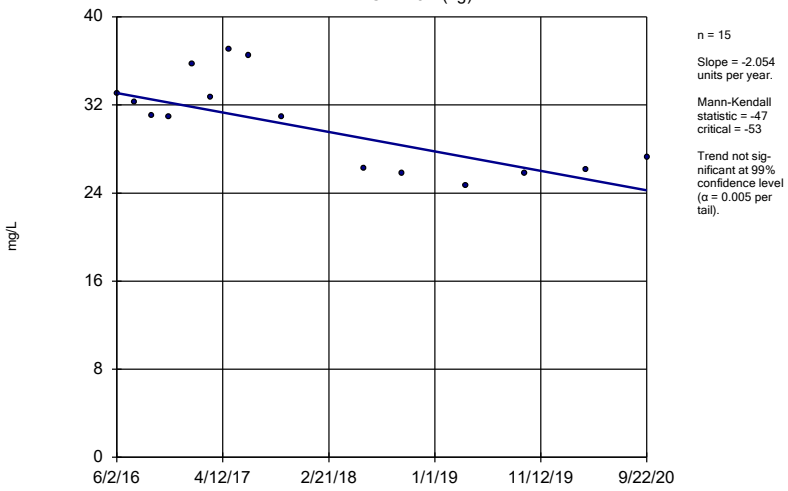
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-5D (bg)



n = 15

Slope = -2.054 units per year.

Mann-Kendall statistic = -47
critical = -53

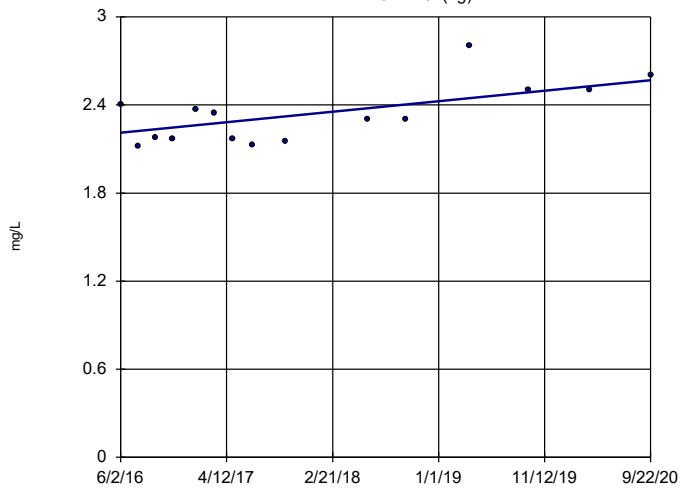
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 15

Slope = 0.08295 units per year.

Mann-Kendall statistic = 38
critical = 53

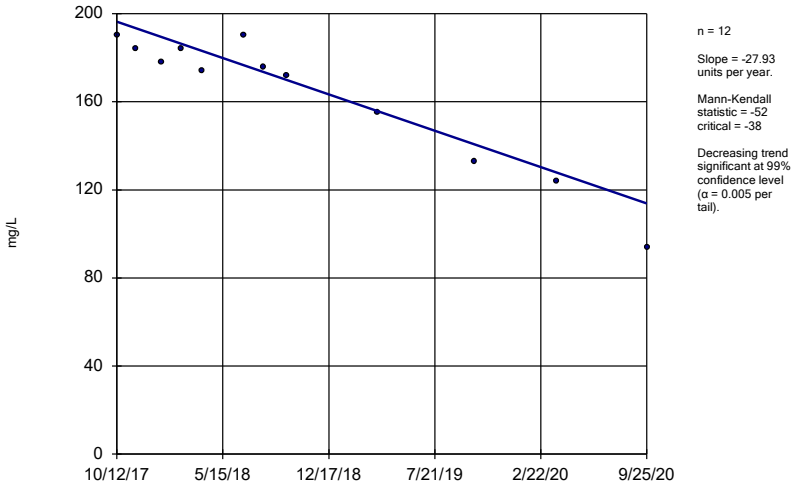
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 12

Slope = -27.93 units per year.

Mann-Kendall statistic = -52
critical = -38

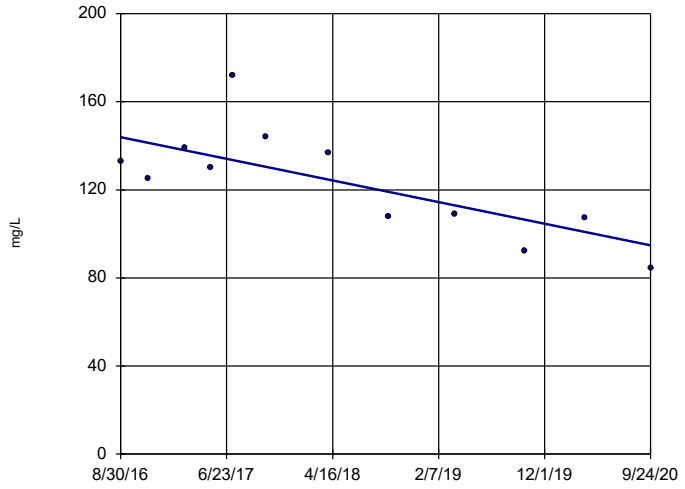
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 12

Slope = -12.06 units per year.

Mann-Kendall statistic = -34
critical = -38

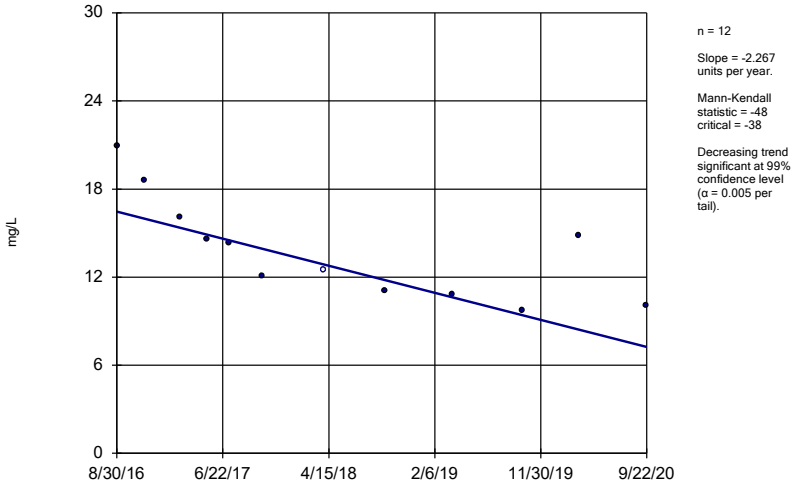
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 12

Slope = -2.267 units per year.

Mann-Kendall statistic = -48
critical = -38

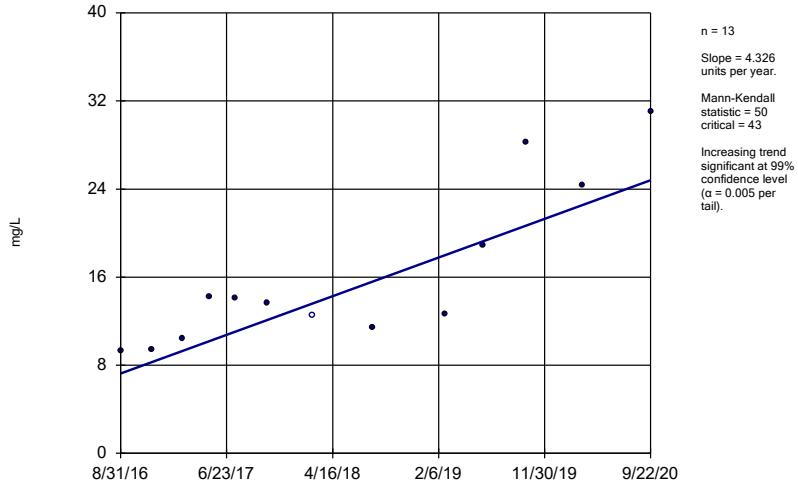
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 4.326 units per year.

Mann-Kendall statistic = 50
critical = 43

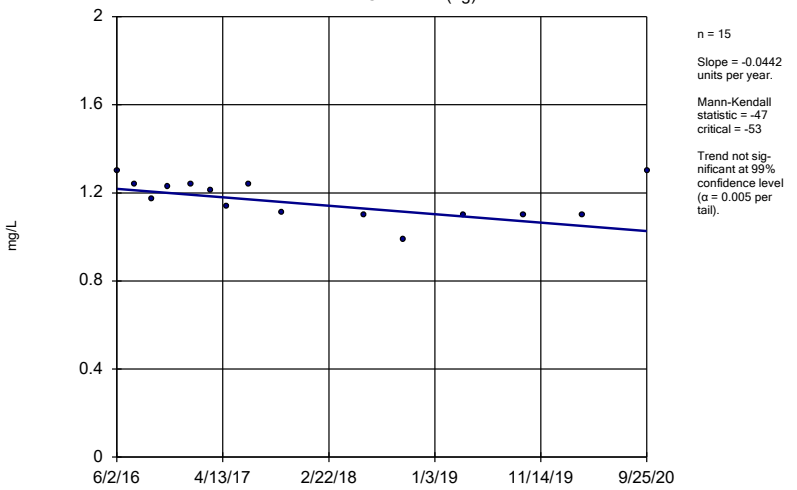
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 15

Slope = -0.0442 units per year.

Mann-Kendall statistic = -47
critical = -53

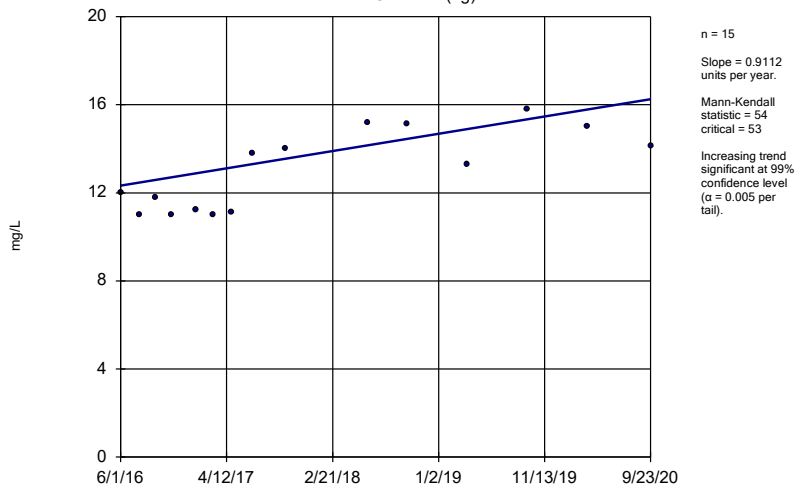
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 15

Slope = 0.9112 units per year.

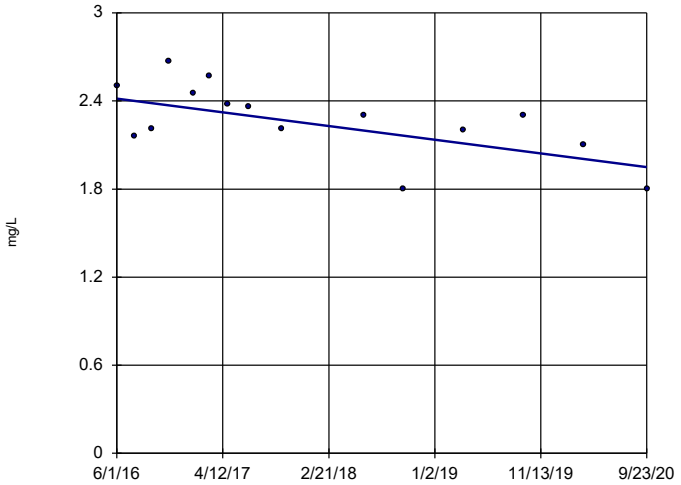
Mann-Kendall statistic = 54
critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-1I (bg)



n = 15

Slope = -0.1082 units per year.

Mann-Kendall statistic = -50
critical = -53

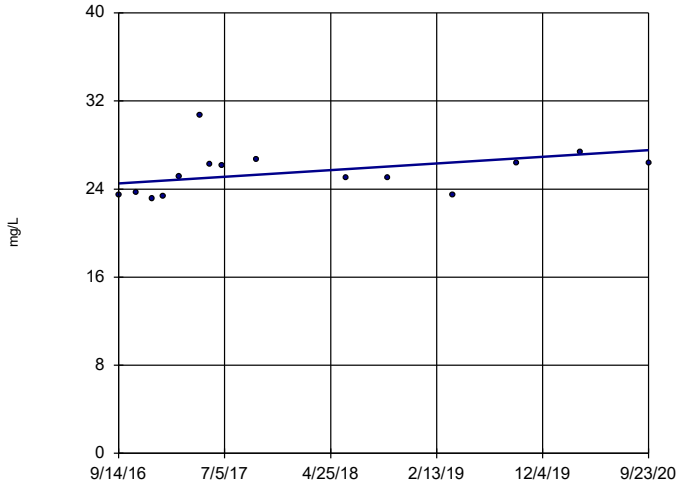
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 15

Slope = 0.7549 units per year.

Mann-Kendall statistic = 37
critical = 53

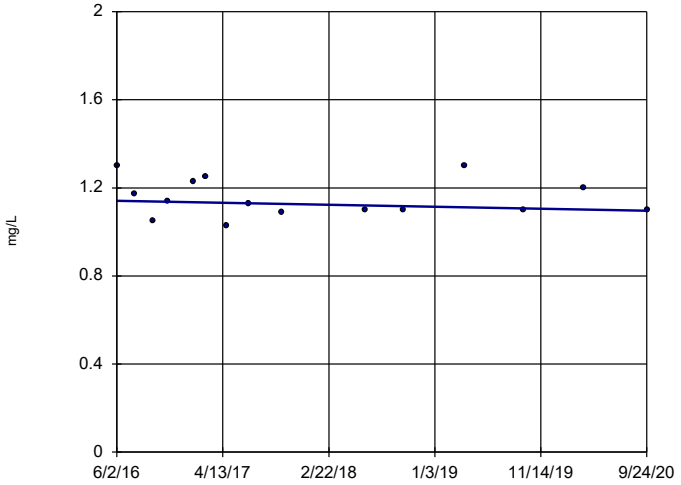
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 15

Slope = -0.01026 units per year.

Mann-Kendall statistic = -12
critical = -53

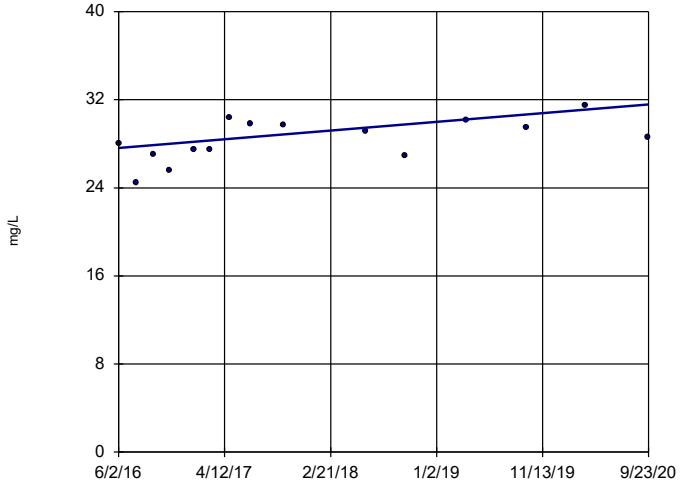
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 15

Slope = 0.9217 units per year.

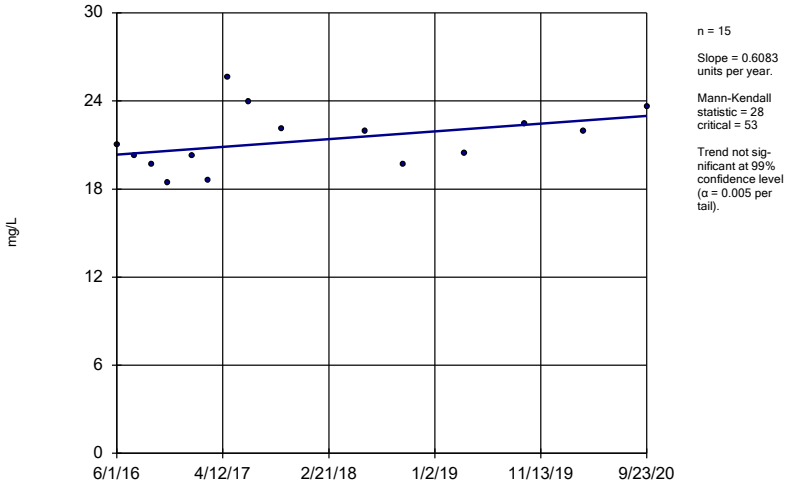
Mann-Kendall statistic = 40
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3I (bg)



n = 15

Slope = 0.6083 units per year.

Mann-Kendall statistic = 28 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

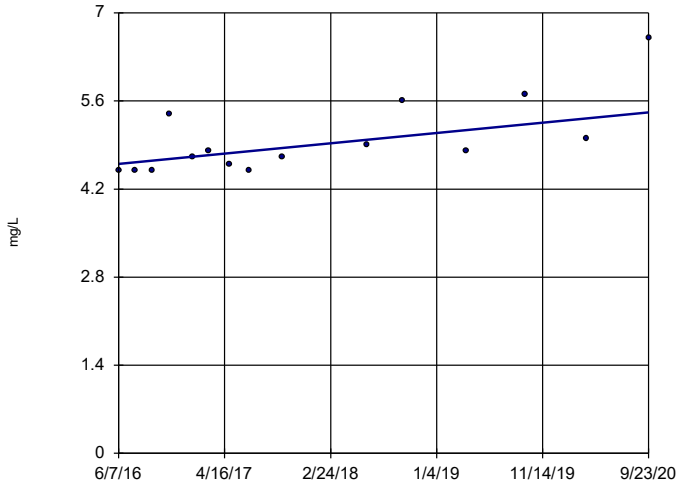
Constituent: Calcium Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 15

Slope = 0.1906 units per year.

Mann-Kendall statistic = 61 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

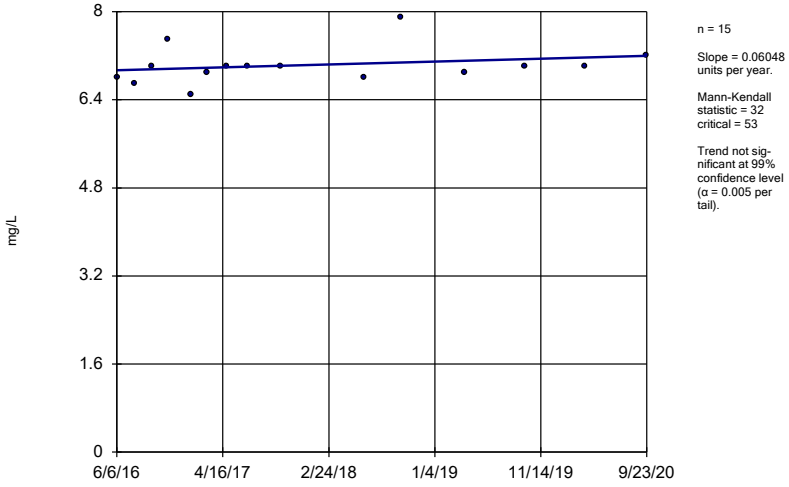
Constituent: Chloride Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 15

Slope = 0.06048 units per year.

Mann-Kendall statistic = 32 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

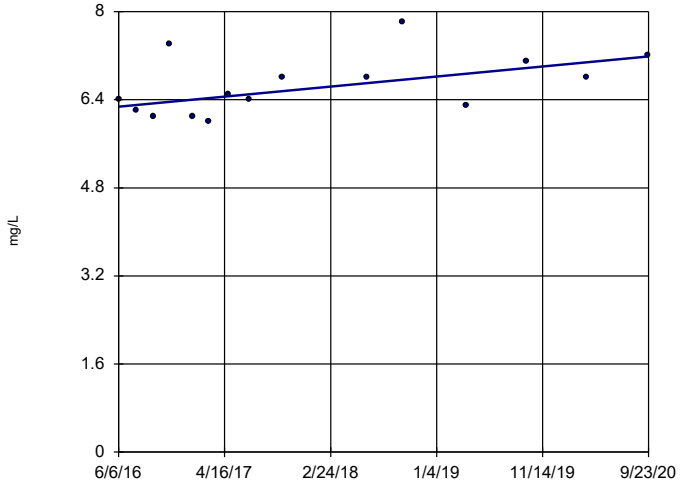
Constituent: Chloride Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 15

Slope = 0.2113 units per year.

Mann-Kendall statistic = 40 critical = 53

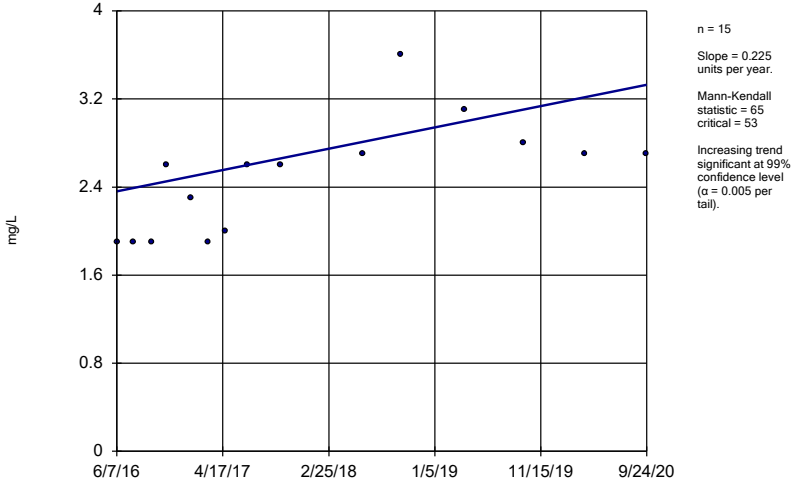
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-20S (bg)



n = 15

Slope = 0.225 units per year.

Mann-Kendall statistic = 65
critical = 53

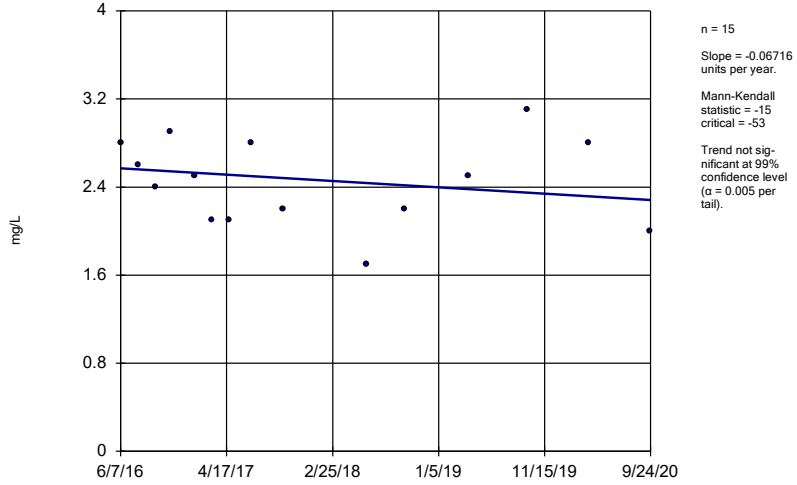
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 15

Slope = -0.06716 units per year.

Mann-Kendall statistic = -15
critical = -53

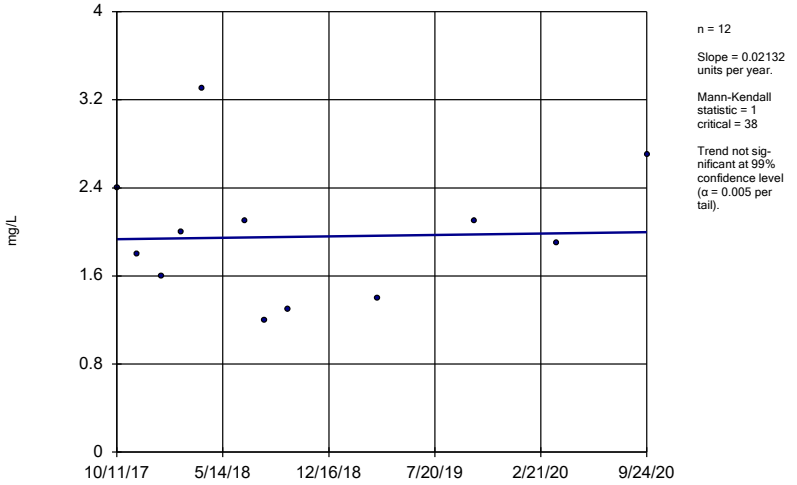
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:01 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 12

Slope = 0.02132 units per year.

Mann-Kendall statistic = 1
critical = 38

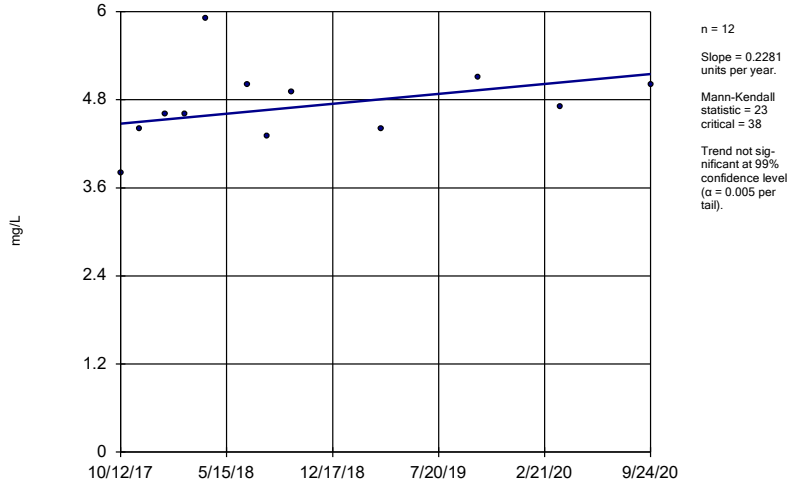
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 12

Slope = 0.2281 units per year.

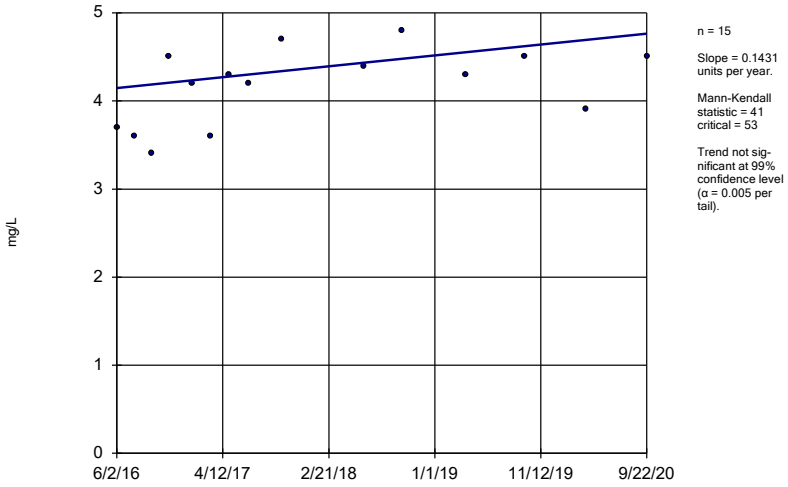
Mann-Kendall statistic = 23
critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-4I (bg)



n = 15

Slope = 0.1431 units per year.

Mann-Kendall statistic = 41 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

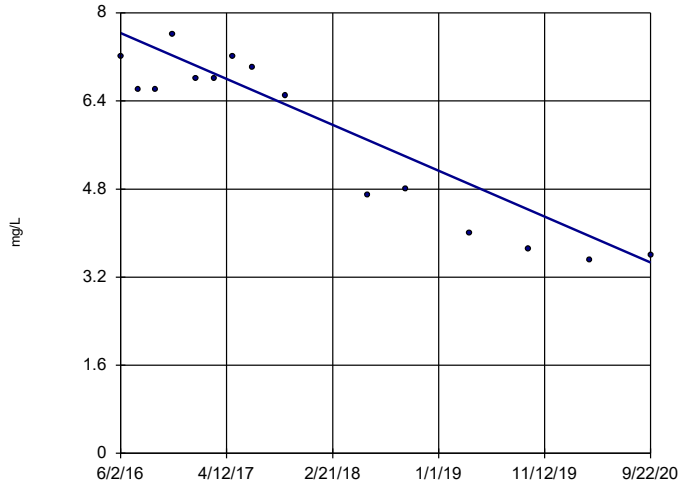
Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 15

Slope = -0.9674 units per year.

Mann-Kendall statistic = -68 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

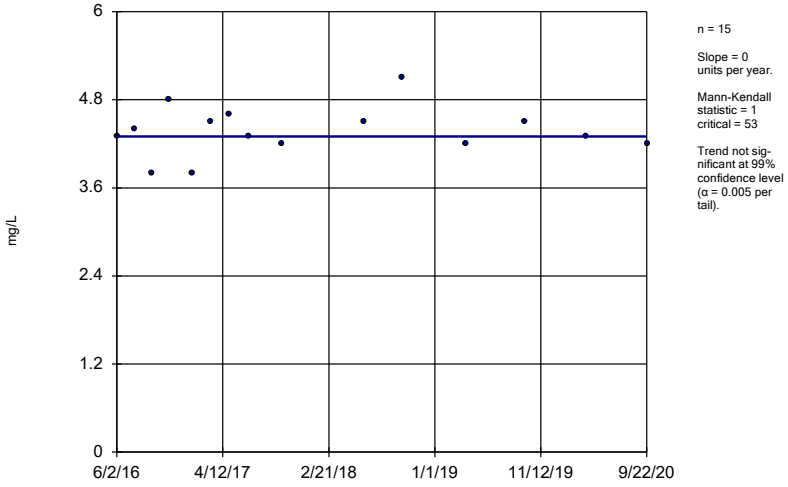
Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 1 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

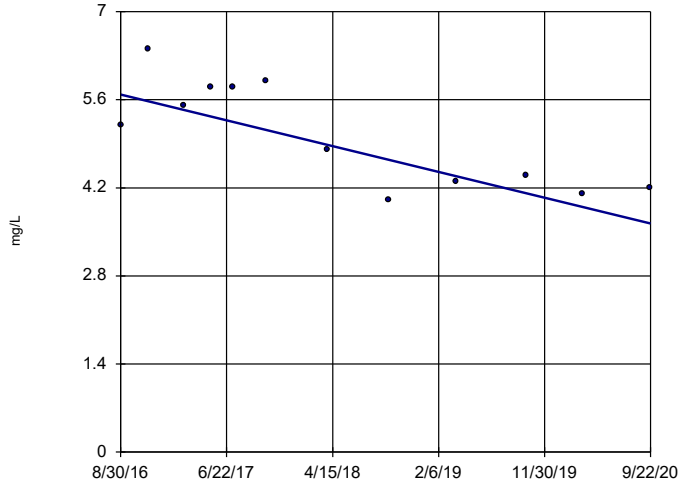
Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 12

Slope = -0.504 units per year.

Mann-Kendall statistic = -33 critical = -38

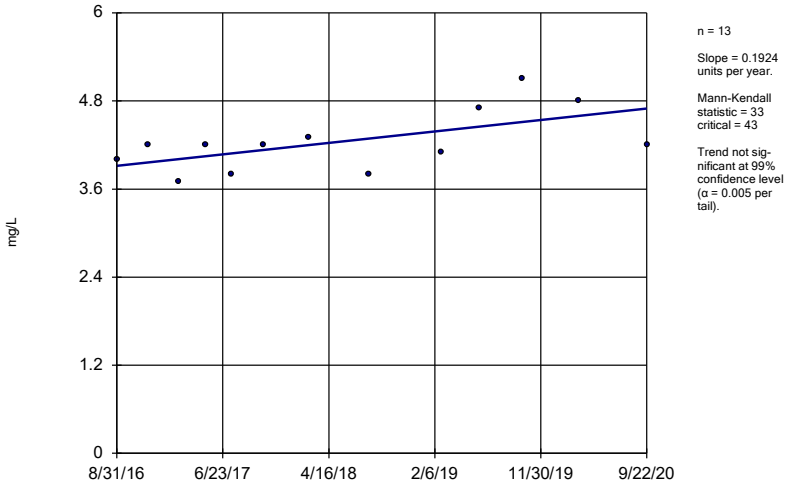
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 0.1924 units per year.

Mann-Kendall statistic = 33 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

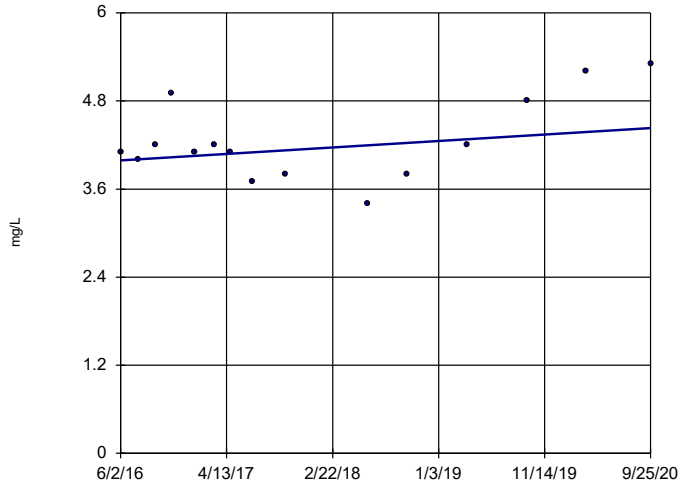
Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 15

Slope = 0.1026 units per year.

Mann-Kendall statistic = 20 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

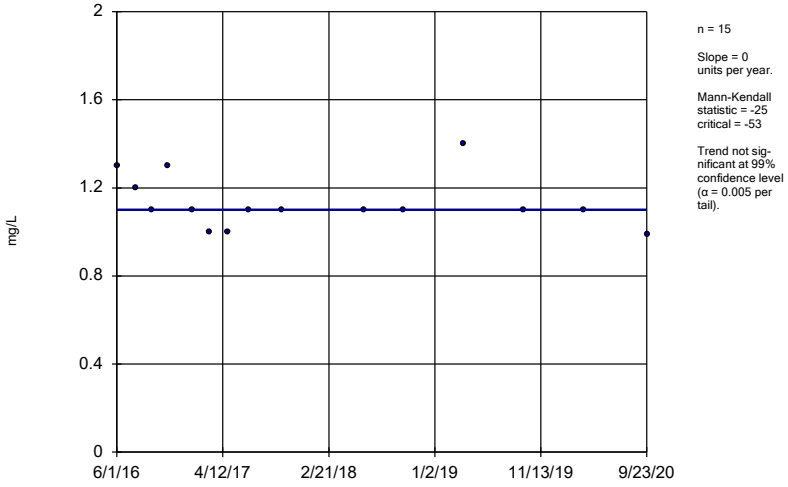
Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -25 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

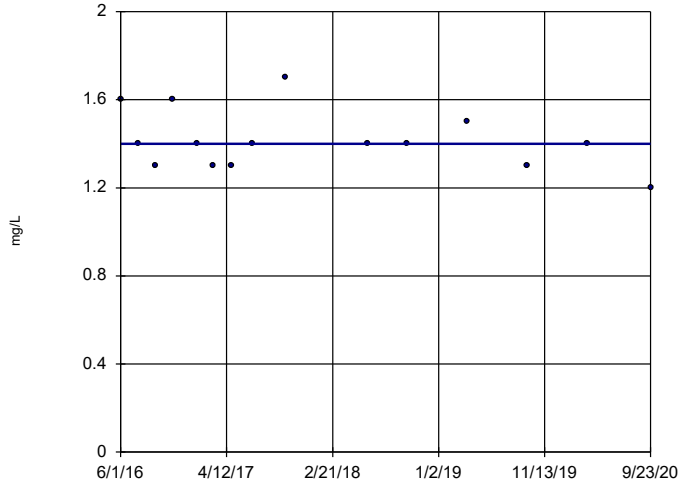
Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -19 critical = -53

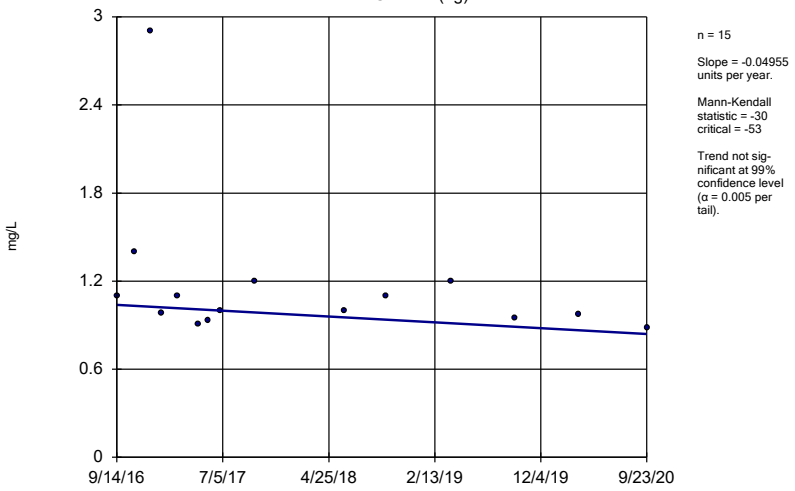
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-2I (bg)



n = 15

Slope = -0.04955 units per year.

Mann-Kendall statistic = -30
critical = -53

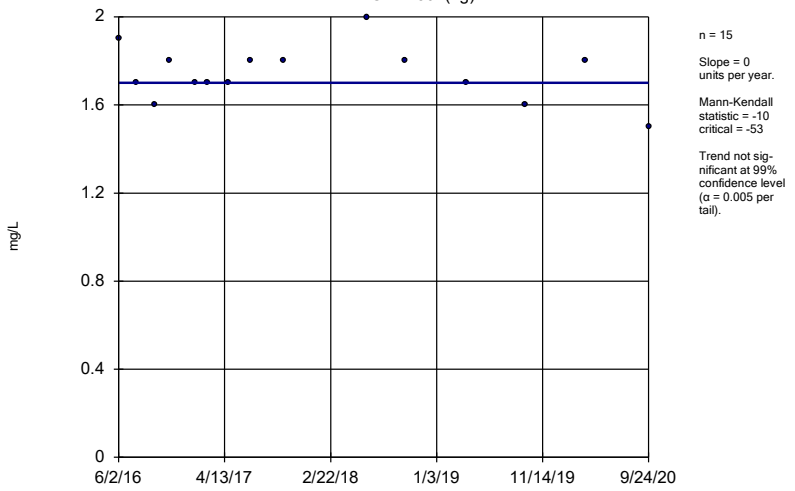
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -10
critical = -53

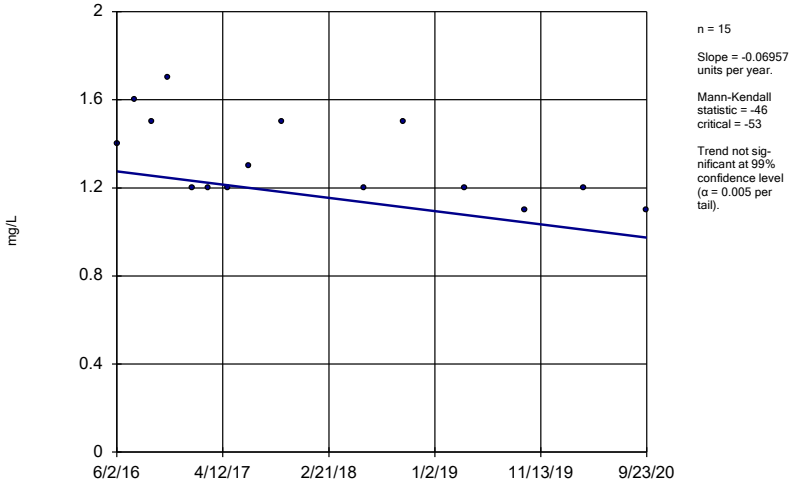
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 15

Slope = -0.06957 units per year.

Mann-Kendall statistic = -46
critical = -53

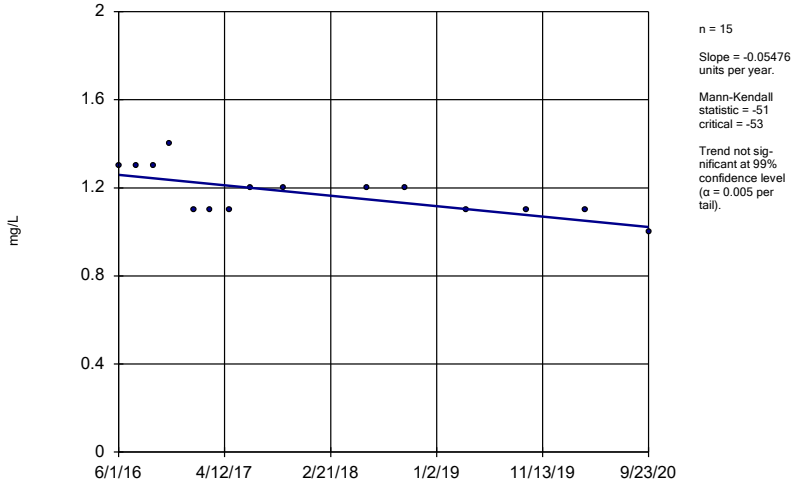
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 15

Slope = -0.05476 units per year.

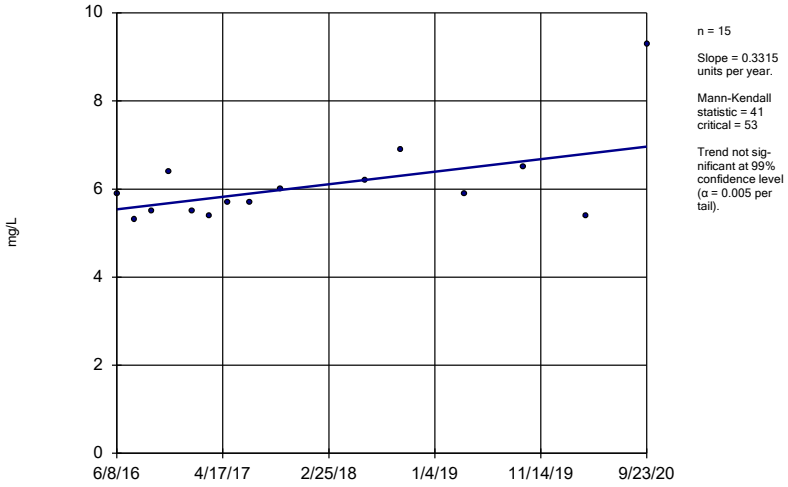
Mann-Kendall statistic = -51
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-24SA

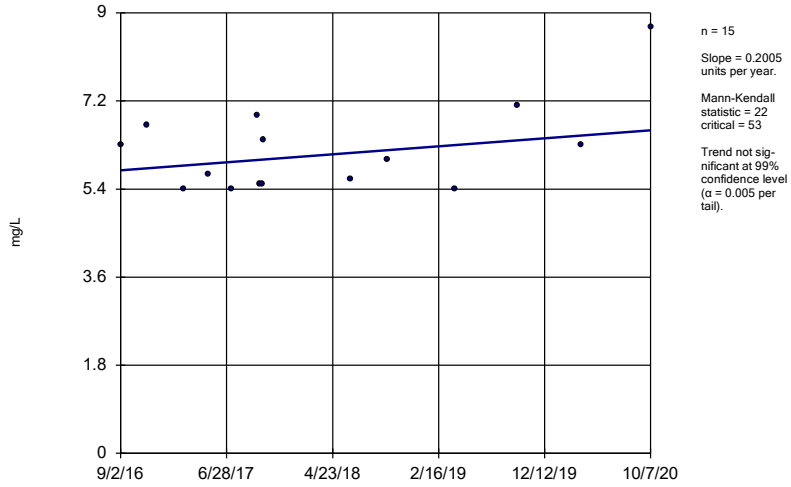


Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-36A

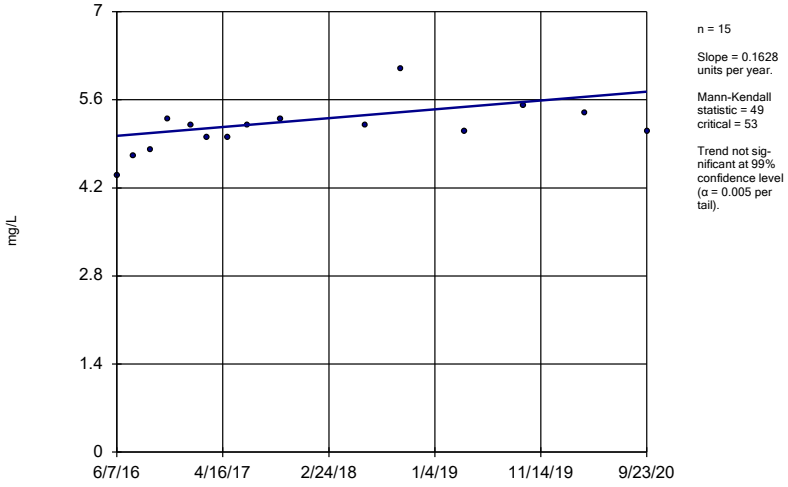


Constituent: Chloride Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)

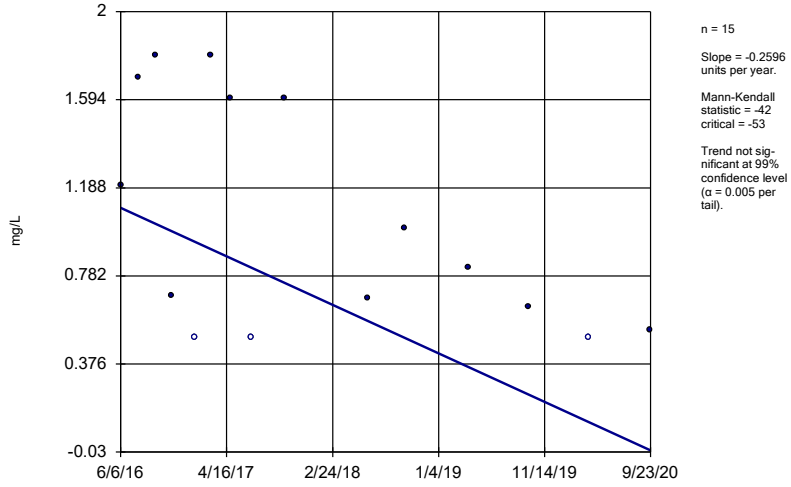


Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)

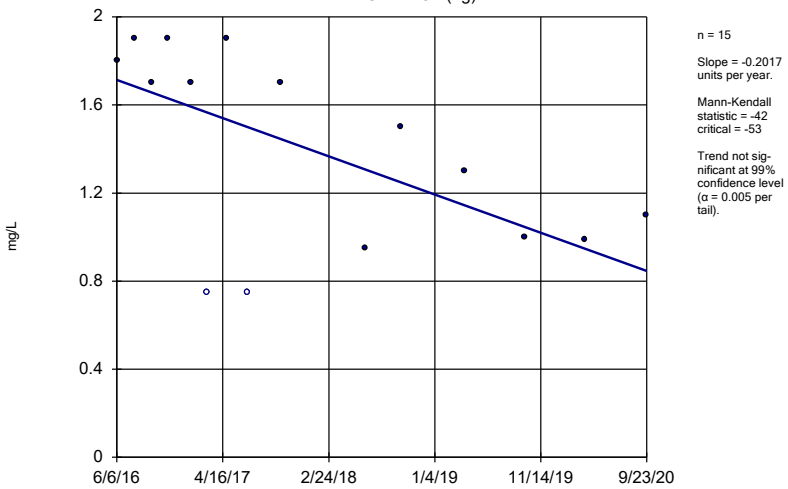


Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 15

Slope = -0.2017 units per year.

Mann-Kendall statistic = -42
critical = -53

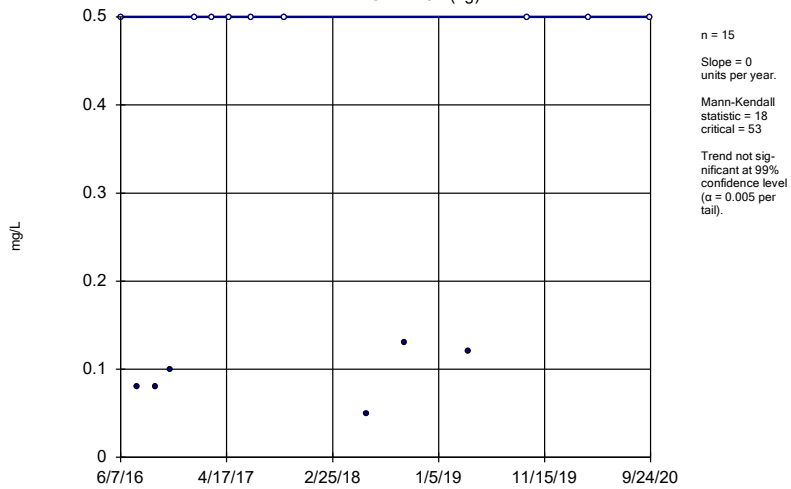
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 18
critical = 53

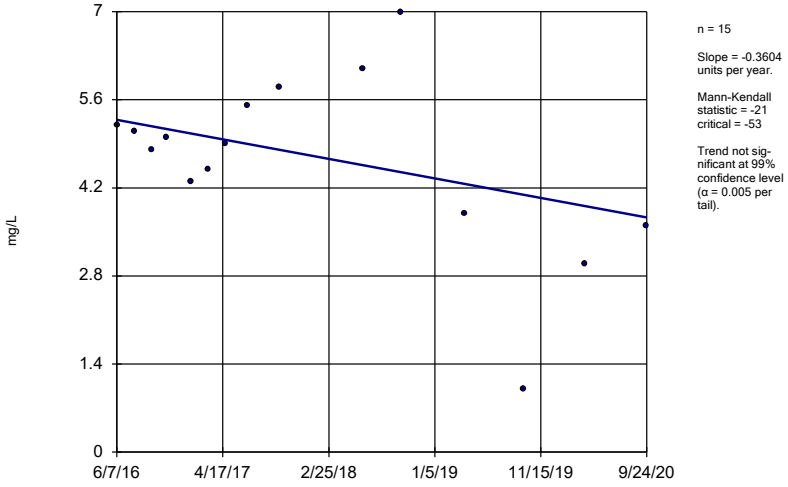
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 15

Slope = -0.3604 units per year.

Mann-Kendall statistic = -21
critical = -53

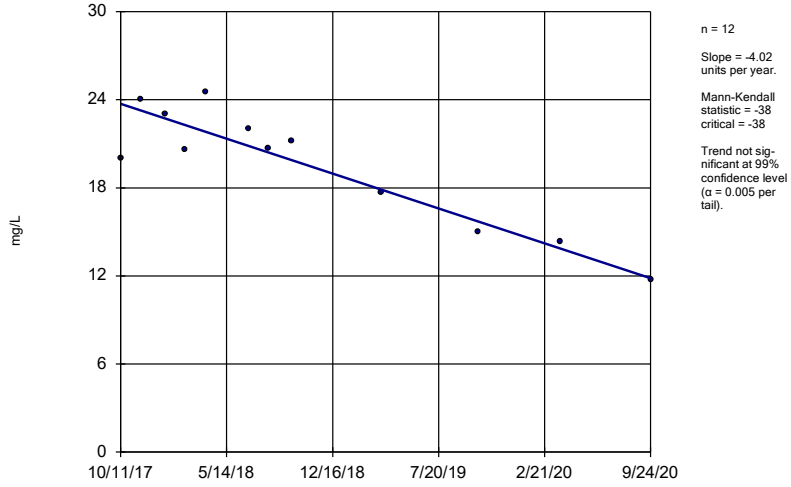
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 12

Slope = -4.02 units per year.

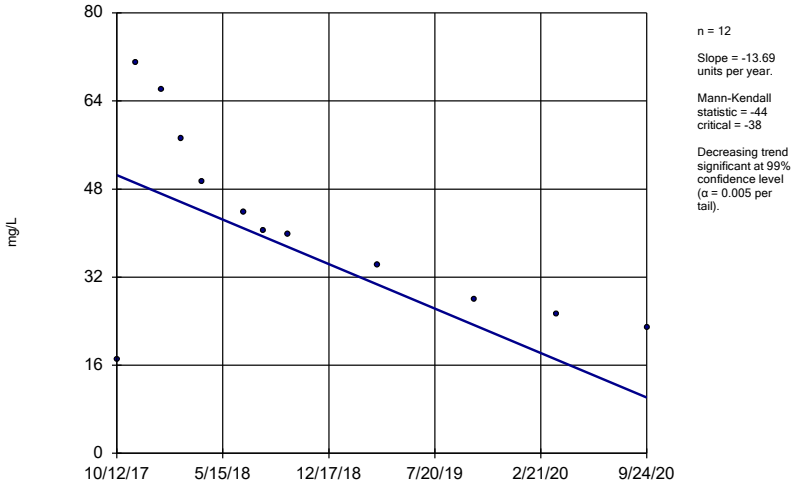
Mann-Kendall statistic = -38
critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-40 (bg)



n = 12

Slope = -13.69 units per year.

Mann-Kendall statistic = -44 critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

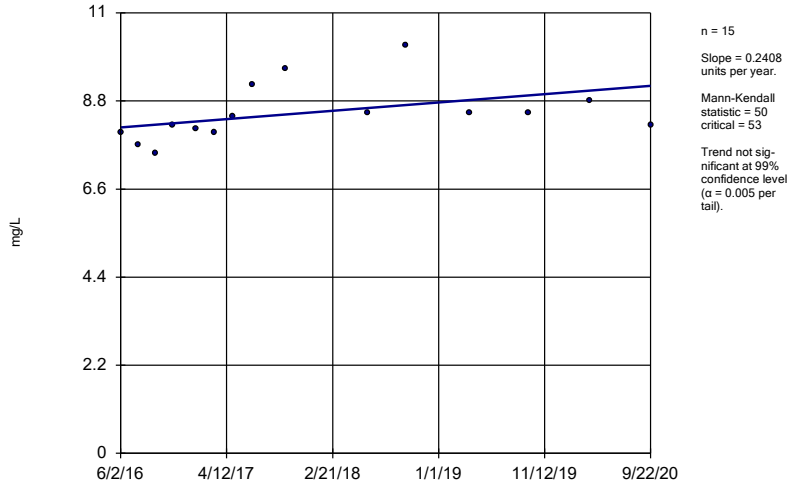
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 15

Slope = 0.2408 units per year.

Mann-Kendall statistic = 50 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

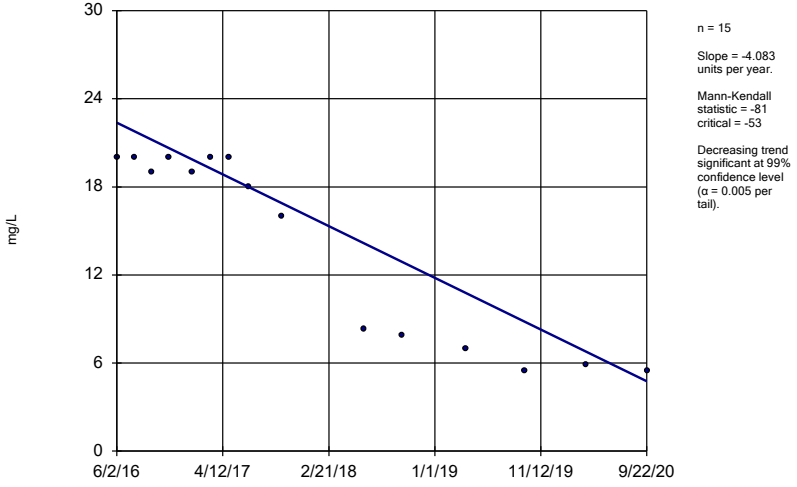
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 15

Slope = -4.083 units per year.

Mann-Kendall statistic = -81 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

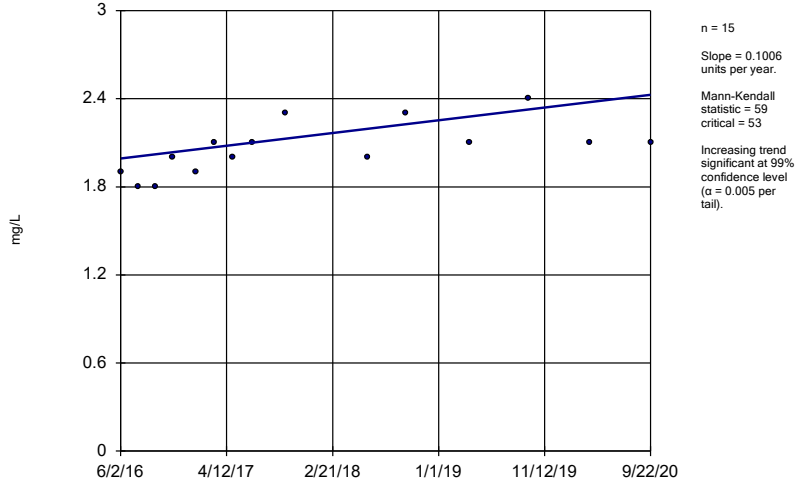
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 15

Slope = 0.1006 units per year.

Mann-Kendall statistic = 59 critical = 53

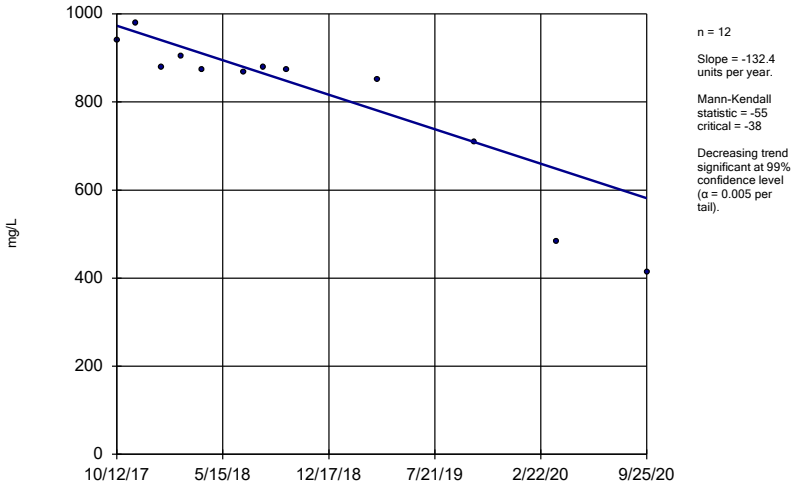
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-38



n = 12

Slope = -132.4 units per year.

Mann-Kendall statistic = -55 critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

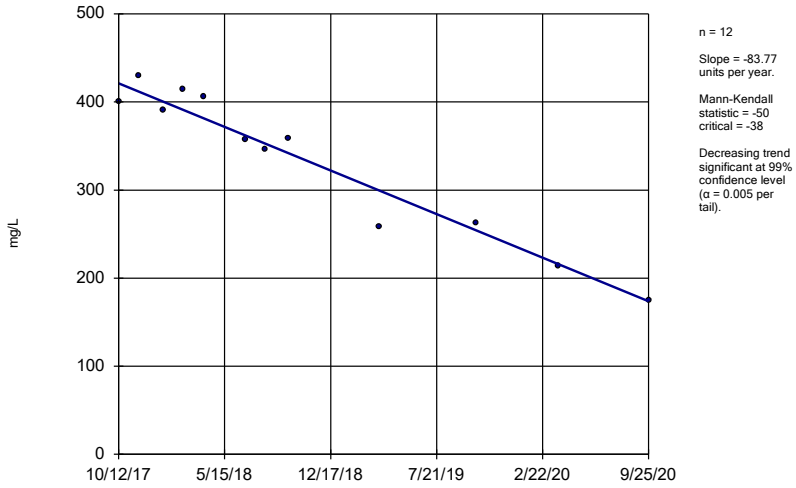
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-41



n = 12

Slope = -83.77 units per year.

Mann-Kendall statistic = -50 critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

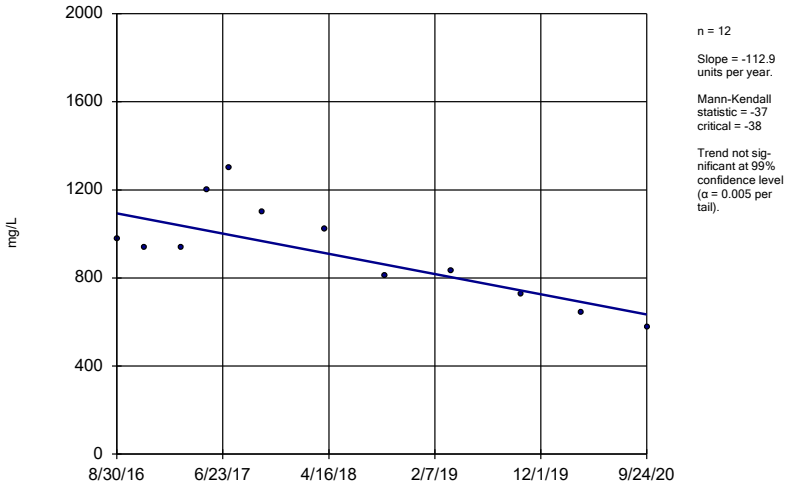
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 12

Slope = -112.9 units per year.

Mann-Kendall statistic = -37 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

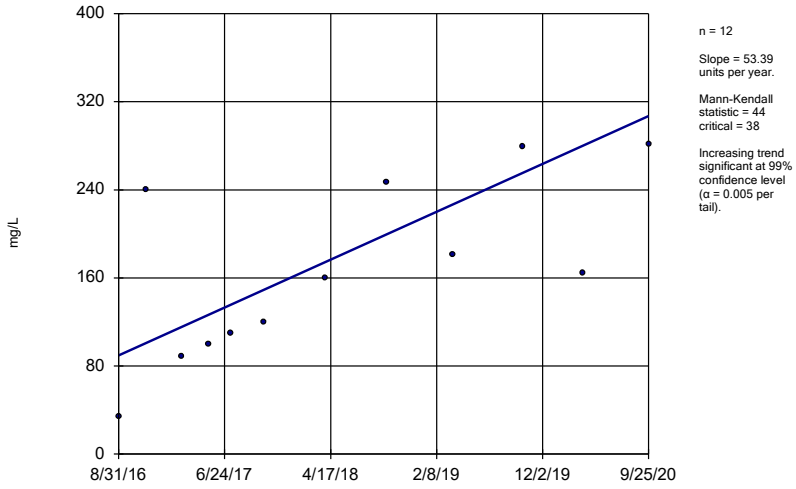
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 12

Slope = 53.39 units per year.

Mann-Kendall statistic = 44 critical = 38

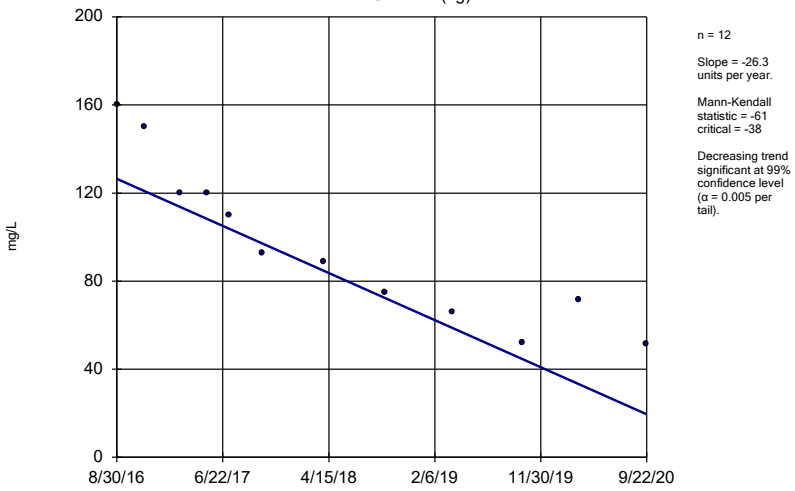
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-47 (bg)



n = 12

Slope = -26.3 units per year.

Mann-Kendall statistic = -61 critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

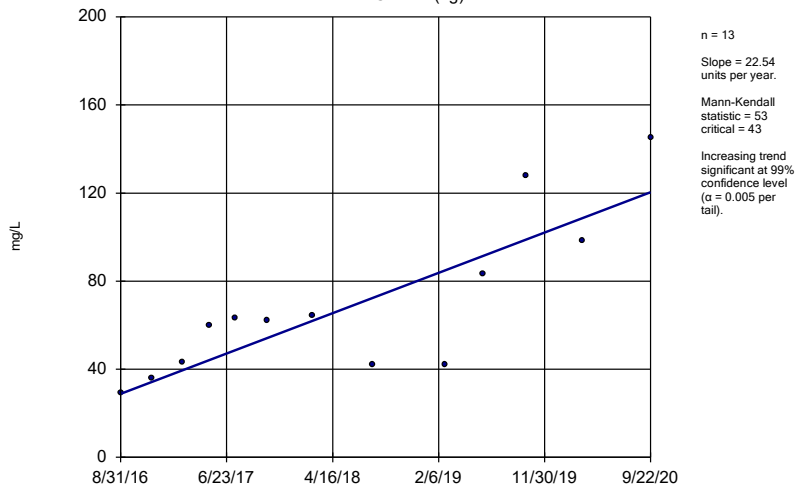
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 22.54 units per year.

Mann-Kendall statistic = 53 critical = 43

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

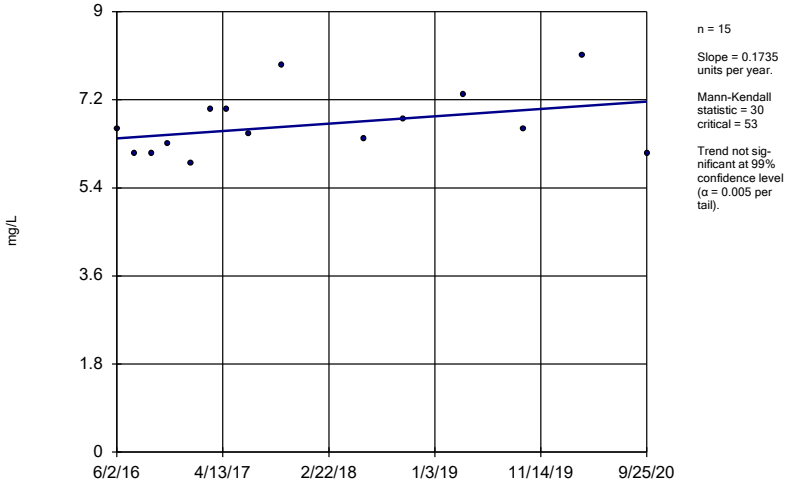
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 15

Slope = 0.1735 units per year.

Mann-Kendall statistic = 30 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

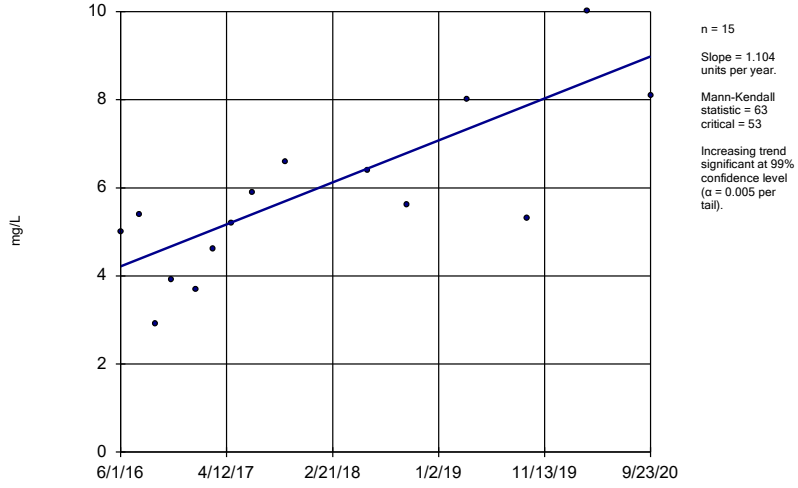
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 15

Slope = 1.104 units per year.

Mann-Kendall statistic = 63 critical = 53

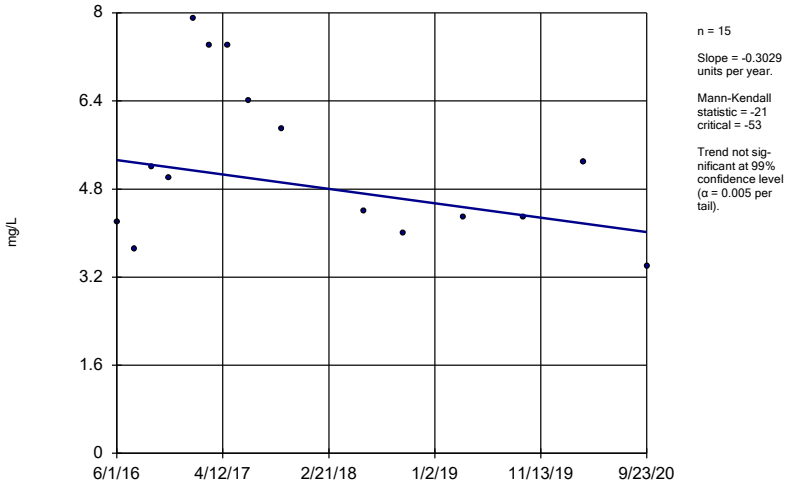
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-1I (bg)



n = 15

Slope = -0.3029 units per year.

Mann-Kendall statistic = -21
critical = -53

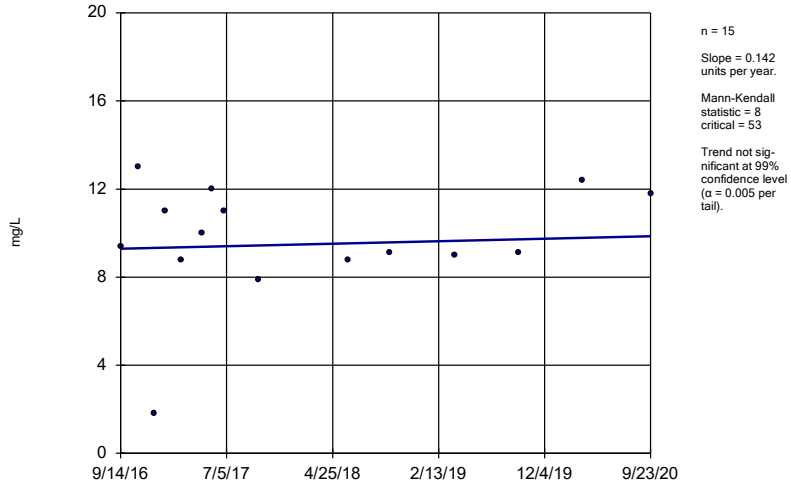
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 15

Slope = 0.142 units per year.

Mann-Kendall statistic = 8
critical = 53

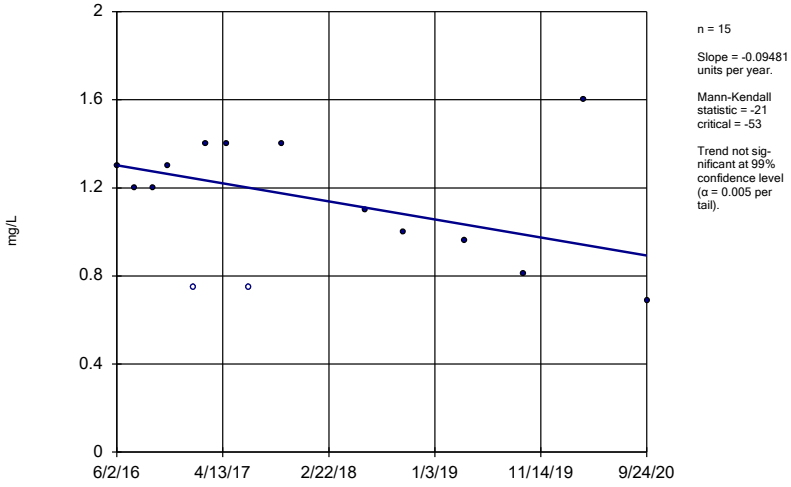
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 15

Slope = -0.09481 units per year.

Mann-Kendall statistic = -21
critical = -53

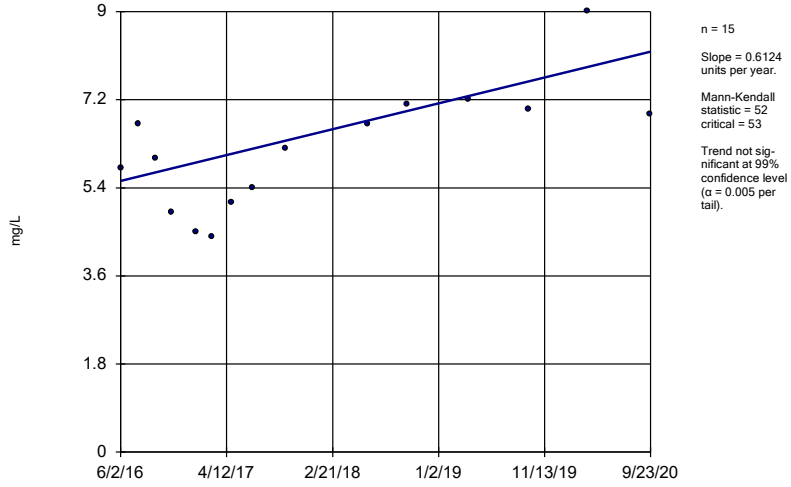
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 15

Slope = 0.6124 units per year.

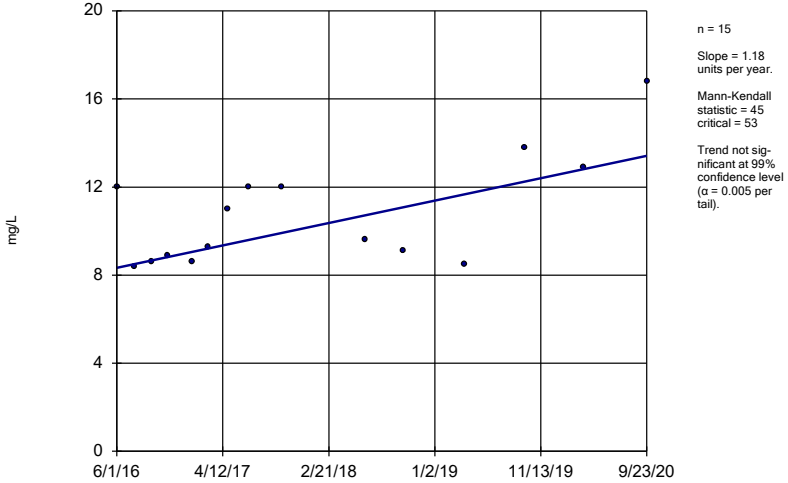
Mann-Kendall statistic = 52
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3I (bg)



n = 15

Slope = 1.18 units per year.

Mann-Kendall statistic = 45 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

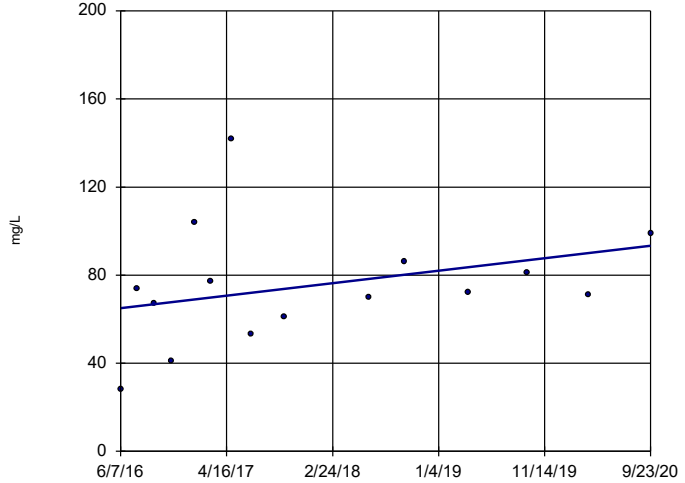
Constituent: Sulfate Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 15

Slope = 6.577 units per year.

Mann-Kendall statistic = 31 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

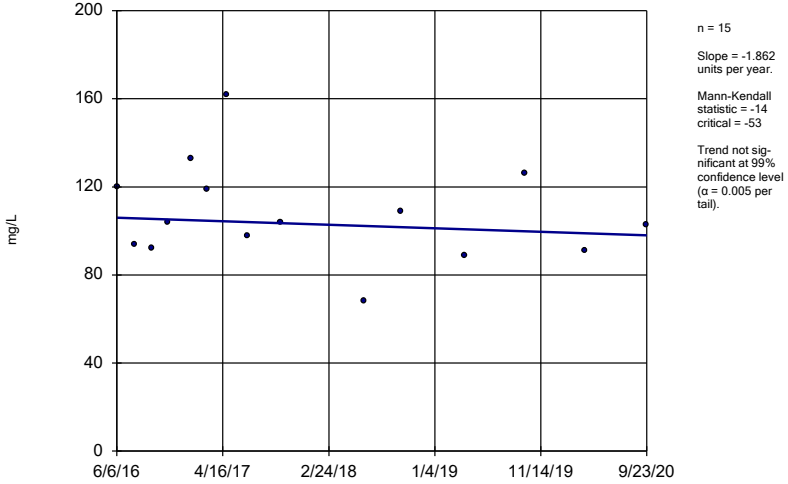
Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 15

Slope = -1.862 units per year.

Mann-Kendall statistic = -14 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

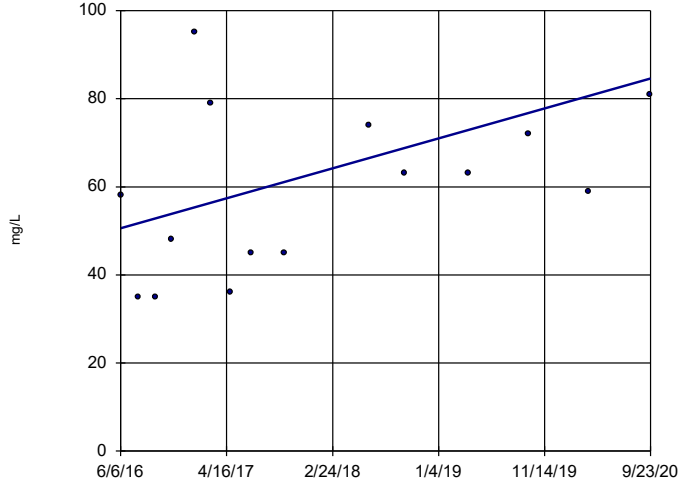
Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 15

Slope = 7.897 units per year.

Mann-Kendall statistic = 34 critical = 53

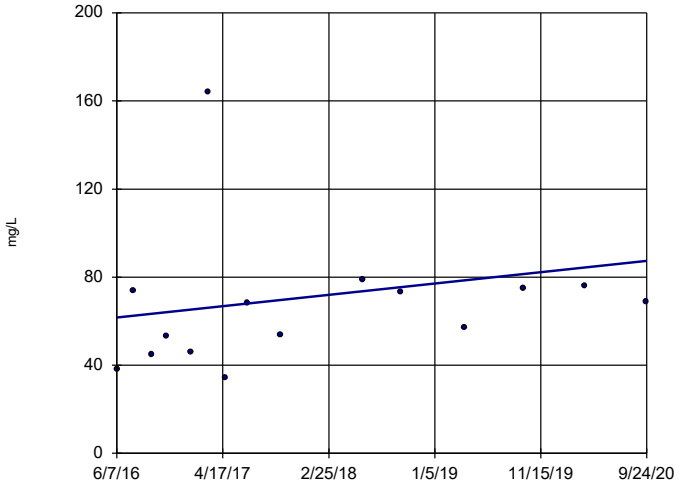
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-20S (bg)



n = 15

Slope = 5.975 units per year.

Mann-Kendall statistic = 37 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

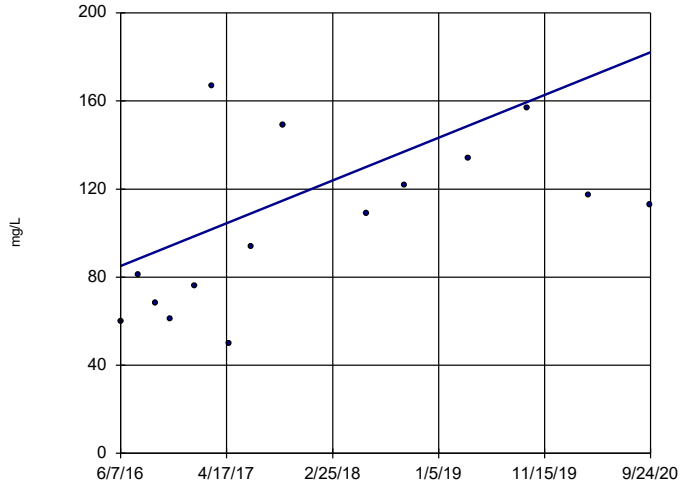
Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 15

Slope = 22.56 units per year.

Mann-Kendall statistic = 45 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

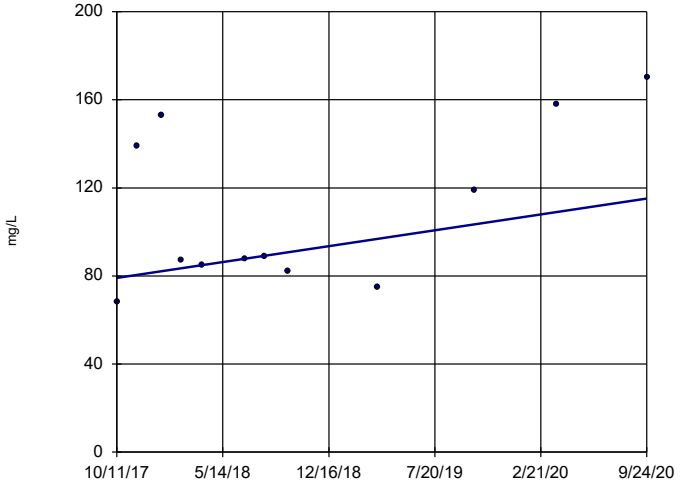
Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 12

Slope = 12.16 units per year.

Mann-Kendall statistic = 18 critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

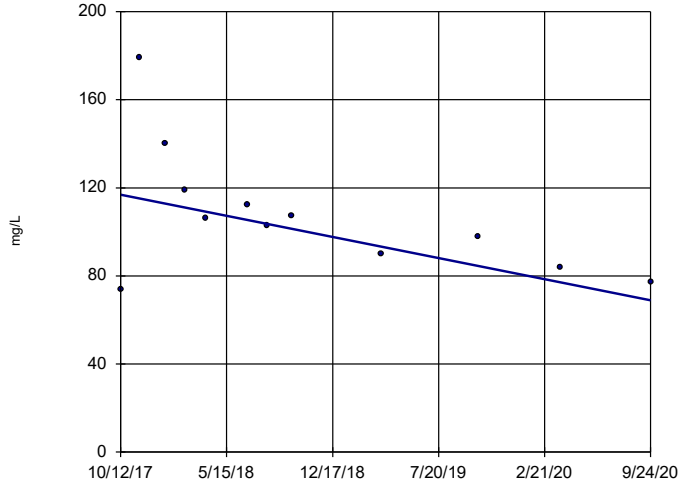
Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 12

Slope = -16.26 units per year.

Mann-Kendall statistic = -36 critical = -38

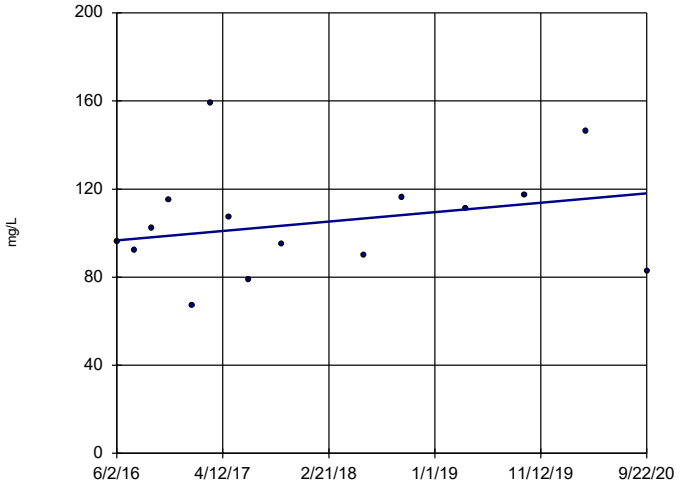
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-4I (bg)



n = 15

Slope = 4.95 units per year.

Mann-Kendall statistic = 19 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

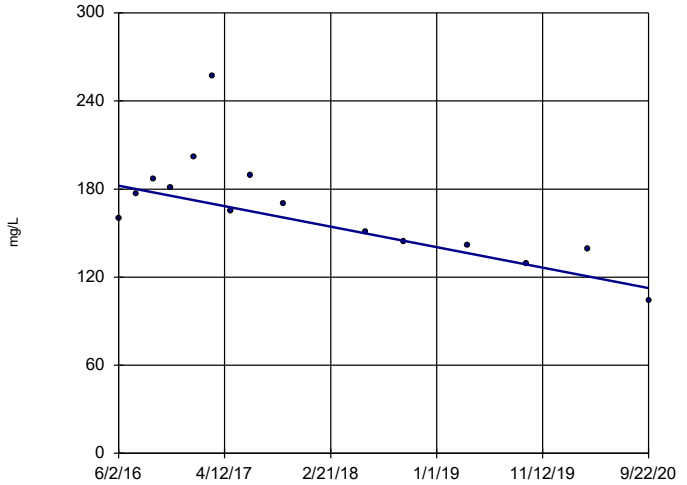
Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 15

Slope = -16.16 units per year.

Mann-Kendall statistic = -59 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

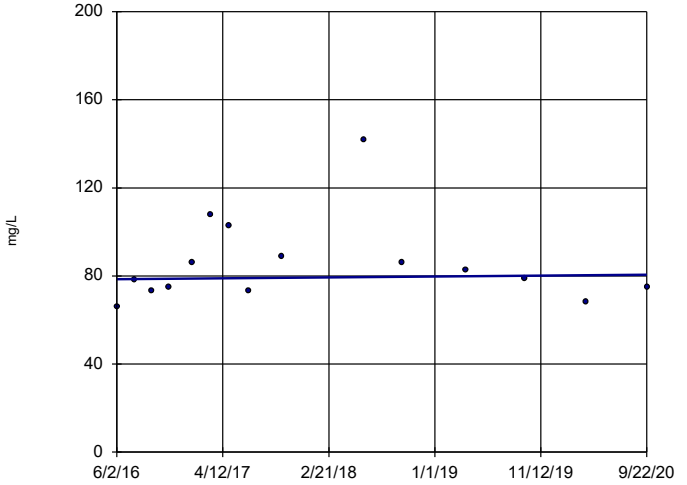
Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 15

Slope = 0.4969 units per year.

Mann-Kendall statistic = 6 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

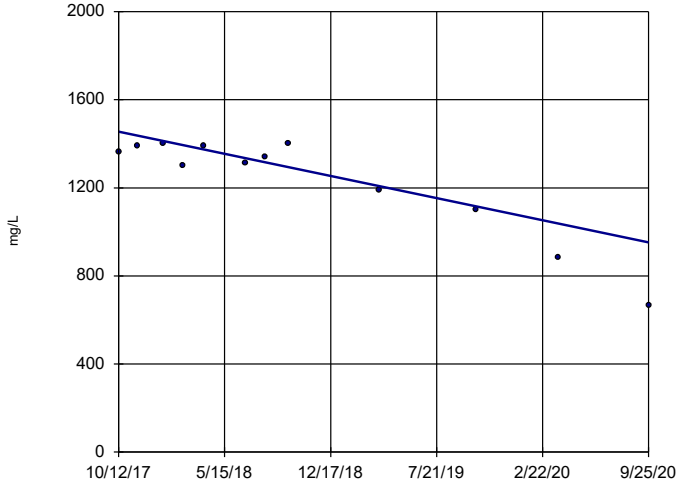
Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 12

Slope = -170 units per year.

Mann-Kendall statistic = -36 critical = -38

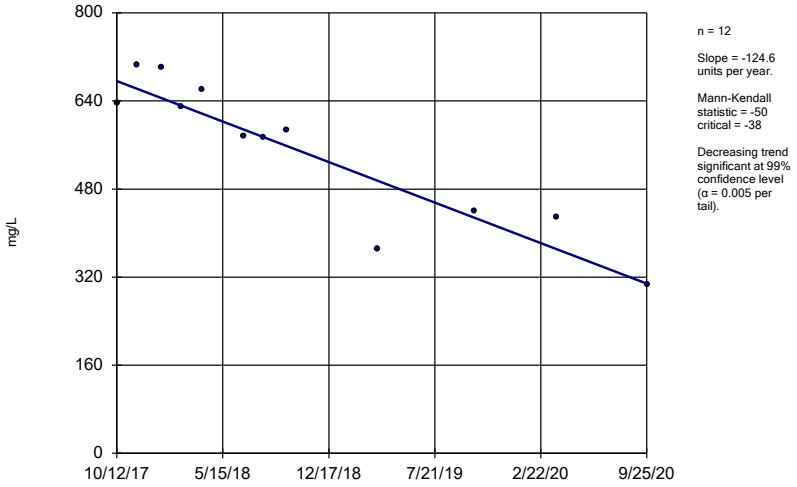
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-41



n = 12

Slope = -124.6 units per year.

Mann-Kendall statistic = -50
critical = -38

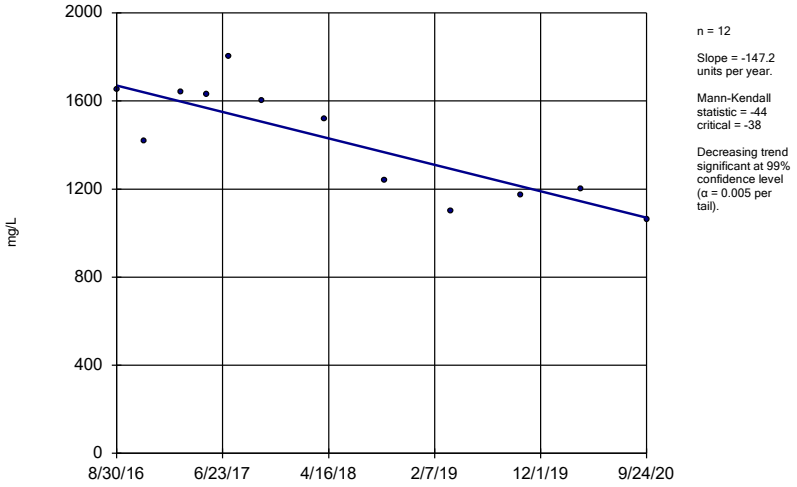
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 12

Slope = -147.2 units per year.

Mann-Kendall statistic = -44
critical = -38

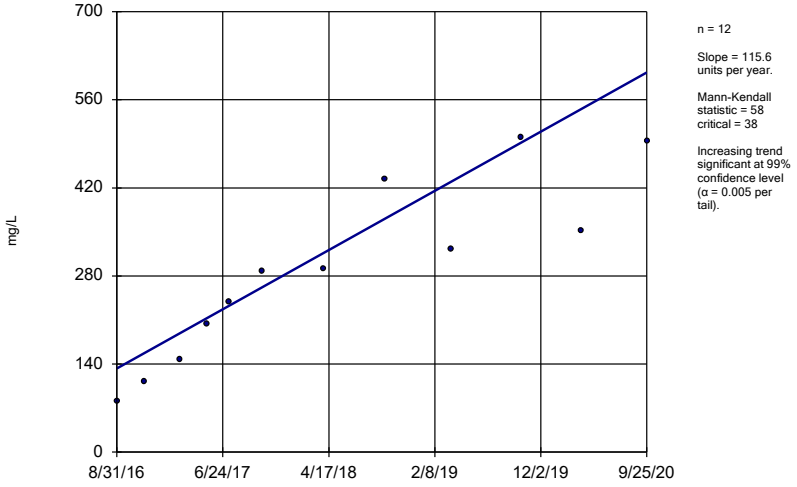
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 12

Slope = 115.6 units per year.

Mann-Kendall statistic = 58
critical = 38

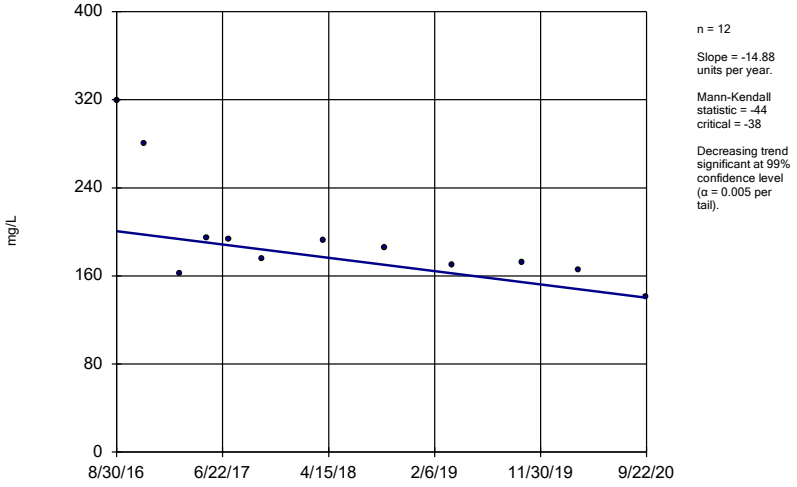
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 12

Slope = -14.88 units per year.

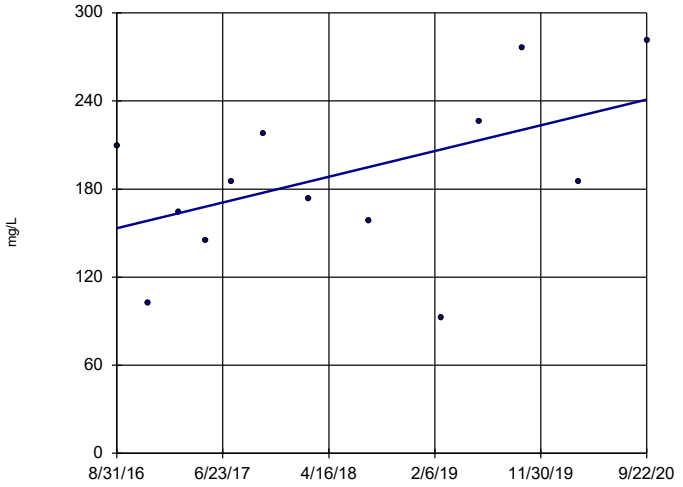
Mann-Kendall statistic = -44
critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 21.56 units per year.

Mann-Kendall statistic = 27
critical = 43

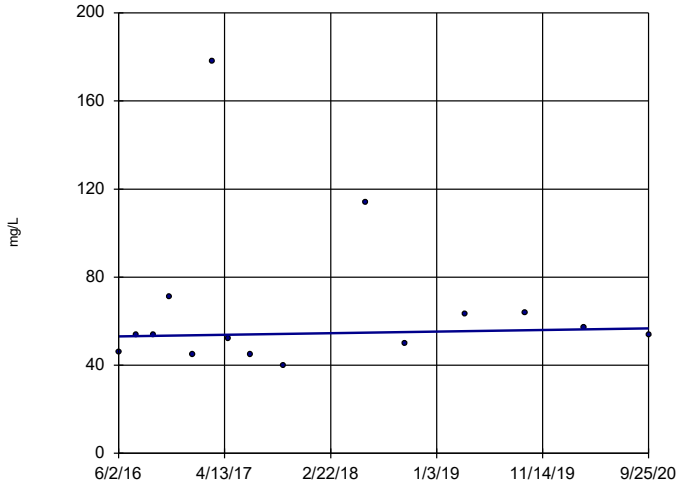
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 15

Slope = 0.8555 units per year.

Mann-Kendall statistic = 9
critical = 53

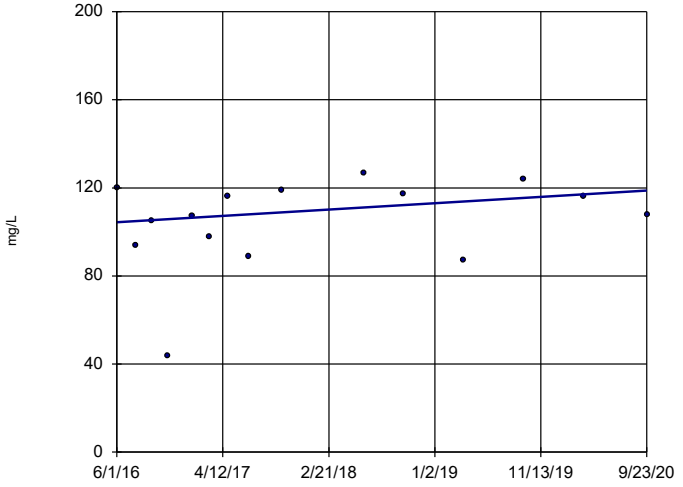
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 15

Slope = 3.318 units per year.

Mann-Kendall statistic = 18
critical = 53

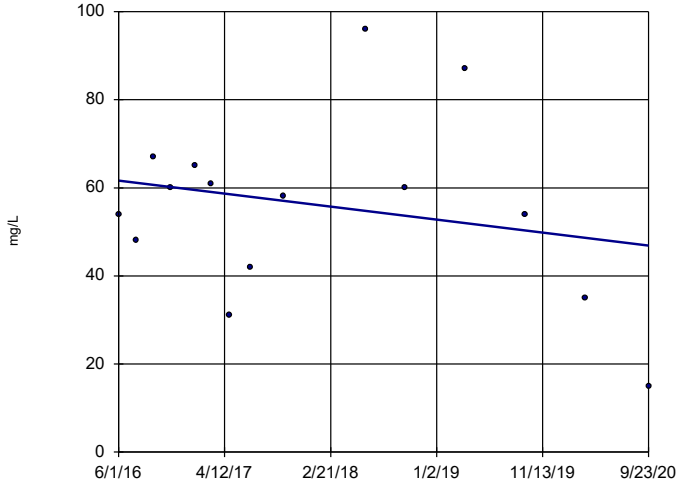
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 15

Slope = -3.416 units per year.

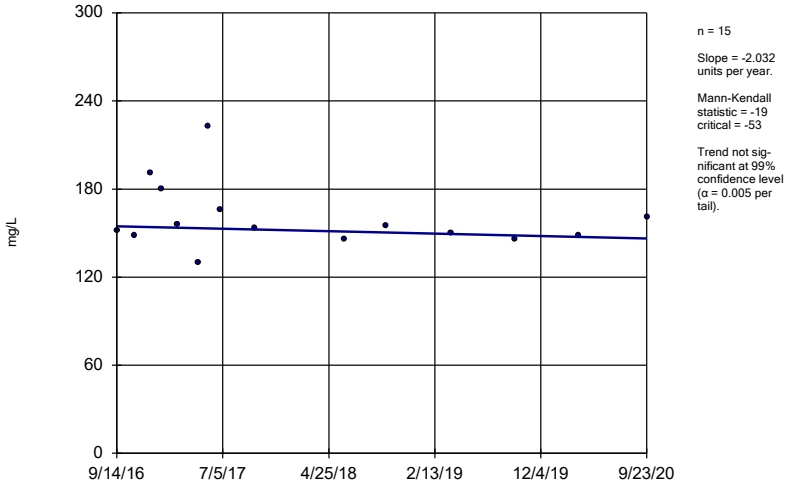
Mann-Kendall statistic = -17
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-2I (bg)



n = 15

Slope = -2.032 units per year.

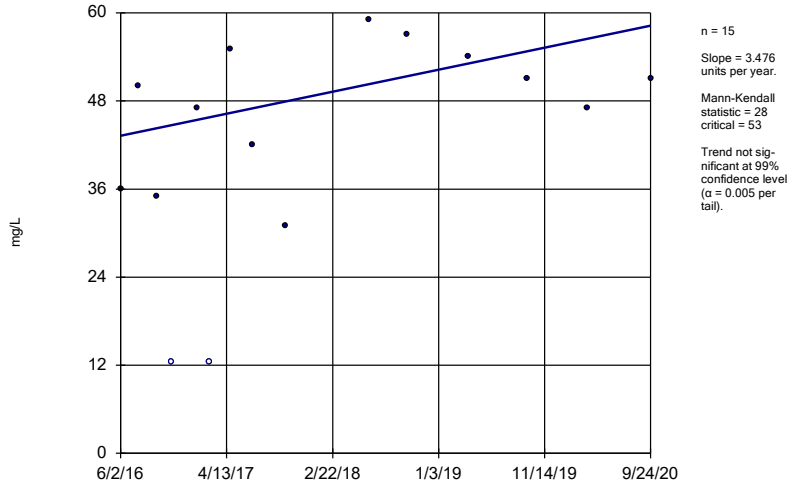
Mann-Kendall statistic = -19
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-30I (bg)



n = 15

Slope = 3.476 units per year.

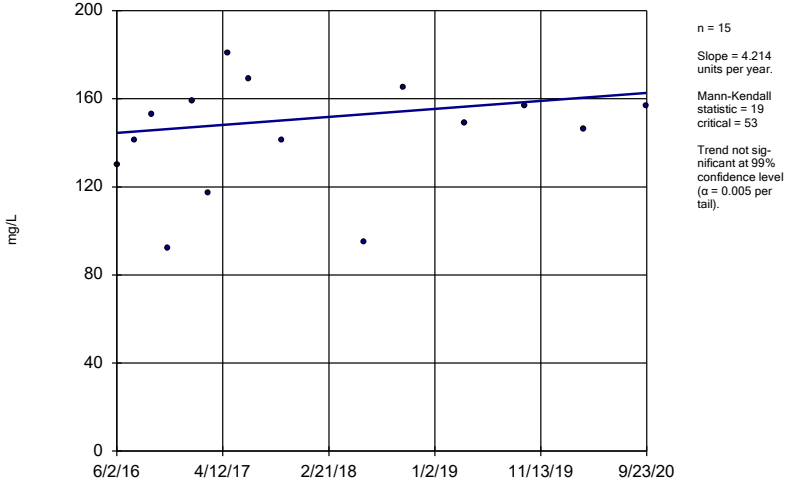
Mann-Kendall statistic = 28
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3D (bg)



n = 15

Slope = 4.214 units per year.

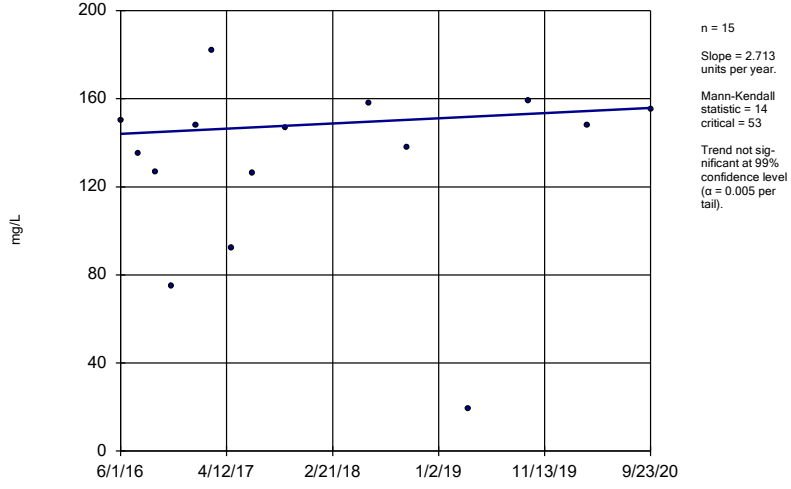
Mann-Kendall statistic = 19
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3I (bg)



n = 15

Slope = 2.713 units per year.

Mann-Kendall statistic = 14
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/25/2020 7:02 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

FIGURE F.

Upper Tolerance Limit Summary Table

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/25/2020, 7:12 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	280	n/a	n/a	86.43	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	328	n/a	n/a	77.13	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.071	n/a	n/a	328	n/a	n/a	3.354	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.003	n/a	n/a	312	n/a	n/a	83.01	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	313	n/a	n/a	96.17	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.01	n/a	n/a	280	n/a	n/a	77.14	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	326	n/a	n/a	69.63	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	306	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	327	n/a	n/a	68.5	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.005	n/a	n/a	282	n/a	n/a	85.82	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	307	n/a	n/a	28.34	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0005	n/a	n/a	251	n/a	n/a	92.43	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	272	n/a	n/a	59.56	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.01	n/a	n/a	311	n/a	n/a	91	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	281	n/a	n/a	96.44	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		0.003	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005	0.005
Chromium, Total (mg/L)	0.1		0.01	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.9	6.9	6.9
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.005	0.015	0.005
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0005	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.01	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

**Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Federal Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005678**	**0.004422**	**0.004**	**Yes**	**12**	**0.00505**	**0.0008006**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.2443**	**0.1404**	**0.05**	**Yes**	**12**	**0.1923**	**0.06621**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06783**	**0.05001**	**0.05**	**Yes**	**12**	**0.05798**	**0.01434**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	**PZ-37**	**0.314**	**0.2065**	**0.05**	**Yes**	**9**	**0.2602**	**0.05567**	**0**	**None**	**No**	**0.01**	**Param.**

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	14	0.002653	0.0008892	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00063	0.006	No	11	0.002431	0.001001	72.73	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.003	0.006	No	11	0.002755	0.0008111	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	11	0.002603	0.000893	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	9	0.002822	0.0005333	88.89	None	No	0.002	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	14	0.00285	0.0005612	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0011	0.006	No	14	0.002757	0.001498	57.14	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	16	0.004762	0.00095	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.002081	0.000666	0.01	No	12	0.001457	0.001244	8.333	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00052	0.01	No	12	0.002527	0.002193	41.67	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-42	0.003092	0.001303	0.01	No	12	0.002197	0.00114	8.333	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.0007	0.01	No	12	0.003933	0.001932	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	11	0.00386	0.001955	72.73	None	No	0.006	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	4	0.003922	0.002155	75	None	No	0.0625	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0006	0.01	No	9	0.002338	0.00201	33.33	None	No	0.002	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	16	0.004781	0.000875	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00066	0.01	No	16	0.004179	0.001766	81.25	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.06167	0.01983	2	No	4	0.04075	0.009215	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04535	0.02741	2	No	16	0.03638	0.01379	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.02477	0.01915	2	No	12	0.02196	0.003581	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.03182	0.02188	2	No	12	0.02685	0.006338	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04914	0.03246	2	No	12	0.0408	0.01063	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03422	0.01481	2	No	12	0.02452	0.01237	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.0817	0.06995	2	No	11	0.07583	0.007047	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.0755	0.01971	2	No	4	0.04375	0.01305	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	PZ-37	0.06066	0.0438	2	No	9	0.05223	0.008732	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.02	0.0189	2	No	16	0.01959	0.001899	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04563	0.03361	2	No	16	0.03878	0.01042	0	None	x^2	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0007084	5.5e-8	0.004	No	4	0.001607	0.001614	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.003	0.000077	0.004	No	16	0.001001	0.001392	31.25	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005678**	**0.004422**	**0.004**	**Yes**	**12**	**0.00505**	**0.0008006**	**0**	**None**	**No**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.003727	0.002924	0.004	No	12	0.00325	0.0006332	0	None	x^4	0.01	Param.
Beryllium (mg/L)	YGWC-42	0.003	0.00009	0.004	No	12	0.002029	0.001434	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.003	0.00029	0.004	No	12	0.001659	0.001404	50	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	11	0.0003727	0.0008715	9.091	None	No	0.006	NP (normality)
Beryllium (mg/L)	PZ-35	0.003	0.00033	0.004	No	5	0.001442	0.001424	40	None	No	0.031	NP (normality)
Beryllium (mg/L)	PZ-37	0.003	0.0002	0.004	No	9	0.0009144	0.001184	22.22	None	No	0.002	NP (normality)
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	16	0.0006582	0.001162	18.75	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.00033	0.00014	0.004	No	16	0.0004269	0.000691	6.25	None	No	0.01	NP (normality)
Cadmium (mg/L)	YAMW-1	0.0025	0.00014	0.005	No	4	0.001327	0.001354	50	None	No	0.0625	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0025	0.00007	0.005	No	16	0.002348	0.0006075	93.75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.002879	0.002192	0.005	No	12	0.002517	0.000484	0	None	x^2	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0025	0.00015	0.005	No	12	0.0005867	0.0008948	16.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0025	0.00017	0.005	No	12	0.001022	0.0011	33.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0025	0.0025	0.005	No	11	0.002279	0.0007327	90.91	None	No	0.006	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0025	0.00016	0.005	No	4	0.001915	0.00117	75	None	No	0.0625	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0007433	0.0002497	0.005	No	9	0.0009444	0.0009163	22.22	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0002	0.00012	0.005	No	16	0.0004612	0.0007967	12.5	None	No	0.01	NP (normality)
Chromium (mg/L)	YGWC-23S	0.01	0.0008	0.1	No	12	0.007042	0.004379	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-38	0.01	0.00065	0.1	No	12	0.008429	0.003669	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.01	0.00039	0.1	No	12	0.009199	0.002774	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.01	0.0006	0.1	No	12	0.007694	0.004176	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.01	0.00062	0.1	No	12	0.006881	0.004608	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.0019	0.0014	0.1	No	10	0.00248	0.002652	10	None	No	0.011	NP (normality)
Chromium (mg/L)	PZ-37	0.01	0.001	0.1	No	9	0.007178	0.00424	66.67	None	No	0.002	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.01	0.0011	0.1	No	12	0.008503	0.003496	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.01	0.0013	0.1	No	12	0.007962	0.00374	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.03018	-0.003377	0.035	No	5	0.0134	0.01119	40	Kaplan-Meier	No	0.01	Param.

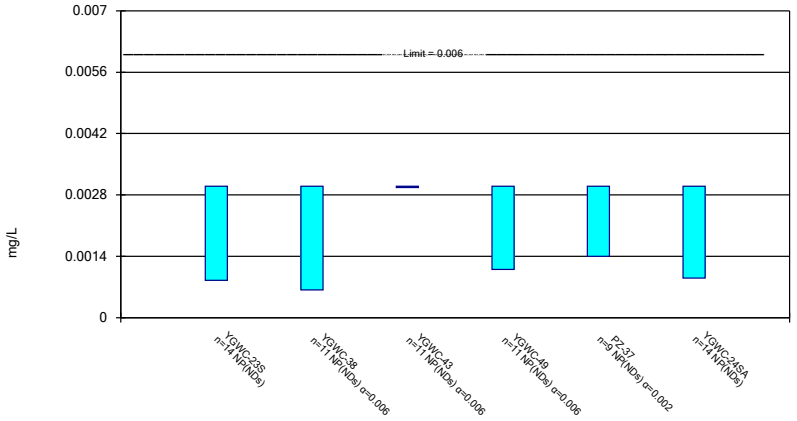
Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	YGWC-41	0.005	0.0003	0.035	No	12	0.003532	0.002177	66.67	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.003	0.0017	0.035	No	12	0.002258	0.0009568	8.333	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	12	0.003525	0.00167	50	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	11	0.003409	0.002208	63.64	None	No	0.006	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	4	0.005225	0.00045	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	PZ-37	0.01448	0.005406	0.035	No	9	0.009944	0.0047	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	16	0.003895	0.001979	75	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8368	0.3246	6.9	No	16	0.5807	0.3936	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.43	0.5739	6.9	No	12	1.002	0.5459	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.466	0.5994	6.9	No	12	1.056	0.596	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	3.21	1.441	6.9	No	12	2.326	1.127	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	3.154	1.069	6.9	No	12	2.112	1.328	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.287	0.537	6.9	No	11	0.9118	0.4498	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	2.207	1.402	6.9	No	9	1.803	0.441	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.8154	0.4728	6.9	No	16	0.6441	0.2633	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.168	0.6117	6.9	No	16	0.8898	0.4274	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	17	0.09406	0.02136	82.35	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.41	0.034	4	No	13	0.1711	0.1243	53.85	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	13	0.1008	0.002774	84.62	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.041	4	No	13	0.08392	0.02742	69.23	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1271	0.05852	4	No	13	0.1141	0.05491	30.77	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.1059	0.05031	4	No	12	0.09917	0.02937	50	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	PZ-37	0.45	0.1	4	No	9	0.1944	0.1269	55.56	None	No	0.002	NP (NDs)
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	17	0.09594	0.01623	88.24	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.18	0.05	4	No	17	0.09153	0.03486	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-23S	0.005	0.00044	0.015	No	14	0.003973	0.002043	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.005	0.0001	0.015	No	12	0.003775	0.002216	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.005	0.00007	0.015	No	12	0.003446	0.00231	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.005	0.00009	0.015	No	12	0.003778	0.002211	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.005	0.00008	0.015	No	12	0.00418	0.001916	83.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.005	0.005	0.015	No	11	0.004551	0.00149	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	PZ-37	0.005	0.000085	0.015	No	9	0.002843	0.002558	55.56	None	No	0.002	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.005	0.000053	0.015	No	14	0.004647	0.001322	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.0017	0.0002	0.015	No	14	0.001084	0.001707	14.29	None	No	0.01	NP (normality)
Lithium (mg/L)	YAMW-1	0.01499	-0.003454	0.04	No	4	0.008075	0.006149	25	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0035	0.0018	0.04	No	16	0.003044	0.003251	6.25	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.009177	0.00794	0.04	No	12	0.008558	0.0007879	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0047	0.0029	0.04	No	12	0.004683	0.003312	8.333	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.04368	0.02738	0.04	No	12	0.03553	0.01039	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01692	0.01079	0.04	No	12	0.01386	0.003904	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0036	0.04	No	11	0.003718	0.0002601	0	None	No	0.006	NP (normality)
Lithium (mg/L)	PZ-35	0.01502	-0.006283	0.04	No	4	0.007025	0.00709	25	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	PZ-37	0.03141	0.02268	0.04	No	9	0.02697	0.005114	11.11	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006231	0.004408	0.04	No	16	0.005156	0.001647	0	None	x^2	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.0014	0.1	No	12	0.005976	0.004239	50	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.1	No	12	0.006433	0.004416	58.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-49	0.01	0.01	0.1	No	10	0.00907	0.002941	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0015	0.1	No	9	0.005444	0.004328	44.44	None	No	0.002	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0015	0.1	No	12	0.006583	0.003844	50	None	No	0.01	NP (normality)
Selenium (mg/L)	YAMW-1	0.005	0.0019	0.05	No	4	0.004225	0.00155	75	None	No	0.0625	NP (NDs)
Selenium (mg/L)	YGWC-23S	0.04038	0.02571	0.05	No	16	0.03304	0.01128	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.2443**	**0.1404**	**0.05**	**Yes**	**12**	**0.1923**	**0.06621**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06783**	**0.05001**	**0.05**	**Yes**	**12**	**0.05798**	**0.01434**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-42	0.05953	0.03932	0.05	No	12	0.04943	0.01288	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.00927	0.006766	0.05	No	11	0.008018	0.001503	9.091	None	No	0.01	Param.
Selenium (mg/L)	**PZ-37**	**0.314**	**0.2065**	**0.05**	**Yes**	**9**	**0.2602**	**0.05567**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.002733	0.001769	0.05	No	16	0.00305	0.001322	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Thallium (mg/L)	YGWC-49	0.001	0.001	0.002	No	11	0.0009173	0.0002744	90.91	None	No	0.006	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

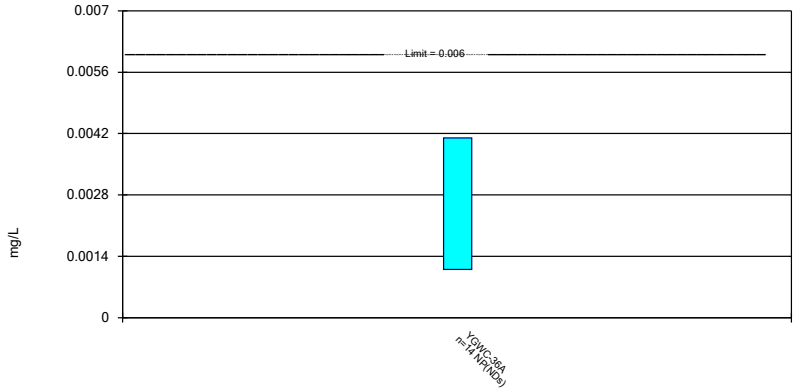


Constituent: Antimony Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

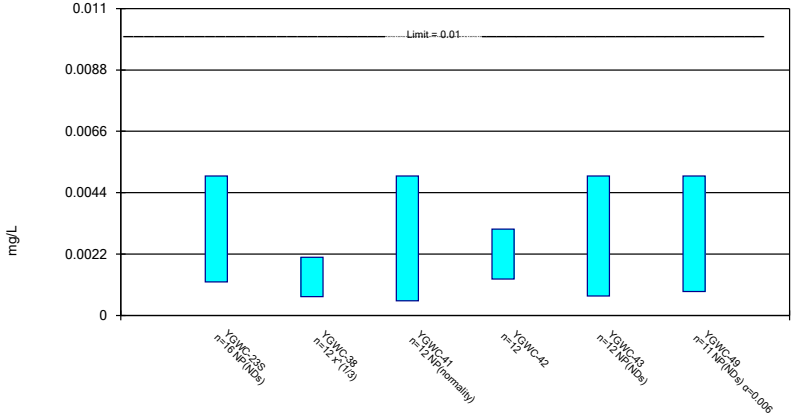


Constituent: Antimony Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

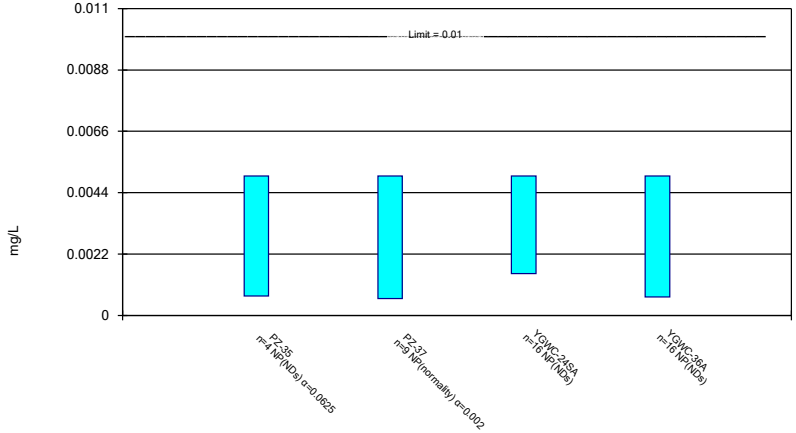


Constituent: Arsenic Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

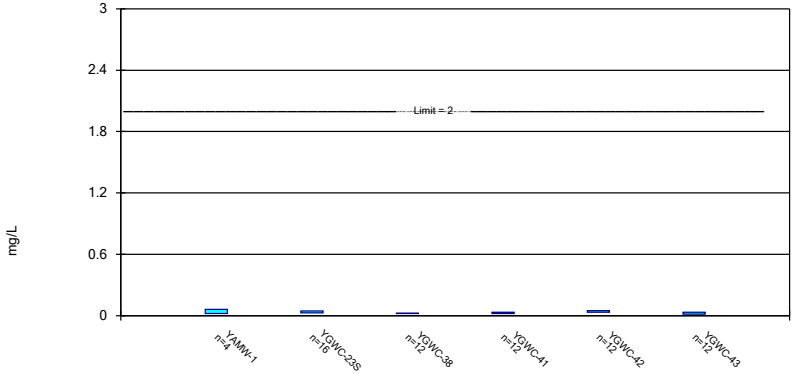
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Arsenic Analysis Run 1/13/2021 2:32 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.

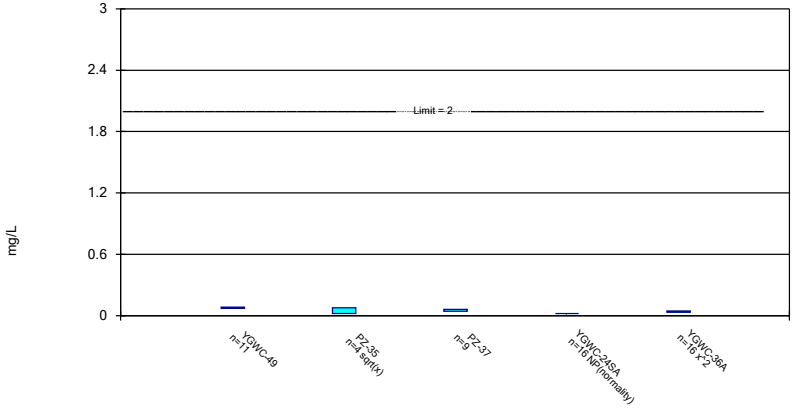


Constituent: Barium Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

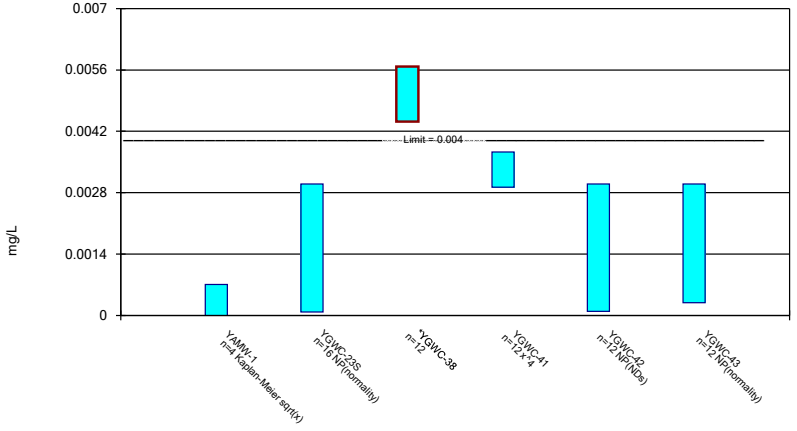


Constituent: Barium Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

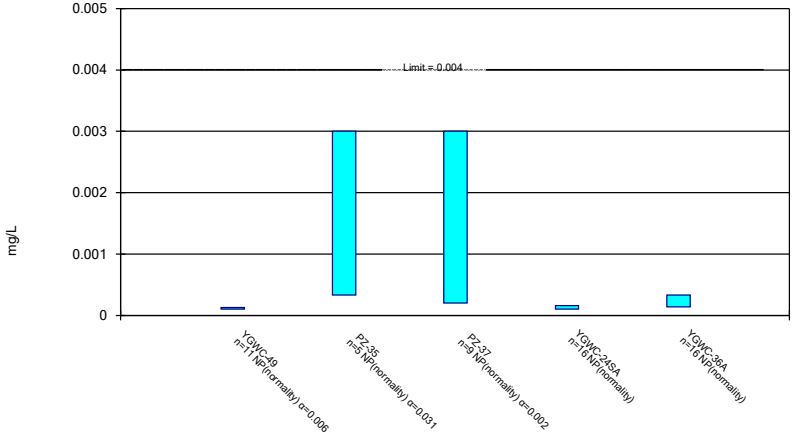


Constituent: Beryllium Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

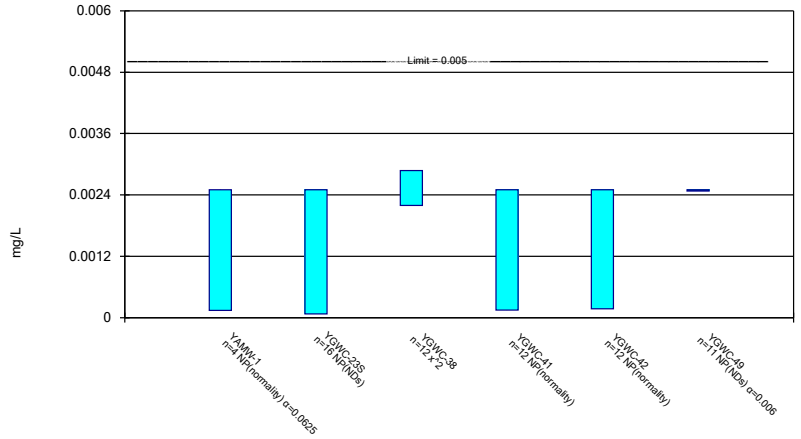
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Beryllium Analysis Run 1/13/2021 2:32 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.

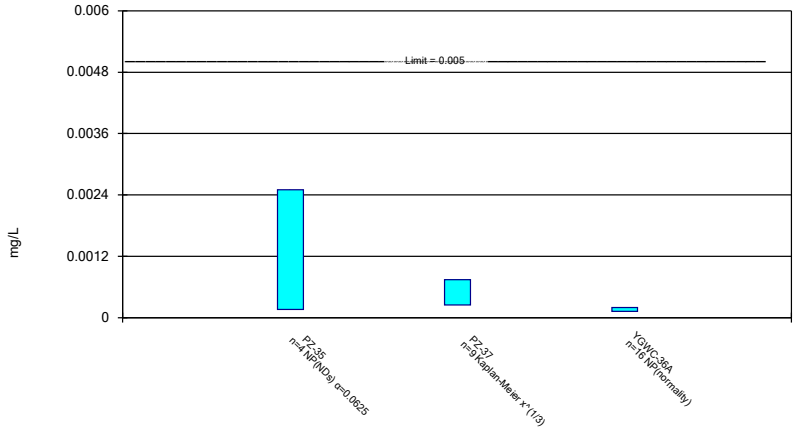


Constituent: Cadmium Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

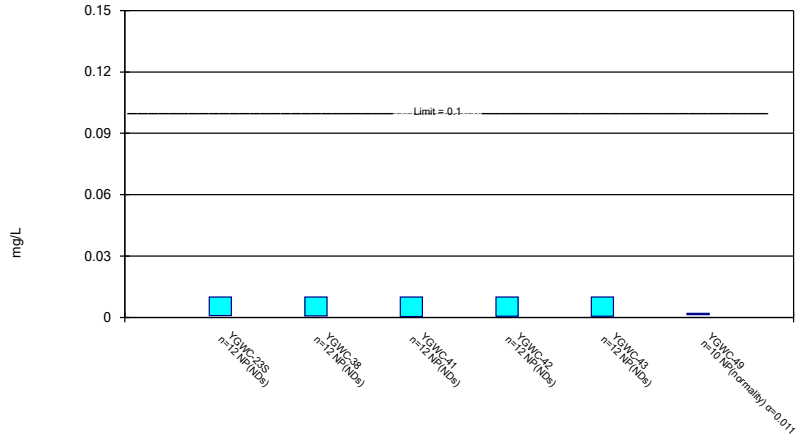


Constituent: Cadmium Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

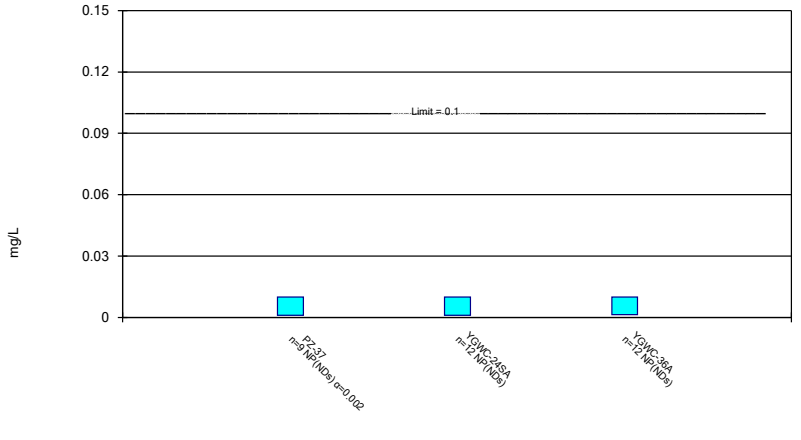


Constituent: Chromium Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

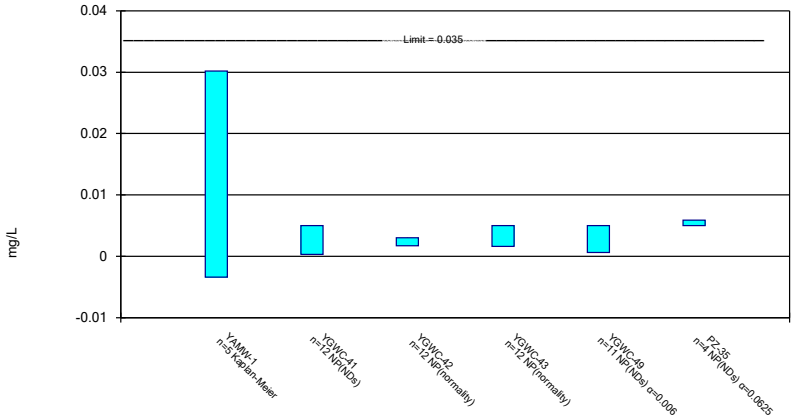
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 1/13/2021 2:32 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.

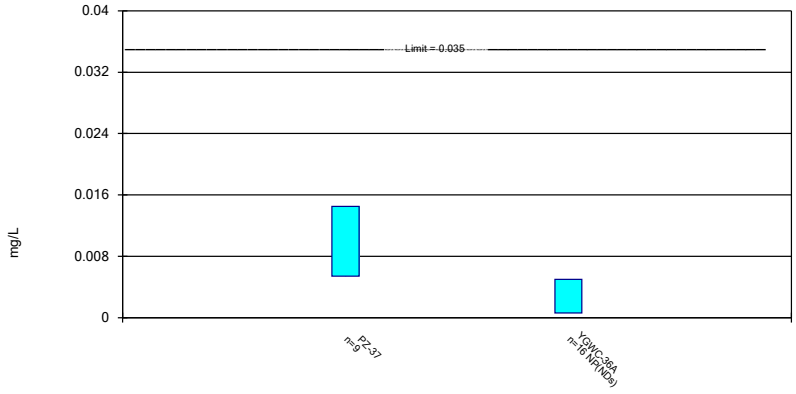


Constituent: Cobalt Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

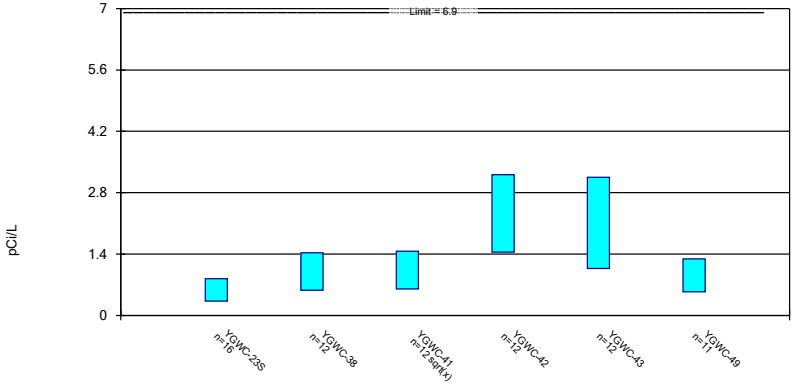


Constituent: Cobalt Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

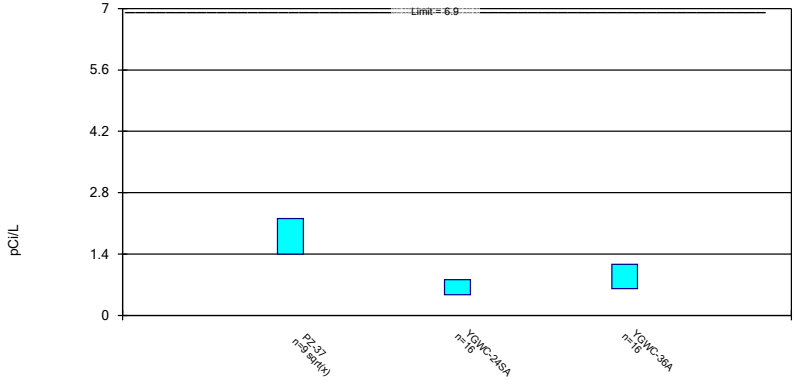


Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric Confidence Interval

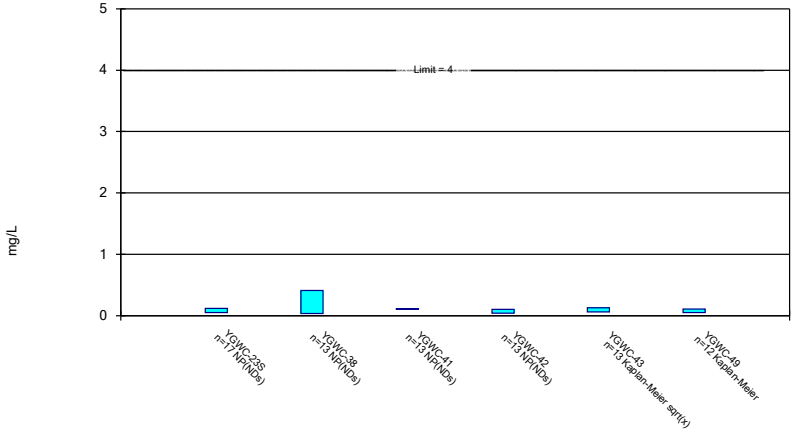
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 2:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

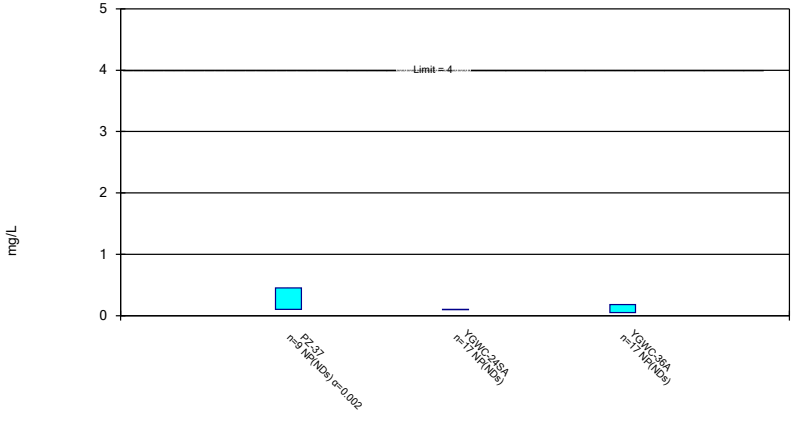
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/13/2021 2:33 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

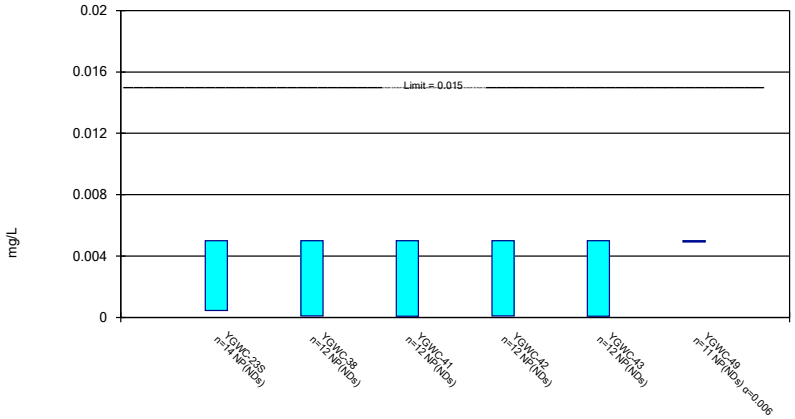
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Fluoride Analysis Run 1/13/2021 2:33 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

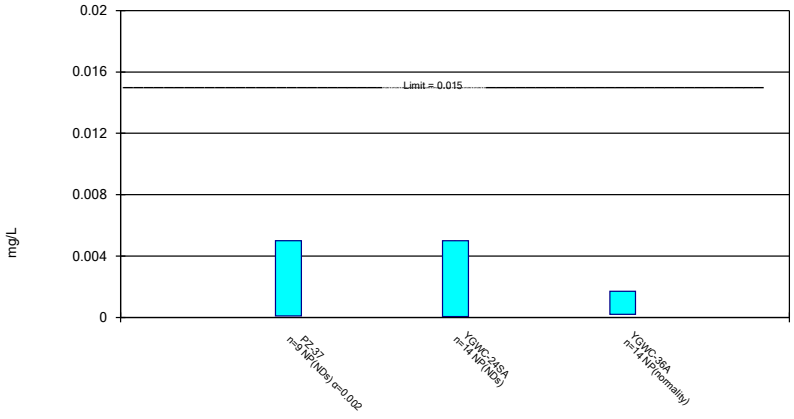
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 1/13/2021 2:33 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

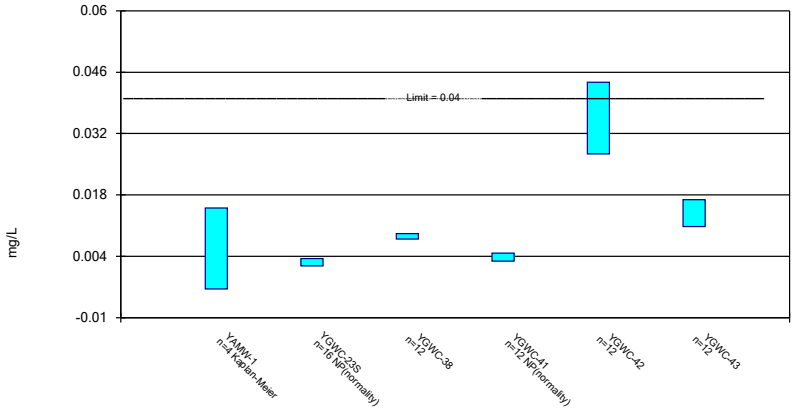
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 1/13/2021 2:33 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.

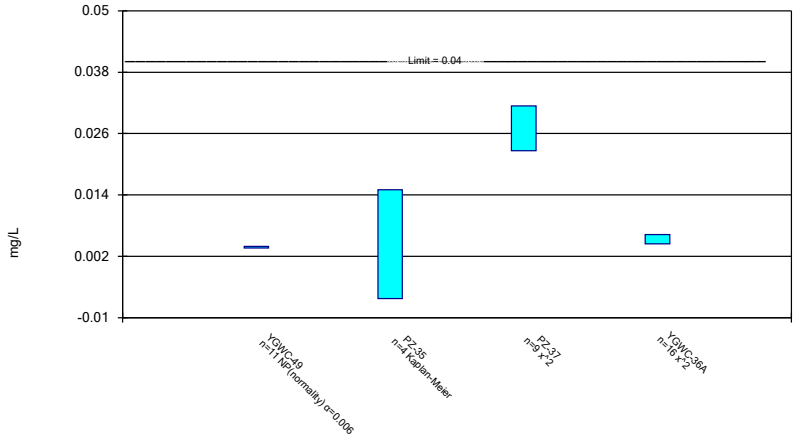


Constituent: Lithium Analysis Run 1/13/2021 2:33 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

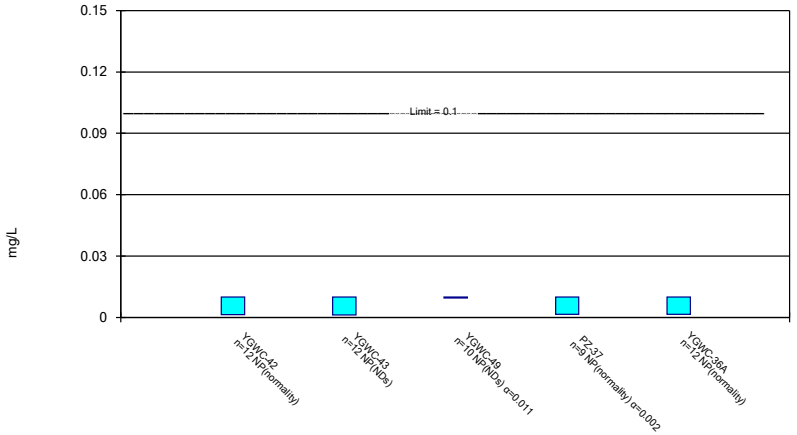


Constituent: Lithium Analysis Run 1/13/2021 2:33 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

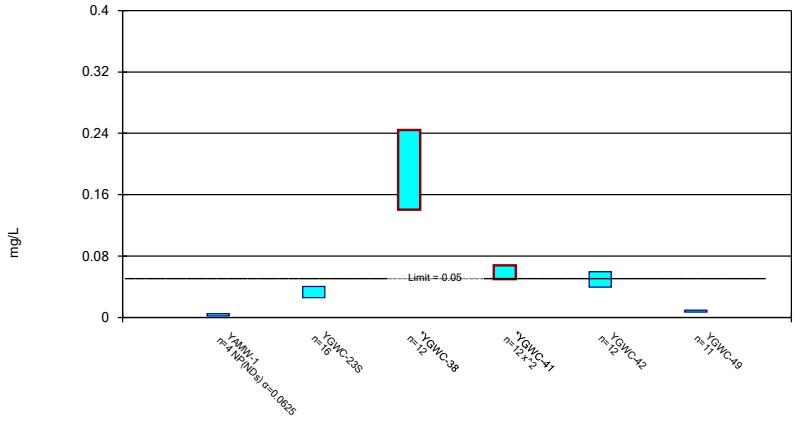


Constituent: Molybdenum Analysis Run 1/13/2021 2:33 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

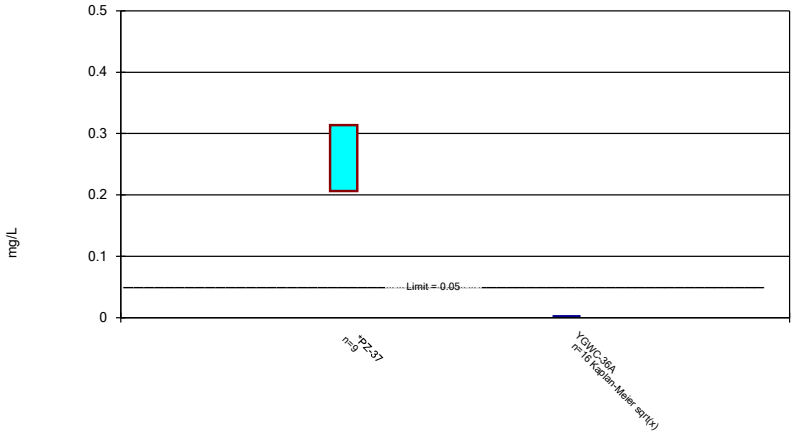
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 1/13/2021 2:33 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

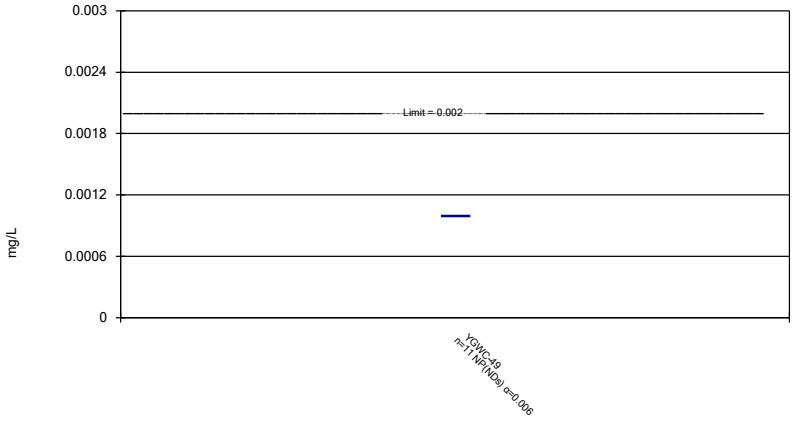


Constituent: Selenium Analysis Run 1/13/2021 2:33 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/13/2021 2:33 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 1/13/2021, 2:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005678**	**0.004422**	**0.004**	**Yes**	**12**	**0.00505**	**0.0008006**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.2443**	**0.1404**	**0.05**	**Yes**	**12**	**0.1923**	**0.06621**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06783**	**0.05001**	**0.05**	**Yes**	**12**	**0.05798**	**0.01434**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	**PZ-37**	**0.314**	**0.2065**	**0.05**	**Yes**	**9**	**0.2602**	**0.05567**	**0**	**None**	**No**	**0.01**	**Param.**

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	14	0.002653	0.0008892	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00063	0.006	No	11	0.002431	0.001001	72.73	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.003	0.006	No	11	0.002755	0.0008111	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	11	0.002603	0.000893	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	9	0.002822	0.0005333	88.89	None	No	0.002	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	14	0.00285	0.0005612	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0011	0.006	No	14	0.002757	0.001498	57.14	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	16	0.004762	0.00095	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.002081	0.000666	0.01	No	12	0.001457	0.001244	8.333	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00052	0.01	No	12	0.002527	0.002193	41.67	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-42	0.003092	0.001303	0.01	No	12	0.002197	0.00114	8.333	None	No	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.0007	0.01	No	12	0.003933	0.001932	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	11	0.00386	0.001955	72.73	None	No	0.006	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	4	0.003922	0.002155	75	None	No	0.0625	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0006	0.01	No	9	0.002338	0.00201	33.33	None	No	0.002	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	16	0.004781	0.000875	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00066	0.01	No	16	0.004179	0.001766	81.25	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.06167	0.01983	2	No	4	0.04075	0.009215	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04535	0.02741	2	No	16	0.03638	0.01379	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.02477	0.01915	2	No	12	0.02196	0.003581	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.03182	0.02188	2	No	12	0.02685	0.006338	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04914	0.03246	2	No	12	0.0408	0.01063	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03422	0.01481	2	No	12	0.02452	0.01237	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.0817	0.06995	2	No	11	0.07583	0.007047	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.0755	0.01971	2	No	4	0.04375	0.01305	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	PZ-37	0.06066	0.0438	2	No	9	0.05223	0.008732	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.02	0.0189	2	No	16	0.01959	0.001899	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04563	0.03361	2	No	16	0.03878	0.01042	0	None	x^2	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0007084	5.5e-8	0.004	No	4	0.001607	0.001614	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.003	0.000077	0.004	No	16	0.001001	0.001392	31.25	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005678**	**0.004422**	**0.004**	**Yes**	**12**	**0.00505**	**0.0008006**	**0**	**None**	**No**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.003727	0.002924	0.004	No	12	0.00325	0.0006332	0	None	x^4	0.01	Param.
Beryllium (mg/L)	YGWC-42	0.003	0.00009	0.004	No	12	0.002029	0.001434	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.003	0.00029	0.004	No	12	0.001659	0.001404	50	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	11	0.0003727	0.0008715	9.091	None	No	0.006	NP (normality)
Beryllium (mg/L)	PZ-35	0.003	0.00033	0.004	No	5	0.001442	0.001424	40	None	No	0.031	NP (normality)
Beryllium (mg/L)	PZ-37	0.003	0.0002	0.004	No	9	0.0009144	0.001184	22.22	None	No	0.002	NP (normality)
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	16	0.0006582	0.001162	18.75	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.00033	0.00014	0.004	No	16	0.0004269	0.000691	6.25	None	No	0.01	NP (normality)
Cadmium (mg/L)	YAMW-1	0.0025	0.00014	0.005	No	4	0.001327	0.001354	50	None	No	0.0625	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0025	0.00007	0.005	No	16	0.002348	0.0006075	93.75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.002879	0.002192	0.005	No	12	0.002517	0.000484	0	None	x^2	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0025	0.00015	0.005	No	12	0.0005867	0.0008948	16.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0025	0.00017	0.005	No	12	0.001022	0.0011	33.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0025	0.0025	0.005	No	11	0.002279	0.0007327	90.91	None	No	0.006	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0025	0.00016	0.005	No	4	0.001915	0.00117	75	None	No	0.0625	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0007433	0.0002497	0.005	No	9	0.0009444	0.0009163	22.22	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0002	0.00012	0.005	No	16	0.0004612	0.0007967	12.5	None	No	0.01	NP (normality)
Chromium (mg/L)	YGWC-23S	0.01	0.0008	0.1	No	12	0.007042	0.004379	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-38	0.01	0.00065	0.1	No	12	0.008429	0.003669	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.01	0.00039	0.1	No	12	0.009199	0.002774	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.01	0.0006	0.1	No	12	0.007694	0.004176	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.01	0.00062	0.1	No	12	0.006881	0.004608	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.0019	0.0014	0.1	No	10	0.00248	0.002652	10	None	No	0.011	NP (normality)
Chromium (mg/L)	PZ-37	0.01	0.001	0.1	No	9	0.007178	0.00424	66.67	None	No	0.002	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.01	0.0011	0.1	No	12	0.008503	0.003496	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.01	0.0013	0.1	No	12	0.007962	0.00374	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.03018	-0.003377	0.035	No	5	0.0134	0.01119	40	Kaplan-Meier	No	0.01	Param.

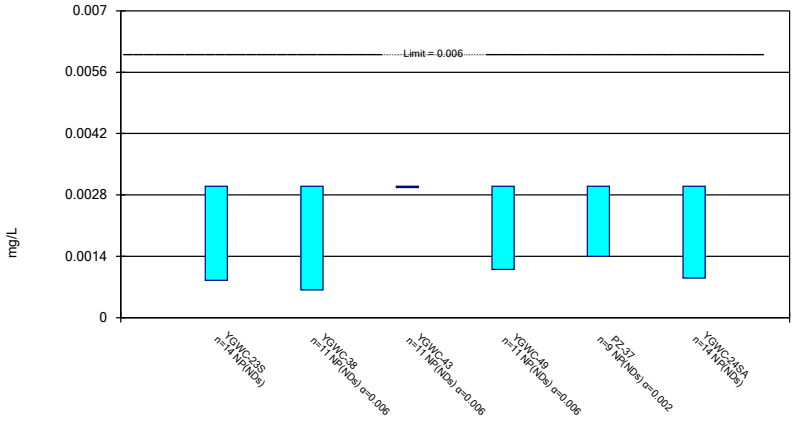
State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 1/13/2021, 2:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	YGWC-41	0.005	0.0003	0.035	No	12	0.003532	0.002177	66.67	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.003	0.0017	0.035	No	12	0.002258	0.0009568	8.333	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	12	0.003525	0.00167	50	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	11	0.003409	0.002208	63.64	None	No	0.006	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	4	0.005225	0.00045	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	PZ-37	0.01448	0.005406	0.035	No	9	0.009944	0.0047	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	16	0.003895	0.001979	75	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8368	0.3246	6.9	No	16	0.5807	0.3936	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.43	0.5739	6.9	No	12	1.002	0.5459	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.466	0.5994	6.9	No	12	1.056	0.596	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	3.21	1.441	6.9	No	12	2.326	1.127	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	3.154	1.069	6.9	No	12	2.112	1.328	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.287	0.537	6.9	No	11	0.9118	0.4498	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	2.207	1.402	6.9	No	9	1.803	0.441	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.8154	0.4728	6.9	No	16	0.6441	0.2633	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.168	0.6117	6.9	No	16	0.8898	0.4274	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	17	0.09406	0.02136	82.35	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.41	0.034	4	No	13	0.1711	0.1243	53.85	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	13	0.1008	0.002774	84.62	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.041	4	No	13	0.08392	0.02742	69.23	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1271	0.05852	4	No	13	0.1141	0.05491	30.77	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.1059	0.05031	4	No	12	0.09917	0.02937	50	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	PZ-37	0.45	0.1	4	No	9	0.1944	0.1269	55.56	None	No	0.002	NP (NDs)
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	17	0.09594	0.01623	88.24	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.18	0.05	4	No	17	0.09153	0.03486	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-23S	0.005	0.00044	0.005	No	14	0.003973	0.002043	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.005	0.0001	0.005	No	12	0.003775	0.002216	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.005	0.00007	0.005	No	12	0.003446	0.00231	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.005	0.00009	0.005	No	12	0.003778	0.002211	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.005	0.00008	0.005	No	12	0.00418	0.001916	83.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.005	0.005	0.005	No	11	0.004551	0.00149	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	PZ-37	0.005	0.000085	0.005	No	9	0.002843	0.002558	55.56	None	No	0.002	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.005	0.000053	0.005	No	14	0.004647	0.001322	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.0017	0.0002	0.005	No	14	0.001084	0.001707	14.29	None	No	0.01	NP (normality)
Lithium (mg/L)	YAMW-1	0.01499	-0.003454	0.03	No	4	0.008075	0.006149	25	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0035	0.0018	0.03	No	16	0.003044	0.003251	6.25	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.009177	0.00794	0.03	No	12	0.008558	0.0007879	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0047	0.0029	0.03	No	12	0.004683	0.003312	8.333	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.04368	0.02738	0.03	No	12	0.03553	0.01039	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01692	0.01079	0.03	No	12	0.01386	0.003904	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0036	0.03	No	11	0.003718	0.0002601	0	None	No	0.006	NP (normality)
Lithium (mg/L)	PZ-35	0.01502	-0.006283	0.03	No	4	0.007025	0.00709	25	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	PZ-37	0.03141	0.02268	0.03	No	9	0.02697	0.005114	11.11	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006231	0.004408	0.03	No	16	0.005156	0.001647	0	None	x^2	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.0014	0.014	No	12	0.005976	0.004239	50	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.014	No	12	0.006433	0.004416	58.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-49	0.01	0.01	0.014	No	10	0.00907	0.002941	90	None	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0015	0.014	No	9	0.005444	0.004328	44.44	None	No	0.002	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0015	0.014	No	12	0.006583	0.003844	50	None	No	0.01	NP (normality)
Selenium (mg/L)	YAMW-1	0.005	0.0019	0.05	No	4	0.004225	0.00155	75	None	No	0.0625	NP (NDs)
Selenium (mg/L)	YGWC-23S	0.04038	0.02571	0.05	No	16	0.03304	0.01128	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.2443**	**0.1404**	**0.05**	**Yes**	**12**	**0.1923**	**0.06621**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-41**	**0.06783**	**0.05001**	**0.05**	**Yes**	**12**	**0.05798**	**0.01434**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-42	0.05953	0.03932	0.05	No	12	0.04943	0.01288	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.00927	0.006766	0.05	No	11	0.008018	0.001503	9.091	None	No	0.01	Param.
Selenium (mg/L)	**PZ-37**	**0.314**	**0.2065**	**0.05**	**Yes**	**9**	**0.2602**	**0.05567**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.002733	0.001769	0.05	No	16	0.00305	0.001322	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Thallium (mg/L)	YGWC-49	0.001	0.001	0.002	No	11	0.0009173	0.0002744	90.91	None	No	0.006	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

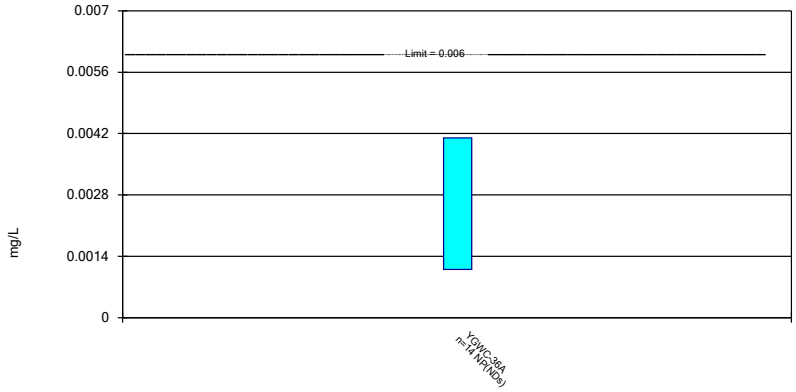


Constituent: Antimony Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

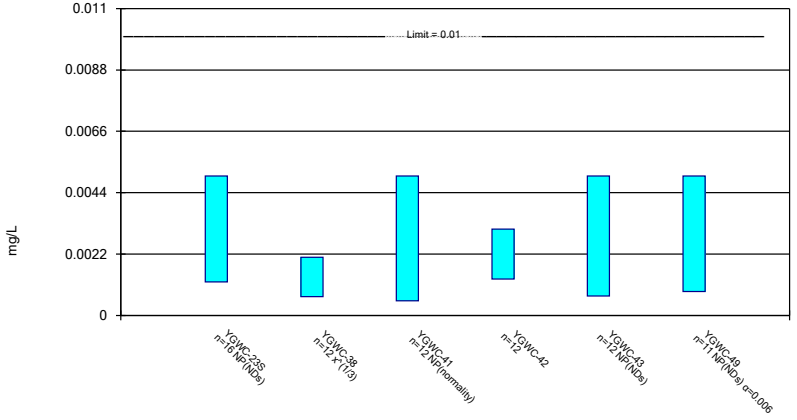


Constituent: Antimony Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

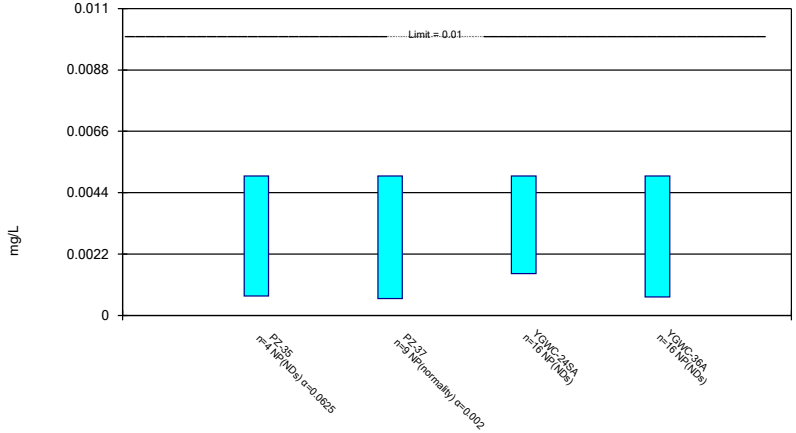


Constituent: Arsenic Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

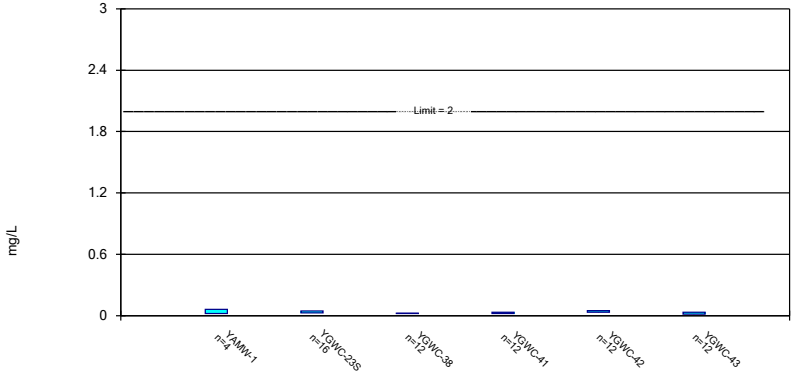
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Arsenic Analysis Run 1/13/2021 2:29 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.

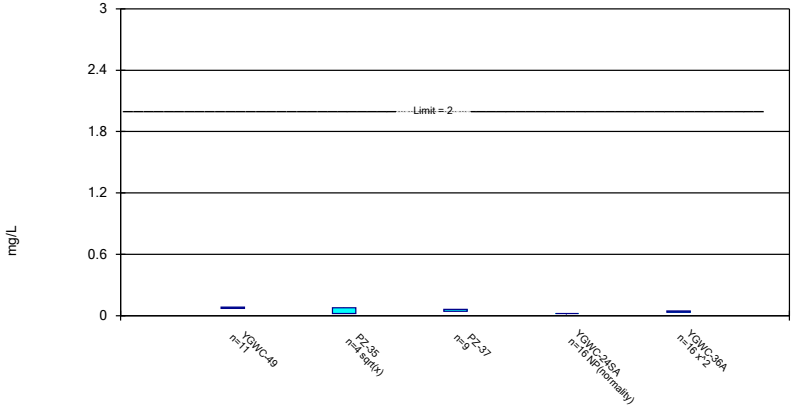


Constituent: Barium Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

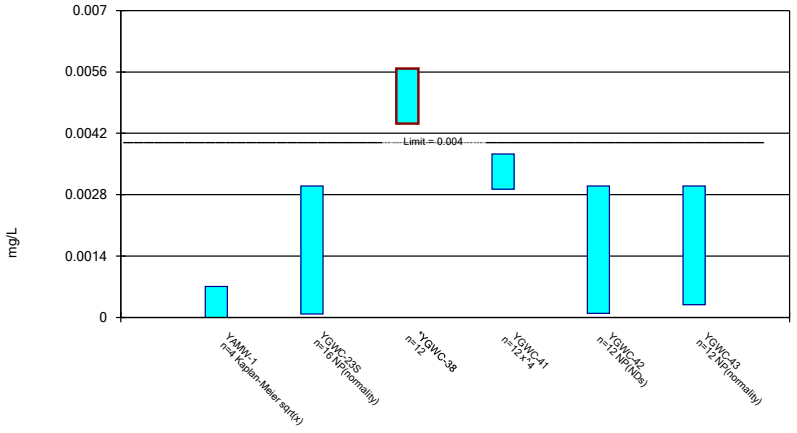


Constituent: Barium Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

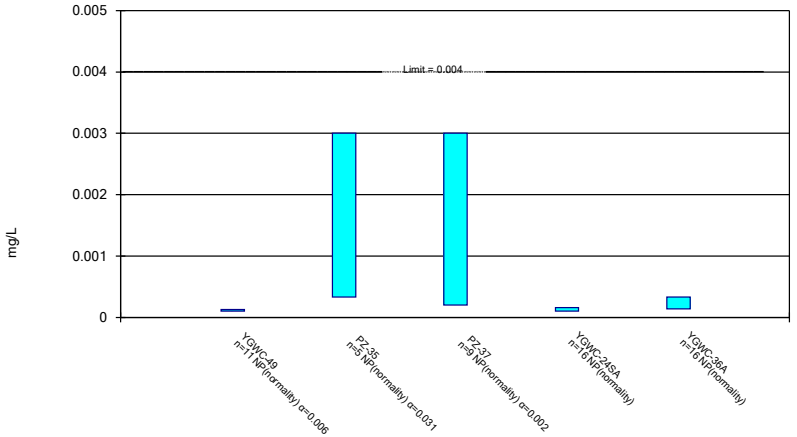


Constituent: Beryllium Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

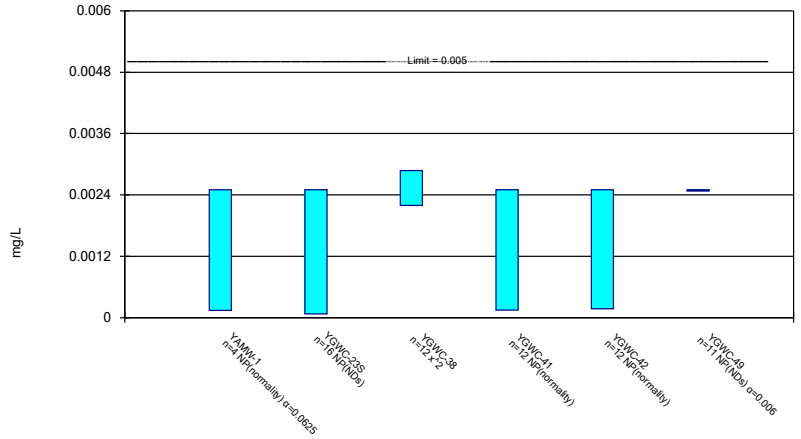
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Beryllium Analysis Run 1/13/2021 2:29 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.

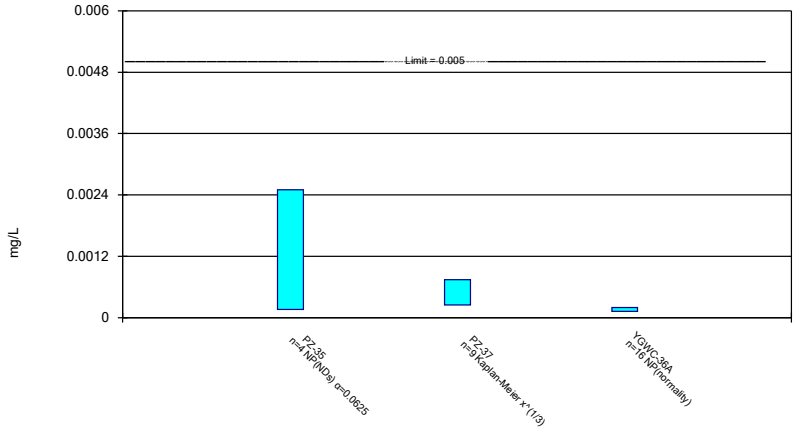


Constituent: Cadmium Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

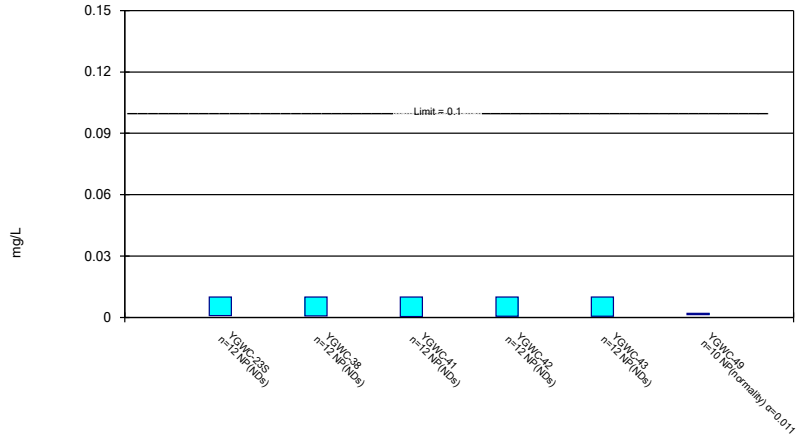


Constituent: Cadmium Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

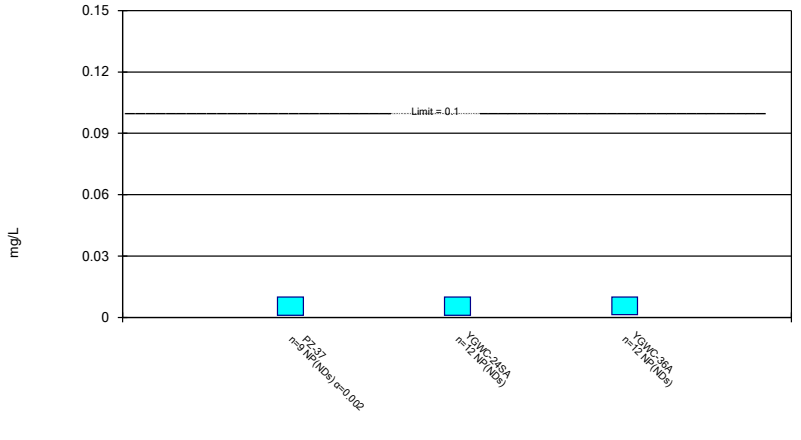


Constituent: Chromium Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

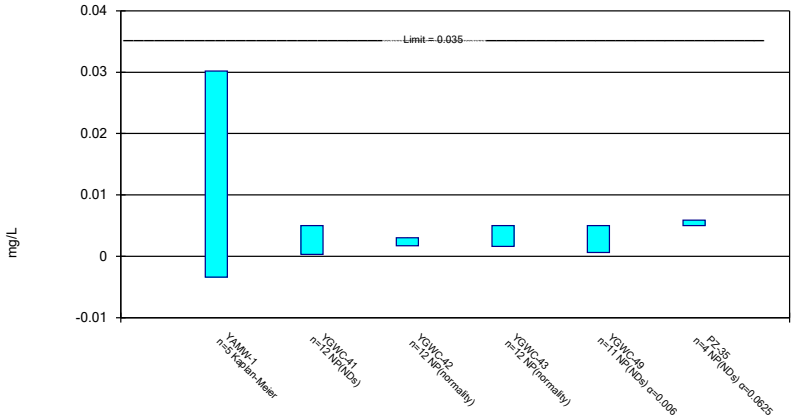
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 1/13/2021 2:29 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.

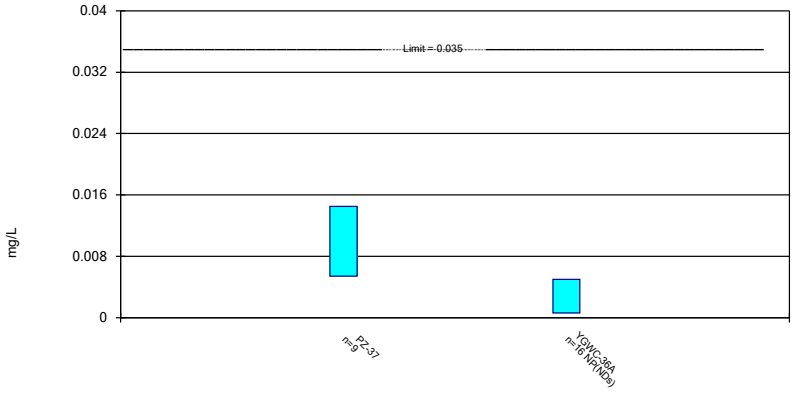


Constituent: Cobalt Analysis Run 1/13/2021 2:29 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

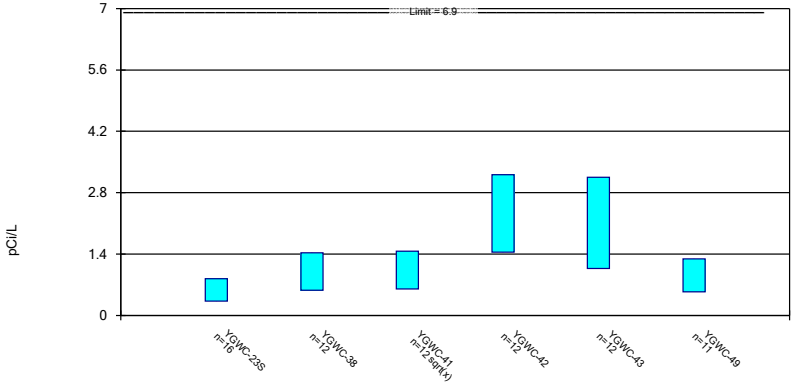


Constituent: Cobalt Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

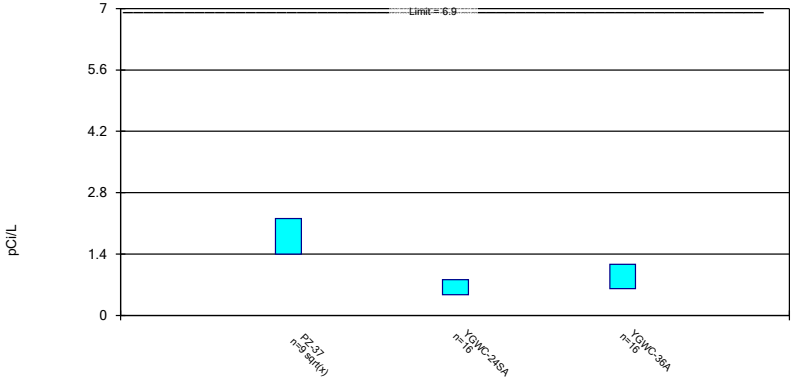


Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric Confidence Interval

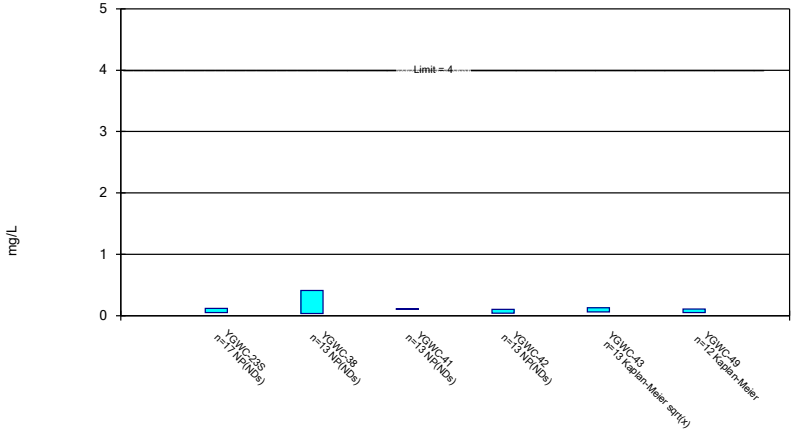
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2021 2:30 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.

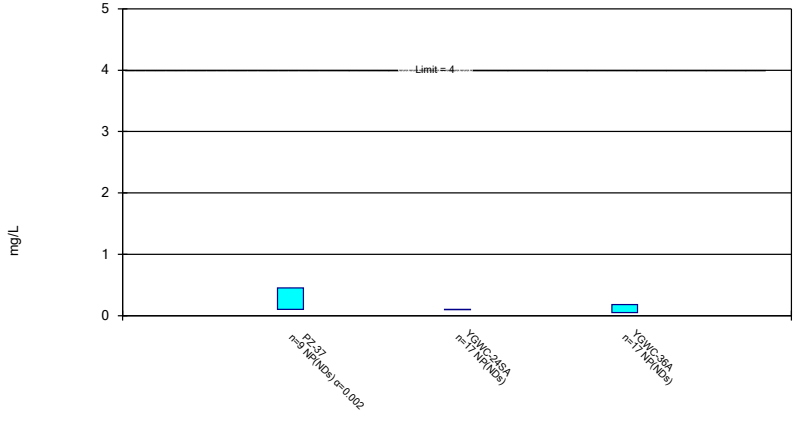


Constituent: Fluoride Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

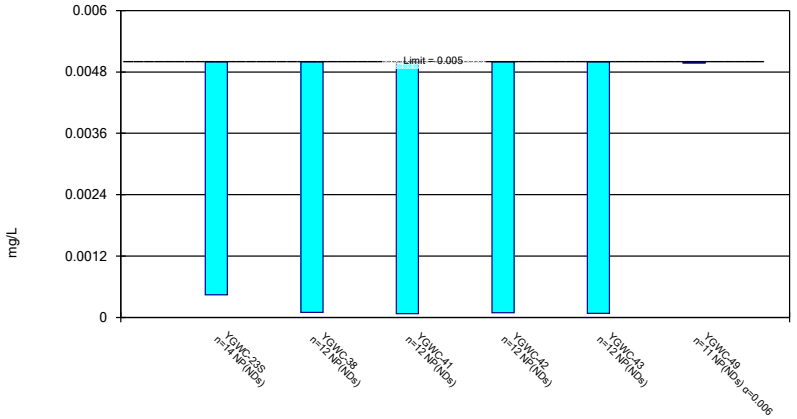


Constituent: Fluoride Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

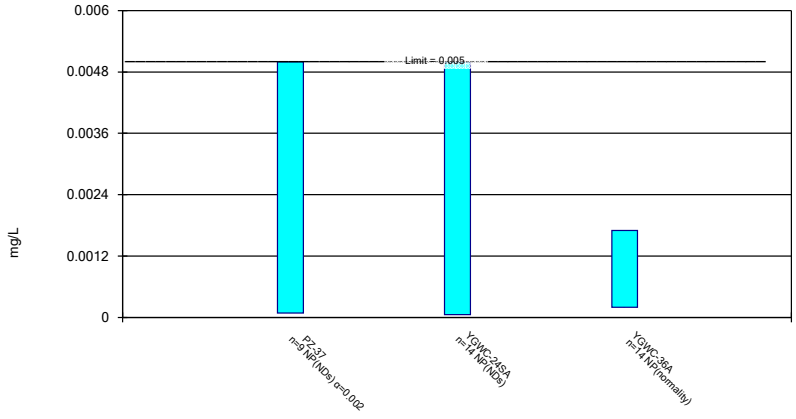


Constituent: Lead Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

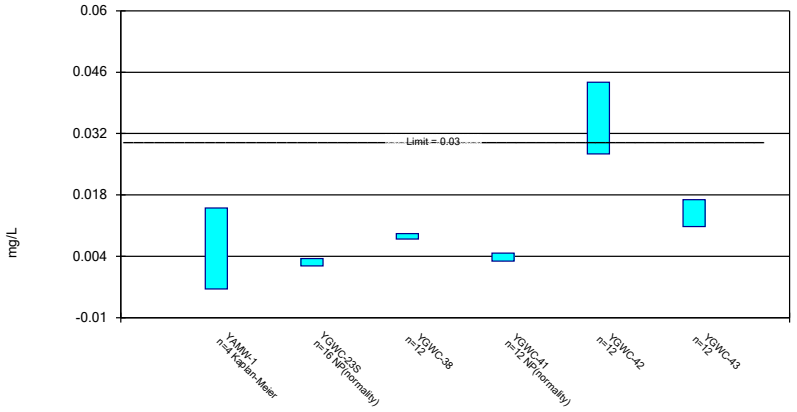
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 1/13/2021 2:30 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.

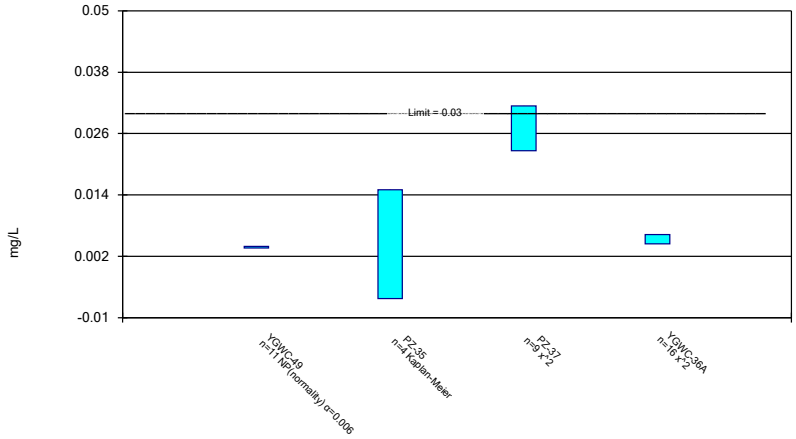


Constituent: Lithium Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b 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.

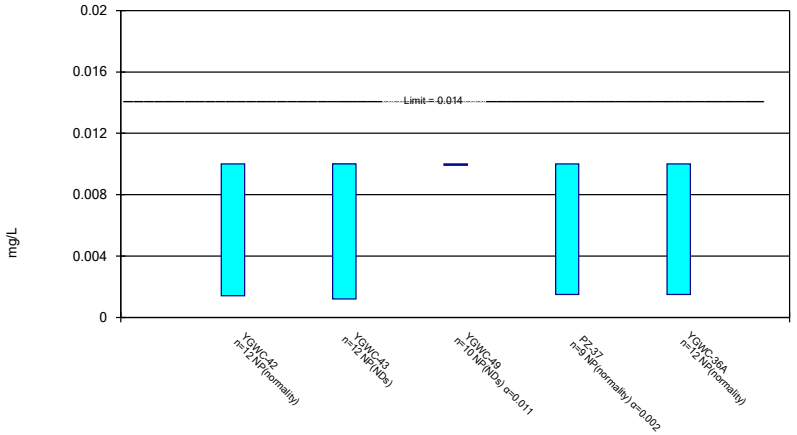


Constituent: Lithium Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

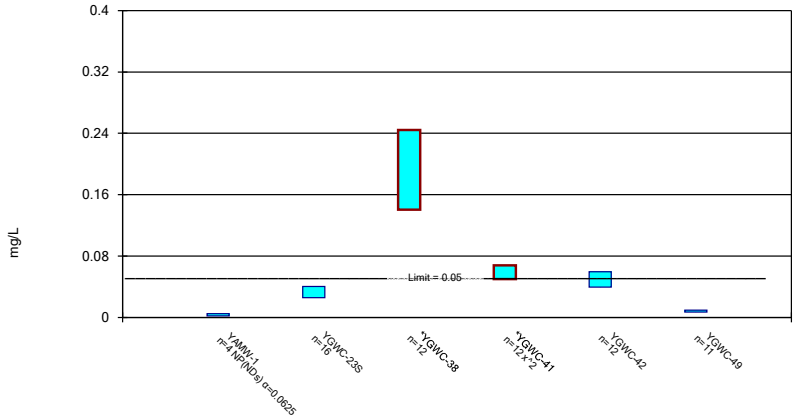


Constituent: Molybdenum Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

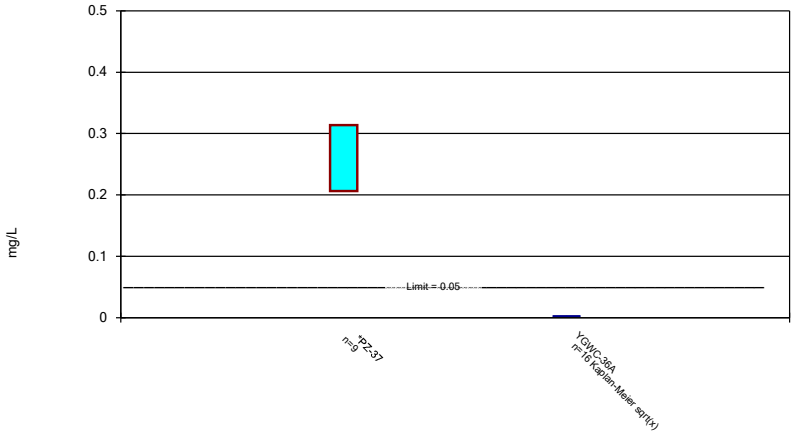
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

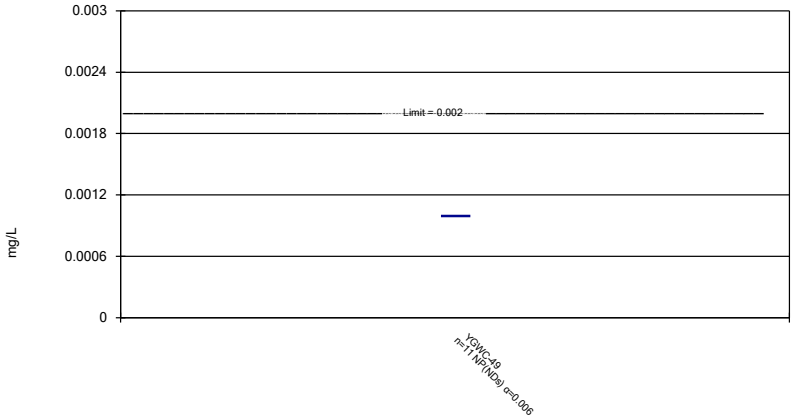


Constituent: Selenium Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/13/2021 2:30 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6