



# 2021 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

Plant Yates - Ash Pond 2 Newnan, Georgia

August 31, 2021

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# 2021 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

Plant Yates - Ash Pond 2 Newnan, Georgia

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#### SUMMARY

This summary of the 2021 Semiannual Monitoring and Corrective Action Report provides the status of groundwater monitoring and corrective action program from January through June 2021 at Georgia Power Company's (Georgia Power's) Plant Yates Ash Pond (AP) AP-2 (the Site). Arcadis U.S., Inc. (Arcadis) prepared this summary on behalf of Georgia Power to meet the requirements listed in Part A, Section 6¹ 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 materials resulting from power generation have historically been transferred and stored at the Site.

Groundwater at the Site is monitored using a monitoring system of 19 upgradient and seven downgradient wells. 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 15, 2018. During the 2021 semiannual reporting period, the Site remained in assessment monitoring.

During the first half of the 2021 reporting period, Arcadis conducted two groundwater sampling events in February and March. Groundwater



Plant Yates and the Site

samples were submitted to Pace Analytical Services, LLC, for analysis. Per the CCR rule, groundwater results for March 2021 data were evaluated in accordance with the certified statistical methods. That evaluation showed statistically significant values of Appendix III<sup>2</sup> parameters in wells provided in the table below. There were no statistically significant levels (SSLs) detected for Appendix IV<sup>3</sup> parameters.

Appendix III Parameter	March 2021
Boron	YGWC-26I, YGWC-26S, YGWC-27I, YGWC-27S, YGWC-28I, YGWC-28S, YGWC-29I
Chloride	YGWC-26I, YGWC-26S, YGWC-27I, YGWC-28I, YGWC-28S

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

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

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

# 2021 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PLANT YATES – ASH POND 2

Appendix III Parameter	March 2021
Sulfate	YGWC-27S

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

# **CONTENTS**

Acr	onyn	ns and <i>i</i>	Abbreviations	.ii
Pro	fessi	ional Ce	ertification	٠i.
1	Intro	oduction	1	. 1
	1.1	Backg	round	. 1
	1.2	Regio	nal Geology and Hydrogeologic Setting	. 1
	1.3	Groun	dwater Monitoring Well Network and CCR Unit Description	. 2
2	Gro	undwate	er Monitoring	. 2
	2.1	Monito	oring Well Installation and Maintenance	. 3
	2.2	Asses	sment Monitoring	. 3
3	San	npling M	lethodology and Analysis	. 3
	3.1	Groun	dwater Flow Direction, Gradient, and Velocity	. 3
	3.2	Groun	dwater Sampling	. 4
	3.3	Labora	atory Analyses	. 4
	3.4	Data C	Quality Assurance/Quality Control and Validation	. 5
4	Stat	istical A	nalysis	. 5
	4.1	Statist	ical Methods	. 5
		4.1.1	Appendix III Statistical Methods	. 6
		4.1.2	Assessment Monitoring Statistical Methods	. 6
	4.2	Statist	ical Analysis Results	. 7
		4.2.1	Appendix III Monitoring Constituents	. 7
		4.2.2	Appendix IV Assessment Monitoring Constituents	. 7
5	Mor	nitoring	Program Status	. 8
6	Con	clusion	s and Future Actions	. 8
7	Ref	arences		5

# **TABLES**

Table 1. Monitoring Network Well Summary

Table 2. 2021 Groundwater Sampling Plan

# 2021 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PLANT YATES – ASH POND 2

- Table 3. Summary of Groundwater Elevations February and March 2021
- Table 4. Groundwater Flow Velocity Calculations March 2021
- Table 5. Summary of Groundwater Monitoring Parameters
- Table 6. Groundwater Analytical Data February and March 2021
- Table 7. Background Levels and Groundwater Protection Standards

## **FIGURES**

- Figure 1. Site Location Map
- Figure 2. Plant Yates Ash Removal Areas
- Figure 3. Well Location Map
- Figure 4. Groundwater Elevation Map February 2021
- Figure 5. Groundwater Elevation Map March 2021

# **APPENDICES**

- A. Field Sampling Forms (February and March 2021)
- B. Analytical Lab and Data Validation Reports (February and March 2021)
- C. Statistical Analysis

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# **ACRONYMS AND ABBREVIATIONS**

Arcadis Arcadis, Inc.

AP Ash Pond

CCR Coal Combustion Residuals

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

TDS total dissolved solids

USEPA United States Environmental Protection Agency

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## PROFESSIONAL CERTIFICATION

This 2021 Semiannual Groundwater Monitoring and Corrective Action Report for the Georgia Power Company Plant Yates Ash Pond 2 (AP-2) has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residual Rule (40 Code of Federal Regulations 257 Subpart D) and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Arcadis, U.S., Inc.

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#### 1 INTRODUCTION

This 2021 Semiannual Groundwater Monitoring and Corrective Action Report documents groundwater monitoring conducted at the Georgia Power Company (GPC) Plant Yates Ash Pond (AP) AP-2 (the Site) in February and March 2021. This report was prepared in accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residuals (CCR) Rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division (GAEPD) Rules for Solid Waste Management 391-3-4-.10. Groundwater monitoring requirements for the Site are specified by GAEPD Rule 391-3-4-.10(6)(a), which also incorporates the USEPA CCR Rule. For ease of reference, the USEPA CCR Rules are cited within this report.

This report presents the results of both the annual monitoring for Appendix IV constituents conducted in February 2021 and the semiannual monitoring event conducted in March 2021 in accordance with 40 CFR § 257.95.

# 1.1 Background

Plant Yates is located on 708 Dyer Road, on the east bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line, approximately 8 miles northwest of the City of Newnan and 13 miles southeast of the City of Carrollton. Plant Yates occupies approximately 2,400 acres. **Figure 1** depicts the site location relative to the surrounding area. Areas where CCR Removal Reports have been submitted to GA EPD are shown on **Figure 2**. The layout of Plant Yates and the other site features is shown on **Figure 3**.

A permit application to comply with EPD rules was submitted in November 2018 and is currently under review. AP-2 was placed in an assessment monitoring program based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, which was implemented on January 15, 2018. A notice of assessment monitoring was placed in the operation record on May 15, 2018. Semiannual monitoring for the CCR unit is performed in accordance with the monitoring requirements 40 CFR § 257.90 through 257.95 of the Federal CCR Rule and the GAEPD rules for Solid Waste Management 391-3-4-.10(6)(a).

# 1.2 Regional Geology and Hydrogeologic Setting

Plant Yates is located in the Inner Piedmont Physiographic Province of western Georgia, immediately southeast of the Brevard Zone, a regional fault zone that separates the Piedmont from the Blue Ridge. Rock units at Plant Yates are primarily interlayered gneiss and schists. The rocks in the area have been subjected to extensive metamorphism, deformation, and igneous intrusions. Extensive fracture sets are present in the underlying bedrock. Surface expressions of these fractures are observed on topographic maps and aerial photos of the Plant Yates area (ACC 2018).

A thin layer of soil from 1 to 2 feet thick overlies a thick layer of saprolite. The saprolite, which extends to typical depths of 20 to 40 feet below ground surface, was formed in place by the physical and chemical weathering of the underlying metamorphic rocks. The saprolite typically consists of clay- and silt-rich soils that grade to sandier soils with depth. A zone of variable thickness (approximately 5 to 20 feet) of transitionally weathered rock typically exists between the saprolite and competent bedrock. The lithology of the transition zone is highly variable and ranges from medium to coarse unconsolidated material to

highly fractured and weathered rock fragments. Localized alluvial soils consisting of generally coarser material (silty-sand, clayey silt, and silty clay with well-rounded gravel and cobbles) that have been observed in saprolite may be related to historical river channel migration.

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

Field hydraulic conductivity tests (i.e., slug tests) have been performed in saprolite and weathered bedrock at multiple locations at the Site. The hydraulic conductivity at these locations is typically in a range from 10<sup>-3</sup> to 10<sup>-4</sup> centimeters per second based on multiple rising-head and falling-head slug tests (ACC 2020). 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 groundwater monitoring system was installed within the uppermost aquifer at the Site. The monitoring system is designed to monitor groundwater passing the waste boundary of the CCR Unit within the uppermost aquifer. Wells are located to monitor upgradient and downgradient conditions based on groundwater flow direction. The compliance monitoring well network is summarized in **Table 1**.

As typical of the Piedmont Physiographic Province, there is a degree of connectivity between the saprolite and partially weathered rock units (Harned, D.A., and Daniel, C.C., III 1992). Fractured bedrock may or may not be connected to the overlying units, and flow may be controlled by geologic structures present. Based on the site hydrogeology, the monitoring system is designed to monitor groundwater flow in the saprolite, the transition zone, and the upper bedrock. Wells suffixed with an "S" are installed in saprolite, an "I" indicates partially weathered rock (transition zone), and "D" indicates upper bedrock. The CCR unit AP-2 was established along a topographically low area formed by an unnamed tributary. Based on the site hydrogeology, the monitoring system is designed to monitor groundwater flow in the overburden, the transition zone, and the upper bedrock. The monitoring well network for the Site is illustrated on **Figure 3**.

#### 2 GROUNDWATER MONITORING

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

**Table 2** summarizes groundwater sampling events conducted by Arcadis at AP-2 during this semiannual period (February and March 2021). During the February 2021 event, groundwater samples were collected and analyzed for 40 CFR 257 Appendix IV constituents to meet the requirement of 40 CFR § 257.95(b).

During the March 2021 semiannual sampling event, groundwater samples were collected for both 40 CFR 257 Appendix III and the Appendix IV constituents detected during the February 2021 event. Field sampling logs are provided in **Appendix A**.

## 2.1 Monitoring Well Installation and Maintenance

There were no changes to the groundwater monitoring system in the first half of 2021; the network remained the same as in the 2020 reporting year. Monitoring well-related activities were limited to visual inspection of well conditions before sampling, recording the site conditions, and performing exterior maintenance necessary for sampling under safe and clean conditions.

### 2.2 Assessment Monitoring

AP-2 was placed in an assessment monitoring program based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, which was implemented on January 15, 2018. A notice of assessment monitoring was placed in the operation record on May 15, 2018. Monitoring wells at AP-2 were sampled for Appendix IV parameters in February 2021 pursuant to 40 CFR § 257.95(b). In accordance with 40 CFR § 257.95(d), a semiannual assessment monitoring event occurred in March 2021, in which samples were collected and analyzed for Appendix III parameters and Appendix IV parameters detected at concentrations above the laboratory method detection limit (MDL) from the February 2021 event. A summary of groundwater sampling events completed during the first half of 2021 is provided in **Table 2**.

## 3 SAMPLING METHODOLOGY AND ANALYSIS

Groundwater monitoring methods at the Site are described in the following sections.

# 3.1 Groundwater Flow Direction, Gradient, and Velocity

Before each sampling event, static water levels were recorded from piezometers and wells at AP-2. Water levels were collected at 14 monitoring wells within the certified well network along with eight non-network monitoring wells and/or piezometers. The groundwater elevation data are summarized in **Table 3**.

Saprolite and transition zone groundwater elevation data were used to prepare potentiometric surface elevation contour maps from February and March gauging events (**Figures 4 and 5**). In the first half of 2021, saprolite and transition zone groundwater elevations ranged from 821.75 feet (YGWA-2I) to 685.84 feet (YGWC-27I). The groundwater flow direction for the saprolite and transition zone wells is generally northeast, southwest, and west toward AP-2 where it flows west to the Chattahoochee River. The groundwater flow direction is consistent with historical patterns. It is interpreted that variations between saprolite/transition zone wells and deep bedrock wells are attributed to bedrock geologic structural controls, and therefore to not reflect the surficial aquifer potentiometric surface. Based on this interpretation, the deep bedrock potentiometric surface was not used for contouring.

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

$$v=rac{k\left(rac{dh}{dl}
ight)}{n_e}$$
 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 February and March 2021 are presented in **Table 4**. The calculated average groundwater linear flow velocity was approximately 27 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 instrument) was used to monitor and record field water quality parameters (pH, conductivity, and dissolved oxygen [DO]) during well purging to verify stabilization before sampling. Turbidity was measured using a portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met for a minimum of three consecutive readings:

- ± 0.1 standard units for pH;
- ± 5% for specific conductance; and
- Turbidity measurements less than 5 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 and daily equipment calibration records are included in **Appendix A**.

# 3.3 Laboratory Analyses

Samples were submitted for laboratory analysis from 14 monitoring wells as summarized in **Table 2**. During the February 2021 sampling event, the AP-2 wells were sampled and analyzed for Appendix IV parameters according to 40 CFR § 257.95(b). Groundwater samples collected during the semiannual event in March 2021 were analyzed for Appendix III parameters as well as those Appendix IV parameters detected at concentrations above the laboratory MDL during the February 2021 event in accordance with 40 CFR § 257.95(d). **Table 5** provides a summary of the constituents monitored during the events. Mercury and thallium were not detected at concentrations above the laboratory MDL during the February

2021 scan event and, therefore, were not analyzed during the March event. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports, along with chain-of-custody records included in **Appendix B**.

Analytical data collected from the 2021 sampling events are summarized in Table 6.

Laboratory analyses were performed by Pace Analytical Services, LLC, which is accredited by the National Environmental Laboratory Accreditation Program and maintains this certification for all parameters analyzed for this project.

### 3.4 Data Quality Assurance/Quality Control and Validation

During each sampling event, quality assurance/quality control (QA/QC) samples were collected at a rate of one per 10 samples. QA/QC samples included equipment blanks (where non-dedicated equipment is used), field blanks, and duplicate samples. Groundwater quality data in this report were validated in accordance with USEPA guidance (USEPA 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post-digestion spikes, laboratory and field duplicate relative percent differences, equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags have been applied to the data using USEPA procedures as guidance (USEPA 2017). The March 2021 data validation reports included in **Appendix B** summarize the validation actions and applicable interpretation.

The purpose of the data quality evaluation was to determine the reliability of the chemical analyses and the accuracy and precision of information acquired from the laboratory. Data quality was assessed through the review and evaluation of field sampling, 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 B**.

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 data from the 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 2021 event were compared to the statistical limit to determine whether concentrations exceeded background levels. The statistical method incorporates an optional 1-of-2 verification resample plan. When an initial statistically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine whether the result was an outlier. If resampling is performed, and the initial finding is not verified, the resampled value replaces the initial finding. When the resample confirms the initial result, both values remain in the database, and an SSI is declared. The following criteria were applied to the evaluation:

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

#### 4.1.2 Assessment Monitoring Statistical Methods

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

The confidence and coverage levels for non-parametric tolerance limits depend on the number of background samples. The background limits were then used when determining the Groundwater Protection Standards (GWPS) established under 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a).

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

- The maximum contaminant level (MCL) established under 40 CFR §§ 141.62 and 141.66.
- For the following constituents:

Cobalt: 0.006 milligram per liter (mg/L)

Lead: 0.015 mg/LLithium: 0.040 mg/LMolybdenum: 0.100 mg/L.

 The background level for constituents for which the background level is higher than the MCL or rule identified GWPS.

USEPA revised the federal CCR Rule on July 30, 2018, providing GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR 257.95(h)(2). Presently, those updated GWPS have not yet been incorporated into the current GAEPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, background concentrations are considered when determining the GWPS for constituents for which an MCL has not been established (or where 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-2. **Table 7** summarizes the background levels established at the monitoring well for the March 2021 sampling event along with the GWPS established under federal and state rules.

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

# 4.2 Statistical Analysis Results

Appendix III statistical analysis for wells associated with the Site was performed to determine whether constituent concentrations have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine whether concentrations statistically exceed the established GWPS. Appendix III and Appendix IV data from the March 2021 semiannual events were statistically analyzed in accordance with the Statistical Analysis Plan (Groundwater Stats 2019).

#### 4.2.1 Appendix III Monitoring Constituents

Based on review of the Appendix III statistical analysis from the March 2021 sampling event presented in **Appendix C**, Appendix III concentrations have not returned to background levels, and assessment monitoring should continue pursuant to 40 CFR § 257.95(f). A table summarizing these constituents and wells is provided in **Appendix C**.

#### 4.2.2 Appendix IV Assessment Monitoring Constituents

Statistical analysis of the March 2021 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). No SSLs were identified. Sanitas™ statistical output data for calculation of site-specific background concentrations and confidence intervals for each Appendix IV constituent in downgradient wells are provided in **Appendix D**.

## 5 MONITORING PROGRAM STATUS

In accordance with 40 CFR § 257.94(e), an assessment monitoring program was implemented in January 2018. No statistical exceedance of a GWPS for Appendix IV parameters has been identified. Pursuant to 40 CFR § 257.96(b), GPC will continue to monitor groundwater at AP-2 in accordance with the assessment monitoring program regulations of 40 CFR § 257.95 due to SSIs for Appendix III parameters.

#### 6 CONCLUSIONS AND FUTURE ACTIONS

Statistical evaluations of the groundwater monitoring data for the Site identified no exceedance of a GWPS for an Appendix IV constituent during the March 2021 semiannual sampling events. The next assessment monitoring event is scheduled for August 2021.

#### 7 REFERENCES

- ACC. 2018. *Plant Yates, Ash Pond 2 Hydrogeologic Assessment Report.* Prepared for Georgia Environmental Protection Division. November 2018.
- Driscoll, Fletcher G. 1986. Groundwater and Wells. Johnson Screens, Saint Paul, Minnesota. 1089 pp.
- Freeze, R.A. and Cherry, J.A. 1979. Groundwater. Prentice-Hall, Englewood Cliffs, New Jersey. 604 pp.
- Groundwater Stats Consulting. 2019. *Statistical Analysis Plan Plant Yates Ash Pond 2*. Prepared for Georgia Environmental Protection Division.
- Harned, D.A., and Daniel D.D., III, 1992. The transition zone between bedrock and saprolite Conduit for contamination? Ground water in the Piedmont Proceedings of a conference on ground water in the Piedmont of the eastern United States: Clemson, S.C. p. 336-348.
- Newell, C.J., L.P. Hopkins, and P.B. Bedient. 1990. A Hydrogeologic Database for Ground-Water Modeling. *Ground Water*. 28(5):703-714.
- State Waste Management Board. 2016. State Solid Waste Management Regulations (9VAC20 81 et seq.). January.
- USEPA. 1989. RCRA Facility Investigation (RFI) Guidance, Interim Final, Vol I. [EPA 530/SW-89-031], OWSER Directive 9502.00-6D.
- USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance.

  Office of Resource Conservation and Recovery Program Implementation and Information Division.

  March.
- USEPA. 2011. Data Validation Standard Operating Procedures. Science and Ecosystem Support Division. Region IV. Athens, GA. September.
- USEPA. 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC. January.

# **TABLES**



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 / Purpose
Upgradient V	Vells						
YGWA-4I	5/21/2014	784.21	48.81	735.40	38.51	745.70	Upgradient
YGWA-5I	5/21/2014	784.54	58.94	725.60	48.64	735.90	Upgradient
YGWA-5D	5/21/2014	784.53	129.13	655.40	78.83	706.00	Upgradient
YGWA-17S	9/10/2015	783.05	39.85	743.20	29.55	753.20	Upgradient
YGWA-18S	9/8/2015	790.57	39.97	750.60	29.97	760.90	Upgradient
YGWA-18I	9/8/2015	790.57	79.97	710.60	69.67	720.90	Upgradient
YGWA-20S	9/29/2015	767.12	29.52	737.60	19.22	747.90	Upgradient
YGWA-21I	9/28/2015	783.70	79.90	703.80	69.60	714.10	Upgradient
YGWA-39	7/7/2016	818.19	68.59	749.60	58.09	760.10	Upgradient
YGWA-40	7/7/2016	815.73	48.23	767.50	37.73	778.00	Upgradient
YGWA-1I	5/20/2014	836.60	53.60	783.00	43.30	793.30	Upgradient
YGWA-1D	5/20/2014	837.25	128.85	708.40	78.05	759.20	Upgradient
YGWA-2I	5/20/2014	866.25	63.75	802.50	53.45	812.80	Upgradient
YGWA-3I	5/20/2014	796.55	59.05	737.50	48.85	747.70	Upgradient
YGWA-3D	5/20/2014	796.78	134.18	662.60	83.88	712.90	Upgradient
YGWA-14S	5/20/2014	748.76	34.96	713.80	24.66	724.10	Upgradient
YGWA-30I	9/23/2015	762.58	59.48	703.10	49.18	713.40	Upgradient
YGWA-47	7/11/2016	758.22	59.19	696.41	48.62	709.60	Upgradient
GWA-2	4/12/2007	805.62	52.02	753.60	41.82	763.80	Upgradient
Downgradier	nt Wells						
YGWC-26S	10/1/2015	716.28	40.18	676.10	29.88	686.40	Downgradient
YGWC-26I	9/30/2015	715.91	69.81	646.10	59.51	656.40	Downgradient
YGWC-27S	10/7/2015	716.52	40.52	676.00	30.22	686.30	Downgradient
YGWC-27I	10/7/2015	716.19	79.99	636.20	69.69	646.50	Downgradient
YGWC-28S	10/5/2015	717.95	44.95	673.00	34.65	683.30	Downgradient
YGWC-28I	10/5/2015	717.93	69.93	648.00	59.63	658.30	Downgradient
YGWC-29I	10/1/2015	717.39	39.59	677.80	29.29	688.10	Downgradient
Non-Network	Wells						
PZ-1S	5/20/2014	836.84	36.34	800.50	26.04	810.80	Piezometer
PZ-3S	5/20/2014	796.39	42.39	754.00	32.09	764.30	Piezometer
PZ-13S	5/20/2014	807.79	43.79	764.00	33.49	774.30	Piezometer
PZ-13I	5/20/2014	807.62	59.22	748.40 48.92 758.70		758.70	Piezometer
PZ-14I	5/20/2014	749.06	50.86	698.20	40.56	708.50	Piezometer
PZ-25S	9/2/2015	766.60	56.80	709.80	46.50	720.10	Piezometer
PZ-25I	9/3/2015	766.38	84.58	681.80	74.28	692.10	Piezometer
PZ-31S	9/24/2015	738.62	34.72	703.90	24.42	714.02	Piezometer

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

#### Acronyms and Abbreviations:

bTOC = below top of casing

ft = feet



Well ID	Hydraulic Location	Assessment Monitoring <sup>1</sup>	2021 Semiannual Sampling <sup>2</sup>		
		February 8 - 12, 2021	March 1 - 4, 2021		
YGWA-1I	Upgradient	Х	X		
YGWA-1D	Upgradient	X	X		
YGWA-2I	Upgradient	X	X		
YGWA-3I	Upgradient	X	X		
YGWA-3D	Upgradient	X	X		
YGWA-14S	Downgradient	X	X		
YGWA-30I	Downgradient	X	X		
YGWC-26S	Downgradient	X	X		
YGWC-26I	Downgradient	X	X		
YGWC-27S	Downgradient	X	X		
YGWC-27I	Downgradient	X	X		
YGWC-28S	Downgradient	X	X		
YGWC-28I	Downgradient	X	X		
YGWC-29I	Downgradient	X	Х		

- 1. All wells analyzed for Appendix IV.
- 2. Appendix III and detected Appendix IV.

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

 $\label{eq:Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.}$ 

USEPA = United States Environmental Protection Agency

CCR = Coal Combustion Residuals



Well ID	Date	TOC Elevation (ft)	Depth to Water (bTOC)	Groundwater Elevation (ft)
ebruary 2021				
YGWA-1I	2/8/2021	836.60	37.84	798.76
YGWA-1D	2/8/2021	837.25	48.50	788.75
YGWA-2I	2/8/2021	866.25	44.96	821.29
YGWA-3I	2/8/2021	796.55	52.34	744.21
YGWA-3D	2/8/2021	796.78	29.44	767.34
YGWA-14S	2/8/2021	748.76	17.56	731.20
YGWA-30I	2/8/2021	762.58	59.48	703.10
YGWC-26S	2/8/2021	716.28	25.43	690.85
YGWC-26I	2/8/2021	715.91	26.05	689.86
YGWC-27S	2/8/2021	716.52	29.68	686.84
YGWC-27I	2/8/2021	716.19	29.58	686.61
YGWC-28S	2/8/2021	717.95	27.68	690.27
YGWC-28I	2/8/2021	717.93	29.50	688.43
YGWC-29I	2/8/2021	717.39	27.80	689.59
PZ-01S	2/8/2021	836.84	32.86	803.98
PZ-03S	2/8/2021	796.39	35.71	760.68
PZ-13S	2/8/2021	807.79	35.94	771.85
PZ-13I	2/8/2021	807.62	39.33	768.29
PZ-14I	2/8/2021	749.06	18.83	730.23
PZ-25S	2/8/2021	766.60	35.64	730.96
PZ-25I	2/8/2021	766.38	36.93	729.45
PZ-31S	2/8/2021	738.62	16.18	722.44
larch 2021				
YGWA-1I	3/1/2021	836.60	37.25	799.35
YGWA-1D	3/1/2021	837.25	47.88	789.37
YGWA-2I	3/1/2021	866.25	44.50	821.75
YGWA-3I	3/1/2021	796.55	52.36	744.19
YGWA-3D	3/1/2021	796.78	29.30	767.48
YGWA-14S	3/1/2021	748.76	16.70	732.06
YGWA-30I	3/1/2021	762.58	43.88	718.70
YGWC-26S	3/1/2021	716.28	24.86	691.42
YGWC-26I	3/1/2021	715.91	25.99	689.92
YGWC-27S	3/1/2021	716.52	30.35	686.17
YGWC-27I	3/1/2021	716.19	30.35	685.84
YGWC-28S	3/1/2021	717.95	28.06	689.89
YGWC-28I	3/1/2021	717.93	29.79	688.14
YGWC-29I	3/1/2021	717.39	28.21	689.18
PZ-01S	3/1/2021	836.84	32.42	804.42
PZ-03S	3/1/2021	796.39	35.72	760.67
PZ-13S	3/1/2021	807.79	35.64	772.15
PZ-13I	3/1/2021	807.62	38.94	768.68
PZ-14I	3/1/2021	749.06	18.10	730.96
PZ-25S	3/1/2021	766.60	35.39	731.21
PZ-25I	3/1/2021	766.38	36.76	729.62
PZ-31S	3/1/2021	738.62	16.49	722.13

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

#### Acronyms and Abbreviations:

bTOC = below top of casing

ft = feet

TOC = top of casing



Equation

 $\frac{V=K\left(dh/dl\right)}{n_{e}} \qquad \text{where:} \qquad V=\text{groundwater velocity}$  K=i=hydraulic conductivity dh/dl=hydraulic gradient

n<sub>e</sub> = effective porosity

#### Values Used in Calculation

	Value		Source				
K <sub>max</sub> :	3.02E-03	cm/sec					
	8.57	ft/day					
K <sub>min</sub> :	1.00E-06	cm/sec	0				
	0.003	ft/day	See note 1				
K <sub>avq</sub>	1.50E-04	cm/sec					
	0.43	ft/day					
	Distance fro	om:					
PZ01S to YGWA-14S	1,200	feet					
PZ-13S to YGWC-28	2,665	feet					
YGWA-14 to PZ-31S	570	feet					
Gre	oundwater El	evation	Date Collected:				
PZ-01S	803.98						
YGWA-14S 731.20 PZ-13S 771.85 YGWC-28 690.27 YGWA-14 731.20							
		feet	F-h 2004				
		reet	February 2021				
PZ-31S	722.44						
PZ-01S	804.42						
YGWA-14S	732.06						
PZ-13S	772.15		M I 0004				
YGWC-28	689.89	feet	March 2021				
YGWA-14	732.06						
PZ-31S	722.13						
			Hydraulic gradient from:				
i <sub>1</sub> =	0.028	unitless	PZ-01S to YGWA-14S (Feb. 2021)				
i <sub>2</sub> =	0.056	unitless	PZ-13S to YGWC-28 (Feb. 2021)				
i <sub>3</sub> =	0.017	unitless	YGWA-14 to PZ-31S (Feb. 2021)				
i <sub>avg</sub> =	0.033	unitless	Average				
			D7 040 to VOWA 440 (May 600 ()				
$i_1 = 0.028$		unitless unitless	PZ-01S to YGWA-14S (Mar. 2021)				
_	$i_2 = 0.056$		PZ-13S to YGWC-28 (Mar. 2021)				
_	0.019	unitless	YGWA-14 to PZ-31S (Mar. 2021)				
i <sub>avg</sub> =	0.034	unitless	Average				
n. =	0.20	unitless	See note 2				

#### Minimum Linear Flow Velocity

February 2021

March 2021

 $V_{min} = (0.003) (0.033)$ 0.20  $V_{min} = (0.003) (0.034)$ 0.20

 $V_{min} = 0.0005 \text{ ft/day}, \text{ or } 0.2 \text{ ft/year}$ 

 $V_{min} = 0.0005$  ft/day, or 0.2 ft/year

#### Maximum Linear Flow Velocity

February 2021

March 2021

 $V_{max} = \underbrace{(8.57)\ (0.033)}_{0.20}$   $V_{max} = \underbrace{(8.57)\ (0.034)}_{0.20}$ 

 $V_{max} = 1.4 \text{ ft/day, or 511 ft/year}$   $V_{max} = 1.5 \text{ ft/day, or 548 ft/year}$ 

Average Linear Flow Velocity							
February 2021	March 2021						
$V_{avg} = (0.43)(0.033)$	$V_{avg} = (0.43)(0.034)$						
0.2	0.2						
$V_{avg} = 0.07 \text{ ft/day, or 26 ft/year}$	$V_{avg} = 0.07 \text{ ft/day, or } 27 \text{ ft/year}$						

#### Notes:

- 1. Slug tests performed by Atlantic Coast Consulting, Inc. at AP-2 (2014-2017)
- 2. Default value recommended by USEPA for silty sand-type soil (USEPA 1989)





40 CFR 257 Appendix III	40 CFR 257 Appendix IV
Boron	Antimony
Calcium	Arsenic
Chloride	Barium
Fluoride	Beryllium
рН	Cadmium
Sulfate	Chromium
Total Dissolved Solids	Cobalt
	Fluoride
	Lead
	Lithium
	Mercury
	Molybdenum
	Combined Radium - 226/228
	Selenium
	Thallium

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

CFR = Code of Federal Regulations



	Analyte pH	YGWA-1I	YGWA-1I	YGWA-1D	YGWA-1D	YGWA-2I	YGWA-2I	YGWA-3I	YGWA-3I
		2/12/2021	3/3/2021	2/12/2021	3/3/2021	2/10/2021	3/3/2021	2/10/2021	3/3/2021
	pН	6.21	5.38	7.14	7.20	7.29	7.92	7.58	8.23
	Boron		< 0.0052		< 0.0052		< 0.0052		< 0.0052
	Calcium		1.8		14.1		25.6		20.6
Annandiv	Chloride		1.2		0.96 J		0.86 J		0.99 J
Appendix III	Fluoride	< 0.050	< 0.050	0.068 J	0.078 J	0.094 J	0.085 J	< 0.050	0.10
	Sulfate		4.4		9.0		10.6		9.6
	Sulfate          4.4          9.0          10.6           Total Dissolved Solids          39.0          99.0          138           Antimony         < 0.00028		111						
	Antimony	< 0.00028	< 0.00028	< 0.00028	< 0.00028	0.0013 J	< 0.00028	< 0.00028	< 0.00028
	Arsenic	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	0.00098 J	0.00078 J	< 0.00078
	Barium	0.0090 J	0.0094	0.0057 J	0.0068	0.0032 J	0.0041 J	0.0029 J	0.0031 J
	Beryllium	< 0.000046	< 0.000046	< 0.00046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046
	Cadmium	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
	Chromium	< 0.00055	< 0.00055	< 0.00055	< 0.00055	< 0.00055	< 0.00055	< 0.00055	< 0.00055
Appendix IV	Cobalt	0.0028 J	0.0030 J	0.00086 J	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038
Appendix iv	Lead	0.00038 J	< 0.000036	0.000044 J	0.000056 J	0.00015 J	< 0.000036	< 0.000036	< 0.000036
	Lithium	0.0025 J	0.0025 J	0.010 J	0.012 J	0.0039 J	0.0016 J	0.015 J	0.017 J
	Mercury	< 0.000078		< 0.000078		< 0.000078		< 0.000078	
	Molybdenum	0.0056 J	0.0049 J	0.0080 J	0.0088 J	0.0041 J	0.0074 J	0.0038 J	0.0036 J
	Combined Radium - 226/228	< 0.458 U	< 0.105 U	< 0.366 U	< 0.492 U	< 1.04 U	< 0.459 U	2.46	2.03
	Selenium	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
	Thallium	< 0.00014		< 0.00014		< 0.00014		< 0.00014	

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.

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

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

- -- Not analyzed for this constituent.
- < Analyte was not detected above the laboratory method detection limit (MDL).

#### **Laboratory Qualifiers:**

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



	Analyte	YGWA-3D	YGWA-3D	YGWA-14S	YGWA-14S	YGWA-30I	YGWA-30I	YGWC-26S	YGWC-26S
	Analyte	2/10/2021	3/3/2021	2/10/2021	3/2/2021	2/11/2021	3/1/2021	2/10/2021	3/2/2021
-	pН	7.81	8.39	5.35	5.49	5.73	5.78	5.18	5.38
	Boron		< 0.0052		0.017 J		< 0.0052		0.57
	Calcium		29.8		1.2		1.2		12.9
Appendix III	Chloride		1.1		4.9		1.6		13.2
Appendix III	Fluoride	0.43	0.44	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate		7.0		6.0		0.88 J		92.7
	Total Dissolved Solids		137		67.0		23.0		154
	Antimony	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028
	Arsenic	0.00094 J	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078
	Barium	0.0059 J	0.0064	0.0078 J	0.0076	0.0077 J	0.0070	0.031	0.031
	Beryllium	< 0.000046	< 0.000046	0.00019 J	0.00018 J	0.000047 J	< 0.000046	0.00013 J	0.00016 J
	Cadmium	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
	Chromium	< 0.00055	< 0.00055	< 0.00055	< 0.00055	< 0.00055	< 0.00055	0.00091 J	0.0010 J
Appendix IV	Cobalt	< 0.00038	< 0.00038	< 0.00038	< 0.00038	0.0078	0.0061	0.0017 J	0.0021 J
Appendix IV	Lead	< 0.000036	< 0.000036	0.000048 J	< 0.000036	0.000046 J	< 0.000036	0.000050 J	0.000056 J
	Lithium	0.023 J	0.024 J	< 0.00081	< 0.00081	0.0012 J	0.0011 J	< 0.00081	< 0.00081
	Mercury	< 0.000078		< 0.000078		< 0.000078		< 0.000078	
	Molybdenum	0.014	0.013	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069
	Combined Radium - 226/228	3.65	3.58	< 0.353 U	< 0.710 U	< 0.678 U	< 0.412 U	< 0.410 U	< 0.394 U
	Selenium	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
	Thallium	< 0.00014		< 0.00014		< 0.00014		< 0.00014	

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.

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	pH Boron Calcium	YGWC-26I	YGWC-26I	YGWC-27S	YGWC-27S	YGWC-27I	YGWC-27I	YGWC-28S	YGWC-28S
		2/10/2021	3/3/2021	2/10/2021	3/3/2021	2/10/2021	3/3/2021	2/12/2021	3/3/2021
	рН	5.96	5.93	6.21	6.35	6.29	6.43	6.60	6.61
	Boron		0.69		1.2		2.0		2.3
	Calcium		16.1		30.2		25.7		28.4
Appondix III	Chloride		16.6		4.0		13.0		18.0
Appendix III	Fluoride	0.050 J	0.050 J	0.084 J	< 0.050	0.055 J	0.058 J	0.069 J	0.13
	Sulfate		89.3		451		2.6		4.9
	Total Dissolved Solids		205		178		173		217
	Antimony	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028
	Arsenic	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078
	Barium	0.060	0.064	0.088	0.075	0.080	0.080	0.057	0.25
	Beryllium	< 0.000046	< 0.000046	0.000066 J	< 0.000046	0.00014 J	0.00013 J	< 0.000046	< 0.000046
	Cadmium	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	0.00048 J	< 0.00012
	Chromium	0.00065 J	< 0.00055	0.0027 J	0.00058 J	< 0.00055	< 0.00055	< 0.00055	< 0.00055
Appendix IV	Cobalt	< 0.00038	< 0.00038	0.0025 J	0.0017 J	0.0048 J	0.0042 J	< 0.00038	0.0010 J
Appendix IV	Lead	0.000051 J	< 0.000036	0.00072 J	< 0.000036	< 0.000036	< 0.000036	0.000052 J	< 0.000036
	Lithium	0.0067 J	0.0077 J	0.00081 J	< 0.00081	0.0067 J	0.0066 J	0.0053 J	< 0.00081
	Mercury	< 0.000078		< 0.000078		< 0.000078		< 0.000078	
	Molybdenum	< 0.00069	< 0.00069	< 0.00069	< 0.00069	0.0016 J	0.0017 J	< 0.00069	0.00083 J
	Combined Radium - 226/228	< 0.513 U	< 0.419 U	< 0.663 U	< 0.327 U	2.47	1.39	< 0.419 U	1.04
	Selenium	0.0026 J	0.0034 J	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
	Thallium	< 0.00014		< 0.00014		< 0.00014		< 0.00014	

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.

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YGWC-28I YGWC-28I YGWC-29I YGWC-29I Analyte 2/11/2021 3/3/2021 2/12/2021 3/3/2021 6.57 6.51 6.24 6.27 рΗ 1.8 0.62 Boron ----30.9 9.5 Calcium Chloride 14.6 6.7 Appendix III 0.066 J 0.072 J 0.17 0.056 J Fluoride Sulfate 8.6 --26.6 184 **Total Dissolved Solids** 110 < 0.00028 < 0.00028B < 0.00028 < 0.00028 Antimony < 0.00078 < 0.00078 < 0.00078 < 0.00078 Arsenic Barium 0.078 0.077 0.21 0.059 < 0.000046 < 0.000046 < 0.000046 < 0.000046 Beryllium Cadmium 0.00052 J 0.00014 J < 0.00012 0.00029 J < 0.00055 Chromium < 0.00055 < 0.00055 < 0.00055 < 0.00038 < 0.00038 0.00094 J < 0.00038 Cobalt Appendix IV < 0.000036 < 0.000036 0.000066 J 0.00016 J Lead 0.0070 J 0.0063 J 0.0054 J < 0.00081 Lithium < 0.000078 < 0.000078 Mercury 0.0012 J 0.0011 J 0.00083 J < 0.00069 Molybdenum Combined Radium - 226/228 1.07 < 0.261 U 0.826 0.955 < 0.0016 < 0.0016 Selenium < 0.0016 < 0.0016 < 0.00014 Thallium < 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.

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





Constituent	Units	Background	Federal GWPS	State GWPS			
March 2021							
Antimony	mg/L	0.0047	0.006	0.006			
Arsenic	mg/L	0.005	0.010	0.010			
Barium	mg/L	0.071	2	2			
Beryllium	mg/L	0.0005	0.004	0.004			
Cadmium	mg/L	0.0005	0.005	0.005			
Chromium	mg/L	0.0093	0.100	0.100			
Cobalt	mg/L	0.035	0.035 <sup>3</sup>	0.035 <sup>3</sup>			
Fluoride	mg/L	0.680	4	4			
Lead	mg/L	0.0013	0.015	0.0013			
Lithium	mg/L	0.030	0.040	0.030			
Mercury	mg/L	0.0002	0.002	0.002			
Molybdenum	mg/L	0.014	0.100	0.014			
Selenium	mg/L	0.005	0.050	0.050			
Thallium	mg/L	0.001	0.002	0.002			
Combined Radium - 226/228	pCi/L	6.92	6.92 <sup>3</sup>	6.92 <sup>3</sup>			

- 1. Site background: Tolerance limits calculated from pooled upgradient well data.
- 2. Federal GWPS = Groundwater Protection Standard per 40 CFR §257.95(h).
- 3. Background concentration is higher than the federally promulgated value (0.006 mg/L for Cobalt). Background is higher than radium MCL (5 mg/L). Therefore, background is the GWPS.

#### **Acronyms and Abbreviations:**

CFR = Code of Federal Regulations

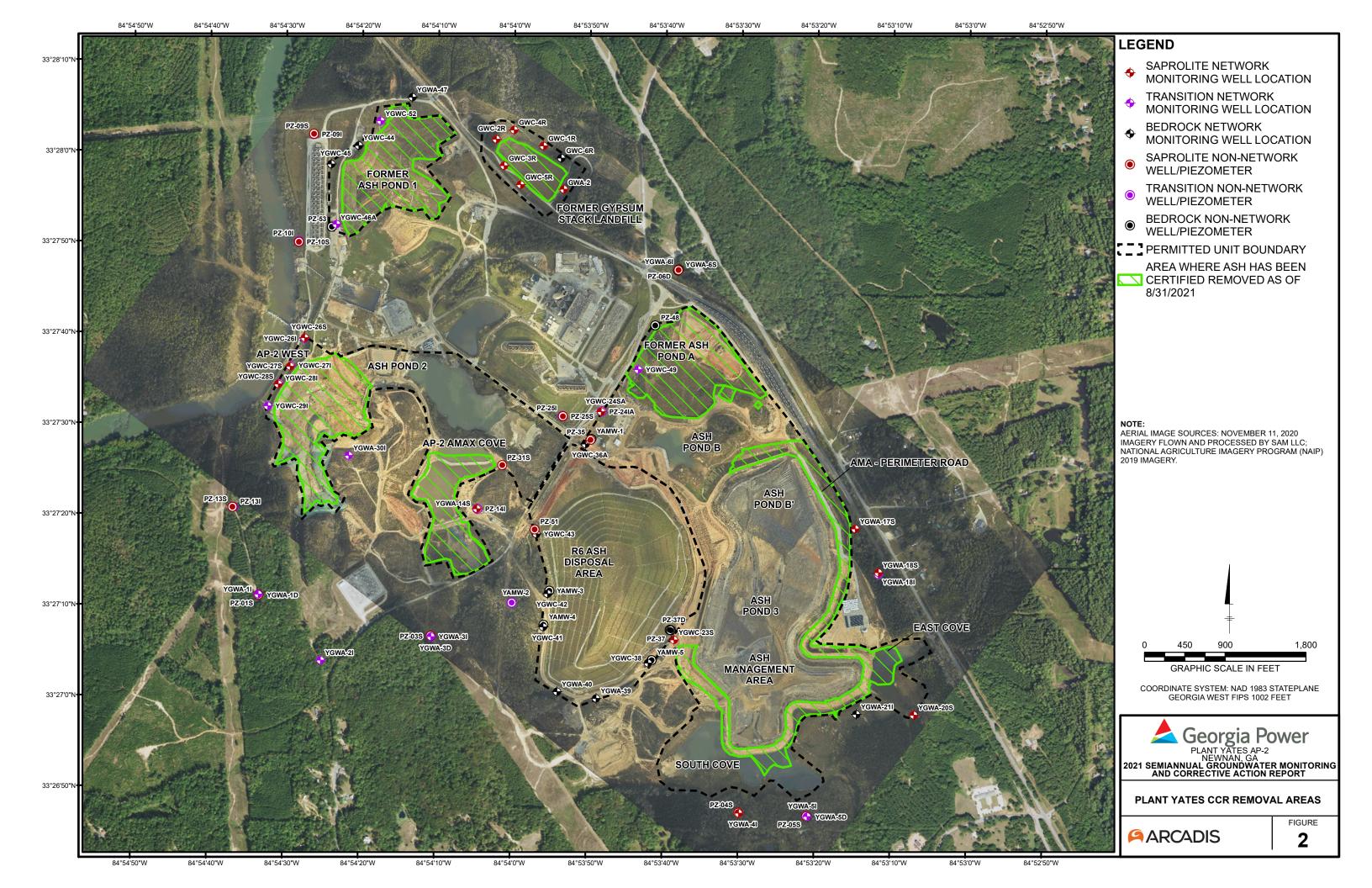
MCL = Maximum Contaminant Level

mg/L = millgrams per liter

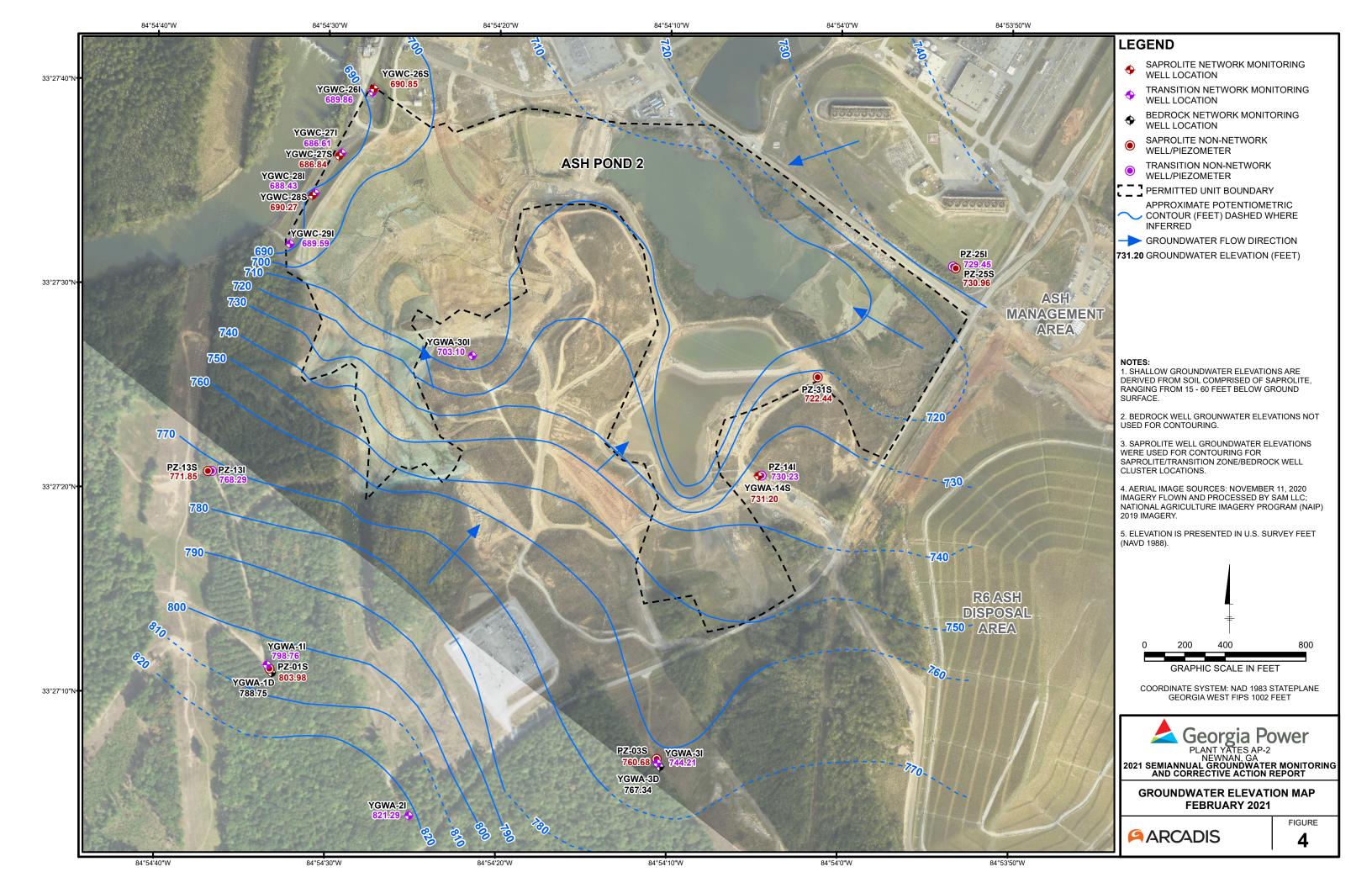
pCi/L = picocuries per liter

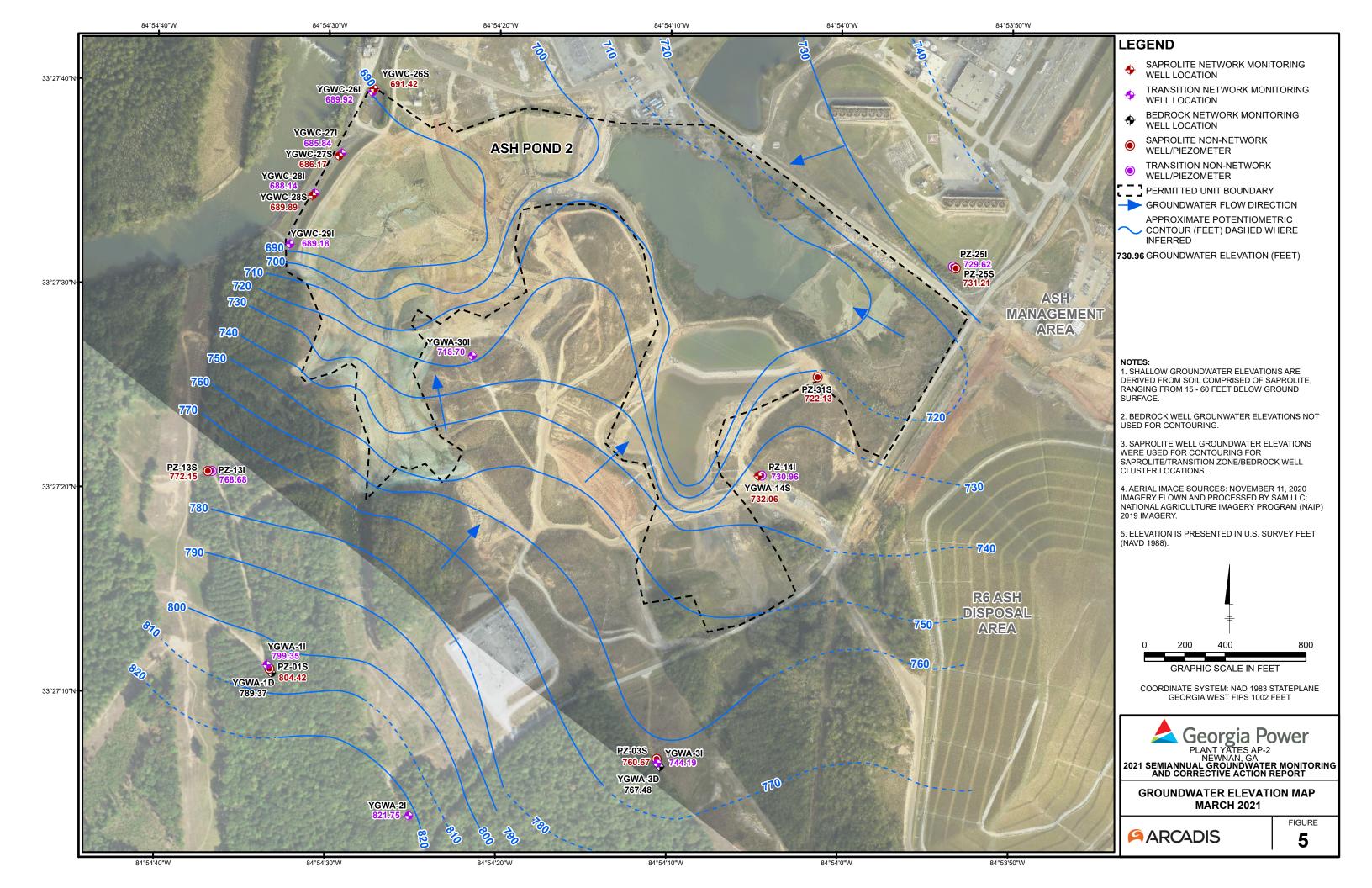
# **FIGURES**











# **APPENDIX A**

Field Sampling Forms (February and March 2021)

# February 2021 Event

#### February 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

# Instrument Calibration Date: 2/08/21 Time: 14:30

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	NA
pН	S.U.	4.00	4.00	4.00	NA
pН	S.U.	7.00	7.00	7.00	NA
pН	S.U.	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	LaMotte SN 6012-4015
0.0	NTU	0.00	0.00	NA
10.0	NTU	10.00	10.00	NA

#### Notes:

 $DO-Dissolved\ Oxygen;\ us/cm-microsiemens/centimeter;\ ORP-oxidation-reduction\ potential;\ mV-millivolts;\ NTU-Nphelometric\ Turbidity\ Units;\ NC-Not\ calibrated$ 

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

## Instrument Calibration Date: 2/09/21 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072		
DO	% saturation	100	100	100	100		
Conductivity	us/cm	8000	8000	8000	8000		
рН	S.U.	4.00	4.00	4.00	4.00		
рН	S.U.	7.00	7.00	7.00	7.00		
рН	S.U.	10.00	10.00	10.00	10.00		
ORP	mV	232.0	232.0	232.0	232.0		

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	LaMotte SN 6012-4015
0.0	NTU	0.00	0.00	NA
10.0	NTU	10.00	10.00	NA

Date: 2/09/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pН	S.U.	4.00	4.00	4.00	4.00
pН	S.U.	7.00	7.00	7.00	7.00
pН	S.U.	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	LaMotte SN 6012-4015
0.0	NTU	0.00	0.00	NA
10.0	NTU	10.00	10.00	NA

#### Notes:

 $DO-Dissolved\ Oxygen;\ us/cm-microsiemens/centimeter;\ ORP-oxidation-reduction\ potential;\ mV-millivolts;\ NTU-Nphelometric\ Turbidity\ Units;\ NC-Not\ calibrated$ 

Quick Cal solution standard is dependant on temperature and will fluctuate

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

## Instrument Calibration Date: 2/10/21 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pН	S.U.	4.00	4.00	4.00	4.00
pН	S.U.	7.00	6.98	6.98	6.98
рН	S.U.	10.00	10.00	10.00	10.00
ORP	mV	229	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Date: 2/10/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pН	S.U.	4.00	4.00	4.00	4.00
pН	S.U.	7.00	6.98	6.98	6.98
pН	S.U.	10.00	10.00	10.00	10.00
ORP	mV	228	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	NA	0.00	NA
10.0	NTU	NA	10.00	NA

#### Notes:

 $\label{eq:continuous} \begin{tabular}{ll} DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated \\ \end{tabular}$ 

Quick Cal solution standard is dependant on temperature and will fluctuate

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

## Instrument Calibration Date: 2/11/21 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pН	S.U.	4.00	4.00	4.00	4.00
pН	S.U.	7.00	6.98	6.98	6.98
рН	S.U.	10.00	10.00	10.00	10.00
ORP	mV	229	232.0	232.0	232.0

Turb Stan		Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.	0	NTU	0.00	0.00	0.00
10	.0	NTU	10.00	10.00	10.00

Date: 2/11/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pН	S.U.	4.00	4.00	4.00	4.00
pН	S.U.	7.00	6.98	6.98	6.98
pН	S.U.	10.00	10.00	10.00	10.00
ORP	mV	228	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	NA	0.00	NA
10.0	NTU	NA	10.00	NA

#### Notes:

 $\label{eq:continuous} \begin{tabular}{ll} DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated \\ \end{tabular}$ 

Quick Cal solution standard is dependant on temperature and will fluctuate

Project Plant Yates
Field Staff: Becky Steever

Instrument Calibration
Date: 2/12/21 Time: 07:00

Date. 2/12/21 1	A.C. 2/12/21 Time. 07:00									
Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072					
DO	% saturation	100	100	NA	NA					
Conductivity	us/cm	8000	8000	NA	NA					
pН	S.U.	4.00	4.00	NA	NA					
pН	S.U.	6.98	6.98	NA	NA					
pН	S.U.	10.00	10.00	NA	NA					
ORP	mV	232.0	232.0	NA	NA					

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	NA	NA	
10.0	NTU	10.00	10.00	NA	NA	

#### Notes:

 $\label{eq:decomposition} DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated$ 

Quick Cal solution standard is dependant on temperature and will fluctuate



Client:				Georgia Power	
Project Locat	ion:			AP-2	
Date:				2/8/2021	
Sampler:				Becky Steever	
Equipment:				water probe	
Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWA-2I	2/8/2021	09:16:00	44.96	63.75	
YGWA-1D	2/8/2021	09:39:00	48.50	128.85	
PZ-1S	2/8/2021	09:42:00	32.86	36.34	
YGWA-1I	2/8/2021	09:45:00	37.84	53.60	
PZ-13S	2/8/2021	09:50:00	35.94	43.79	
PZ-13I	2/8/2021	09:58:00	39.33	59.22	
PZ-3S	2/8/2021	10:02:00	35.71	42.39	
YGWA-3I	2/8/2021	10:15:00	52.34	59.05	
YGWA-3D	2/8/2021	10:18:00	29.44	134.18	
YGWA-14S	2/8/2021	10:25:00	17.56	34.96	
PZ-14I	2/8/2021	10:42:00	18.83	50.86	
PZ-31S	2/8/2021	10:48:00	16.18	34.72	
YGWA-30I	2/8/2021	10:52:00	44.35	59.48	
PZ-25I	2/8/2021	11:03:00	36.93	84.58	
PZ-25S	2/8/2021	11:22:00	35.64	56.80	
YGWC-26S	2/8/2021	12:00:00	25.43	40.18	
YGWC-26I	2/8/2021	12:04:00	26.05	69.81	
YGWC-27I	2/8/2021	12:11:00	29.58	79.99	
YGWC-27S	2/8/2021	12:19:00	29.68	40.52	
YGWC-28I	2/8/2021	12:30:00	29.50	69.93	
YGWC-28S	2/8/2021	12:32:00	27.68	44.95	
YGWC-29I	2/8/2021	12:47:00	27.80	39.59	



Client: Georgia Power						
Project Locati	ion:			AP-2		
Date:				3/1/2021		
Sampler:				Katie Pupkiewicz		
Equipment:						
Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments	
YGWA-14S	3/1/2021	12:04:00	16.70	34.96	Well pad cannot be seen	
PZ-14I	3/1/2021	12:08:00	18.10	50.86	Well pad cannot be seen	
PZ-31S	3/1/2021	12:13:00	16.49	34.72		
YGWA-30I	3/1/2021	12:20:00	43.88	59.48		
PZ-3S	3/1/2021	12:35:00	35.72	42.39		
YGWA-3I	3/1/2021	12:39:00	52.36	59.05		
YGWA-3D	3/1/2021	12:42:00	29.30	134.18		
YGWA-2I	3/1/2021	13:39:00	44.50	63.75		
YGWA-1I	3/1/2021	13:42:00	37.25	53.60		
PZ-1S	3/1/2021	13:46:00	32.42	36.34		
YGWA-1D	3/1/2021	13:48:00	47.88	128.85		
PZ-13S	3/1/2021	13:52:00	35.64	43.79		
PZ-13I	3/1/2021	13:56:00	38.94	59.22		
PZ-25S	3/1/2021	14:10:00	35.39	56.80		
PZ-25I	3/1/2021	14:12:00	36.76	84.58		
YGWC-29I	3/1/2021	14:24:00	28.21	39.59		
YGWC-28S	3/1/2021	14:54:00	28.06	44.95		
YGWC-28I	3/1/2021	14:55:00	29.79	69.93		
YGWC-27S	3/1/2021	15:01:00	30.35	40.52		
YGWC-27I	3/1/2021	15:03:00	30.35	79.99		
YGWC-26S	3/1/2021	15:10:00	24.86	40.18		
YGWC-26I	3/1/2021	15:11:00	25.99	69.81		



**Project Number** 30052922 Well ID YGWA-2I Date 02/10/2021 AP-2 68.0 degrees F and Clear. The wind is blowing E/SE at 8.1 mph. **Project Location** Weather(°F) Well Casing Measuring Pt. Description Screen Casing PVC Top of Inner Casing 53.45 2 Diameter (in) Material Setting (ft-bmp) **Static Water** Total Depth (ft-Water Gallons in 44.9 63.75 18.85 3.06 Level (ft-bmp) bmp) Column(ft) Well Sample Pump Intake (ft-**MP Elevation** 866.25 60 Purge Method Low-Flow Low-Flow bmp) Method **Well Volumes** Sample Time 12:40 0.45 Sample ID YGWA-2I Sampled by Becky Steever **Purged** Replicate/ **Gallons Purged Purge Start** 10:41 1.37 Color Clear Code No.

Purge End 12:39

i dige Liid	12.55								
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)
10:41:35	00:00	45	45.45	7.21	202.10	22.74	8.56	14.4	210.56
10:46:35	05:00	45	46.28	7.31	255.83	4.49	4.19	15.6	-77.14
10:51:35	10:00	45	46.75	7.42	241.50	3.18	2.74	16.1	-62.33
10:56:35	15:00	45	47.24	7.60	0.06	0.51	2.35	17.6	-43.77
11:01:35	20:00	45	47.55	7.25	0.06	0.16	3.32	18.9	-7.49
11:06:35	25:00	45	47.86	7.50	263.14	0.38	2.39	17.9	-96.50
11:11:35	30:00	45	48.09	7.42	272.18	0.61	4.43	18.3	-88.36
11:16:35	35:00	45	48.3	7.41	268.37	0.66	2.29	18.0	-88.23
11:21:35	40:00	45	48.58	7.37	271.49	0.98	2.18	18.0	-82.05
11:26:35	45:00	45	48.82	7.34	255.31	0.69	2.21	17.9	-74.02
11:31:35	50:00	45	49.08	7.38	254.07	0.75	2.24	17.8	-74.29
11:36:35	55:00	45	49.3	7.35	251.92	1.35	2.30	18.0	-64.60
11:41:35	00:00	40	49.51	7.33	251.77	2.96	2.33	18.2	-63.33
11:46:35	05:00	40	49.79	7.35	250.27	2.56	2.32	18.6	-62.86
11:51:35	10:00	40	49.84	7.33	251.85	4.70	2.21	18.5	-60.14
11:56:35	15:00	43	50.13	7.33	249.24	6.05	2.24	18.4	-56.65
12:01:35	20:00	40	50.76	7.32	244.83	9.20	2.18	18.2	-53.59
12:06:35	25:00	40	50.97	7.29	243.86	10.44	2.23	18.5	-51.48
12:11:35	30:00	40	51.11	7.30	243.13	10.71	2.18	18.7	-45.47
12:16:35	35:00	40	52.1	7.30	242.49	14.35	2.28	18.5	-44.50
12:21:35	40:00	40	51.35	7.30	242.56	18.27	2.30	18.6	-45.62
12:26:35	45:00	45	51.5	7.30	242.07	19.66	2.32	18.7	-45.53
12:31:35	50:00	45	51.63	7.29	243.55	23.57	2.19	19.0	-44.47

°C = degrees Celsius



Constituent Samp	led	Conta	ainer		Number	P	Preservative
RAD Chem		1L Pla	astic		2	H	INO3
Metals		250 m	nL Plastic		1		INO3
Fluoride		250 m	nL Plastic		1	N	lone
Comments:		one meter: 10.3, 9.6, 8.4 1.87, 1.6, 1.31,	te because of slow rechar 4, 6.7, 5.21, 0.88, 0.97, 0.		.2, 5.63, 5.88, 6.73,	6.01, 7.88, 5	.12, 5.19, 5.06, 4.88,
Well Casing Volun	ne Conversion						
Well diameter (inch	es) = gallons per foot	1 = 0.04 1.5 = 0.09 2.5 1.25 = 0.06 2 = 0.16 3	5 = 0.26 3.5 = 0.50 6 = 1. 3 = 0.37 4 = 0.65	47			
Well Information							
Well Location:			Well Locked at	t Arrival:			
Condition of Well:			Well Locked at De	parture:			_
Well Completion:	NA		Key Number	To Well: NA			_



Project Number	30053438	Well ID	YGWC-26S		C	Date	02/10/2021
Project Location	AP-2		Weather(°F)	Sunny, dry			
Measuring Pt. Description	Top of Inner Casir	Screen Setting (ft-bmp)	29.88	Casing Diameter (in) 2		Vell Casing Material	PVC
Static Water Level (ft-bmp)	26.55	Total Depth (ft- bmp)	40.18	Water Column(ft) 13.	P.3	Gallons in Vell	2.21
MP Elevation	716.28	Pump Intake (ft- bmp)	37	Purge Method Lov		Sample Method	Low-Flow
Sample Time	10:00	Well Volumes Purged	0.51	Sample ID YG	WC-26S <b>S</b>	Sampled by	Peter Argyakis
Purge Start	09:33	Gallons Purged	1.14	Replicate/ Code No.	(	Color	Clear
Purge End	09:58						
	T-4-1	Donth to		0	Discolored		

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
09:33:20	00:00	250	26.55	5.85	316.89	0.00	7.74	15.4	83.91
09:38:20	05:00	200	26.8	5.02	290.91	27.81	0.65	17.5	177.29
09:43:20	10:00	100	27.12	5.05	290.81	2.31	0.42	17.7	197.71
09:48:20	15:00	100	27.31	5.10	292.66	0.00	0.35	17.6	201.35
09:53:20	20:00	100	27.39	5.14	293.42	1.78	0.34	17.7	199.66
09:58:20	25:00	100	27.5	5.18	294.85	0.00	0.35	17.6	197.90

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time:NTU)

0933: 3.10 0938: 2.34 0943: 2.16 0948: 2.88 0953: 2.15 0958: 2.22

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot  $1 = 0.04 \ 1.5 = 0.09 \ 2.5 = 0.26 \ 3.5 = 0.50 \ 6 = 1.47$ 

1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information			
Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	NA	Key Number To Well:	NA



Project Number	30053437	Well ID	YGWA-30I			Date	02/11/2021
Project Location	AP-2		Weather(°F)	62.1 degrees F	and Cloudy. The wind	d is blowing und	efined at 0.0 mph.
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	49.18	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	44.34	Total Depth (ft- bmp)	59.48	Water Column(ft)	15.14	Gallons in Well	2.46
MP Elevation	762.58	Pump Intake (ft- bmp)	54.5	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	09:50	Well Volumes Purged	0.93	Sample ID	YGWA-30I	Sampled by	Katie Pupkiewicz
Purge Start	09:01	Gallons Purged	2.30	Replicate/ Code No.	FB-02	Color	Clear

**Purge End** 09:46

90	001.0								
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)
09:01:52	00:00	160	44.34	9.55	89.01	193.33	9.66	14.6	153.49
09:06:52	05:00	160	44.36	8.38	57.50	0.09	7.56	16.2	151.32
09:11:52	10:00	160	44.36	7.79	57.32	0.06	7.33	16.4	138.33
09:14:34	12:42	160	44.36	7.34	57.40	0.38	8.22	16.4	150.83
09:19:34	17:42	160	44.33	6.74	53.64	0.05	7.28	16.4	146.95
09:24:34	22:42	160	44.37	6.54	53.49	0.10	7.30	16.5	143.06
09:29:34	27:42	160	44.37	6.28	52.94	0.10	7.26	16.5	142.17
09:34:34	32:42	160	44.39	5.97	36.16	0.10	9.51	16.4	166.24
09:39:34	37:42	160	44.36	5.92	52.62	0.87	7.52	16.3	149.81
09:44:34	42:42	160	44.35	5.82	52.53	2.11	7.51	16.2	153.33
09:49:34	47:42	160	44.35	5.76	53.42	0.21	7.52	16.2	156.09
09:53:05	51:13	160	44.35	5.73	52.52	0.09	7.48	16.2	160.20
				1	1	1		1	L

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

LaMotte turbidity readings every five minutes in accordance with VuSitu purge  $\log\,0.70$ Comments:

1.33

0.89

0.06

0.21

0.06

0.29

1.57

1.41

1.02

0.76



#### **Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot  $1 = 0.04 \ 1.5 = 0.09 \ 2.5 = 0.26 \ 3.5 = 0.50 \ 6 = 1.47 \ 1.25 = 0.06 \ 2 = 0.16 \ 3 = 0.37 \ 4 = 0.65$ 

Well Information			
Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	NA	Key Number To Well:	NA
-			



Project Number	30052922		Well ID	YGWC-2	291		ı	Date	02/12	/2021
Project Location	n AP-2			Weathe	r(°F)					
Measuring Pt. Description	Top of Inn	er Casing	Screen Setting (ft-bmp	29.29	Casing Diameter	(in) <sup>2</sup>		Well Casing Material	PVC	
Static Water Level (ft-bmp)	28.2		Total Depth (ft- bmp)	39.59	Water Column(f	t) 11.39		Gallons in Well	1.85	
MP Elevation	717.39		Pump Intake (f bmp)	t- 35	Purge Me	thod Low-Flo		Sample Method	Low-l	Flow
Sample Time	14:20		Well Volumes Purged	0.34	Sample II	<b>y</b> YGWC	-291	Sampled by	Beck	/ Steever
Purge Start	14:02		Gallons Purge	<b>d</b> 0.63	Replicate Code No.		C	Color	Clear	
Purge End	14:15									
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ture	Redox (mV)

С	Constituent Sampled				Container			Number	Preserv	ative .
	14:15:51	13:45	100	29.19	6.24	219.79	0.07	8.83	16.5	47.82
	14:10:51	08:45	100	29.18	6.27	225.64	0.04	5.94	16.4	43.76
	14:07:06	05:00	100	29.02	6.33	230.00	0.02	3.26	16.2	42.50
	14:02:06	00:00	200	28.2	6.58	238.89	0.04	7.63	14.6	45.42
				l ` ´	-					

RAD Chem	1L Plastic	2	HNO3			
Metals	250 mL Plastic	1	HNO3			
Fluoride	250 mL Plastic	1	None			
Comments: LaMotte turbidity read	ing at time of sample below 5.0 NTU					
Well Casing Volume Conversion						
Well diameter (inches) = gallons per foot	1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65					
Well Information		-				
Well Location:	Well Locked at Arrival:					
Condition of Well:	Well Locked at Departure:	Well Locked at Departure:				
Well Completion: NA	Key Number To Well: N	NA				



Project Location AP-2 Weather(°F) It is Clear. The wind is blowing E/SE at 4.7 mph.	
Measuring Pt. Description  Top of Inner Casing Screen Setting (ft-bmp)  Screen Setting (ft-bmp)  Sometimes Sometimes Setting (ft-bmp)  Sometimes	
Static Water Level (ft-bmp) 26.33 Total Depth (ft-bmp) 69.81 Water Column(ft) 43.48 Gallons in Well 7.07	
MP Elevation 715.91 Pump Intake (ft-bmp) 65 Purge Method Low-Flow Sample Method Low-Flow	
Sample Time 11:10 Well Volumes Purged 0.24 Sample ID YGWC-26I Sampled by Peter Argya	akis
Purge Start 10:27 Gallons Purged 1.72 Replicate/ Code No. DUP-2 Color Clear	

Purge End	11:08
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Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:27:46	00:00	150	26.33	6.19	319.75	8.58	9.25	14.9	146.67
10:32:46	05:00	150	26.67	5.88	339.80	0.00	0.55	18.2	19.24
10:37:46	10:00	150	26.74	5.84	337.26	0.00	0.29	18.3	74.50
10:42:46	15:00	150	26.74	5.85	337.29	0.00	0.37	18.5	106.49
10:47:46	20:00	150	26.74	5.84	337.96	0.00	0.44	19.2	126.30
10:52:46	25:00	150	26.74	5.88	338.40	4.30	1.20	19.7	137.25
10:57:46	30:00	150	26.74	5.96	339.60	3.86	1.52	20.3	144.25
11:02:46	35:00	150	26.74	5.94	340.40	3.71	1.65	21.1	147.54
11:07:46	40:00	150	26.74	5.96	342.59	3.49	1.95	21.9	149.37

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

**Comments:** LaMotte turbidity readings (time:NTU)

1027: 2.23 1033: 2.79 1038: 3.44 1043: 2.40 1048: 2.02 1053: 1.76 1058: 1.51 1103: 1.20

1108: 1.55

**Well Casing Volume Conversion** 

Well diameter (inches) = gallons per foot 1 = 0.041.5 = 0.092.5 = 0.263.5 = 0.506 = 1.47

1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

**Well Information** 

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  $\mu$ S/cm = microSiemens per centimeters mV = millivolts

°F = degrees Fahrenheit

°C = degrees Celsius



Project Number	30053438	Well ID	YGWA-14S			Date	02/10/2021
Project Location	AP-2		Weather(°F)	Cold, dry			
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	24.66	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	17.71	Total Depth (ft- bmp)	34.96	Water Column(ft)	17.25	Gallons in Well	2.8
MP Elevation	748.76	Pump Intake (ft- bmp)	30	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	08:50	Well Volumes Purged	0.42	Sample ID	YGWA-14S	Sampled by	Peter Argyakis
Purge Start	08:26	Gallons Purged	1.19	Replicate/ Code No.	DUP-1	Color	Clear
Purge End	08:46						

Purge End	08:46
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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)
08:26:07	00:00	250	17.71	6.11	0.08	0.00	10.79	10.8	214.06
08:31:07	05:00	150	18.48	5.26	68.42	0.00	6.32	16.4	232.90
08:36:07	10:00	150	18.5	5.31	67.43	0.00	6.22	16.9	224.32
08:41:07	15:00	150	18.5	5.28	67.62	0.00	6.22	16.9	218.17
08:46:07	20:00	150	18.5	5.35	66.78	0.00	6.22	17.0	217.29

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

LaMotte turbidity readings (time:NTU) Comments:

0826: 2.61 0831: 1.97 0836: 2.46 0841: 2.35 0846: 1.66

#### **Well Casing Volume Conversion**

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47 Well diameter (inches) = gallons per foot

 $1.25 = 0.06\ 2 = 0.16\ 3 = 0.37\ 4 = 0.65$ 

Well Information			
Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	NA	Key Number To Well:	NA



Groundwater Sampling Form								ARUADIS bullt asserts		
r 30053438	<b>;</b>	Well ID	YGWC-2	27S		ı	Date	02/10/2	2021	
n AP-2			Weathe	r(°F) 68.0 degr	ees F and Clea	ar. The wind is	blowing E/SE	at 8.1 n	nph.	
Top of Inn	er Casing	Screen Setting (ft-bmp	30.22	Casing Diameter	(in) <sup>2</sup>			PVC		
30.07		Total Depth (ft- bmp)	40.52	Water Column(t	10.45			1.7		
716.52		Pump Intake (f bmp)	t- 35	Purge Me	ethod Low-Flo			Low-F	low	
13:15		Well Volumes Purged	0.70	Sample I	D YGWC-	27S <b>:</b>	Sampled by	Peter /	Argyakis	
12:42		Gallons Purge	<b>d</b> 1.19			(	Color	Clear		
13:12										
Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ure	Redox (mV)	
00:00	150	30.07	6.63	374.13	2.39	8.13	19.8		36.32	
05:00	150	30.07	6.40	379.02	0.30	7.06	19.7		22.22	
10:00	150	30.07	6.18	364.33	1.01	0.97	20.0		63.36	
	Top of Inn 30.07 716.52 13:15 12:42 13:12 Total Elapsed Minutes 00:00 05:00	r 30053438  n AP-2  Top of Inner Casing  30.07  716.52  13:15  12:42  13:12  Total Elapsed Minutes  00:00  150  05:00  150	Top of Inner Casing   Screen Setting (ft-bmp 30.07   Total Depth (ft-bmp)	Measure   Meas	Mell ID   YGWC-27S	Meather(°F)   68.0 degrees F and Clear	Meather(°F)   68.0 degrees F and Clear. The wind is	Mate	Material   Property   Property   Material   Property   Property	

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

378.99

377.55

377.34

378.47

2.63

16.96

18.05

10.17

0.77

0.68

0.58

0.53

19.8

19.8

19.9

20.1

78.63

87.62

92.63

95.47

**Comments:** LaMotte turbidity readings (time:NTU)

1242: 3.74 1247: 3.90 1252: 2.78 1257: 2.19 1302: 2.55 1307: 2.41 1312: 2.78

### 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

12:57:00

13:02:00

13:07:00

13:12:00

15:00

20:00

25:00

30:00

150

150

150

150

30.07

30.07

30.07

30.07

6.19

6.18

6.20

6.21

Well Locked at Arrival:

Condition of Well:

Well Locked at Departure:

Well Completion: NA

Key Number To Well: NA



		GIO	unawater	amping	1 01111				
Project Number	30052922	2	Well ID	YGWA-1	ID			Date	02/12/2021
Project Location	AP-2			Weathe	r(°F) 60.8 degre	es F and Fog	/Mist. The win	d is blowing N/	/NW at 5.8 mph.
Measuring Pt. Description	Top of Inr	ner Casing	Screen Setting (ft-bmp	78.05	Casing Diameter (	(in) <sup>2</sup>		Well Casing Material	PVC
Static Water Level (ft-bmp)	48.49		Total Depth (ft- bmp)	128.85	Water Column(ft	80.36		Gallons in Well	13.06
MP Elevation	837.25		Pump Intake (ft bmp)	108	Purge Met	hod Low-Flo	w	Sample Method	Low-Flow
Sample Time	11:55		Well Volumes Purged	0.17	Sample ID	YGWA-	1D	Sampled by	Becky Steever
Purge Start	11:03		Gallons Purgeo	2.22	Replicate/ Code No.	NA		Color	Clear
Purge End	11:52								
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ture Red (m)
11:03:28	00:00	170	48.64	9.25	182.29	2.92	9.73	14.1	117.
11:08:28	05:00	170	48.49	7.98	172.12	1.04	2.42	15.4	89.
11:13:28	10:00	170	48.58	7.58	174.43	2.40	0.47	15.6	54.3
11:18:28	15:00	170	48.67	7.43	162.65	16.36	0.37	15.5	24.0
11:19:57	16:29	170	48.75	7.37	163.34	7.41	0.36	15.5	11.
11:24:57	21:29	170	48.78	7.25	157.96	2.90	0.44	15.5	-6.0
11:29:57	26:29	170	48.77	7.21	151.71	0.95	0.41	15.5	-17.
11:34:57	31:29	170	48.78	7.16	149.50	0.34	0.43	15.4	-27.
11:39:57	36:29	170	48.78	7.16	144.03	0.38	0.63	15.4	-33.
11:44:57	41:29	170	48.78	7.14	141.18	0.31	0.58	15.5	-35.
11:49:57	46:29	170	48.78	7.14	139.66	0.33	0.59	15.4	-37.
Constituent Sam	pled			Container			Number	P	reservative
RAD Chem				1L Plastic			2	Н	INO3
Metals			<del></del> :	250 mL Plastic			1		INO3
Fluoride				250 mL Plastic			1	N	lone
Comments:			igs (time:NTU): 1113=1.02, 111	18=2.3, 1119=	10.3, 1124= 6.4, 112	29= 3.2, 1134	=1.3, 1139=0	).87, 1144=0.5	55, 1149=0.23
Well Casing Volu			,	<u> </u>		· · · · · · · · · · · · · · · · · · ·			
Well diameter (inc	hes) = gallo	ns per foot	1 = 0.04 1.5 = 0. 1.25 = 0.06 2 = 0		3.5 = 0.50 6 = 1.47 4 = 0.65				
Well Information									
Well Location	n:				Well Locked at Arr	rival:			
Condition of Well	l:			W	ell Locked at Depart	ture:			_
Well Completion	n: NA				Key Number To V	Well: NA			-
ft-bmp = feet below in = inches	w measuring	g point	mS/cm = milliSie			mV = m °F = dec	illivolts arees Fahrenh	neit	_

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  $\mu$ S/cm = microSiemens per centimeters

°F = degrees Fahrenheit °C = degrees Celsius



							•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		- Contraster
Project Numbe	er 30052922	2	Well ID	YGWC-	28S			Date	02/12/20	)21
Project Location	on AP-2			Weathe	r(°F) °, , winds	s at mph.				
Measuring Pt. Description	Top of Inr	ner Casing	Screen Setting (ft-bmp	34.65	Casing Diameter	(in) <sup>2</sup>		Well Casing Material	PVC	
Static Water Level (ft-bmp)	27.69		Total Depth (ft- bmp)	44.95	Water Column(f	17.26		Gallons in Well	2.8	
MP Elevation	717.95		Pump Intake (ft bmp)	40	Purge Me	thod Low-Flo		Sample Method	Low-Flo	W
Sample Time	15:20		Well Volumes Purged	0.59	Sample II	YGWC-	28S	Sampled by	Becky S	teever
Purge Start	14:42		Gallons Purged	1.65	Replicate Code No.			Color	Clear	
Purge End	15:18									
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ure	Redox (mV)
14:42:51	00:00	200	28.58	6.36	430.65	29.86	6.26	17.1		49.86
14:47:51	05:00	200	28.58	6.53	468.92	17.24	0.48	17.7		-11.42
14:52:51	10:00	200	28.58	6.55	471.24	12.05	0.38	17.7		-27.26
14:57:51	15:00	200	28.58	6.54	473.86	7.95	0.44	17.8		-38.21
15:02:51	20:00	150	28.58	6.55	474.86	9.06	0.26	17.5		-40.66
15:07:51	25:00	150	28.58	6.67	470.56	3.92	0.98	17.8		-37.65
15:12:51	30:00	150	28.58	6.65	472.41	1.99	0.91	17.4		-38.74
15:17:51	35:00	150	28.58	6.60	470.37	2.31	0.88	17.4		-38.66
Constituent Sa	ımpled			Container			Number	P	reservati	ve
RAD Chem				1L Plastic			2	Н	NO3	
Metals			<del></del> ;	250 mL Plastic	;		1	— <u> —</u>	NO3	
Fluoride				250 mL Plastic	;	-	1		lone	
Comments:	stuck in fl	ow rough cell o	emptied out flow causing a higher =NTU): 15073.8	reading.	ook turbidity readin	g with stand al	one meter (3.2	26); and recon	nected. Li	kely partic
Well Casing Vo			· · · · · · · · · · · · · · · · · · ·	<u> </u>						
Well diameter (i	nches) = gallo	ns per foot	1 = 0.04 1.5 = 0 1.25 = 0.06 2 =		3.5 = 0.50 6 = 1.47 4 = 0.65					
Well Information	on									
Well Locat	ion:				Well Locked at A	rrival:				
Condition of M	/- II-				Iall Looked at Dana				_	

Well Locked at Departure:

Key Number To Well: NA

Condition of Well:

Well Completion: NA



Project Number	30052922	Well ID	YGWA-3D			Date	02/10/2021
Project Location	AP-2		Weather(°F)	71.4 degrees F	and Cloudy. The wind	I is blowing W a	at 3.4 mph.
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	83.88	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	29.35	Total Depth (ft- bmp)	134.18	Water Column(ft)	104.83	Gallons in Well	17.03
MP Elevation	796.78	Pump Intake (ft- bmp)	113	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	17:25	Well Volumes Purged	0.07	Sample ID	YGWA-3D	Sampled by	Becky Steever
Purge Start	17:01	Gallons Purged	1.19	Replicate/ Code No.		Color	Clear
Purge End	17:22						

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Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
17:01:20	00:00	200	29.48	7.64	211.97	0.40	9.99	16.4	25.63
17:06:20	05:00	200	29.48	7.57	208.55	0.58	0.70	16.8	-93.37
17:11:20	10:00	200	29.48	7.77	208.32	0.22	0.25	16.7	-106.85
17:16:20	15:00	200	29.48	7.82	207.94	0.21	0.23	16.8	-117.00
17:21:20	20:00	200	29.48	7.81	207.63	0.22	0.15	16.7	-121.14

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity reading at time of sampling below 5.0 NTU

**Well Casing Volume Conversion** 

Well diameter (inches) = gallons per foot 1 = 0.041.5 = 0.092.5 = 0.263.5 = 0.506 = 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: N	A



Project Number	30053438	Well ID	YGWC-28I			Date	02/11/2021
Project Location	AP-2		Weather(°F)	Rain, cold			
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	59.63	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	32.4	Total Depth (ft- bmp)	69.93	Water Column(ft)	37.53	Gallons in Well	6.1
MP Elevation	717.93	Pump Intake (ft- bmp)	64	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	09:40	Well Volumes Purged	0.40	Sample ID	YGWC-28I	Sampled by	Peter Argyakis
Purge Start	09:01	Gallons Purged	2.43	Replicate/ Code No.	MSMSD	Color	Clear

Purae Ena 09:37	Purge	End	09:37
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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)
09:01:21	00:00	250	32.4	7.22	0.22	107.51	10.05	15.1	203.76
09:06:21	05:00	250	32.56	6.85	0.07	104.23	9.49	15.4	194.81
09:11:21	10:00	250	32.62	6.57	423.92	0.00	1.82	17.3	210.12
09:16:21	15:00	250	32.77	6.54	422.20	0.00	0.31	17.4	196.94
09:21:21	20:00	250	32.84	6.55	421.36	0.00	0.28	17.5	191.34
09:26:21	25:00	250	32.9	6.55	422.92	0.00	0.23	17.6	185.08
09:31:21	30:00	250	32.94	6.55	424.41	0.00	0.20	17.4	179.86
09:36:21	35:00	250	32.94	6.57	423.66	0.00	0.23	16.7	181.61

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity reading (time:NTU)

0901: 2.16 0906: 2.70 0911: 2.35 0916: 1.73 0921: 2.56 0926: 2.33 0931: 2.10 0936: 1.61

Last depth to water: 32.97

**Well Casing Volume Conversion** 

Well diameter (inches) = gallons per foot  $1 = 0.04 \ 1.5 = 0.09 \ 2.5 = 0.26 \ 3.5 = 0.50 \ 6 = 1.47$ 

 $1.25 = 0.06\ 2 = 0.16\ 3 = 0.37\ 4 = 0.65$ 

**Well Information** 

Well Location: Well Locked at Arrival:

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  $\mu$ S/cm = microSiemens per centimeters mV = millivolts

°F = degrees Fahrenheit

°C = degrees Celsius



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Project Numbe	r 30052922		Well ID	YGWA-	11			Date	02/12/2021
Project Locatio	n AP-2			Weathe	r(°F) 48.9 degre	es F and . Th	e wind is blow	ring NW at 8.1	mph.
Measuring Pt. Description	Top of Inn	er Casing	Screen Setting (ft-bmp	) 43.3	Casing Diameter (	in) <sup>2</sup>		Well Casing Material	PVC
Static Water Level (ft-bmp)	37.88		Total Depth (ft- bmp)	53.6	Water Column(ft	15.72		Gallons in Well	2.55
MP Elevation	836.6		Pump Intake (ft bmp)	49			Sample Method	Low-Flow	
Sample Time	13:20		Well Volumes Purged	0.53	Sample ID	YGWA-	11	Sampled by	Becky Steever
Purge Start	12:26		Gallons Purgeo	1.34	Replicate/ Code No.			Color	Clear
Purge End	07:44								
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	cure Redox (mV)
12:26:12	00:00	150	38.88	6.90	68.81	1.00	8.53	14.4	-3.90
12:31:12	05:00	125	40.02	6.86	88.19	1.46	3.02	15.0	-21.28
12:36:12	10:00	130	41.31	6.76	79.14	1.15	1.87	15.0	-24.45
12:44:42	18:30	100	42.28	6.40	57.67	0.11	3.50	15.1	-5.10
12:49:42	23:30	100	42.35	6.27	53.86	0.12	4.27	15.0	8.87
12:54:42	28:30	100	42.33	6.24	53.72	0.17	4.52	15.0	15.13
12:59:42	33:30	100	42.34	6.24	55.39	0.26	4.55	15.0	22.86
13:04:42	38:30	100	42.35	6.19	56.98	0.32	4.55	15.0	25.36
13:09:42	43:30	100	42.35	6.22	58.65	0.54	4.54	14.9	28.94
13:11:37	45:25	100	42.35	6.15	60.53	0.70	4.62	15.0	32.39
13:15:15	49:03	100	42.35	6.21	59.56	0.72	4.69	15.0	33.68
Constituent Sa	mpled			Container			Number	P	reservative
RAD Chem				1L Plastic			2	Н	NO3
Metals				250 mL Plastic	:		1		NO3
Fluoride				250 mL Plastic	<u> </u>		1		one
Comments:	LaMotte to	urbidity reading	ween 10 and 18 g at time of samp						
Well Casing Vo			4 00445 2	00.05	0.500 4.5				
Well diameter (ir	ncnes) = galloi	ns per toot	$1 = 0.04 \ 1.5 = 0.$ $1.25 = 0.06 \ 2 = 0.$		3.5 = 0.50 6 = 1.47 1 = 0.65				
Well Informatio	n								
Well Locati	on:				Well Locked at Arr	ival:			
Condition of W	ell:				ell Locked at Depart	ture:			_

ft-bmp = feet below measuring point in = inches

Well Completion: NA

mS/cm = milliSiemens per centimeter NTU = Nephelometric Turbidity Unit mg/L = milligrams per liter ft = feet mL/min = milliliters per minute μS/cm = microSiemens per centimeters

Key Number To Well: NA

mV = millivolts °F = degrees Fahrenheit °C = degrees Celsius



Project Number	30052922	Well ID	YGWA-3I			Date	02/10/2021
Project Location	AP-2		Weather(°F)	71.4 degrees F	and Cloudy. The wir	nd is blowing W	at 3.4 mph.
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	48.85	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	52.34	Total Depth (ft- bmp)	59.05	Water Column(ft)	6.71	Gallons in Well	1.09
MP Elevation	796.55	Pump Intake (ft- bmp)	54	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	16:40	Well Volumes Purged	1.96	Sample ID	YGWA-3I	Sampled by	Becky Steever
Purge Start	16:04	Gallons Purged	2.14	Replicate/ Code No.		Color	Clear
Purge End	16:39						
		Donth to					

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
16:04:38	00:00	250	52.34	7.49	252.19	0.44	6.27	17.5	185.91
16:09:38	05:00	250	54.48	7.51	259.68	0.13	2.86	17.2	28.89
16:14:38	10:00	230	54.62	7.49	239.27	0.08	1.52	17.2	-37.90
16:19:38	15:00	200	54.92	7.50	217.20	0.11	0.73	17.0	-61.08
16:24:38	20:00	200	54.95	7.55	201.91	0.15	0.55	17.2	-81.07
16:29:38	25:00	200	54.95	7.57	187.43	0.12	0.33	17.2	-92.72
16:34:38	30:00	200	54.92	7.59	183.94	0.12	0.30	17.0	-98.58
16:39:38	35:00	200	54.93	7.58	182.29	0.18	0.29	16.9	-99.61

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments:

 $LaMotte turbidity reading (time=NTU) \\ 1604=0.78, 1609=0.32, 1614=0.28, 1619=0.22, 1624=0.25, 1629=0.19, 1634=0.11, 1639=0.15 \\$ 

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47

 $1.25 = 0.06 \ 2 = 0.16 \ 3 = 0.37 \ 4 = 0.65$ 

Well Information		
Well Location:	Well Locked at Arrival:	
Condition of Well:	Well Locked at Departure:	
Well Completion: NA	Key Number To Well: 1	NA



Project Number	30053438	Well ID	YGWC-27I			Date	02/10/2021
Project Location	AP-2		Weather(°F)	Sunny, dry			
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	69.69	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	31	Total Depth (ft- bmp)	79.99	Water Column(ft)	48.99	Gallons in Well	7.96
MP Elevation	716.19	Pump Intake (ft- bmp)	75	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	12:20	Well Volumes Purged	0.12	Sample ID	YGWC-27I	Sampled by	Peter Argyakis
Purge Start	11:57	Gallons Purged	0.92	Replicate/ Code No.		Color	Clear
Purge End	12:17						

Purge	End	12:17
uige	LIIU	12.11

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)
11:57:31	00:00	150	31	6.39	341.69	0.00	3.94	18.6	8.55
12:02:31	05:00	150	31	6.33	366.59	0.87	1.04	18.6	-11.42
12:07:31	10:00	150	31	6.32	366.78	0.00	0.58	19.1	-25.17
12:12:31	15:00	150	31	6.30	363.82	0.00	0.46	19.5	-29.24
12:17:31	20:00	150	31	6.29	360.06	0.00	0.41	19.5	-33.92

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

LaMotte turbidity readings (time:NTU) Comments:

1157: 4.52 1202: 3.69 1207: 3.14 1212: 2.80 1217: 2.44

#### **Well Casing Volume Conversion**

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47 Well diameter (inches) = gallons per foot

 $1.25 = 0.06\ 2 = 0.16\ 3 = 0.37\ 4 = 0.65$ 

well illiorillation			
Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	NA	Key Number To Well:	NA

## March 2021 Event

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

# Instrument Calibration Date: 3/01/21 Time: 11:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
рН	S.U.	4.00	4.00	4.00	4.00	NA
рН	S.U.	7.00	7.00	7.00	7.00	NA
рН	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	235.4	235.4	235.4	235.4	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

#### Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

# Instrument Calibration Date: 3/02/21 Time: 10:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
рН	S.U.	4.00	4.00	4.00	4.00	NA
рН	S.U.	7.00	7.00	7.00	7.00	NA
рН	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

#### Notes

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

# Instrument Calibration Date: 3/03/21 Time: 07:45

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
рН	S.U.	4.00	4.00	4.00	4.00	4.00
рН	S.U.	7.00	7.00	7.00	7.00	7.00
рН	S.U.	10.00	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

### Date: 3/03/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
рН	S.U.	4.00	4.00	4.00	4.00	NA
рН	S.U.	7.00	7.00	7.00	7.00	NA
рН	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

#### Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

# Instrument Calibration Date: 3/04/21 Time: 08:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
рН	S.U.	4.00	4.00	4.00	4.00	4.00
рН	S.U.	7.00	7.00	7.00	7.00	7.00
рН	S.U.	10.00	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

### Date: 3/04/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
рН	S.U.	4.00	4.00	4.00	4.00	NA
pН	S.U.	7.00	7.00	7.00	7.00	NA
рН	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

#### Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate



Project Number	30052922	Well ID	YGWA-2I		Date	03/03/2021
Project Location	AP-2		Weather(°F)	46.4 degrees F and Clea	ar. The wind is blowing N at	10.3 mph.
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	53.45	Casing Diameter (in)	Well Casing Material	PVC
Static Water Level (ft-bmp)	44.45	Total Depth (ft- bmp)	63.75	Water Column(ft) 19.3	Gallons in Well	3.14
MP Elevation	866.25	Pump Intake (ft- bmp)	60	Purge Method Low-Flo	Sample Method	Low-Flow
Sample Time	11:45	Well Volumes Purged	0.44	Sample ID YGWA-2	2I Sampled by	Becky Steever
Purge Start	09:45	Gallons Purged	1.39	Replicate/ Code No.	Color	Clear

**Purge End** 11:41

arge Lila										
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)	
09:45:05	00:00	50	47.98	8.57	220.70	0.92	1.91	14.0	-54.63	
09:50:05	05:00	50	49.25	8.18	215.99	0.24	1.52	13.9	-41.25	
09:55:05	10:00	50	49.98	8.22	213.69	2.02	1.19	14.1	-38.95	
10:00:05	15:00	50	50.55	7.93	214.06	3.16	1.16	14.0	-20.93	
10:05:05	20:00	45	51.1	7.94	213.75	3.06	1.17	13.9	-19.06	
10:10:05	25:00	45	51.72	7.92	213.56	3.73	1.22	13.9	-17.89	
10:15:05	30:00	45	52.28	7.90	213.59	3.51	1.36	14.0	-12.20	
10:20:05	35:00	45	52.89	8.03	212.34	3.71	1.42	14.3	-17.22	
10:25:05	40:00	45	53.56	8.05	211.94	3.83	1.54	14.5	-17.13	
10:30:05	45:00	45	54.19	8.00	211.59	4.08	1.66	14.7	-14.23	
10:35:05	50:00	45	54.63	7.98	211.63	4.34	1.80	14.8	-10.85	
10:40:05	55:00	45	54.81	7.97	211.91	5.08	2.00	14.8	-8.63	
10:45:05	00:00	45	55.02	7.95	212.20	5.58	2.07	15.2	-5.68	
10:50:05	05:00	45	55.28	8.10	210.73	0.01	2.33	15.7	-12.02	
10:55:05	10:00	45	55.44	8.01	210.07	1.21	2.22	16.0	-5.06	
11:00:05	15:00	45	55.65	7.92	211.30	1.63	2.38	15.9	3.27	
11:05:05	20:00	45	55.83	7.98	214.55	0.60	2.36	16.1	-2.80	
11:10:05	25:00	45	56.09	7.84	218.12	0.20	2.30	16.1	-0.47	
11:15:05	30:00	45	56.29	7.82	219.25	0.00	2.28	16.0	-0.96	
11:20:05	35:00	45	56.49	7.85	218.60	0.00	2.06	16.1	-4.21	
11:25:05	40:00	45	56.64	7.91	218.64	0.00	1.93	16.4	-7.58	
11:30:05	45:00	45	56.89	7.99	219.41	0.00	1.74	16.8	-11.49	
11:35:05	50:00	45	57.01	7.93	219.59	0.00	1.64	17.1	-20.04	
11:40:05	55:00	45	57.19	7.92	219.70	0.00	1.50	17.6	-36.44	

mV = millivolts °F = degrees Fahrenheit °C = degrees Celsius



Constituent Sa	mpled	Container	Number	Preservative
TDS		250 mL Plastic	1	None
Anions		250 mL Plastic	1	None
Metals		250 mL Plastic	1	HNO3
RAD Chem		500 mL Plastic	2	HNO3
Comments:	La motte stand alone (@15:00: 4.58	confirmation turbidity readings.		
Well Casing Vo	olume Conversion			
		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	on			
Well Locati	ion:	Well Locked at Arrival:		
Condition of W	/ell:	Well Locked at Departure:		
Well Completi	ion: NA	Key Number To Well: NA		



437 f Inner Casing	Screen Setting (ft-bmp) Total Depth (ft-bmp) Pump Intake (ft-bmp)	69.81		in) <sup>2</sup>	lly Cloudy. Th	Date e wind is blowi Well Casing Material Gallons in Well	03/03/2021 ing N at 8.1 mph. PVC 7.19
	Setting (ft-bmp  Total Depth (ft-bmp)  Pump Intake (ft	59.51 69.81	Casing Diameter (	in) <sup>2</sup>		Well Casing Material Gallons in	PVC
	Setting (ft-bmp  Total Depth (ft-bmp)  Pump Intake (ft	69.81	Diameter (	44.27		Material Gallons in	
1	bmp) Pump Intake (ft			44.27			7.19
1		- 61					
	1.7	01	Purge Met	hod Low-Flow		Sample Method	Low-Flow
	Well Volumes Purged	0.15	Sample ID	YGWC-2	261	Sampled by	Katie Pupkiewicz
	Gallons Purgeo	1.08	Replicate/ Code No.	DUP-02		Color	Clear
	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	rure Redox (mV)
180	25.81	6.46	329.07	0.00	7.24	13.2	55.01
180	25.87	6.07	319.43	0.00	2.55	15.8	23.04
180	25.85	5.97	309.42	0.00	1.65	16.1	96.96
180	25.89	5.94	310.47	0.00	1.43	16.4	145.93
180	25.9	5.93	323.42	0.00	1.25	16.2	168.63
		Container			Number	P	reservative
		1L Plastic			2	Н	NO3
	<del></del> :	250 mL Plastic	;		1	— <u>н</u>	NO3
		500 mL Plastic	;		1		one
	<del></del>	250 mL Plastic	;		1	N	one
	Rate (mL/min) 180 180 180 180 180	Rate (mL/min) Depth to Water (ft)  180 25.81  180 25.87  180 25.85  180 25.89  180 25.9	Rate (mL/min) Depth to Water (ft) standard units)  180 25.81 6.46  180 25.87 6.07  180 25.85 5.97  180 25.89 5.94  180 25.9 5.93  Container  1L Plastic  250 mL Plastic  500 mL Plastic	Rate (mL/min)   Depth to Water (ft)   Specific Conductivity (µS/cm)	Rate (mL/min)   Depth to Water (ft)   (standard units)   Conductivity (µS/cm)   Turbidity (NTU)	Rate (mL/min)   Depth to Water (ft)   Specific Conductivity (µS/cm)   Turbidity (NTU)   Dissolved Oxygen (mg/L)	Code No.   DOP-02   Color

Well Locked at Arrival:

Key Number To Well: NA

Well Locked at Departure:

Well Location:
Condition of Well:

Well Completion: NA



		010	unawater (	Jamping	1 01111		•	//-u \\	built esset
Project Number	30053437	,	Well ID	YGWA-	14S			Date	03/02/2021
Project Location	AP-2			Weathe	r(°F)				
Measuring Pt. Description	Top of Inr	ner Casing	Screen Setting (ft-bmp	24.66	Casing Diameter (	(in) <sup>2</sup>		Well Casing Material	PVC
Static Water Level (ft-bmp)	16.71		Total Depth (ft- bmp)	34.96	Water Column(ft	18.25		Gallons in Well	2.97
MP Elevation	748.76		Pump Intake (fi	t- 30	Purge Met	hod Low-Flo		Sample Method	Low-Flow
Sample Time	11:20		Well Volumes Purged	0.36	Sample ID	YGWA-	14S	Sampled by	Katie Pupkiewicz
Purge Start	10:46		Gallons Purge	<b>d</b> 1.06	Replicate/ Code No.	DUP-01		Color	Clear
Purge End	11:17								
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	rure Redox (mV)
10:56:14	00:00	100	17.23	5.58	1220.33	0.00	1.47	15.0	-73.80
11:01:14	05:00	100	17.18	5.50	1229.41	0.00	1.37	15.6	-61.17
11:06:14	10:00	100	17.17	5.49	1233.85	0.00	1.44	15.6	-43.77
11:11:14	15:00	100	17.19	5.47	1231.60	0.00	1.44	15.5	-32.65
11:16:14	20:00	100	17.17	5.49	1229.86	0.00	1.44	15.6	-26.94
Constituent Sam	ıpled			Container			Number	P	reservative
RAD Chem				1L Plastic			2	Н	NO3
Metals				250 mL Plastic	;		1	— <u> </u>	NO3
TDS				500 mL Plastic	;		1		one
Chloride,Fluoride,	, SO4			250 mL Plastic	;		1		one
Comments:	LaMotte to 0.73 0.61 0.70 0.73 0.61	urbidity reading	gs taken every fi	ve minutes in a	accordance with VuS	iitu purge log			
Well Casing Volu		sion							
Well diameter (ind	ches) = gallo	ns per foot	1 = 0.04 1.5 = 0 1.25 = 0.06 2 =		3.5 = 0.50 6 = 1.47 4 = 0.65				
Well Information	l								
Well Location	n:				Well Locked at Arı	rival:			
Condition of We	II:			W	ell Locked at Depart	ture:			-

Well Completion: NA

Key Number To Well: NA



		010	unawater	Jamping	1 01111			//-1/1		1 0990
Project Number	30053437	7	Well ID	YGWC-	281			Date	03/03/2021	
Project Location	n AP-2			Weathe	r(°F) 59.0 degre	es F and Clea	ar. The wind is	blowing N at	10.3 mph.	
Measuring Pt. Description	Top of Inr	ner Casing	Screen Setting (ft-bmp	59.63	Casing Diameter	(in) <sup>2</sup>		Well Casing Material	PVC	
Static Water Level (ft-bmp)	29.41		Total Depth (ft- bmp)	69.93	Water Column(f	40.52		Gallons in Well	6.58	
MP Elevation	717.93		Pump Intake (fi	t <b>-</b> 64	Purge Me	thod Low-Flo	W	Sample Method	Low-Flow	
Sample Time	13:40		Well Volumes Purged	0.19	Sample II	YGWC-	281	Sampled by	Katie Pupkiew	CZ
Purge Start	13:08		Gallons Purged	<b>d</b> 1.27	Replicate Code No.	1		Color	Clear	
Purge End	13:37									
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C		lox V)
13:08:35	00:00	180	30.13	7.09	497.67	0.09	7.91	19.4	201	.18
13:13:35	05:00	180	30.67	6.54	478.35	0.10	3.35	20.3	188	.95
13:18:35	10:00	140	30.93	6.48	473.68	0.10	1.14	20.6	178	.65
13:21:15	12:40	140	30.93	6.61	469.01	0.04	4.70	19.5	198	.83
13:26:15	17:40	140	30.89	6.49	459.43	0.05	3.14	19.4	168	.32
13:31:15	22:40	140	30.86	6.50	462.02	0.10	1.81	19.5	147	.82
13:36:15	27:40	140	30.89	6.51	461.25	0.22	0.95	19.4	134	.69
Constituent Sar	mpled			Container			Number	P	reservative	
RAD Chem				1L Plastic			2	Н	INO3	
Metals				250 mL Plastic	;		1		INO3	
TDS				500 mL Plastic	;		1		lone	
Chloride,Fluoride	e and SO4		<del></del>	250 mL Plastic	;		1	N	lone	_
Chloride,Fluoride Comments:		urbidity readin			accordance with Vu	Situ purge log	1		lone	

ft-bmp = feet below measuring point in = inches

mL/min = milliliters per minute

**Well Casing Volume Conversion** 

**Well Information** 

Well Location:

Well Completion: NA

Condition of Well:

ft = feet

Well diameter (inches) = gallons per foot

mS/cm = milliSiemens per centimeter NTU = Nephelometric Turbidity Unit mg/L = milligrams per liter  $\mu$ S/cm = microSiemens per centimeters

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47

Well Locked at Arrival:

Key Number To Well: NA

Well Locked at Departure:

1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

mV = millivolts °F = degrees Fahrenheit °C = degrees Celsius



		0.0	anawater c	Jampinig				,,,	
Project Number	30053437	•	Well ID	YGWC-	28S			Date	03/03/2021
Project Location	AP-2			Weathe	er(°F) 53.6 degre	es F and Clea	ar. The wind is	blowing N at 9	9.2 mph.
Measuring Pt. Description	Top of Inr	ner Casing	Screen Setting (ft-bmp	34.65	Casing Diameter (	in) <sup>2</sup>		Well Casing Material	PVC
Static Water Level (ft-bmp)	27.95		Total Depth (ft- bmp)	44.95	Water Column(ft)	17		Gallons in Well	2.76
MP Elevation	717.95		Pump Intake (ft bmp)	t <b>-</b> 40	Purge Met	hod Low-Flo	ow .	Sample Method	Low-Flow
Sample Time	11:55		Well Volumes Purged	0.28	Sample ID	YGWC-	28S	Sampled by	Katie Pupkiewicz
Purge Start	11:32		Gallons Purgeo	<b>d</b> 0.77	Replicate/ Code No.			Color	Clear
Purge End	11:49								
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ture Redox (mV)
11:32:25	00:00	160	28.35	6.59	420.74	15.45	5.40	18.1	-18.25
11:37:25	05:00	160	28.35	6.57	452.43	1.50	2.42	18.7	-45.78
11:42:25	10:00	160	28.35	6.57	464.65	1.06	2.44	18.9	-55.28
11:47:25	15:00	160	28.35	6.61	470.20	0.32	1.05	19.0	-62.22
Constituent Sam	pled			Container			Number	Р	reservative
RAD Chem				1L Plastic			2	Н	INO3
Metals			<del></del> :	250 mL Plastic	;		1		INO3
TDS				500 mL Plastic	;		1	N	lone
Chloride,Fluoride,	SO4		<del></del> :	250 mL Plastic	;		1	N	lone
Comments:	LaMotte to 5.64 4.14 2.16 1.48	urbidity readin	gs taken every fi	ve minutes in a	accordance with VuS	itu purge log			
Well Casing Volu	me Conver	sion							
Well diameter (inc	hes) = gallo	ns per foot	1 = 0.04 1.5 = 0 1.25 = 0.06 2 =		3.5 = 0.50 6 = 1.47 4 = 0.65				
Well Information									
Well Location	n:				Well Locked at Arr	ival:			
Condition of Wel	l:				/ell Locked at Depart	ure:			_

Key Number To Well: NA

Well Completion: NA



Project Number	30052922	Well ID	YGWA-1D			Date	03/03/2021
Project Location	AP-2		Weather(°F)	62.4 degrees F	and Clear. The wind i	s blowing NW a	at 6.9 mph.
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	78.05	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	47.83	Total Depth (ft- bmp)	128.85	Water Column(ft)	81.02	Gallons in Well	13.17
MP Elevation	837.25	Pump Intake (ft- bmp)	108	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	14:25	Well Volumes Purged	0.06	Sample ID	YGWA-1D	Sampled by	Becky Steever
Purge Start	14:03	Gallons Purged	0.79	Replicate/ Code No.		Color	Clear
Purge End	14:24						

Purge End	14:24
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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)
14:03:49	00:00	150	47.9	7.01	126.75	0.00	9.30	15.5	102.99
14:08:49	05:00	150	47.92	7.03	134.23	0.00	5.52	16.4	-12.08
14:13:49	10:00	150	47.96	7.17	156.30	0.00	3.20	16.3	-32.10
14:18:49	15:00	150	47.99	7.12	154.82	0.00	1.95	16.4	-25.57
14:23:49	20:00	150	48.01	7.20	153.08	0.00	1.35	16.5	-21.69

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic		HNO3
TDS	500 mL Plastic	1	None
		_	

Comments:

La motte turbidity readings 1403=0.22, 1408= 0.19, 1413=0.19, 1418=0.18, 1423=0.11

#### **Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47

 $1.25 = 0.06\ 2 = 0.16\ 3 = 0.37\ 4 = 0.65$ 

Well Information			
Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	NA	Key Number To Well:	NA



Project Number	30052922	Well ID	YGWA-1I			Date	03/03/2021
Project Location	AP-2		Weather(°F)	59.0 degrees F	and Clear. The wind	is blowing N at	10.3 mph.
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	43.3	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	37.19	Total Depth (ft- bmp)	53.6	Water Column(ft)	16.41	Gallons in Well	2.67
MP Elevation	836.6	Pump Intake (ft- bmp)	49	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	12:13	Well Volumes Purged	1.02	Sample ID	YGWA-1A	Sampled by	Becky Steever
Purge Start	12:35	Gallons Purged	2.73	Replicate/ Code No.		Color	Clear

**Purge End** 13:31

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)
12:35:36	00:00	200	38.75	7.48	84.79	0.00	6.96	17.5	-1.92
12:40:36	05:00	200	40.92	7.07	75.47	0.00	1.79	17.3	1.52
12:45:36	10:00	190	41.5	6.64	59.12	0.00	3.30	16.7	36.68
12:50:36	15:00	190	41.78	6.34	56.25	0.00	3.49	16.5	61.44
12:55:36	20:00	190	41.98	6.12	53.98	0.00	4.32	16.4	80.16
13:00:36	25:00	190	42.11	5.92	54.10	0.00	4.92	16.1	94.37
13:05:36	30:00	190	42.28	5.76	54.63	0.00	4.95	15.9	107.56
13:10:36	35:00	190	42.37	5.65	55.25	0.00	4.87	15.7	117.23
13:15:36	40:00	190	42.55	5.57	55.86	0.00	4.79	15.6	123.49
13:20:36	45:00	190	42.68	5.42	56.14	0.00	4.67	15.5	130.89
13:25:36	50:00	150	42.7	5.39	56.27	0.00	4.61	15.5	133.42
13:30:36	55:00	150	42.65	5.38	56.02	0.00	4.66	15.5	135.16

Constituent Sampled	Container	Number	Preservative	
TDS	500 mL Plastic	1	None	
RAD Chem	1L Plastic	2	HNO3	
Anions	250 mL Plastic	1	None	
Metals	250 mL Plastic	1	HNO3	

Comments:

LaMotte turbidity readings (time=NTU) 1310=0.31, 1315=0.22, 1320=0.19, 1325=0.16, 1330=0.10

**Well Casing Volume Conversion** 

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47 Well diameter (inches) = gallons per foot

 $1.25 = 0.06\ 2 = 0.16\ 3 = 0.37\ 4 = 0.65$ 

**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 Gampling Form						,	Dulit esserts			
Project Number	30052922	30052922 <b>Well ID</b> YGWA-3D						Date	03/03/2021		
Project Location	AP-2				Weather(°F) 65.7 degrees F and Clear. The wind i				is blowing N at 12.8 mph.		
Measuring Pt. Description	Top of Inner Casing Screen Setting (ft-bmp)		83.88	83.88 Casing Diameter			Well Casing Material	PVC			
Static Water Level (ft-bmp)	29.28		Total Depth (ft- bmp)	134.18	Water Column(f	t) 104.9		Gallons in Well	17.05		
MP Elevation	796.78		Pump Intake (ft bmp)	113	Purge Me	Purge Method Low-Flow		Sample Method	Low-Flow		
Sample Time	16:00		Well Volumes Purged	0.05	Sample ID YGWA-3D			Sampled by	Becky Steever		
Purge Start	15:38		Gallons Purgeo	<b>d</b> 0.79	Replicate Code No.			Color Clear			
Purge End	16:58										
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	eure Redox (mV)		
15:38:19	00:00	200	29.28	8.25	228.79	0.00	8.63	16.7	-63.41		
15:43:19	05:00	200	29.28	8.32	226.31	0.00	2.34	16.5	-117.08		
15:48:19	10:00	200	29.28	8.42	226.72	0.00	0.85	16.4	-104.03		
15:53:19	15:00	200	29.28	8.39	226.67	0.00	0.59	16.3	-94.87		
Constituent Sam	pled			Container			Number	P	reservative		
RAD Chem				1L Plastic			2	Н	NO3		
Metals			<del></del> -	250 mL Plastic			1	— <u>н</u>	NO3		
nnions 250			250 mL Plastic	mL Plastic 1			None				
rds .				500 mL Plastic	1			None			
Comments:		urbidity readin 1 5	g with depth and gs (time:NTU)	holding pressu	ıre. Has not previol	usly been an is	ssue. Flowed a	at 100 ml/m bed	cause of this.		
Well Casing Volu											
Well diameter (inc	hes) = gallor	ns per foot	1 = 0.04 1.5 = 0 1.25 = 0.06 2 =		3.5 = 0.50 6 = 1.47 = 0.65						
Well Information											
Well Location	n:				Well Locked at A	rrival:					
Condition of Wel	l:			W	ell Locked at Depa	rture:			-		

Well Completion: NA

Key Number To Well: NA



Project Number	30053437	Well ID	YGWA-30I			Date	03/01/2021
Project Location	AP-2		Weather(°F)	63.1 degrees F	and Cloudy. The wind	l is blowing NW	at 5.8 mph.
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	49.18	Casing Diameter (in)	2	Well Casing Material	PVC
Static Water Level (ft-bmp)	43.88	Total Depth (ft- bmp)	59.48	Water Column(ft)	15.6	Gallons in Well	2.53
MP Elevation	762.58	Pump Intake (ft- bmp)	54.5	Purge Method	Low-Flow	Sample Method	Low-Flow
Sample Time	16:25	Well Volumes Purged	0.68	Sample ID	YGWA-30I	Sampled by	Katie Pupkiewicz
Purge Start	15:51	Gallons Purged	1.72	Replicate/ Code No.		Color	Clear
Purge End	16:23						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
15:51:20	00:00	200	43.89	6.57	56.00	0.00	8.86	17.0	208.83
15:56:20	05:00	200	43.89	6.14	27.71	0.06	8.09	17.2	193.78
16:01:20	10:00	200	43.91	6.28	48.39	0.00	7.70	17.0	189.09
16:06:20	15:00	200	43.9	5.84	48.75	0.00	7.43	17.1	202.04
16:11:20	20:00	200	43.9	5.76	47.92	0.00	7.34	17.1	208.39
16:16:20	25:00	200	43.91	5.73	47.75	0.00	7.38	17.0	207.81
16:21:20	30:00	200	43.91	5.78	47.97	8.12	7.26	17.0	205.08

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Chloride,Fluoride SO4	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None
		<del></del>	

Comments: LaMotte turbidity readings taken every five minutes in accordance with VuSitu purge log

0.00

Turbidity meter ran out of batteries, will replace tomorrow

0.12 taken at the 25 minute mark

0.55

#### **Well Casing Volume Conversion**

Well diameter (inches) = gallons per foot  $1 = 0.04 \ 1.5 = 0.09 \ 2.5 = 0.26 \ 3.5 = 0.50 \ 6 = 1.47$ 

1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information			
Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	NA	Key Number To Well:	NA



30053437  AP-2  Top of Inn  24.73  716.28  14:00  13:34		Screen Setting (ft-bmp Total Depth (ft-bmp) Pump Intake (ftbmp) Well Volumes Purged	40.18	Casing Diameter ( Water Column(ft)	in) <sup>2</sup>		Date ind is blowing E Well Casing Material Gallons in	PVC		
Top of Inn 24.73 716.28 14:00	er Casing	Setting (ft-bmp)  Total Depth (ft-bmp)  Pump Intake (ft-bmp)  Well Volumes	29.88	Casing Diameter ( Water Column(ft	in) <sup>2</sup>		Well Casing Material Gallons in	PVC	nph.	
24.73 716.28 14:00 13:34	er Casing	Setting (ft-bmp)  Total Depth (ft-bmp)  Pump Intake (ft-bmp)  Well Volumes	40.18	Diameter ( Water Column(ft	15.45		Material Gallons in			
716.28 14:00 13:34		bmp) Pump Intake (fibmp) Well Volumes	40.16	Column(ft	15.45			0.54		
14:00		bmp) Well Volumes	37				Well	2.51		
13:34				Purge Met	hod Low-Flo	W	Sample Method	Low-Flo	»W	
			0.32	Sample ID	YGWC-	261	Sampled by	Katie P	upkiewicz	
40.55		Gallons Purged	0.79	Replicate/ Code No.			Color	Clear		
13:55										
Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ure	Redox (mV)	
00:00	200	25.7	6.45	357.31	164.92	7.62	15.6		83.80	
05:00	100	26.45	5.37	346.24	0.00	2.29	17.4		152.54	
10:00	100	26.27	5.37	341.88	0.00	1.79	16.7		193.41	
15:00	100	26.24	5.38	343.93	0.00	0.75	16.6		202.53	
20:00	100	26.22	5.38	345.14	0.00	0.71	16.6		204.01	
pled			Container			Number	P	reservati	ive	
			1L Plastic	2	HNO3					
		<del></del>	250 mL Plastic	;		1		NO3		
		<del></del>	500 mL Plastic	;		1	N	one		
SO4		<del></del>	250 mL Plastic	50 mL Plastic 1				None		
LaMotte to 1.37 2.04 1.08 0.99 0.90	urbidity readin	gs taken every fi	ve minutes in a	accordance with VuS	itu purge log					
ıme Convers	sion									
ches) = gallor	ns per foot									
ı										
	Elapsed Minutes  00:00  05:00  10:00  15:00  20:00  Epled  SO4  LaMotte to 1.37  2.04  1.08  0.99  0.90  Lime Conversibles) = gallor	Total Elapsed Minutes	13:34 Gallons Purged  13:55  Total Elapsed Minutes (mL/min) Purged  00:00 200 25.7  05:00 100 26.45  10:00 100 26.27  15:00 100 26.24  20:00 100 26.22  pled  LaMotte turbidity readings taken every first 1.37  2.04  1.08  0.99  0.90  Image Conversion  ches) = gallons per foot 1 = 0.04 1.5 = 0  1.25 = 0.06 2 = 6	13:34   Gallons Purged   0.79     13:55     Total Elapsed Minutes   Rate (mL/min)   Usandard units)     00:00   200   25.7   6.45     05:00   100   26.45   5.37     10:00   100   26.27   5.37     15:00   100   26.24   5.38     20:00   100   26.22   5.38     20:00   100   26.22   5.38     11. Plastic     250 mL Plastic     500 mL Plastic     500 mL Plastic     500 mL Plastic     500 mL Plastic     1.37     2.04     1.08     0.99     0.90     1 = 0.04 1.5 = 0.09 2.5 = 0.26     1.25 = 0.06 2 = 0.16 3 = 0.37 4     1.25 = 0.06 2 = 0.16 3 = 0.37 4     1.35     1.35     1.36     1.37     1.37     1.37     1.37     1.38     1.39     1.39     1.39     1.39     1.30     1.31     1.32     1.33     1.34     1.35     1.35     1.36     1.37     1.37     1.38     1.39     1.39     1.30     1.30     1.31     1.32     1.33     1.34     1.35     1.35     1.36     1.37     1.37     1.37     1.38     1.39     1.30     1.30     1.31     1.32     1.33     1.34     1.35     1.35     1.35     1.36     1.37     1.37     1.37     1.37     1.38     1.39     1.30	13:34   Gallons Purged   0.79   Replicate/Code No.     13:55     Total Elapsed (mL/min)   Ph (standard units)   Conductivity (µS/cm)     00:00   200   25.7   6.45   357.31     05:00   100   26.45   5.37   346.24     10:00   100   26.27   5.37   341.88     15:00   100   26.24   5.38   343.93     20:00   100   26.22   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38   345.14     10:00   100   26.24   5.38	13:34   Gallons Purged   0.79   Replicate/Code No.     13:55     Total Elapsed Minutes   Rate (mL/min)   Depth to Water (ft)   (standard units)   (uS/cm)   (NTU)     00:00   200   25.7   6.45   357.31   164.92     05:00   100   26.45   5.37   346.24   0.00     10:00   100   26.27   5.37   341.88   0.00     15:00   100   26.24   5.38   343.93   0.00     20:00   100   26.22   5.38   345.14   0.00     15:00   100   26.22   5.38   345.14   0.00     100   100   26.22   5.38   345.14   0.00     100   100   26.22   5.38   345.14   0.00     100   Depth	13:34   Gallons Purged   0.79   Replicate/ Code No.     13:35     Total Elapsed Minutes   Rate (mL/min)   Depth to (mL/min)   Water (mt) (mt) (mt) (ms/munits)   Conductivity (us/cm) (ms/L)     00:00	13:34   Gallons Purged   0.79   Replicate/ Code No.   Color	13:34   Gallons Purged   0.79   Replicate/ Code No.   Color   Clear	

Well Locked at Arrival:

Key Number To Well: NA

Well Locked at Departure:

Well Location:

Well Completion: NA

Condition of Well:



		GIO	unawater	Jamping	hult assets					
Project Number	30053437	,	Well ID	YGWC-2	27S			Date	03/03/2021	
Project Location	AP-2			Weathe	r(°F) 63.3 degre	ees F and Clea	ar. The wind is	s blowing N/NV	V at 3.4 mph.	
Measuring Pt. Description	Top of Inr	ner Casing	Screen Setting (ft-bmp	30.22	Casing Diameter	(in) <sup>2</sup>		Well Casing Material	PVC	
Static Water Level (ft-bmp)	29.6		Total Depth (ft- bmp)	40.52	Water Column(f	t) 10.92		Gallons in Well	1.77	
MP Elevation	716.52		Pump Intake (ft bmp)	35	Purge Me	thod Low-Flo	ow .	Sample Method	Low-Flow	
Sample Time	14:40		Well Volumes Purged	0.40	Sample II	YGWC-	27S	Sampled by	Katie Pupkiewicz	
Purge Start	14:19		Gallons Purgeo	<b>d</b> 0.72	Replicate Code No.			Color	Clear	
Purge End	14:38									
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ture Redox (mV)	
14:19:39	00:00	120	29.63	6.50	420.33	11.95	5.80	19.1	73.16	
14:24:39	05:00	120	29.69	6.41	421.19	1.06	2.42	19.9	133.08	
14:28:04	08:25	120	29.68	6.38	423.88	2.68	1.86	19.9	211.54	
14:33:04	13:25	120	29.69	6.36	430.38	2.13	1.19	19.8	175.45	
14:38:04	18:25	120	29.69	6.35	433.98	0.48	0.75	19.9	161.75	
				•				_		
Constituent San	ıpıea			Container			Number		Preservative	
RAD Chem				1L Plastic			2		HNO3	
Metals 25				250 mL Plastic			1		HNO3	
011 11 =1 11	Chloride,Fluoride and SO4 25				250 mL Plastic 1				lone	
Chloride,Fluoride TDS				500 I DI- "	500 mL Plastic 1			None		

**Well Casing Volume Conversion** 

Well diameter (inches) = gallons per foot  $1 = 0.04 \cdot 1.5 = 0.09 \cdot 2.5 = 0.26 \cdot 3.5 = 0.50 \cdot 6 = 1.47$ 

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	



		GIO	ANUADIO bult assets						
Project Number	30053437		Well ID	YGWC-2	271			Date	03/03/2021
Project Location	AP-2			Weathe	r(°F) 64.8 degre	es F and Clea	ar. The wind is	blowing NW a	t 8.1 mph.
Measuring Pt. Description	Top of Inn	er Casing	Screen Setting (ft-bmp	69.69	9 Casing Diameter (in) 2			Well Casing Material	PVC
Static Water Level (ft-bmp)	29.59		Total Depth (ft- bmp)	79.99	Water Column(ft)	50.4		Gallons in Well	8.19
MP Elevation	716.19		Pump Intake (fi	t <b>-</b> 75	Purge Met	hod Low-Flo		Sample Method	Low-Flow
Sample Time	15:40		Well Volumes Purged	0.15	Sample ID	YGWC-	271	Sampled by	Katie Pupkiewic
Purge Start	15:08		Gallons Purged	<b>d</b> 1.19	Replicate/ Code No.			Color	Clear
Purge End	15:38								
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ure Redo (mV
15:08:24	00:00	200	30.2	6.68	398.50	0.38	4.95	21.6	18.5
15:13:24	05:00	140	30.5	6.48	420.18	0.15	1.47	19.8	-20.8
15:18:24	10:00	140	30.4	6.44	415.79	0.16	1.38	20.4	-11.1
15:23:24	15:00	140	30.45	6.40	337.69	0.13	1.12	19.8	-6.7
15:28:24	20:00	140	30.44	6.41	411.14	0.19	1.24	20.7	-8.0
15:33:24	25:00	140	30.48	6.43	408.88	0.27	1.18	20.7	-7.3
15:38:24	30:00	140	30.48	6.43	406.77	0.22	0.96	20.5	-4.8
Constituent Sam	nled			Container			Number	P	reservative
RAD Chem	picu			1L Plastic			2		NO3
Metals				250 mL Plastic			1		NO3
TDS				500 mL Plastic			1		one
Chloride,Fluoride	and SO4			250 mL Plastic			1		one
Comments:	LaMotte tu follows: 0.62 0.43 0.79	urbidity meter	died at the begin	ning of purging	j. The three readings	s taken five, t	en, and fifteen	minutes before	e sampling are as

Well Locked at Arrival:

Key Number To Well: NA

Well Locked at Departure:

**Well Information** 

Well Location:

Well Completion: NA

Condition of Well:



		GIO	unuwater	amping	FOITH				ノヘレ	built esset	
Project Number	30053437	•	Well ID	YGWC-	291			Date	03/03/	2021	
Project Location	AP-2			Weathe	er(°F) 50.0 degre	es F and Clea	ar. The wind is	s blowing N at	10.3 mp	h.	
Measuring Pt. Description	Top of Inr	ner Casing	Screen Setting (ft-bmp)	29.29	Casing Diameter	in) <sup>2</sup>		Well Casing Material	PVC		
Static Water Level (ft-bmp)	27.85		Total Depth (ft- bmp)	39.59	Water Column(ft	) 11.74		Gallons in Well	1.91		
MP Elevation	717.39		Pump Intake (ft bmp)	35	Purge Met	t <b>hod</b> Low-Flo	ow	Sample Method	Low-F	Low-Flow	
Sample Time	10:45		Well Volumes Purged	0.44	Sample ID	YGWC-	·29I	Sampled by	Katie F	Pupkiewicz	
Purge Start	10:23		Gallons Purgeo	0.85	Replicate/ Code No.			Color	Clear		
Purge End	10:39										
Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperat °C	ure	Redox (mV)	
10:23:17	00:00	180	28.96	6.72	218.63	0.00	4.89	17.0		81.99	
10:28:17	05:00	180	29.11	6.30	220.23	0.00	2.27	17.4		125.52	
10:33:17	10:00	180	29.16	6.26	219.90	0.00	1.65	17.5		148.74	
10:38:17	15:00	180	29.1	6.27	211.87	0.00	1.44	18.2		153.99	
Constituent Sam	pled			Container			Number	Р	reserva	ıtive	
RAD Chem				1L Plastic 2				HNO3			
Metals				250 mL Plastic 1				HNO3			
TDS				500 mL Plastic 1				None			
Chloride,Fluoride,	SO4			250 mL Plastic	<del></del>		1	N	lone		
Comments:	LaMotte to 1.35 0.68 0.79 0.74	urbidity readin	igs taken every fiv	ve minutes in a	accordance with VuS	Situ purge log					
Well Casing Volu	ıme Conver	sion									
Well diameter (inc	ches) = gallo	ns per foot	1 = 0.04 1.5 = 0. 1.25 = 0.06 2 = 0		3.5 = 0.50 6 = 1.47 4 = 0.65						
Well Information											
Well Location	n:				Well Locked at Ar	rival:					
Condition of Wel	II:			W	ell Locked at Depar	ture:			_		
Mall Campletie	o. NIA				Kov Number Tr	Λ/αΙΙ. ΝΙΛ			-		

Key Number To Well: NA

Well Completion: NA



Project Number	30052922	Well ID	YGWA-3I			Date	03/03/2021	
Project Location	AP-2		Weather(°F)	66.2 degrees F and Clear. The wind is blowing NW at 11.4 mph.				
Measuring Pt. Description	Top of Inner Casing	Screen Setting (ft-bmp)	48.85	Casing Diameter (in)	2	Well Casing Material	PVC	
Static Water Level (ft-bmp)	52.33	Total Depth (ft- bmp)	59.05	Water Column(ft)	6.72	Gallons in Well	1.09	
MP Elevation	796.55	Pump Intake (ft- bmp)	54	Purge Method	Low-Flow	Sample Method	Low-Flow	
Sample Time	17:00	Well Volumes Purged	1.27	Sample ID	YGWA-3I	Sampled by	Becky Steever	
Purge Start	16:28	Gallons Purged	1.39	Replicate/ Code No.	NA	Color	Clear	
Purge End	16:58							

Purge End 16:	58
---------------	----

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
16:28:09	00:00	250	53.13	8.14	206.85	0.00	7.51	15.6	-29.52
16:33:09	05:00	200	53.82	8.09	223.89	0.00	3.52	15.8	-34.40
16:38:09	10:00	200	53.73	8.07	221.76	0.00	3.34	15.7	-40.21
16:43:09	15:00	200	53.74	8.11	207.23	0.00	1.54	15.7	-50.88
16:48:09	20:00	200	53.74	8.13	200.41	0.00	0.81	15.7	-61.82
16:53:09	25:00	200	53.75	8.13	197.61	0.00	0.67	15.7	-66.37

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Anions	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

Comments:

La motte turbidity readings (time:NTU): 1628=0.18, 1633=0.09, 1638=0.12, 1643=0.10, 1648=0.08, 1653=0.09

**Well Casing Volume Conversion** 

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47 Well diameter (inches) = gallons per foot

 $1.25 = 0.06\ 2 = 0.16\ 3 = 0.37\ 4 = 0.65$ 

Well Information			
Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	NA	Key Number To Well:	NA



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWA-2I			
Perso	on Gauging:	Becky Steever			
		2/8/2021			
	Time:	09:16:00			1
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			V
6	Based on yo	ur professional judgement, is the well construction / location:			
	-	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	☑		
7	Corrective a	ctions as needed, by date:			
		•			
	Data !				
8	Date by whe	en corrective actions are needed:			



			I		
	ct Location:	AP-2	-		
Perm	nit Number:		-		
		YGWA-1D	-		
Perso		Becky Steever	-		
		2/8/2021	-		
	Time:	09:39:00			
			Yes	No	N/A
1	Location Ide				
	a	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	☑		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	$\square$		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	$\square$		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	$\square$		
4	Internal Casi	1 1			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	е	Is the depth of the well consistent with the original well log?			Ø
	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)	<u> </u>	_	
Г	Sampling: C	roundwater Wells Only:			
5	, ,				[7]
	a	Does well recharge adequately when purged?		Ш	$\square$
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			
	С	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on yo	our professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	☑		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	PZ-1S			
Perso	on Gauging:	Becky Steever			
	Date:	2/8/2021			
	Time:	09:42:00			
			Yes	No	N/A
1	Location Ide	ntification:			
	a	Is the well visible and accessible?	V		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	$\overline{\mathbf{Q}}$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	V		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	V		
	е	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			$\square$
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			☑
	С	Does the well require redevelopment (low flow, turbid)?			$\square$
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
		•			
8	Date by whe	en corrective actions are needed:			



			1		
	ct Location:	AP-2	-		
Perm	nit Number:		-		
	Well ID:		-		
Perso		Becky Steever	1		
		2/8/2021	-		
	Time:	09:45:00	.,		
			Yes	No	N/A
1	Location Ide				
	a	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	☑		
	С	Is the well in a high traffic area and does the well require protection from traffic?	V		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	V		
	С	Does the casing have a functioning weep hole?	V		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	v		
	С	Is the well pad in complete contact with the protective casing?	$\overline{\mathbf{V}}$		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	V		
4	Internal Casi				
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	V		
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	е	Is the depth of the well consistent with the original well log?			Ø
	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)	<u> </u>		
	Campling: C	roundwater Wells Only:			
5	, ,	•			[7]
	a	Does well recharge adequately when purged?		Ш	$\square$
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			☑
	С	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	PZ-13S			
Perso	on Gauging:	Becky Steever			
		2/8/2021			
	Time:	09:50:00			
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	i e e e e e e e e e e e e e e e e e e e			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	e	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			$\square$
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6		ur professional judgement, is the well construction / location:			
9		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	<b>□</b>		
7	Corrective	ctions as needed, by date:	_	_	_
,	Corrective a	ctions as needed, by date.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2	-		
Perm	nit Number:		-		
	Well ID:		-		
Perso		Becky Steever	-		
		2/8/2021	-		
	l ime:	09:58:00	Voc	No	NI/A
1	Location Ide	entification:	Yes	INO	N/A
'		Is the well visible and accessible?			
	a				
	b	Is the well properly identified with the correct well ID?			
	С	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)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?		Ø	
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	V		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?			Ø
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6	Based on vo	our professional judgement, is the well construction / location:			
	, , , ,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	$\square$		
		and 2) comply with the applicable regulatory requirements?	$\square$		
7	Corrective a	ctions as needed, by date:			
,		starting to build up on portion of pad. Will need to shovel/clean off.			
	Seamlett 18	starting to baild up on portion of pad. will need to shovely clean on.			
8	Date by whe	en corrective actions are needed:			
	-				



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	PZ-3S			
Perso	on Gauging:	Becky Steever			
		2/8/2021			
	Time:	10:02:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	₫		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	i e e e e e e e e e e e e e e e e e e e			
	а	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?			
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			V
6		ur professional judgement, is the well construction / location:			
_	- , , -	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	<u></u>		
7	Corrective a	ctions as needed, by date:		•	
,	Corrective a	enons as necees, by saice.			
8	Date by whe	en corrective actions are needed:			



			1		
	ct Location:	AP-2	-		
Perm	nit Number:		-		
_		YGWA-3D	-		
Perso		Becky Steever	_		
		2/8/2021	1		
	i ime:	10:18:00	Voc	NIa	NI/A
1	Location Ide	ntification.	Yes	No	N/A
I				_	
	a	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	☑		
	С	Is the well in a high traffic area and does the well require protection from traffic?	V		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?			
	b	Is the casing free of degradation or deterioration?	V		
	С	Does the casing have a functioning weep hole?	V		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	V		
3	Surface Pad				
	а	Is the well pad in good condition (not cracked or broken)?	V		
	b	Is the well pad sloped away from the protective casing?	V		
	С	Is the well pad in complete contact with the protective casing?	V		
	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)	Ø		
	e	Is the pad surface clean (not covered with sediment or debris)?			
4	Internal Casi				
	a	Does the cap prevent entry of foreign material into the well?	v		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<b>I</b>		
	С	Is the well properly vented for equilibration of air pressure?	<u></u>		
		Is the survey point clearly marked on the inner casing?	<b>I</b>		
	d				
	e	Is the depth of the well consistent with the original well log?	Ш		[4]
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			$\square$
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6	Based on yo	our professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	V		
		and 2) comply with the applicable regulatory requirements?	V		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



			1		
	ct Location:		-		
Perm	nit Number:		-		
_		YGWA-14S	-		
Perso		Becky Steever	-		
		2/8/2021 10:25:00	-		
	ı ime:	10.23.00	Yes	No	N/A
1	Location Ide	entification:	165	INO	IN/A
'		Is the well visible and accessible?	$\square$		
	a				
	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 C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?			V
	b	Is the well pad sloped away from the protective casing?			V
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?			
4	Internal Casi	· ·			
	а	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)?			
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	e	Is the depth of the well consistent with the original well log?			<u> </u>
	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)	$\square$		
5	Sampling: G	roundwater Wells Only:			
	а	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?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6	Based on yo	our professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program			
		and 2) comply with the applicable regulatory requirements?			
7	Corrective a	ctions as needed, by date:			
		deeply buried under sediment. Appears to be in sediment flow are.	,		
Ω	Date by who	en corrective actions are needed:			
O	Date by Wile	THE CONTECTIVE ACTIONS ARE RECUEUS.			



			1		
	ct Location:	AP-2	-		
Perm	nit Number:		-		
	Well ID:		-		
Perso		Becky Steever	-		
		2/8/2021	-		
	Time:	10:42:00	Voc	NIa	NI/A
1	Location Ide	ntification:	Yes	No	N/A
'		Is the well visible and accessible?			
	a				
	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)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	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?	$\square$		
3	Surface Pad				
	а	Is the well pad in good condition (not cracked or broken)?			
	b	Is the well pad sloped away from the protective casing?			Ø
	С	Is the well pad in complete contact with the protective casing?	$\square$		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?		$\overline{\checkmark}$	
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	e	Is the depth of the well consistent with the original well log?			Ø
	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)	<b>Ø</b>		
5	Sampling: G	roundwater 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?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			V
6	Based on yo	ur professional judgement, is the well construction / location:			
	-	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	$\square$		
7	Corrective a	ctions as needed, by date:			
		ly buried under sediment. Appears to be in the path of sediment flow			
8	Date by whe	en corrective actions are needed:			



			1		
	ct Location:	AP-2	-		
Perm	it Number:		_		
	Well ID:		-		
Perso		Becky Steever	-		
		2/8/2021	-		
	Time:	10:48:00	V	NI.	N1 / A
1	La sada a Isla		Yes	No	N/A
ı	Location Ide			_	_
	a	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	☑		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	V		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	V		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	V		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	e	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	•			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	V		
	С	Is the well properly vented for equilibration of air pressure?	V		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	e	Is the depth of the well consistent with the original well log?			Ø
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			☑
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6		ur professional judgement, is the well construction / location:			
J	J.	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	$\overline{\mathbf{Q}}$		
		and 2) comply with the applicable regulatory requirements?	<u> </u>		
7	Corrective a	ctions as needed, by date:		_	
,	Corrective a	caons as necaca, by date.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWA-3I			
Perso	on Gauging:	Becky Steever			
		2/8/2021			
	Time:	10:15:00			
			Yes	No	N/A
1	Location Ide				
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	i e e e e e e e e e e e e e e e e e e e			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\overline{\mathbf{Z}}$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	e	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			V
6	Based on vo	ur professional judgement, is the well construction / location:			
	- ,-	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	<u></u>		
7	Corrective a	ctions as needed, by date:			-
,	Corrective a	caons as necaca, by date.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2	1		
Perm	nit Number:		_		
	Well ID:	YGWA-30I			
Perso	on Gauging:	Becky Steever	_		
		2/8/2021	_		
	Time:	10:52:00			
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	V		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	V		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	а	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	V		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	V		
	e	Is the pad surface clean (not covered with sediment or debris)?	V		
4	Internal Casi	•			
	а	Does the cap prevent entry of foreign material into the well?	V		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\overline{\mathbf{Z}}$		
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?			$\overline{\square}$
	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)	<b>I</b>		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6	Based on yo	ur professional judgement, is the well construction / location:			
	,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
		• •			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	PZ-25I			
Perso	on Gauging:	Becky Steever			
		2/8/2021			
	Time:	11:03:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	₫		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	i e e e e e e e e e e e e e e e e e e e			
	а	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	e	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			V
6		ur professional judgement, is the well construction / location:			
_	- , , -	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:		•	
,	Corrective a	enons as necees, by saice.			
8	Date by whe	en corrective actions are needed:			



	ct Location:	AP-2	-		
Perm	nit Number: Well ID:	D7 250	1		
Dores		Becky Steever	-		
Perso		2/8/2021	1		
		11:22:00	1		
	· · · · · · · · · · · · · · · · · · ·		Yes	No	N/A
1	Location Ide	entification:			,
	а	Is the well visible and accessible?	$\square$		
	b	Is the well properly identified with the correct well ID?	$\overline{\mathbf{Q}}$		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
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?	V		
	С	Is the well pad in complete contact with the protective casing?	V		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Cas	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?			Ø
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



			1		
	ct Location:	AP-2	-		
Perm	nit Number:		-		
		YGWC-26S	-		
Perso		Becky Steever	-		
		2/8/2021	-		
	Time:	12:00:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	$\square$		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	$\overline{\mathbf{A}}$		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	$\square$		
4	Internal Casi				
	а	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\overline{\mathbf{A}}$		
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	e	Is the depth of the well consistent with the original well log?			<b>☑</b>
	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)	<u> </u>	_	
	Campling: C	roundwater Wells Only:			
5	, ,	•			[7]
	a	Does well recharge adequately when purged?		Ш	$\square$
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	☑		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



			1		
	ct Location:	AP-2	-		
Perm	nit Number:		-		
_		YGWC-26I	-		
Perso		Becky Steever	_		
		2/8/2021	-		
	ı ime:	12:04:00	Yes	No	NI/A
1	Location Ide	ntification:	res	INO	N/A
'		Is the well visible and accessible?	Ø		
	a				
	b	Is the well properly identified with the correct well ID?			
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	☑		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	V		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	V		
	b	Is the well pad sloped away from the protective casing?	V		
	С	Is the well pad in complete contact with the protective casing?	V		
	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)	V		
	е	Is the pad surface clean (not covered with sediment or debris)?	v		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	V		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	v		
	d	Is the survey point clearly marked on the inner casing?	V		
	е	Is the depth of the well consistent with the original well log?			V
	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)	V		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			$\square$
6	Based on yo	ur professional judgement, is the well construction / location:			
	, , ,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	V		
		and 2) comply with the applicable regulatory requirements?	V		
7	Corrective a	ctions as needed, by date:			
•		······································			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWC-27I			
Perso	on Gauging:	Becky Steever			
		2/8/2021			
	Time:	12:11:00			i
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	$\square$		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	$\square$		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?			Ø
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			$\overline{\mathbf{A}}$
6	Based on vo	our professional judgement, is the well construction / location:			
	- )-	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	$\square$		
		and 2) comply with the applicable regulatory requirements?			
7	Corrective a	ctions as needed, by date:	·		_
,	corrective a	eachs as needed, by dute.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWC-27S			
Perso		Becky Steever			
		2/8/2021			
	Time:	12:19:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?			
	е	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			
6	Based on yo	ur professional judgement, is the well construction / location:			
	,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
•	321.000W0 W				
	Date la 1				
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	YGWC-28I			
Perso	on Gauging:	Becky Steever			
		2/8/2021			
	Time:	12:30:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	₫		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	i e e e e e e e e e e e e e e e e e e e			
	а	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?			
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	e	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			V
6		ur professional judgement, is the well construction / location:			
_	- , , -	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:		•	
,	corrective a	caons as necaca, by date.			
8	Date by whe	en corrective actions are needed:			



Duoio	ct Location:	AD_2			
	nit Number:	At -2	1		
reiii		YGWC-28S	1		
Perso		Becky Steever	1		
		2/8/2021	1		
	Time:	12:32:00			
			Yes	No	N/A
1	Location Ide	ntification:			
	a	Is the well visible and accessible?	V		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?			
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	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)?	$\square$		
	b	Is the well pad sloped away from the protective casing?			
	С	Is the well pad in complete contact with the protective casing?	$\square$		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	$\square$		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?			
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	е	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	YGWC-29I			
Perso	on Gauging:	Becky Steever			
		2/8/2021			
	Time:	12:47:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	☑		
	С	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 C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	☑		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	а	Is the well pad in good condition (not cracked or broken)?	$\square$		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	$\overline{\mathbf{A}}$		
4	Internal Casi	ing			
	а	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)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	$\overline{\mathbf{A}}$		
	d	Is the survey point clearly marked on the inner casing?	$\overline{\mathbf{Q}}$		
	е	Is the depth of the well consistent with the original well log?			V
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			V
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	V		
7	Corrective a	ctions as needed, by date:			
-		• •			
8	Date by whe	en corrective actions are needed:			



	ct Location:	AP-2	-		
Perm	nit Number:	NCHA 44C	-		
D		YGWA-14S	1		
Perso		Katie Pupkiewicz 3/1/2021	1		
		12:04:00	1		
	111116.		Yes	No	N/A
1	Location Ide	entification:	103	140	14//
·	a	Is the well visible and accessible?	v		
	b	Is the well properly identified with the correct well ID?	V		
	С	Is the well in a high traffic area and does the well require protection from traffic?	V		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	V		
	b	Is the casing free of degradation or deterioration?	$\overline{\mathbf{A}}$		
	С	Does the casing have a functioning weep hole?	V		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	V		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?		$\square$	
	b	Is the well pad sloped away from the protective casing?		Ø	
	С	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)		Ø	
	е	Is the pad surface clean (not covered with sediment or debris)?		Ø	
4	Internal Casi	ng			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\overline{\mathbf{A}}$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	V		
	е	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	V		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		Ø	
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	PZ-14I			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	12:08:00			i
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	$\square$		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	$\square$		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?		$\overline{\mathbf{Q}}$	
	b	Is the well pad sloped away from the protective casing?		$\overline{\mathbf{V}}$	
	С	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)		Ø	
	е	Is the pad surface clean (not covered with sediment or debris)?			
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?			Ø
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	е	Is the depth of the well consistent with the original well log?	$\square$		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6		our professional judgement, is the well construction / location:			
J		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	<b>1</b>		
		and 2) comply with the applicable regulatory requirements?			
7	Corrective	ctions as needed, by date:		_	_
,	Corrective d	caons as necueu, by date.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	YGWA-30I			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	12:20:00			1
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	i e e e e e e e e e e e e e e e e e e e			
	а	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?			
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	Ø		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		$\overline{\checkmark}$	
6	Based on yo	ur professional judgement, is the well construction / location:			
	, , ,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			-
,	Corrective at	caons as necaca, by dute.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	PZ-13S			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	13:52:00			i
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	$\square$		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	$\square$		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?			
	е	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			V
6		our professional judgement, is the well construction / location:			
	- )-	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	$\square$		
		and 2) comply with the applicable regulatory requirements?			
7	Corrective a	ctions as needed, by date:	·		_
,	corrective a	eachs as needed, by dute.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	PZ-13I			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	13:56:00			Î
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	$\square$		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	$\square$		
	С	Is the well pad in complete contact with the protective casing?	$\square$		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?			
	е	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			$\square$
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			
6		our professional judgement, is the well construction / location:			
	,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	$\square$		
7	Corrective a	ctions as needed, by date:			
,					
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	PZ-31S			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	12:13:00			
			Yes	No	N/A
1	Location Ide				
	a	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	i e e e e e e e e e e e e e e e e e e e			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	e	Is the depth of the well consistent with the original well log?	$\square$		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			<b>V</b>
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			V
6		ur professional judgement, is the well construction / location:			
J	2232 311 yo	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	_ ☑		
7	Corrective 3	ctions as needed, by date:	_		
,	CONTECUIVE d	ctions as needed, by date.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	PZ-1S			
Perso		Katie Pupkiewicz			
		3/1/2021			
	Time:	13:46:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	$\square$		
	b	Is the well properly identified with the correct well ID?	☑		
	С	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)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	а	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			V
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	☑		
7	Corrective a	ctions as needed, by date:			
		•			
	Date la l				
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	PZ-3S			
Perso		Katie Pupkiewicz			
		3/1/2021			
	Time:	12:35:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?			
	b	Is the well properly identified with the correct well ID?	☑		
	С	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)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	$\square$		
	b	Is the well pad sloped away from the protective casing?	$\square$		
	С	Is the well pad in complete contact with the protective casing?	$\square$		
	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)	☑		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			V
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			V
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑		
		and 2) comply with the applicable regulatory requirements?			
7	Corrective a	ctions as needed, by date:			
		·			
	Date la	no powerative potions are wooded.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	PZ-25S			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	14:10:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)			
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	$\square$		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?			
	е	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			$\square$
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			Ø
	С	Does the well require redevelopment (low flow, turbid)?			$\square$
6	Based on yo	ur professional judgement, is the well construction / location:			
	,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
,					
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:				
Perso		Katie Pupkiewicz			
		3/1/2021			
	Time:	14:12:00			
			Yes	No	N/A
1	Location Ide				
	a	Is the well visible and accessible?			
	b	Is the well properly identified with the correct well ID?	☑		
	С	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)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?			Ø
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			V
	С	Does the well require redevelopment (low flow, turbid)?			Ø
6	Based on yo	ur professional judgement, is the well construction / location:			
	,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
	D				
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWA-2I	]		
Perso	on Gauging:	Katie Pupkiewicz			
	Date:	3/1/2021			
	Time:	13:39:00			
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?	$\overline{\mathbf{Q}}$		
	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)	Ø		
5	Sampling: G	roundwater 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?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?			
6		ur professional judgement, is the well construction / location:			
J	2232 311 yo	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?			
7	Corrective	ctions as needed, by date:	_		_
,	COTTECTIVE 4	ctions as needed, by date.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWA-3I			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	12:39:00			i
			Yes	No	N/A
1	Location Ide	entification:			
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi				
	а	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)?	$\overline{\mathbf{Q}}$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	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)	<b>I</b>		
5	Sampling: G	roundwater Wells Only:			
,	a	Does well recharge adequately when purged?	Ø		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved			
		groundwater plan for the facility?	<b>Ø</b>		
	С	Does the well require redevelopment (low flow, turbid)?		<u> </u>	
6	Based on yo	our professional judgement, is the well construction / location:		_	_
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	☑		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



	ct Location:	AP-2	-		
Perm	nit Number:	VOLUM OD	-		
		YGWA-3D	-		
Perso		Katie Pupkiewicz 3/1/2021	-		
		12:42:00	-		
	i ime:	12.42.00	Yes	No	N/A
1	Location Ide	ntification:	163	INO	IN/A
'	a	Is the well visible and accessible?	$\square$		
	b	Is the well properly identified with the correct well ID?	<b>I</b>		
		Is the well in a high traffic area and does the well require protection from traffic?			
	c d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious			
		drainage flow path)	Ø		
2	Protective C				
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	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)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	V		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	Ø		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		Ø	
6	Based on yo	ur professional judgement, is the well construction / location:			
	, , ,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	V		
		and 2) comply with the applicable regulatory requirements?	<b>V</b>		
7	Corrective a	ctions as needed, by date:			
•	321.000ivo u				
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	YGWC-29I			
Perso	on Gauging:	Katie Pupkiewicz			
	Date:	3/1/2021			
	Time:	14:24:00			
			Yes	No	N/A
1	Location Ide	ntification:			
	a	Is the well visible and accessible?	$\square$		
	b	Is the well properly identified with the correct well ID?	$\square$		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	а	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	V		
	е	Is the depth of the well consistent with the original well log?	V		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	а	Does well recharge adequately when purged?	Ø		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		$\square$	
6	Based on yo	our professional judgement, is the well construction / location:			
	_	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
		•			
8	Date by whe	en corrective actions are needed:			



	ct Location:	AP-2	-		
Perm	nit Number:		-		
		YGWC-28S	-		
Perso		Katie Pupkiewicz	-		
		3/1/2021	-		
	Time:	14:54:00			
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	$\square$		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	а	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	$\overline{\mathbf{A}}$		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	$\square$		
4	Internal Casi				
	а	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\overline{\mathbf{A}}$		
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	е	Is the depth of the well consistent with the original well log?	<u></u>		
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand	<b>I</b>	_	
	CC	due to lack of grout or use of slip couplings in construction)			
5	, ,	roundwater 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?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		<u> </u>	
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑		
		and 2) comply with the applicable regulatory requirements?	☑		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWC-28I			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	14:55:00			
			Yes	No	N/A
1	Location Ide				
	a	Is the well visible and accessible?	Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	$\square$		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	$\square$		
	b	Is the well pad sloped away from the protective casing?	$\square$		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	$\square$		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	<b>7</b>		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		V	
6		ur professional judgement, is the well construction / location:			
	- )-	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	$\square$		
		and 2) comply with the applicable regulatory requirements?			
7	Corrective a	ctions as needed, by date:	·		_
,	corrective a	caons as necaca, by dute.			
8	Date by whe	en corrective actions are needed:			



	ct Location:	AP-2	-		
Perm	nit Number:	NOME 276	-		
D		YGWC-27S	-		
Perso		Katie Pupkiewicz 3/1/2021	-		
		15:01:00	1		
	i iiiie.	15.01.00	Yes	No	N/A
1	Location Ide	ntification:	103	110	14//
·	a	Is the well visible and accessible?	$\square$		
	b	Is the well properly identified with the correct well ID?	$\square$		
	С	Is the well in a high traffic area and does the well require protection from traffic?	$\square$		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	$\square$		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	V		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ng			
	a	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?			
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	е	Is the depth of the well consistent with the original well log?	$\square$		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	$\square$		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		Ø	
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



			1		
	ct Location:	AP-2	-		
Perm	nit Number:		-		
		YGWC-27I	-		
Perso		Katie Pupkiewicz	1		
		3/1/2021	-		
	Time:	15:03:00	.,		
			Yes	No	N/A
1	Location Ide				
	а	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	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)	Ø		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	V		
	С	Does the casing have a functioning weep hole?	V		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	а	Is the well pad in good condition (not cracked or broken)?	V		
	b	Is the well pad sloped away from the protective casing?	V		
	С	Is the well pad in complete contact with the protective casing?	V		
	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)	V		
	е	Is the pad surface clean (not covered with sediment or debris)?	V		
4	Internal Casi				
	а	Does the cap prevent entry of foreign material into the well?	V		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\overline{\mathbf{V}}$		
	С	Is the well properly vented for equilibration of air pressure?	$\square$		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	е	Is the depth of the well consistent with the original well log?	<u> </u>		
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand	<b>V</b>		
	CC	due to lack of grout or use of slip couplings in construction)			
5	, ,	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	Ø		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		<u> </u>	
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWC-26I			
Perso		Katie Pupkiewicz			
		3/1/2021			
	Time:	15:11:00			
			Yes	No	N/A
1	Location Ide				
	a	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	$\square$		
	С	Does the casing have a functioning weep hole?	$\square$		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	е	Is the depth of the well consistent with the original well log?	$\square$		
	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: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	Ø		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		V	
6	Based on yo	ur professional judgement, is the well construction / location:			
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
-		• ,			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Perm	nit Number:				
	Well ID:	YGWC-26S			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	15:10:00			1
			Yes	No	N/A
1	Location Ide				
	a	Is the well visible and accessible?	☑		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	$\square$		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	· ·			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	$\square$		
	e	Is the depth of the well consistent with the original well log?	$\square$		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	$\square$		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑		
	С	Does the well require redevelopment (low flow, turbid)?			
6		ur professional judgement, is the well construction / location:			
J		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	_ ☑		
7	Corrective a	ctions as needed, by date:	_		_
1	CONTECUIVE d	ctions as needed, by date.			
8	Date by whe	en corrective actions are needed:			



Proje	ct Location:	AP-2			
Pern	nit Number:				
	Well ID:	YGWA-1I			
Perso	on Gauging:	Katie Pupkiewicz			
		3/1/2021			
	Time:	13:42:00			1
			Yes	No	N/A
1	1 Location Identification: a Is the well visible and accessible?				
	a Is the well visible and accessible? b Is the well properly identified with the correct well ID?		Ø		
	b	Is the well properly identified with the correct well ID?	Ø		
	С	Is the well in a high traffic area and does the well require protection from traffic?	Ø		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Ø		
2	Protective C	asing:			
	а	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)	Ø		
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	· ·			
	а	Does the cap prevent entry of foreign material into the well?	$\square$		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	$\square$		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	e	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	Ø		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?			
6		ur professional judgement, is the well construction / location:			
9	22.32.311.70	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?			
7	Corrective a	ctions as needed, by date:	_		
/	COLLECTIVE at	ctions as needed, by date.			
8	Date by whe	en corrective actions are needed:			



	ct Location:	AP-2			
Perm	nit Number:	VOLUM 4.D.			
		YGWA-1D			
Perso		Katie Pupkiewicz 3/1/2021	-		
		13:48:00			
	i ime:	13.46.00	Yes	No	N/A
1	Location Ide	ntification:	163	INO	IN/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?		☑		
			<b>Ø</b>		
			☑		
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious			
		drainage flow path)	Ø		
2	Protective C	asing:			
	a	Is the protective casing free from apparent damage and able to be secured?	Ø		
	b	Is the casing free of degradation or deterioration?	Ø		
	С	Does the casing have a functioning weep hole?	Ø		
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Ø		
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	Ø		
	b	Is the well pad sloped away from the protective casing?	Ø		
	С	Is the well pad in complete contact with the protective casing?	Ø		
	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)			
	е	Is the pad surface clean (not covered with sediment or debris)?	Ø		
4	Internal Casi	ing			
	a	Does the cap prevent entry of foreign material into the well?	Ø		
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Ø		
	С	Is the well properly vented for equilibration of air pressure?	Ø		
	d	Is the survey point clearly marked on the inner casing?	Ø		
	е	Is the depth of the well consistent with the original well log?	Ø		
	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)	Ø		
5	Sampling: G	roundwater Wells Only:			
	a	Does well recharge adequately when purged?	Ø		
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	Ø		
	С	Does the well require redevelopment (low flow, turbid)?		V	
6	Based on yo	ur professional judgement, is the well construction / location:			
	,	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	Ø		
		and 2) comply with the applicable regulatory requirements?	Ø		
7	Corrective a	ctions as needed, by date:			
		-			
8	Date by whe	en corrective actions are needed:			

# **APPENDIX B** Analytical Lab and Data Validation Reports (February and March 2021) 2021 Semiannual Groundwater and Corrective Action Report Plant Yates AP-2

Newnan, GA

# February 2021



# Georgia Power Co. – Plant Yates

# **DATA REVIEW**

Metals, Radium, and General Chemistry Analyses SDGs # 92521567, 92521568, 92521578 and 92521581

Analyses Performed By:

Pace Analytical Services – Asheville, North Carolina Pace Analytical Services – Peachtree Corners, Georgia Pace Analytical Services – Greensburg, Pennsylvania

Review Level: Tier II Project: 30052923.00004

#### **SUMMARY**

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) # 92521567, 92521568, 92521578 and 92521581 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

			Sample Collection Date		Analysis			
SDG	Sample ID	Lab ID		Collection	Parent Sample	RAD	MET	GEN CHEM
	YGWC-26S	92521567-4 92521578-4	Water	02/10/21		Х	Х	Х
	YGWC-26I	92521567-5 92521578-5	Water	02/10/21		Х	Х	Х
	YGWC-27S	92521567-6 92521578-6	Water	02/10/21		Х	Х	Х
	YGWC-27I	92521567-7 92521578-7	Water	02/10/21		X	Х	Х
92521567 92521578	DUP-2	92521567-8 92521578-8	Water	02/10/21	YGWC-26I	X	Х	Х
	YGWC-28I	92521567-9 92521578-9	Water	02/11/21		X	Х	Х
	YGWC-28S	92521567-12 92521578-12	Water	02/12/21		Х	Х	Х
	YGWC-29I	92521567-13 92521578-13	Water	02/12/21		Х	Х	Х
	EB-02	92521567-14 92521578-14	Water	02/12/21		Х	Х	Х
	YGWA-5D	92521568-1 92521581-1	Water	02/08/21		X	Х	Х
	DUP-01	92521568-2 92521581-2	Water	02/08/21	YGWA-5D	Х	Х	Х
92521568 92521581	YGWA-5I	92521568-3 92521581-3	Water	02/08/21		X	Х	Х
	YGWA-39	92521568-4 92521581-4	Water	02/10/21		X	Х	Х
	YGWA-40	92521568-5 92521581-5	Water	02/10/21		X	Х	Х

			Matrix	Sample Collection Date		Analysis		
SDG	Sample ID	Lab ID			Parent Sample	RAD	MET	GEN CHEM
	FB-01	92521568-6 92521581-6	Water	02/10/21		Х	Х	Х
	YGWA-20S	92521568-7 92521581-7	Water	02/09/21		Х	Х	Х
	YGWA-4I	92521568-8 92521581-8	Water	02/09/21		X	Х	Х
	YGWA-17S	92521568-9 92521581-9	Water	02/09/21		X	Х	Х
	YGWA-18S	92521568-10 92521581-10	Water	02/09/21		X	Х	Х
	YGWA-18I	92521568-11 92521581-11	Water	02/09/21		X	Х	Х
	YGWA-21I	92521568-12 92521581-12	Water	02/09/21		х	Х	Х
	YGWA-3I	92521568-13 92521581-13	Water	02/10/21		х	Х	Х
92521568	YGWA-3D	92521568-14 92521581-14	Water	02/10/21		х	Х	Х
92521581	YGWA-30I	92521568-15 92521581-15	Water	02/11/21		х	Х	Х
	FB-01 (021121)	92521568-16 92521581-16	Water	02/11/21		х	Х	Х
	EB-01 (021121)	92521568-17 92521581-17	Water	02/11/21		х	Х	Х
	EB-02 (021021)	92521568-1 92521578-1	Water	02/10/21		х	Х	Х
	DUP-1	92521567-3 92521578-3	Water	02/10/21	YGWA-14S	х	Х	Х
	YGWA-14S	92521578-2 92521581-2	Water	02/10/21		Х	Х	Х
	YGWA-1I	92521578-10 92521581-10	Water	02/12/21		X	Х	Х
	YGWA-1D	92521578-11 92521581-11	Water	02/12/21		X	Х	Х
	YGWA-2I	92521572-02 92521583-02	Water	02/10/21		X	Х	Х

#### Notes:

1. Metals were performed by Pace Analytical Services – Peachtree Corners, Georgia.

- 2. Anions (fluoride) analysis performed by Pace Analytical Services Asheville, North Carolina.
- 3. Radium analysis performed by Pace Analytical Services Greensburg, Pennsylvania.
- 4. pH analysis performed as a field measurement.

#### **ANALYTICAL DATA PACKAGE DOCUMENTATION**

The table below is the evaluation of the data package completeness.

	Rep	Reported		rmance ptable	Not	
Items Reviewed	No	Yes	No	Yes	Required	
Sample receipt condition		Х		Х		
2. Requested analyses and sample results		Х		Х		
Master tracking list		Х		Х		
4. Methods of analysis		Х		Х		
5. Reporting limits		Х		Х		
6. Sample collection date		Х		Х		
7. Laboratory sample received date		Х		Х		
8. Sample preservation verification (as applicable)		Х		Х		
9. Sample preparation/extraction/analysis dates		Х		Х		
10. Fully executed Chain-of-Custody (COC) form		Х		Х		
11. Narrative summary of QA or sample problems provided		Х		Х		
12. Data Package Completeness and Compliance		Х		X		

Note:

QA - Quality Assurance

#### **INORGANIC ANALYSIS INTRODUCTION**

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 9315, and 9320; Standard Method (SM) SM4500-H+ B and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma—Atomic Emission Spectroscopy and Inductively Coupled Plasma—Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January2017).

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

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

#### Concentration (C) Qualifiers

- U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
- J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).

#### Quantitation (Q) Qualifiers

- E The reported value is estimated due to the presence of interference.
- N Spiked sample recovery is not within control limits.
- Duplicate analysis is not within control limits.

#### Validation Qualifiers

- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
- UB Analyte considered non-detect at the listed value due to associated blank contamination.
- R The sample results are rejected.

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

#### **METALS ANALYSES**

#### 1. Holding Times

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

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

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

#### 2. Blank Contamination

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

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

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
YGWA-30I	Lead (FB)	Detected sample results <rl <bal<="" and="" td=""><td>"UB" at the RL</td></rl>	"UB" at the RL
YGWA-20S YGWA-21I	Antimony (MB)	Detected sample results <rl <bal<="" and="" td=""><td>"UB" at the RL</td></rl>	"UB" at the RL

Note:

EB = Equipment blank

RL = Reporting limit

MB = Method Blank

#### 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

The MS/MSD performed on samples YGWA-40, YGWC-28I and YGWA-1D exhibited recoveries and RPDs within the control limits.

#### 3.2 Laboratory Duplicate Analysis

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

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

#### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Barium	0.060	0.062	3.3%
	Chromium	0.00065 J	0.00068 J	AC
YGWC-26I / DUP-2	Lead	0.000051 J	0.000049 J	AC
	Lithium	0.0067 J	0.0073 J	AC
	Selenium	0.0026 J	0.0024 J	AC
	Barium	0.0079 J	0.020	AC
	Lead	0.00013 J	0.0050 U	AC
YGWA-5D / DUP-01	Lithium	0.0063 J	0.0031 J	AC
	Molybdenum	0.0011 J	0.010 U	AC

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Barium	0.0078 J	0.0078 J	AC
YGWA-14S / DUP-1	Beryllium	0.00019 J	0.000019 J	AC
	Lead	0.000048 J	0.0050 U	AC

Note:

AC = Acceptable

The RPD between the parent samples and the field duplicate samples were acceptable.

#### 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

#### 6. System Performance and Overall Assessment

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

#### **DATA VALIDATION CHECKLIST FOR METALS**

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not	
	No	Yes	No	Yes	Required	

Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)

Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)

Atomic Absorption - Manual Cold Vapor (CV)

Tier II Validation			
Holding Times	X		X
Reporting limits (units)	X		X
Blanks			
A. Method Blanks	X	Х	
B. Equipment/Field Blanks	X	Х	
Laboratory Control Sample (LCS) %R	X		X
Matrix Spike (MS) %R	X		X
Matrix Spike Duplicate (MSD) %R	X		X
MS/MSD Precision (RPD)	X		X
Field/Lab Duplicate (RPD)	X		X
Reporting Limit Verification	X		X

Notes:

%R Percent recovery

RPD Relative percent difference

#### **GENERAL CHEMISTRY ANALYSES**

#### 1. Holding Times

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

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Fluoride by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

#### 2. Blank Contamination

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

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

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

# 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

#### 3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD performed on samples YGWA-40, YGWC-28I and YGWA-1D for the fluoride analysis exhibited recoveries and RPDs within the control limits.

#### 3.2 Laboratory Duplicate Analysis

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

sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

Laboratory duplicate analysis was not performed using a sample from this SDG.

#### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-26I / DUP-2	Fluoride	0.050 J	0.10 U	AC
YGWA-5D / DUP-01	Fluoride	0.055 J	0.10 U	AC
YGWA-14S / DUP-1	Fluoride	0.10 U	0.10 U	AC

#### Notes:

AC = Acceptable

The RPD between the parent samples and the field duplicate samples were acceptable.

#### 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

#### 6. System Performance and Overall Assessment

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

#### **DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY**

General Chemistry: SM4500-H+ B and USEPA 300.0	Repo	orted	Performance Acceptable		Not Required	
	No	Yes	No	Yes	rtequireu	
Miscellaneous Instrumentation						
Tier II Validation						
Holding times		X		Х		
Reporting limits (units)		X		Х		
Blanks						
A. Method Blanks		Х		Х		
B. Equipment blanks		Х		Х		
Laboratory Control Sample (LCS) %R		Х		Х		
Matrix Spike (MS) %R		Х		Х		
Matrix Spike Duplicate (MSD) %R		Х		Х		
MS/MSD Precision (RPD)		Х		Х		
Field/Lab Duplicate (RPD)		Х		Х		
Dilution Factor		Х		Х		
Moisture Content	Х				Х	

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:

Usample = uncertainty of the sample

U<sub>Blank</sub> = 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*

<sup>\*=</sup> 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:

$$Z_{\text{MS}} = \frac{\mathbf{x} - \mathbf{x}_0 - \mathbf{c}}{\sqrt{\mathbf{u}^2(\mathbf{x}) + \mathbf{u}^2(\mathbf{x}_0) + \mathbf{u}^2(\mathbf{c})}}$$

Where:

x = measured concentration of the spiked sample.

 $x_0$  = measured concentration of the unspiked sample.

c = spike concentration added.

 $u^{2}(x)$ ,  $u^{2}(x0)$ ,  $u^{2}(c)$  = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between +/-3 sigma. Warning limits have been established as +/- 2 sigma.

The MS/MSD performed on sample YGWC-28I exhibited recoveries and RPDs within the control limits.

The MS/MSD performed on samples YGWC-28I and YGWA-1D exhibited recoveries and RPDs within the control limits.

#### 3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

$$Z_{\text{Dup}} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

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.

A laboratory duplicate was not included in the data package.

#### 4. Field Duplicate Analysis

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

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

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. For results greater than five times the MDC, a control limit of 35 percent for water matrices is applied to the RPD between the parent and field duplicate sample results. If the parent and field duplicate sample results are less than five times the MDC, for water matrices a control limit of two times the MDC is applied to the difference between the results.

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

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Radium-226	0.240 +/- 0.141	0.209 +/- 0.140	
YGWC-26I / DUP-2	Radium-228	0.273 +/- 0.374	0.0571 +/- 0.352	AC
	Total Radium	0.513 +/- 0.515	0.209 +/- 0.492	
	Radium-226	2.30 +/- 0.514	0.171 +/- 0.133	
YGWA-5D / DUP-01	Radium-228	0.591 +/- 0.501	0.0142 +/- 0.351	AC
	Total Radium	2.89 +/- 1.02	0.185 +/- 0.484	
	Radium-226	0.173 +/- 0.123	0.0865 +/- 0.0955	
YGWA-14S / DUP-1	Radium-228	0.180 +/- 0.339	0.528 +/- 0.390	AC
	Total Radium	0.353 +/- 0.462	0.615 +/- 0.486	

Notes:

AC = Acceptable

The RPD between the parent samples and the field duplicate samples were acceptable.

#### 5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to110% is applied to each sample spiked with either a carrier and/or a tracer.

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

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

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

The numerical performance indicator for a laboratory control sample is calculated

by:

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

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. <u>If</u> <u>either one of these criteria is true, the sample result is considered "non-detect".</u>

- 1. Sample result is less than the uncertainty and less than the MDC/MDA; or
- 2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- YGWC-26S Radium 226, Radium 228 and Total Radium
- YGWC-26I Radium-228 and Total Radium
- YGWC-27S Radium 226, Radium 228 and Total Radium
- DUP-2 Radium 226, Radium 228 and Total Radium
- YGWC-28I Radium 226
- YGWC-28S Radium 228 and Total Radium
- YGWC-29I Radium 228
- EB-02 (021221) Radium 226, Radium 228 and Total Radium
- YGWA-5D Radium 228
- DUP-01 Radium 226, Radium 228 and Total Radium
- YGWA-5I Radium 228 and Total Radium
- YGWA-39 Radium 228 and Total Radium
- YGWA-40 Radium 228 and Total Radium
- FB-01 Radium 226, Radium 228 and Total Radium
- YGWA-20S Radium 226, Radium 228 and Total Radium
- YGWA-4 Radium 228 and Total Radium
- YGWA-17S Radium 226, Radium 228 and Total Radium
- YGWA-18S Radium 226, Radium 228 and Total Radium
- YGWA-18I Radium 226, Radium 228 and Total Radium
- YGWA-21I Radium 228
- YGWA-30I Radium 226, Radium 228 and Total Radium
- FB-01 Radium 226, Radium 228 and Total Radium

- EB-01 Radium 226, Radium 228 and Total Radium
- EB-02 Radium 226, Radium 228 and Total Radium
- DUP-1 Radium 226, Radium 228 and Total Radium
- YGWA-14S Radium 226, Radium 228 and Total Radium
- YGWA-1I Radium 228 and Total Radium
- YGWA-1D Radium 228 and Total Radium
- YGWA-2I Radium 228 and Total Radium

#### 8. System Performance and Overall Assessment

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

#### **DATA VALIDATION CHECKLIST FOR RADIOLOGICALS**

RADIOLOGICALS: SW-846 9315/9320	Rep	orted	Performance Acceptable		Not	
	No	Yes	No	Yes	Required	
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		Х		X		
Carrier (Surrogate) %R		X		X		
Tracer (Surrogate) %R		X		X		
Laboratory Control Sample (LCS)		X		X		
Laboratory Control Sample Duplicate (LCSD)		Х		X		
LCS/LCSD Precision (RPD)		Х		X		
Matrix Spike (MS) %R		Х		X		
Matrix Spike Duplicate (MSD) %R		Х		X		
MS/MSD Precision (RPD)		Х		X		
Field/Lab Duplicate (RPD)		Х		Х		

Notes:

%R Percent recovery

RPD Relative percent difference

### **DATA REVIEW REPORT**

VALIDATION PERFORMED BY: Rachelle Borne

SIGNATURE:

DATE: May 13, 2021

Jachelle Band

PEER REVIEW: Jennifer Singer

DATE: May 18, 2021

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### CHAIN OF CUSTODY / DATA QUALIFIER SUMMARY TABLE

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### Pace Analytical\*

### Document Name: Sample Condition Upon Receipt(SCUR)

Document No.: F-CAR-CS-033-Rev.07 Document Revised: October 28, 2020 Page 1 of 2

Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples: Asheville	Huntersville Raleig	h□ Mechanicsville□ Atlanta Kernersville□
Sample Condition Upon Receipt  Client Name:	F	Project #: WO#: 92521581
Courrier: Fed Ex UPS Pace	USPS Con	92521581
custody Seal Present? Yes GNO Se	als Intact? 🖟 🔲 Yes 📉 No	Date/Initials Person Examining Contents 2/10/2/
hermometer:	Type of Ice:	ther Biological Tissue Frozen?  Yes No N/A  Iue None
Correction Far Add/Subtract Cooler Temp Corrected (*C):  JSDA Regulated Soil ( N/A, water sample)		Temp should be above freezing to 6°C  Samples out of temp criteria. Samples on ice, cooling process has begun
Did samples originate in a quarantine zone within the target samples or sampl	United States: CA, NY, or SC (check ma	including Hawaii and Puerto Rico)? Yes No
		Comments/Discrepancy:
Chain of Custody Present?	Yes No N/A	<b>1</b> <sub>7</sub> .
Samples Arrived within Hold Time?	eres 🗆 No 🗆 N/A	2.
Short Hold Time Analysis (<72 hr.)?	□Yes □N6 □N/A	3.
Rush Turn Around Time Requested?	☐Yes ☐Ño ☐N/A	4.
		5.
Sufficient Volume?		
Correct Containers Used? -Pace Containers Used?	□Yes □no □n/A □Yes □no □n/A	<b>6.</b>
Containers Intact?	☐Yes ☐NO ☐N/A	7.
Dissolved analysis: Samples Field Filtered?	Yes No AN/A	8.:
Sample Labels Match COC?	THES NO NA	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 NA	
COMMENTS/SAMPLE DISCREPANCY		Field Data Required? Yes No
		Lot ID of split containers:
CLIENT NOTIFICATION/RESOLUTION		
Person contacted:	Date/1	ime:
Project Manager SCURF Review:		Date:
Project Manager SRF Review:		Date:

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Bample ItactD	es					4.			į.						***************************************		~	So	158	100				Ċ		
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PANT	Ţ		ANTEST BROWNING IN	<b>W</b>	WT	WT.	5021 121-2 IM	WT 2+4 1000	WT 2 114 0753	W	<b>W</b>	TW	Wī	WT	FW	# 3 5	S C S S S S S S S S S S S S S S S S S S	des to left)		Project Name: Yales AP-2	Purchase Order #:	Copy To:	Report To: Becky Shewer	Section B Required Project Information:
PRINT Name of SAMPLER: KAT C																SAMPLE TEMP  SOF CONTAIN  Unpreserved  H2804  HN03	- Luca nava	ON	Pace Profile d: 1	Pace Project Manag	Pace Quote:	Company Name:	With the second	Section C hyvoice information:
P. (W. CZ DATE Signed:		Two More	35235		1 1			×	×		×	X			7 2	HCI NaOH Na28203 Methanol Other ADELYGE App IV Metals Fluoride RAD 9315/932		Preservatives		per: kevin.heiristy@paoelabs.com,		A COLUMN TO THE REAL PROPERTY OF THE PROPERTY		ř
21-2		/3//hr //3/13	Piles Park																7				Tags.	
Received on toet: (Y/N) Custody Sealedt: Coolett: (Y/N) Samples Intact; (Y/N)			See Land Bark				<i>δ</i> ()		14.573 ors							Reskival Chief	ine (Y/N)		ΑO	36775 TO	Regulatory Agency	Coe3	•	4



SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier
	YGWA-30I	6010D	Lead	<0.005	mg/L	UB
	YGWA-20S	6010D	Antimony	<0.0030	mg/L	UB
	YGWA-21I	6010D	Antimony	<0.0030	mg/L	UB
92521578				No (	Qualifier	s Added
92521568				No (	Qualifier	s Added
92521567				No (	Qualifier	s Added

### Abbreviations:

mg/L = milligrams per liter

### Qualifiers:

UB = not detected due to blank contamine J/UJ = Estimated





February 25, 2021

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

RE: Project: YATES AMA

Pace Project No.: 92521581

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between February 10, 2021 and February 12, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services Asheville
- Pace Analytical Services Charlotte
- Pace Analytical Services Peachtree Corners, GA

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com

Kein Len

1(704)875-9092

**HORIZON** Database Administrator

**Enclosures** 

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





### **CERTIFICATIONS**

Project: YATES AMA
Pace Project No.: 92521581

**Pace Analytical Services Charlotte** 

9800 Kincey Ave. Ste 100, Huntersville, NC 28078 Louisiana/NELAP Certification # LA170028 North Carolina Drinking Water Certification #: 37706 North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

**Pace Analytical Services Asheville** 

2225 Riverside Drive, Asheville, NC 28804 Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

**Pace Analytical Services Peachtree Corners** 

110 Technology Pkwy, Peachtree Corners, GA 30092 Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812 South Carolina Certification #: 99006001 Florida/NELAP Certification #: E87627 Kentucky UST Certification #: 84 Virginia/VELAP Certification #: 460221

North Carolina Wastewater Certification #: 40 South Carolina Certification #: 99030001 Virginia/VELAP Certification #: 460222

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



### **SAMPLE SUMMARY**

Project: YATES AMA
Pace Project No.: 92521581

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521581001	YGWA-5D (020821)	Water	02/08/21 16:45	02/10/21 17:10
92521581002	DUP-01(020821)	Water	02/08/21 00:00	02/10/21 17:10
92521581003	YGWA-5I (020821)	Water	02/08/21 16:20	02/10/21 17:10
92521581004	YGWA-39 (021021)	Water	02/10/21 09:30	02/10/21 17:10
92521581005	YGWA-40 (021021)	Water	02/10/21 10:50	02/10/21 17:10
92521581006	FB-01(021021)	Water	02/10/21 11:05	02/10/21 17:10
92521581007	YGWA-20S (020921)	Water	02/09/21 16:50	02/10/21 17:10
92521581008	YGWA-4I(020921)	Water	02/09/21 09:50	02/10/21 17:10
92521581009	YGWA-17S(020921)	Water	02/09/21 11:15	02/10/21 17:10
92521581010	YGWA-18S(020921)	Water	02/09/21 13:25	02/10/21 17:10
92521581011	YGWA-18I(020921)	Water	02/09/21 14:00	02/10/21 17:10
92521581012	YGWA-21I(020921)	Water	02/09/21 16:10	02/10/21 17:10
92521581013	YGWA-3I(021021)	Water	02/10/21 16:40	02/11/21 13:03
92521581014	YGWA-3D(021021)	Water	02/10/21 17:25	02/11/21 13:03
92521581015	YGWA-30I(021121)	Water	02/11/21 09:50	02/11/21 13:03
92521581016	FB-01(021121)	Water	02/11/21 10:00	02/11/21 13:03
92521581017	EB-01(021121)	Water	02/11/21 12:05	02/11/21 13:03
92521578002	YGWA-14S (021021)	Water	02/10/21 08:50	02/10/21 17:10
92521578010	YGWA-1I (021221)	Water	02/12/21 13:20	02/12/21 17:10
92521578011	YGWA-1D (021221)	Water	02/12/21 11:55	02/12/21 17:10
92521578001	EB-02 (021021)	Water	02/10/21 11:30	02/10/21 17:10
92521578003	DUP-1 (021021)	Water	02/10/21 00:00	02/10/21 17:10
92521583002	YGWA-2I(021021)	Water	02/10/21 12:40	02/10/21 17:10



### **SAMPLE ANALYTE COUNT**

Project: YATES AMA
Pace Project No.: 92521581

Page   Page	Analytes Reported
PA 7470A   VB   PA 800.0 Rev 2.1 1993   CDC	12
92521581002         DUP-01(020821)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581003         YGWA-5I (020821)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581004         YGWA-39 (021021)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581005         YGWA-40 (021021)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581006         FB-01(021021)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581007         YGWA-20S (020921)         EPA 300.0 Rev 2.1 1993         CDC           92521581007         YGWA-4I(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC         CDC           92521581008         YGWA-4I(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC         CDC           92521581009         YGWA-17S(020921)         EPA 6020B         CW1           EPA 470A         VB         EPA 6020B         CW1 <t< td=""><td>1</td></t<>	1
PRA 7470A   VB   PRA 7470A   VB   PRA 7470A   VB   PRA 7470A   VB   PRA 7470A   VB   PRA 7470A   VB   PRA 7470A   VB   PRA 7470A   VB   PRA 6020B   CW1   PRA 7470A   VB   PRA 6020B   CW1   PRA 7470A   VB   PRA 7470A   PRA 747	1
Page   Page	12
92521581003         YGWA-5I (020821)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581004         YGWA-39 (021021)         EPA 6020B         CW1           EPA 7470A         VB         EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC         CDC           92521581005         YGWA-40 (021021)         EPA 6020B         CW1           EPA 7470A         VB         EPA 300.0 Rev 2.1 1993         CDC           92521581006         FB-01(021021)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC         CDC           92521581007         YGWA-20S (020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581008         YGWA-4I(020921)         EPA 300.0 Rev 2.1 1993         CDC           92521581009         YGWA-4I(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC         CDC           92521581009         YGWA-17S(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581010         YGWA-18S(020921)         EPA 6020B         CW1	1
PA 7470A   VB	1
Page   Page	12
92521581004         YGWA-39 (021021)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581005         YGWA-40 (021021)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581006         FB-01(021021)         EPA 300.0 Rev 2.1 1993         CDC           92521581007         YGWA-20S (020921)         EPA 300.0 Rev 2.1 1993         CDC           92521581008         YGWA-4I(020921)         EPA 300.0 Rev 2.1 1993         CDC           92521581008         YGWA-4I(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581009         YGWA-17S(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581010         YGWA-18S(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581010         YGWA-18S(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           92521581010         YGWA-18I(020921)         EPA 6020B         CW1           EPA 300.0 Rev 2.1 1993         CDC           EPA 300.0 Rev 2.1 1993         CDC           EPA 300.0 Rev 2.1 1993         CDC	1
Pack   Pack	1
PA 300.0 Rev 2.1 1993   CDC	12
92521581005 YGWA-40 (021021) EPA 6020B CW1 EPA 7470A VB EPA 300.0 Rev 2.1 1993 CDC  92521581006 FB-01(021021) EPA 6020B CW1 EPA 7470A VB EPA 7470A VB EPA 300.0 Rev 2.1 1993 CDC  92521581007 YGWA-20S (020921) EPA 6020B CW1 EPA 7470A VB EPA 7470A VB EPA 300.0 Rev 2.1 1993 CDC  92521581008 YGWA-4I(020921) EPA 6020B CW1 EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 6020B CW1 EPA 7470A VB EPA 6020B CW1 EPA 7470A VB EPA 6020B CW1 EPA 7470A VB EPA 7470A	1
PA 7470A   VB     PB-01(021021)   EPA 6020B   CW1     PB-01(021021)   EPA 300.0 Rev 2.1 1993   CDC     P2521581006   FB-01(021021)   EPA 6020B   CW1     EPA 300.0 Rev 2.1 1993   CDC     PA 6020B   CW1     EPA 7470A   VB     EPA 300.0 Rev 2.1 1993   CDC     PA 6020B   CW1     EPA 300.0 Rev 2.1 1993   CDC     PA 6020B   CW1     EPA 7470A   VB     EPA 7470A   VB     EPA 300.0 Rev 2.1 1993   CDC     P2521581009   YGWA-17S(020921)   EPA 6020B   CW1     EPA 7470A   VB     EPA 300.0 Rev 2.1 1993   CDC     P2521581010   YGWA-18S(020921)   EPA 6020B   CW1     EPA 7470A   VB     EPA 6020B   CW1     EPA 6020B   CW1     EPA 6020B   CW1     EPA 7470A   VB     EPA 6020B   CW1     EPA 6020B   CW1     EPA 7470A   VB     EPA 300.0 Rev 2.1 1993   CDC     P2521581011   YGWA-18I(020921)   EPA 6020B   CW1     EPA 300.0 Rev 2.1 1993   CDC     P2521581011   YGWA-18I(020921)   EPA 6020B   CW1     EPA 300.0 Rev 2.1 1993   CDC     P2521581011   YGWA-18I(020921)   EPA 6020B   CW1     EPA 300.0 Rev 2.1 1993   CDC     PA 500.0 Rev 2.1	1
PA 300.0 Rev 2.1 1993   CDC     P2521581006   FB-01(021021)   EPA 6020B   CW1     EPA 7470A   VB     EPA 300.0 Rev 2.1 1993   CDC     EPA 300.0 Rev 2.1 1993   CDC     EPA 6020B   CW1     EPA 6020B   CW1     EPA 6020B   CW1     EPA 7470A   VB     EPA 300.0 Rev 2.1 1993   CDC     EPA 300.0 Rev 2.1 1993   CDC     EPA 7470A   VB     EPA 7470A   VB     EPA 7470A   VB     EPA 300.0 Rev 2.1 1993   CDC     P2521581009   YGWA-175(020921)   EPA 6020B   CW1     EPA 7470A   VB     EPA 7470A   VB     EPA 7470A   VB     EPA 300.0 Rev 2.1 1993   CDC     P2521581010   YGWA-18S(020921)   EPA 6020B   CW1     EPA 7470A   VB     EPA 7470A   CDC     P2521581011   YGWA-18I(020921)   EPA 6020B   CW1     EPA 7470A   CDC     EPA	12
92521581006         FB-01(021021)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581007         YGWA-20S (020921)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581008         YGWA-4I(020921)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581009         YGWA-17S(020921)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581010         YGWA-18S(020921)         EPA 6020B         CW1           EPA 7470A         VB           EPA 7470A         VB           EPA 7470A         VB           EPA 6020B         CW1           EPA 7470A         VB           EPA 6020B         CW1 <t< td=""><td>1</td></t<>	1
EPA 7470A   VB	1
### Page 1925   Page 2025   Pa	12
92521581007       YGWA-20S (020921)       EPA 6020B       CW1         EPA 7470A       VB         EPA 300.0 Rev 2.1 1993       CDC         92521581008       YGWA-4I(020921)       EPA 6020B       CW1         EPA 7470A       VB         EPA 300.0 Rev 2.1 1993       CDC         92521581009       YGWA-17S(020921)       EPA 6020B       CW1         EPA 300.0 Rev 2.1 1993       CDC         92521581010       YGWA-18S(020921)       EPA 6020B       CW1         EPA 7470A       VB         EPA 300.0 Rev 2.1 1993       CDC         92521581011       YGWA-18I(020921)       EPA 6020B       CW1	1
EPA 7470A   VB	1
P2521581008 YGWA-4I(020921) EPA 300.0 Rev 2.1 1993 CDC EPA 6020B CW1 EPA 7470A VB EPA 300.0 Rev 2.1 1993 CDC  P2521581009 YGWA-17S(020921) EPA 6020B CW1 EPA 7470A VB EPA 7470A VB EPA 300.0 Rev 2.1 1993 CDC  P2521581010 YGWA-18S(020921) EPA 6020B CW1 EPA 7470A VB EPA 6020B CW1 EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A CDC  P2521581011 YGWA-18I(020921) EPA 6020B CW1	12
92521581008       YGWA-4I(020921)       EPA 6020B       CW1         EPA 7470A       VB         EPA 300.0 Rev 2.1 1993       CDC         92521581009       YGWA-17S(020921)       EPA 6020B       CW1         EPA 7470A       VB         EPA 300.0 Rev 2.1 1993       CDC         92521581010       YGWA-18S(020921)       EPA 6020B       CW1         EPA 7470A       VB         EPA 7470A       VB         EPA 300.0 Rev 2.1 1993       CDC         92521581011       YGWA-18I(020921)       EPA 6020B       CW1	1
EPA 7470A   VB	1
P2521581009 YGWA-17S(020921) EPA 300.0 Rev 2.1 1993 CDC EPA 6020B CW1 EPA 7470A VB EPA 300.0 Rev 2.1 1993 CDC  P2521581010 YGWA-18S(020921) EPA 6020B CW1 EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 7470A VB EPA 300.0 Rev 2.1 1993 CDC  P2521581011 YGWA-18I(020921) EPA 6020B CW1	12
92521581009         YGWA-17S(020921)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581010         YGWA-18S(020921)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581011         YGWA-18I(020921)         EPA 6020B         CW1	1
EPA 7470A VB	1
P2521581010 YGWA-18S(020921) EPA 300.0 Rev 2.1 1993 CDC  EPA 6020B CW1  EPA 7470A VB  EPA 300.0 Rev 2.1 1993 CDC  P2521581011 YGWA-18I(020921) EPA 6020B CW1	12
92521581010         YGWA-18S(020921)         EPA 6020B         CW1           EPA 7470A         VB           EPA 300.0 Rev 2.1 1993         CDC           92521581011         YGWA-18I(020921)         EPA 6020B         CW1	1
EPA 7470A VB EPA 300.0 Rev 2.1 1993 CDC 92521581011 YGWA-18I(020921) EPA 6020B CW1	1
EPA 300.0 Rev 2.1 1993 CDC  92521581011 YGWA-18I(020921) EPA 6020B CW1	12
<b>92521581011 YGWA-18I(020921)</b> EPA 6020B CW1	1
	1
EPA 7470A VB	12
	1
EPA 300.0 Rev 2.1 1993 CDC	1
<b>92521581012 YGWA-21I(020921)</b> EPA 6020B CW1	12
EPA 7470A VB	1
EPA 300.0 Rev 2.1 1993 CDC	1
<b>92521581013 YGWA-3I(021021)</b> EPA 6020B CW1	12

### **REPORT OF LABORATORY ANALYSIS**



### **SAMPLE ANALYTE COUNT**

Project: YATES AMA
Pace Project No.: 92521581

Lab ID	Sample ID	Method	Analysts	Analytes Reported	
		EPA 7470A		1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521581014	YGWA-3D(021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521581015	YGWA-30I(021121)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521581016	FB-01(021121)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521581017	EB-01(021121)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578002	YGWA-14S (021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578010	YGWA-1I (021221)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	JLH	1	
92521578011	YGWA-1D (021221)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	JLH	1	
92521578001	EB-02 (021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578003	DUP-1 (021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521583002	YGWA-2I(021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	

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

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



Project: YATES AMA
Pace Project No.: 92521581

Lab Sample ID	Client Sample ID	<b>D</b> "		5		0 ""
Method ————————————————————————————————————	Parameters —	Result	Units	Report Limit	Analyzed	Qualifiers
2521581001	YGWA-5D (020821)					
EPA 6020B	Barium	0.0079J	mg/L	0.010	02/17/21 19:42	
EPA 6020B	Lead	0.00013J	mg/L	0.0050	02/17/21 19:42	
EPA 6020B	Lithium	0.0063J	mg/L	0.030		
EPA 6020B	Molybdenum	0.0011J	mg/L		02/17/21 19:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.055J	mg/L	0.10	02/13/21 00:35	
2521581002	DUP-01(020821)					
EPA 6020B	Barium	0.020	mg/L		02/17/21 19:47	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	02/17/21 19:47	
2521581003	YGWA-5I (020821)					
	Performed by	CUSTOME			02/23/21 08:11	
	рН	R 5.67	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.020	mg/L	0.010	02/17/21 19:53	
EPA 6020B	Lead	0.000037J	mg/L	0.0050	02/17/21 19:53	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/17/21 19:53	
2521581004	YGWA-39 (021021)					
	Performed by	CUSTOME			02/23/21 08:11	
	рН	R 5.80	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.027	mg/L	0.010	02/17/21 19:59	
EPA 6020B	Beryllium	0.000051J	mg/L	0.0030	02/17/21 19:59	
EPA 6020B	Cadmium	0.00019J	mg/L	0.0025	02/17/21 19:59	
EPA 6020B	Cobalt	0.00098J	mg/L	0.0050	02/17/21 19:59	
EPA 6020B	Lithium	0.0071J	mg/L	0.030	02/17/21 19:59	
EPA 6020B	Molybdenum	0.0013J	mg/L	0.010	02/17/21 19:59	
2521581005	YGWA-40 (021021)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	5.19	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.032	mg/L	0.010	02/17/21 20:05	
EPA 6020B	Beryllium	0.00021J	mg/L	0.0030	02/17/21 20:05	
2521581006	FB-01(021021)					
EPA 6020B	Antimony	0.00052J	mg/L	0.0030	02/17/21 20:39	В
2521581007	YGWA-20S (020921)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	5.86	Std. Units		02/23/21 08:11	
EPA 6020B	Antimony	0.00032J	mg/L	0.0030	02/17/21 20:45	В
EPA 6020B	Barium	0.015	mg/L	0.010	02/17/21 20:45	
EPA 6020B	Beryllium	0.000068J	mg/L	0.0030	02/17/21 20:45	
EPA 6020B	Chromium	0.00056J	mg/L	0.010	02/17/21 20:45	
EPA 6020B	Lead	0.000063J	mg/L	0.0050	02/17/21 20:45	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES AMA
Pace Project No.: 92521581

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2521581008	YGWA-4I(020921)					
	Performed by	CUSTOME			02/23/21 08:11	
	рН	R 6.06	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.013	mg/L	0.010	02/17/21 20:50	
EPA 6020B	Lithium	0.011J	mg/L	0.030	02/17/21 20:50	
2521581009	YGWA-17S(020921)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	5.62	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.016	mg/L	0.010	02/17/21 20:56	
EPA 6020B	Beryllium	0.000094J	mg/L	0.0030	02/17/21 20:56	
EPA 6020B	Chromium	0.00098J	mg/L	0.010	02/17/21 20:56	
2521581010	YGWA-18S(020921)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	5.43	Std. Units		02/23/21 08:11	
PA 6020B	Barium	0.017	mg/L	0.010	02/17/21 21:02	
PA 6020B	Beryllium	0.000098J	mg/L	0.0030	02/17/21 21:02	
PA 6020B	Chromium	0.0013J	mg/L	0.010	02/17/21 21:02	
PA 6020B	Lead	0.000094J	mg/L	0.0050	02/17/21 21:02	
PA 6020B	Lithium	0.0019J	mg/L	0.030	02/17/21 21:02	
2521581011	YGWA-18I(020921)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	6.12	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.023	mg/L	0.010		
PA 6020B	Chromium	0.00083J	mg/L	0.010		
PA 6020B	Lead	0.000050J	mg/L	0.0050	02/17/21 21:07	
PA 6020B	Lithium	0.0031J	mg/L	0.030		
2521581012	YGWA-21I(020921)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	6.95	Std. Units		02/23/21 08:11	
PA 6020B	Antimony	0.0013J	mg/L	0.0030	02/17/21 21:13	В
PA 6020B	Arsenic	0.0010J	mg/L	0.0050	02/17/21 21:13	
PA 6020B	Barium	0.011	mg/L	0.010	02/17/21 21:13	
PA 6020B	Cadmium	0.00041J	mg/L	0.0025	02/17/21 21:13	
PA 6020B	Cobalt	0.0090	mg/L	0.0050	02/17/21 21:13	
PA 6020B	Lithium	0.0060J	mg/L	0.030	02/17/21 21:13	
PA 300.0 Rev 2.1 1993	Fluoride	0.092J	mg/L	0.10	02/12/21 16:12	
2521581013	YGWA-3I(021021)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	7.58	Std. Units		02/23/21 08:11	
PA 6020B	Arsenic	0.00078J	mg/L	0.0050	02/17/21 21:19	
EPA 6020B	Barium	0.0029J	mg/L		02/17/21 21:19	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES AMA
Pace Project No.: 92521581

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2521581013	YGWA-3I(021021)					
EPA 6020B	Lithium	0.015J	mg/L	0.030	02/17/21 21:19	
EPA 6020B	Molybdenum	0.0038J	mg/L	0.010	02/17/21 21:19	
2521581014	YGWA-3D(021021)					
	Performed by	CUSTOME			02/23/21 08:11	
	рН	R 7.81	Std. Units		02/23/21 08:11	
EPA 6020B	Arsenic	0.00094J	mg/L	0.0050	02/17/21 21:25	
EPA 6020B	Barium	0.0059J	mg/L	0.010		
EPA 6020B	Lithium	0.00393 0.023J	mg/L	0.030	02/17/21 21:25	
EPA 6020B	Molybdenum	0.014	mg/L	0.010	02/17/21 21:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.43	mg/L		02/17/21 21:23	
2521581015	YGWA-30I(021121)		3			
	Performed by	CUSTOME			02/23/21 08:11	
		R	0.1.7.		00/00/04 55 14	
	pH	5.73	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.0077J	mg/L	0.010		
EPA 6020B	Beryllium	0.000047J	mg/L	0.0030		
EPA 6020B	Cobalt	0.0078	mg/L	0.0050	02/17/21 21:30	
EPA 6020B	Lead	0.000046J	mg/L	0.0050		
EPA 6020B	Lithium	0.0012J	mg/L	0.030	02/17/21 21:30	
2521581016	FB-01(021121)					
EPA 6020B	Lead	0.00013J	mg/L	0.0050	02/17/21 21:53	
2521578002	YGWA-14S (021021)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	5.35	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.0078J	mg/L	0.010	02/23/21 20:47	
EPA 6020B	Beryllium	0.00019J	mg/L	0.0030	02/23/21 20:47	
EPA 6020B	Lead	0.000048J	mg/L	0.0050	02/23/21 20:47	
2521578010	YGWA-1I (021221)					
	Performed by	CUSTOME			02/23/21 08:11	
	рН	R 6.21	Std. Units		02/23/21 08:11	
EPA 6020B	рп Barium	0.0090J		0.010	02/23/21 08.11	
			mg/L			
EPA 6020B	Cobalt	0.0028J	mg/L		02/23/21 22:01	
EPA 6020B EPA 6020B	Lead	0.00038J	mg/L	0.0050		
	Lithium	0.0025J	mg/L		02/23/21 22:01	
EPA 6020B	Molybdenum	0.0056J	mg/L	0.010	02/23/21 22:01	
2521578011	YGWA-1D (021221)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рH	7.14	Std. Units		02/23/21 08:11	
PA 6020B	Barium	0.0057J	mg/L	0.010		
EPA 6020B	Cobalt	0.00086J	mg/L	0.0050	02/23/21 22:07	
		0.000044J	mg/L		02/23/21 22:07	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES AMA
Pace Project No.: 92521581

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521578011	YGWA-1D (021221)					
EPA 6020B	Lithium	0.010J	mg/L	0.030	02/23/21 22:07	
EPA 6020B	Molybdenum	0.0080J	mg/L	0.010	02/23/21 22:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.068J	mg/L	0.10	02/16/21 19:01	
92521578003	DUP-1 (021021)					
EPA 6020B	Barium	0.0078J	mg/L	0.010	02/23/21 20:52	
EPA 6020B	Beryllium	0.00019J	mg/L	0.0030	02/23/21 20:52	
92521583002	YGWA-2I(021021)					
	Performed by	CUSTOME R			02/23/21 08:11	
	pН	7.29	Std. Units		02/23/21 08:11	
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	02/19/21 19:27	
EPA 6020B	Barium	0.0032J	mg/L	0.010	02/19/21 19:27	
EPA 6020B	Lead	0.00015J	mg/L	0.0050	02/19/21 19:27	
EPA 6020B	Lithium	0.0039J	mg/L	0.030	02/19/21 19:27	
EPA 6020B	Molybdenum	0.0041J	mg/L	0.010	02/19/21 19:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.094J	mg/L	0.10	02/12/21 16:44	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-5D (020821)	Lab ID:	92521581001	Collecte	ed: 02/08/2	1 16:45	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, 0	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 19:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 19:42	7440-38-2	
Barium	0.0079J	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 19:42	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 19:42	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 19:42	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 19:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 19:42	7440-48-4	
Lead	0.00013J	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 19:42	7439-92-1	
Lithium	0.0063J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 19:42	7439-93-2	
Molybdenum	0.0011J	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 19:42	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 19:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 19:42	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
•	Pace Anal	ytical Services	- Peachtre	ee Corners, 0	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:29	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	Pace Anal	ytical Services	- Asheville	•					
Fluoride	0.055J	mg/L	0.10	0.050	1		02/13/21 00:35	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: DUP-01(020821)	Lab ID:	92521581002	Collecte	ed: 02/08/2	00:00	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, 0	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 19:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 19:47	7440-38-2	
Barium	0.020	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 19:47	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 19:47	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 19:47	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 19:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 19:47	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 19:47	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 19:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 19:47	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 19:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 19:47	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	'470A Pre	paration Met	hod: EF	PA 7470A			
•	Pace Anal	ytical Services	- Peachtre	e Corners, 0	SA.				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:31	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
.,	•	ytical Services							
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 00:50	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Field Data  Analytical Method: Pace Analytical Services - Charlotte  Performed by  CUSTOME R S.667 Std. Units 1 02/23/21 08:11  5020 MET ICPMS  Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA  Antimony  ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 19:53 7440-36-0 Antimony  ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium  0.020 mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium  ND mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Beryllium  ND mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Cadmium  ND mg/L 0.0050 0.00071 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium  ND mg/L 0.0055 0.00012 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-3 Cobalt  ND mg/L 0.0000036 1 02/17/21 12:10 02/17/21 19:53 7439-93-2 Cobalt  ND mg/L 0.0010 0.00068 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Cobelenium  ND mg/L 0.0010 0.0014 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Cobelenium  ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Cobelenium  ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7440-28-0  TA70 Mercury  Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury  ND mg/L 0.00050 0.00078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6	Sample: YGWA-5I (020821)	Lab ID:	92521581003	Collecte	ed: 02/08/21	16:20	Received: 02/	10/21 17:10 Ma	atrix: Water	
Field Data  Analytical Method: Pace Analytical Services - Charlotte  Performed by  CUSTOME R S.67 Std. Units 1 02/23/21 08:11  6020 MET ICPMS  Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA  Antimony ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 19:53 7440-36-0 Antimony Arsenic ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium 0.020 mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium ND mg/L 0.0030 0.00046 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Beryllium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0050 0.00055 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Charlotine ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium 0.0032J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Lithium 0.0032J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7449-99-2 Chromium ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7499-92-1 Lithium 0.0032J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0014 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0014 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.00008 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg				Report						
Performed by CUSTOME R Sold MET ICPMS  Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA  Antimony ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 19:53 7440-36-0 Artsenic ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium 0.020 mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium ND mg/L 0.0030 0.00008 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium ND mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium ND mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Cadmium ND mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7440-48-4 Lead 0.000037J mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7440-48-4 Lead 0.000037J mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7439-93-2 Lithium 0.0032J mg/L 0.030 0.000081 1 02/17/21 12:10 02/17/21 19:53 7439-93-2 Molybdenum ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Ballium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 7440-28-0  7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury ND mg/L 0.0050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
Performed by CUSTOME R 5.67 Std. Units 1 02/23/21 08:11  DH 5.67 Std. Units 1 02/23/21 08:11  DEBUT 1CPMS  Analytical Method: EPA 6020B Preparation Method: EPA 3005A  Pace Analytical Services - Peachtree Corners, GA  Antimony ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 19:53 7440-36-0  Antimony ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 19:53 7440-38-2  Barium 0.020 mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 19:53 7440-39-3  Beryllium ND mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-41-7  Cadmium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 19:53 7440-41-7  Cadmium ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-47-3  Cobalt ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-48-4  Lead 0.000037J mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7439-92-1  Lithium 0.0032J mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7439-92-1  Molybdenum ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-93-2  Molybdenum ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-93-2  Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 7439-93-2  Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 7440-28-0  TA70 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A  Pace Analytical Services - Peachtree Corners, GA  Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.01 C Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993  Pace Analytical Services - Asheville	Field Data	Analytical	Method:							
Second   S		Pace Ana	lytical Services	- Charlotte	)					
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA  Antimony Antimony Antimony Ansenic ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 19:53 7440-36-0 Antimony Arsenic ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium 0.020 mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 19:53 7440-39-3 Beryllium ND mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-41-7 Cadmium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0050 0.00035 1 02/17/21 12:10 02/17/21 19:53 7440-47-3 Cobalt ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-48-4 Lead 0.00037J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7439-92-1 Lithium 0.0032J mg/L 0.0050 0.00036 1 02/17/21 12:10 02/17/21 19:53 7439-93-2 Molydenum ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Fhallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 782-49-2 Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 7440-28-0  Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville	Performed by					1		02/23/21 08:11		
Pace Analytical Services - Peachtree Corners, GA  Antimony  ND mg/L  0.0030  0.00028  1 02/17/21 12:10  02/17/21 19:53  7440-36-0  Antimony  ND mg/L  0.0050  0.00078  1 02/17/21 12:10  02/17/21 19:53  7440-38-2  Barium  0.020 mg/L  0.0030  0.00071  1 02/17/21 12:10  02/17/21 19:53  7440-38-2  Baryllium  ND mg/L  0.0030  0.000046  1 02/17/21 12:10  02/17/21 19:53  7440-43-3  Baryllium  ND mg/L  0.0025  0.00012  0.00051  0.00051  0.0017/21 12:10  02/17/21 19:53  7440-44-7  Cadmium  ND mg/L  0.0025  0.00012  0.00055  0.00012  0.0017/21 12:10  02/17/21 19:53  7440-43-9  Chromium  ND mg/L  0.0050  0.00055  0.00038  1 02/17/21 12:10  02/17/21 19:53  7440-47-3  Cobalt  ND mg/L  0.0050  0.00038  1 02/17/21 12:10  02/17/21 19:53  7440-48-4  Lead  0.00037J mg/L  0.0050  0.00036  1 02/17/21 12:10  02/17/21 19:53  7440-48-4  Lead  0.00032J mg/L  0.0050  0.00036  1 02/17/21 12:10  02/17/21 19:53  7439-92-1  Lithium  0.0032J mg/L  0.030  0.00081  0.0017/21 12:10  02/17/21 12:10  02/17/21 19:53  7439-93-2  Molybdenum  ND mg/L  0.010  0.00069  1 02/17/21 12:10  02/17/21 19:53  7439-98-7  Selenium  ND mg/L  0.010  0.0016  1 02/17/21 12:10  02/17/21 19:53  7439-98-7  Selenium  ND mg/L  0.0010  0.0016  0.0017/21 12:10  02/17/21 19:53  7440-28-0  7470 Mercury  Analytical Method: EPA 7470A Preparation Method: EPA 7470A  Pace Analytical Services - Peachtree Corners, GA  Mercury  Analytical Method: EPA 300.0 Rev 2.1 1993  Pace Analytical Services - Asheville	рН	5.67	Std. Units			1		02/23/21 08:11		
Antimony Ant	6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	nod: EF	PA 3005A			
Arsenic ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium 0.020 mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 19:53 7440-39-3 Beryllium ND mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-41-7 Cadmium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0055 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0055 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7440-48-4 Lead 0.00037J mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7439-92-1 Lithium 0.0032J mg/L 0.030 0.00081 1 02/17/21 12:10 02/17/21 19:53 7439-92-1 Lithium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-93-2 Molybdenum ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 7440-28-0  7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville		Pace Ana	lytical Services	- Peachtre	ee Corners, G	iΑ				
Arsenic ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 19:53 7440-38-2 Barium 0.020 mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 19:53 7440-39-3 Beryllium ND mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-41-7 Cadmium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0055 0.00015 1 02/17/21 12:10 02/17/21 19:53 7440-43-9 Chromium ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-48-4 Lead 0.00037J mg/L 0.0050 0.00036 1 02/17/21 12:10 02/17/21 19:53 7440-48-4 Lead 0.00037J mg/L 0.0050 0.00036 1 02/17/21 12:10 02/17/21 19:53 7439-92-1 Lithium 0.0032J mg/L 0.030 0.00081 1 02/17/21 12:10 02/17/21 19:53 7439-93-2 Molybdenum ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.0010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 7440-28-0  7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 19:53	7440-36-0	
Beryllium  ND mg/L  0.0030 0.000046 1 02/17/21 12:10 02/17/21 19:53 7440-41-7  Cadmium  ND mg/L  0.0025 0.00012 1 02/17/21 12:10 02/17/21 19:53 7440-43-9  Chromium  ND mg/L  0.010 0.00055 1 02/17/21 12:10 02/17/21 19:53 7440-47-3  Cobalt  ND mg/L  0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-48-4  Lead  0.000037J  mg/L  0.0050 0.00038 1 02/17/21 12:10 02/17/21 19:53 7440-48-4  Lead  0.000037J  mg/L  0.0050 0.000036 1 02/17/21 12:10 02/17/21 19:53 7439-92-1  Lithium  0.0032J  mg/L  0.030 0.00081 1 02/17/21 12:10 02/17/21 19:53 7439-93-2  Molybdenum  ND mg/L  0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7  Selenium  ND mg/L  0.010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7782-49-2  Thallium  ND mg/L  0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 77440-28-0  77470 Mercury  Analytical Method: EPA 7470A Preparation Method: EPA 7470A  Pace Analytical Services - Peachtree Corners, GA  Mercury  ND mg/L  0.00050 0.00078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993  Pace Analytical Services - Asheville	Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 19:53	7440-38-2	
ND mg/L	Barium	0.020	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 19:53	7440-39-3	
ND mg/L   0.010   0.00055   1   02/17/21   12:10   02/17/21   19:53   7440-47-3	Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 19:53	7440-41-7	
ND mg/L   0.010   0.00055   1   02/17/21   12:10   02/17/21   19:53   7440-47-3	Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 19:53	7440-43-9	
Description	Chromium	ND		0.010	0.00055	1	02/17/21 12:10	02/17/21 19:53	7440-47-3	
Lithium 0.0032J mg/L 0.030 0.00081 1 02/17/21 12:10 02/17/21 19:53 7439-93-2 Molybdenum ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7782-49-2 Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 77440-28-0 Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6 Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 19:53	7440-48-4	
Molybdenum ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 19:53 7439-98-7 Selenium ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7782-49-2 Thallium ND mg/L 0.0010 0.0014 1 02/17/21 12:10 02/17/21 19:53 7440-28-0  7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Lead	0.000037J	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 19:53	7439-92-1	
Selenium         ND mg/L         0.010 0.0016 1 02/17/21 12:10 02/17/21 19:53 7782-49-2           Thallium         ND mg/L         0.0010 0.0014 1 02/17/21 12:10 02/17/21 19:53 7440-28-0           7470 Mercury         Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA           Mercury         ND mg/L         0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6           300.0 IC Anions 28 Days         Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Lithium	0.0032J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 19:53	7439-93-2	
Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 19:53 7440-28-0  7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 19:53	7439-98-7	
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury  ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 19:53	7782-49-2	
Pace Analytical Services - Peachtree Corners, GA  Mercury  ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993  Pace Analytical Services - Asheville	Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 19:53	7440-28-0	
Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 11:34 7439-97-6  300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	7470 Mercury	Analytical	Method: EPA 7	7470A Pre	paration Metl	nod: EF	PA 7470A			
300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993  Pace Analytical Services - Asheville		Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Pace Analytical Services - Asheville	Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:34	7439-97-6	
· · · · · · · · · · · · · · · · · · ·	300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
Fluoride ND mg/L 0.10 0.050 1 02/13/21 01:04 16984-48-8	- -	Pace Ana	lytical Services	- Asheville	•					
	Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 01:04	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-39 (021021)	Lab ID:	92521581004	Collecte	ed: 02/10/21	09:30	Received: 02/	/10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	5.80	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	nod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 19:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 19:59	7440-38-2	
Barium	0.027	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 19:59	7440-39-3	
Beryllium	0.000051J	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 19:59	7440-41-7	
Cadmium	0.00019J	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 19:59	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 19:59	7440-47-3	
Cobalt	0.00098J	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 19:59	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 19:59	7439-92-1	
Lithium	0.0071J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 19:59	7439-93-2	
Molybdenum	0.0013J	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 19:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 19:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 19:59	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:36	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev	2.1 1993					
	Pace Ana	lytical Services	- Asheville	:					
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 01:19	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-40 (021021)	Lab ID:	92521581005	Collecte	ed: 02/10/21	10:50	Received: 02/	/10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	s - Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	5.19	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Ana	lytical Services	s - Peachtre	e Corners, C	SA.				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:05	7440-38-2	
Barium	0.032	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:05	7440-39-3	
Beryllium	0.00021J	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:05	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:05	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:05	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:05	7440-48-4	
_ead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:05	7439-92-1	
_ithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:05	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:05	7782-49-2	
Γhallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:05	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Prep	paration Met	hod: EF	PA 7470A			
	Pace Ana	lytical Services	s - Peachtre	e Corners, G	SA .				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:38	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	s - Asheville	:					
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 01:33	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: FB-01(021021)	Lab ID:	92521581006	Collecte	ed: 02/10/21	11:05	Received: 02/	10/21 17:10 Ma	atrix: Water	•
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Antimony	0.00052J	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:39	7440-36-0	В
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:39	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:39	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:39	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:39	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:39	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:39	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:39	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:39	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	hod: EF	PA 7470A			
	Pace Analy	ytical Services	- Peachtre	e Corners, G	SA.				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:53	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	•	ytical Services							
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 02:16	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-20S (020921)	Lab ID:	92521581007	Collecte	ed: 02/09/21	16:50	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL_	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME				1		02/23/21 08:11		
-11	R	Otal Haita					00/00/04 00:44		
pH	5.86	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: El	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	βA				
Antimony	0.00032J	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:45	7440-36-0	В
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:45	7440-38-2	
Barium	0.015	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:45	7440-39-3	
Beryllium	0.000068J	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:45	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:45	7440-43-9	
Chromium	0.00056J	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:45	7440-48-4	
Lead	0.000063J	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:45	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:45	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:45	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Pre	paration Met	hod: El	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:55	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	Pace Ana	lytical Services	- Asheville	:					
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 02:31	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-4I(020921)	Lab ID:	92521581008	Collecte	ed: 02/09/21	09:50	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	9					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	6.06	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	nod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, G	iΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:50	7440-38-2	
Barium	0.013	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:50	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:50	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:50	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:50	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:50	7439-92-1	
Lithium	0.011J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:50	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:50	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, G	iΑ				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:57	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev	2.1 1993					
-	Pace Ana	lytical Services	- Asheville	)					
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 02:45	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-17S(020921)	Lab ID:	92521581009	Collecte	ed: 02/09/21	11:15	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	:					
Performed by	CUSTOME				1		02/23/21 08:11		
рΗ	R 5.62	Std. Units			1		02/23/21 08:11		
51 1	3.02	Std. Offits			'		02/23/21 00.11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Prep	paration Met	nod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, G	iΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:56	7440-38-2	
Barium	0.016	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:56	7440-39-3	
Beryllium	0.000094J	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:56	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:56	7440-43-9	
Chromium	0.00098J	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:56	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:56	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:56	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:56	7782-49-2	
Γhallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:56	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Prep	paration Met	nod: EF	PA 7470A			
-	Pace Anal	ytical Services	- Peachtre	e Corners, G	iΑ				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:00	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev 2	2.1 1993					
•	Pace Anal	ytical Services	- Asheville						
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 03:29	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-18S(020921)	Lab ID:	92521581010	Collecte	ed: 02/09/2°	13:25	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	llytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	5.43	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Ana	llytical Services	- Peachtre	e Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:02	7440-38-2	
Barium	0.017	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:02	7440-39-3	
Beryllium	0.000098J	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:02	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:02	7440-43-9	
Chromium	0.0013J	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:02	7440-48-4	
Lead	0.000094J	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:02	7439-92-1	
Lithium	0.0019J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:02	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:02	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	'470A Pre	paration Met	hod: EF	PA 7470A			
	Pace Ana	llytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:02	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	- Asheville	<b>:</b>					
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 03:43	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-18I(020921)	Lab ID:	9252158101	Collecte	ed: 02/09/21	14:00	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Service	s - Charlotte						
Performed by	CUSTOME R				1		02/23/21 08:11		
PΗ	6.12	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA	6020B Prep	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Service	s - Peachtre	e Corners, G	SA.				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:07	7440-38-2	
Barium	0.023	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:07	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:07	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:07	7440-43-9	
Chromium	0.00083J	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:07	7440-48-4	
_ead	0.000050J	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:07	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:07	7439-93-2	
Nolybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:07	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:07	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Prep	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Service	s - Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:05	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
-	Pace Ana	lytical Service	s - Asheville						
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 15:56	16984-48-8	
		-							



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-21I(020921)	Lab ID:	92521581012	Collecte	ed: 02/09/21	16:10	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	6.95	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Antimony	0.0013J	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:13	7440-36-0	В
Arsenic	0.0010J	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:13	7440-38-2	
Barium	0.011	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:13	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:13	7440-41-7	
Cadmium	0.00041J	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:13	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:13	7440-47-3	
Cobalt	0.0090	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:13	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:13	7439-92-1	
Lithium	0.0060J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:13	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:13	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	'470A Pre	paration Met	hod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	<b>S</b> A				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:07	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	Pace Ana	lytical Services	- Asheville	:					
Fluoride	0.092J	mg/L	0.10	0.050	1		02/12/21 16:12	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-3I(021021)	Lab ID:	92521581013	Collecte	ed: 02/10/21	16:40	Received: 02/	/11/21 13:03 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	7.58	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, G	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:19	7440-36-0	
Arsenic	0.00078J	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:19	7440-38-2	
Barium	0.0029J	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:19	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:19	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:19	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:19	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:19	7439-92-1	
Lithium	0.015J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:19	7439-93-2	
Molybdenum	0.0038J	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:19	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:19	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	'470A Pre	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, C	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:09	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev	2.1 1993					
	Pace Ana	lytical Services	- Asheville	)					
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 19:55	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-3D(021021)	Lab ID:	9252158101	4 Collecte	ed: 02/10/21	17:25	Received: 02/	/11/21 13:03 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Service	s - Charlotte	;					
Performed by	CUSTOME R				1		02/23/21 08:11		
Н	7.81	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Ana	lytical Service	s - Peachtre	e Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:25	7440-36-0	
Arsenic	0.00094J	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:25	7440-38-2	
Barium	0.0059J	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:25	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:25	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:25	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:25	7440-48-4	
₋ead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:25	7439-92-1	
_ithium	0.023J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:25	7439-93-2	
Nolybdenum	0.014	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:25	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:25	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
	Pace Ana	lytical Service	s - Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:12	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Service	s - Asheville						
Fluoride	0.43	mg/L	0.10	0.050	1		02/12/21 20:11	16984-48-8	
		-							



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Analytical Method: Pace Analytical Services - Charlotte  Performed by  CUSTOME R 5.73 Std. Units 1 02/23/21 08:11  Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA  Antimony ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 21:30 7440-36-0 Antimony Ansenic ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 21:30 7440-38-2 Barium 0.00077J mg/L 0.0010 0.00071 1 02/17/21 12:10 02/17/21 21:30 7440-39-3 Beryllium 0.00047J mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 21:30 7440-41-7 Dadmium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Chromium ND mg/L 0.0010 0.00055 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Chromium ND mg/L 0.010 0.00055 1 02/17/21 12:10 02/17/21 21:30 7440-47-3 Dabalt 0.00078 mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Lead 0.000046J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Lead 0.000046J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Lead 0.000046J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7449-93-2 Lithium 0.0012J mg/L 0.0050 0.00036 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Lithium 0.0012J mg/L 0.005 0.00036 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Molybdenum ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Molybdenum ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Molybdenum ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Molybdenum ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Molybdenum ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Molydenum ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Molybdenum ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Molybdenum ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7440-28-0 Molybdenum ND mg/L 0.0006 0.00078 1 02/17/21 15:30 02/18/21 12:14 7439-97-6 Molybdenum ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 12:14 7439-97-6 Molybdenum ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 12:14 7439-9	Sample: YGWA-30I(021121)	Lab ID:	92521581015	Collecte	ed: 02/11/21	09:50	Received: 02/	11/21 13:03 Ma	atrix: Water	
Analytical Method: Pace Analytical Services - Charlotte  Performed by  CUSTOME R 5.73 Std. Units 1 02/23/21 08:11  Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA  Antimony ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 21:30 7440-36-0 Antimony ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 21:30 7440-38-2 Barium 0.00077J mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 21:30 7440-38-3 Barium 0.000047J mg/L 0.0025 0.000074 1 02/17/21 12:10 02/17/21 21:30 7440-43-3 Barium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 21:30 7440-43-3 Barium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 21:30 7440-43-3 Barium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 21:30 7440-43-3 Barium ND mg/L 0.00055 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-43-3 Chromium ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-47-3 Barium 0.000046J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Bead 0.000046J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Bead 0.000046J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Bead 0.000046J mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7449-97-8 Belenium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Belenium ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-93-7 Belenium ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7440-28-0  Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville				Report						
Pace Analytical Services - Charlotte  Performed by  CUSTOME R  Sold Units  1 02/23/21 08:11  D02/23/21 10 D02/23/21 08:11  D02/23/21 08:11  D02/23/21 08:11  D02/21/21 12:10 D02/23/21 08:11  D02/23/21 12:10 D02/21/21 12:00 D0	Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
Performed by CUSTOME R 5.73 Std. Units 1 02/23/21 08:11  Page Analytical Method: EPA 6020B Preparation Method: EPA 3005A  Pace Analytical Services - Peachtree Corners, GA  Antimony ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 21:30 7440-36-0 ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 21:30 7440-38-2 Oxarium 0.0077J mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 21:30 7440-38-2 Oxarium 0.00047J mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Oxarium ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Oxarium ND mg/L 0.0025 0.00015 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Oxarium ND mg/L 0.0050 0.000036 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Oxarium ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Oxarium ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Oxarium ND mg/L 0.0050 0.00036 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Oxarium ND mg/L 0.0050 0.00036 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00069 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.010 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.000 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.000 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.000 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.000 0.00014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.0000 0.000014 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Oxarium ND mg/L 0.00000000000000000000000000000000000	Field Data	Analytical	Method:							
State		Pace Ana	lytical Services	- Charlotte	)					
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA Antimony  ND mg/L 0.0030 0.00028 1 02/17/21 12:10 02/17/21 21:30 7440-36-0 Antimony Ansenic  ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 21:30 7440-38-2 Barium  0.0007J mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 21:30 7440-38-2 Barium  0.0004J mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-41-7 Bardmium  ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 21:30 7440-41-7 Bardmium  ND mg/L 0.0025 0.00012 1 02/17/21 12:10 02/17/21 21:30 7440-41-7 Bardmium  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 Chromium  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Bardmium  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Bardmium  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Bardmium  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Bardmium  ND mg/L 0.0050 0.00038 1 02/17/21 12:10 02/17/21 21:30 7439-92-1 Bardmium  ND mg/L 0.0010 0.00069 1 02/17/21 12:10 02/17/21 21:30 7439-93-2 Bardmium  ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.0010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.0010 0.00018 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.0010 0.00018 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.0010 0.00018 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.0010 0.00018 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.0010 0.00018 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.00008 0.000078 1 02/17/21 12:10 02/17/21 21:30 7439-98-7 Balenium  ND mg/L 0.00008 0.000078 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 Balendmium  ND mg/L 0.00008 0.00008 1 02/17/21 12:10	Performed by					1		02/23/21 08:11		
Pace Analytical Services - Peachtree Corners, GA  Antimony  ND mg/L  0.0030  0.00028  1 02/17/21 12:10  02/17/21 21:30  7440-36-0  0.0077J  0.0077J  0.0077J  0.0010  0.00071  0.00071  0.000047J  0.000047J  0.0030  0.000046  0.0017/21 12:10  02/17/21 12:10  02/17/21 21:30  7440-39-3  0.0010  0.000047J  0.000047J  0.0025  0.00012  0.00012  0.0017/21 12:10  02/17/21 12:10  02/17/21 21:30  0.0017/21 21:30  0.0017/21 12:10  0.0017/21 12:10  0.0017/21 12:10  0.0017/21 12:10  0.0017/21 12:10  0.0017/21 12:10  0.0017/21 12:30  0.0017/2	pH		Std. Units			1		02/23/21 08:11		
Antimony Ant	6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Metl	nod: EF	PA 3005A			
Arsenic ND mg/L 0.0050 0.00078 1 02/17/21 12:10 02/17/21 21:30 7440-38-2 0.0077J mg/L 0.010 0.00071 1 02/17/21 12:10 02/17/21 21:30 7440-39-3 0.0071J mg/L 0.0030 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-41-7 0.0030 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-41-7 0.0030 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-41-7 0.0030 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-41-7 0.0030 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 0.0040 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 0.0040 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-43-9 0.0040 0.000046 1 0.000046 1 02/17/21 12:10 02/17/21 21:30 7440-48-4 0.0040 0.000046 1 02/17/21 12:10 02/17/21 12:30 7440-48-4 0.0040 0.000046 1 02/17/21 12:10 02/17/21 12:30 7439-92-1 0.0040 0.000046 1 02/17/21 12:10 02/17/21 12:30 7439-93-2 0.0040 0.00004 0.00004 1 02/17/21 12:10 02/17/21 12:30 7439-93-2 0.0040 0.0040 0.00069 1 02/17/21 12:10 02/17/21 12:30 7439-93-2 0.0040 0.0040 0.0040 0.0040 1 0.004		Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
0.0077J   mg/L   0.010   0.00071   1   02/17/21   12:10   02/17/21   21:30   7440-39-3   0.000047J   mg/L   0.0030   0.000046   1   02/17/21   12:10   02/17/21   21:30   7440-41-7   0.0000000000000000000000000000000000	Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:30	7440-36-0	
Decyllium	Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:30	7440-38-2	
ND mg/L   0.0025   0.00012   1   02/17/21   12:10   02/17/21   21:30   7440-43-9	Barium	0.0077J	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:30	7440-39-3	
ND mg/L   0.010   0.00055   1   02/17/21   12:10   02/17/21   21:30   7440-47-3	Beryllium	0.000047J	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:30	7440-41-7	
Cobalt         0.0078         mg/L         0.0050         0.00038         1         02/17/21 12:10         02/17/21 21:30         7440-48-4           Lead         0.000046J         mg/L         0.0050         0.000036         1         02/17/21 12:10         02/17/21 21:30         7439-92-1           Lithium         0.0012J         mg/L         0.030         0.00081         1         02/17/21 12:10         02/17/21 21:30         7439-93-2           Molybdenum         ND         mg/L         0.010         0.00069         1         02/17/21 12:10         02/17/21 21:30         7439-93-2           Molybdenum         ND         mg/L         0.010         0.00069         1         02/17/21 12:10         02/17/21 21:30         7439-93-2           Molybdenum         ND         mg/L         0.010         0.0016         1         02/17/21 12:10         02/17/21 21:30         7439-98-7           Molybidenum         ND         mg/L         0.0010         0.0014         1         02/17/21 12:10         02/17/21 21:30         7440-28-0           7470 Mercury         Analytical Method: EPA 7470A         Preparation Method: EPA 7470A         EPA 7470A         Pack         Pack         ND         Mg/L         0.00050         0.00078         1<	Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:30	7440-43-9	
Lead         0.000046J         mg/L         0.0050         0.000036         1         02/17/21         12:10         02/17/21         21:30         7439-92-1           Lithium         0.0012J         mg/L         0.030         0.00081         1         02/17/21         12:10         02/17/21         21:30         7439-93-2           Molybdenum         ND         mg/L         0.010         0.00069         1         02/17/21         12:10         02/17/21         21:30         7439-93-2           Molybdenum         ND         mg/L         0.010         0.00069         1         02/17/21         12:10         02/17/21         21:30         7439-98-7           Selenium         ND         mg/L         0.0010         0.0016         1         02/17/21         12:10         02/17/21         21:30         7439-98-7           Thallium         ND         mg/L         0.0010         0.0014         1         02/17/21         12:10         02/17/21         21:30         7440-28-0           7470 Mercury         Analytical Method: EPA 7470A         Preparation Method: EPA 7470A         Preparation Method: EPA 7470A         Preparation Method: EPA 7470A         1         02/17/21         15:30         02/18/21         12:14         74	Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:30	7440-47-3	
0.0012J mg/L 0.030 0.00081 1 02/17/21 12:10 02/17/21 21:30 7439-93-2	Cobalt	0.0078	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:30	7440-48-4	
Molybdenum  ND mg/L  0.010 0.00069 1 02/17/21 12:10 02/17/21 21:30 7439-98-7  Selenium  ND mg/L  0.010 0.0016 1 02/17/21 12:10 02/17/21 21:30 7782-49-2  Thallium  ND mg/L  0.0010 0.0014 1 02/17/21 12:10 02/17/21 21:30 7440-28-0  PATO Mercury  Analytical Method: EPA 7470A Preparation Method: EPA 7470A  Pace Analytical Services - Peachtree Corners, GA  Mercury  ND mg/L  0.00050 0.000078 1 02/17/21 15:30 02/18/21 12:14 7439-97-6  300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993  Pace Analytical Services - Asheville	_ead	0.000046J	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:30	7439-92-1	
ND mg/L   0.010   0.0016   1   02/17/21   12:10   02/17/21   21:30   7782-49-2	Lithium	0.0012J	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:30	7439-93-2	
Thallium ND mg/L 0.0010 0.00014 1 02/17/21 12:10 02/17/21 21:30 7440-28-0  7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 12:14 7439-97-6  300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:30	7439-98-7	
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA  Mercury  ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 12:14 7439-97-6  300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:30	7782-49-2	
Pace Analytical Services - Peachtree Corners, GA  Mercury  ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 12:14 7439-97-6  300.0 IC Anions 28 Days  Analytical Method: EPA 300.0 Rev 2.1 1993  Pace Analytical Services - Asheville	Γhallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:30	7440-28-0	
Mercury ND mg/L 0.00050 0.000078 1 02/17/21 15:30 02/18/21 12:14 7439-97-6  800.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville	7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Meth	nod: EF	PA 7470A			
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville		Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Pace Analytical Services - Asheville	Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:14	7439-97-6	
· · · · · · · · · · · · · · · · · · ·	300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev 2	2.1 1993					
Tuoride ND mg/L 0.10 0.050 1 02/12/21 20:27 16984-48-8	-	Pace Ana	lytical Services	- Asheville	!					
	Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 20:27	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: FB-01(021121)	Lab ID:	92521581016	Collecte	ed: 02/11/21	10:00	Received: 02/	11/21 13:03 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Analy	ytical Services	- Peachtre	e Corners, C	SA.				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:53	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:53	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:53	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:53	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:53	7440-48-4	
Lead	0.00013J	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:53	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:53	7440-28-0	
7470 Mercury	Analytical I	Method: EPA 7	'470A Pre	paration Met	hod: EF	PA 7470A			
· ·	Pace Analy	ytical Services	- Peachtre	e Corners, C	SA.				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:21	7439-97-6	
300.0 IC Anions 28 Days	Analytical I	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	Pace Analy	ytical Services	- Asheville	•					
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 20:43	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: EB-01(021121)	Lab ID:	92521581017	Collecte	ed: 02/11/21	12:05	Received: 02/	11/21 13:03 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	€A				
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:59	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:59	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:59	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:59	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:59	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:59	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:59	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	hod: EF	A 7470A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	€A				
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:24	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev 2	2.1 1993					
•	Pace Anal	ytical Services	- Asheville	:					
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 20:59	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-14S (021021)	Lab ID:	92521578002	Collecte	ed: 02/10/21	08:50	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	5.35	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Metl	nod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 20:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 20:47	7440-38-2	
Barium	0.0078J	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 20:47	7440-39-3	
Beryllium	0.00019J	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 20:47	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 20:47	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 20:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 20:47	7440-48-4	
Lead	0.000048J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 20:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 20:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 20:47	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 20:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 20:47	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Pre	paration Meth	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:40	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
- -	Pace Ana	lytical Services	- Asheville	:					
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 22:26	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-1I (021221)	Lab ID:	92521578010	Collecte	ed: 02/12/2	13:20	Received: 02/	/12/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	6.21	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 22:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 22:01	7440-38-2	
Barium	0.0090J	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 22:01	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 22:01	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 22:01	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 22:01	7440-47-3	
Cobalt	0.0028J	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 22:01	7440-48-4	
Lead	0.00038J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 22:01	7439-92-1	
Lithium	0.0025J	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 22:01	7439-93-2	
Molybdenum	0.0056J	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 22:01	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 22:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 22:01	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:48	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev	2.1 1993					
	Pace Ana	lytical Services	- Asheville	<b>:</b>					
Fluoride	ND	mg/L	0.10	0.050	1		02/16/21 18:16	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-1D (021221)	Lab ID:	92521578011	Collecte	ed: 02/12/21	11:55	Received: 02/	12/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	7.14	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	nod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 22:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 22:07	7440-38-2	
Barium	0.0057J	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 22:07	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 22:07	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 22:07	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 22:07	7440-47-3	
Cobalt	0.00086J	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 22:07	7440-48-4	
_ead	0.000044J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 22:07	7439-92-1	
_ithium	0.010J	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 22:07	7439-93-2	
Molybdenum	0.0080J	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 22:07	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 22:07	7782-49-2	
Γhallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 22:07	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Metl	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:50	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	Pace Ana	lytical Services	- Asheville						
Fluoride	0.068J	mg/L	0.10	0.050	1		02/16/21 19:01	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: EB-02 (021021)	Lab ID:	92521578001	Collecte	ed: 02/10/2	11:30	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	€A				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 20:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 20:41	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 20:41	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 20:41	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 20:41	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 20:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 20:41	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 20:41	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 20:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 20:41	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 20:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 20:41	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	'470A Pre	paration Met	hod: EF	PA 7470A			
•	Pace Anal	ytical Services	- Peachtre	e Corners, C	SA.				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:37	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
,.	•	ytical Services							
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 22:11	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: DUP-1 (021021)	Lab ID:	92521578003	Collecte	ed: 02/10/2	00:00	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Analy	tical Services	- Peachtre	e Corners, C	€A				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 20:52	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 20:52	7440-38-2	
Barium	0.0078J	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 20:52	7440-39-3	
Beryllium	0.00019J	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 20:52	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 20:52	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 20:52	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 20:52	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 20:52	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 20:52	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 20:52	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 20:52	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 20:52	7440-28-0	
7470 Mercury	Analytical I	Method: EPA 7	470A Pre	paration Met	hod: EF	A 7470A			
	Pace Analy	tical Services	- Peachtre	e Corners, C	<b>S</b> A				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:47	7439-97-6	
300.0 IC Anions 28 Days	Analytical I	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	Pace Analy	tical Services	- Asheville						
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 22:40	16084_48_8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Sample: YGWA-2I(021021)	Lab ID:	92521583002	Collecte	ed: 02/10/21	12:40	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	7.29	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	βA				
Antimony	0.0013J	mg/L	0.0030	0.00028	1	02/18/21 11:04	02/19/21 19:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/18/21 11:04	02/19/21 19:27	7440-38-2	
Barium	0.0032J	mg/L	0.010	0.00071	1	02/18/21 11:04	02/19/21 19:27	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/18/21 11:04	02/19/21 19:27	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/18/21 11:04	02/19/21 19:27	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/18/21 11:04	02/19/21 19:27	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/18/21 11:04	02/19/21 19:27	7440-48-4	
Lead	0.00015J	mg/L	0.0050	0.000036	1	02/18/21 11:04	02/19/21 19:27	7439-92-1	
Lithium	0.0039J	mg/L	0.030	0.00081	1	02/18/21 11:04	02/19/21 19:27	7439-93-2	
Molybdenum	0.0041J	mg/L	0.010	0.00069	1	02/18/21 11:04	02/19/21 19:27	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/18/21 11:04	02/19/21 19:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/18/21 11:04	02/19/21 19:27	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 12:03	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev	2.1 1993					
•	Pace Ana	lytical Services	- Asheville	•					
Fluoride	0.094J	mg/L	0.10	0.050	1		02/12/21 16:44	16984-48-8	



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

QC Batch: 600633 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

 $Associated \ Lab \ Samples: \qquad 92521581001, \ 92521581002, \ 92521581003, \ 92521581004, \ 92521581005, \ 92521581006, \ 92521581007, \ 9252$ 

92521581008, 92521581009, 92521581010, 92521581011, 92521581012, 92521581013, 92521581014,

92521581015, 92521581016, 92521581017

METHOD BLANK: 3165605 Matrix: Water

Associated Lab Samples: 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007,

92521581008, 92521581009, 92521581010, 92521581011, 92521581012, 92521581013, 92521581014,

92521581015, 92521581016, 92521581017

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00031J	0.0030	0.00028	02/17/21 19:30	
Arsenic	mg/L	ND	0.0050	0.00078	02/17/21 19:30	
Barium	mg/L	ND	0.010	0.00071	02/17/21 19:30	
Beryllium	mg/L	ND	0.0030	0.000046	02/17/21 19:30	
Cadmium	mg/L	ND	0.0025	0.00012	02/17/21 19:30	
Chromium	mg/L	ND	0.010	0.00055	02/17/21 19:30	
Cobalt	mg/L	ND	0.0050	0.00038	02/17/21 19:30	
Lead	mg/L	ND	0.0050	0.000036	02/17/21 19:30	
Lithium	mg/L	ND	0.030	0.00081	02/17/21 19:30	
Molybdenum	mg/L	ND	0.010	0.00069	02/17/21 19:30	
Selenium	mg/L	ND	0.010	0.0016	02/17/21 19:30	
Thallium	mg/L	ND	0.0010	0.00014	02/17/21 19:30	

LABORATORY CONTROL SAMPLE:	3165606					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX S	SPIKE DUPLI	ICATE: 3165	608		3165611							
			MS	MSD								
		92521581005	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	111	109	75-125	2	20	

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



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

MATRIX SPIKE & MATRIX	SPIKE DUPLI	CATE: 3165	608 MS	MSD	3165611							
Parameter	Units	92521581005 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Barium	mg/L	0.032	0.1	0.1	0.14	0.13	103	98	75-125	4	20	
Beryllium	mg/L	0.00021J	0.1	0.1	0.092	0.093	92	93	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	105	103	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.099	103	99	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.092	0.096	92	96	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.095	96	94	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	3	20	

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.



Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 600920 Analysis Method:
QC Batch Method: EPA 3005A Analysis Description:

Laboratory: Pace Analytical Services - Peachtree Corners, GA

EPA 6020B

6020 MET

Associated Lab Samples: 92521583002

METHOD BLANK: 3167301 Matrix: Water

Associated Lab Samples: 92521583002

Date: 02/25/2021 03:00 PM

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	02/19/21 18:52	
Arsenic	mg/L	ND	0.0050	0.00078	02/19/21 18:52	
Barium	mg/L	ND	0.010	0.00071	02/19/21 18:52	
Beryllium	mg/L	ND	0.0030	0.000046	02/19/21 18:52	
Cadmium	mg/L	ND	0.0025	0.00012	02/19/21 18:52	
Chromium	mg/L	ND	0.010	0.00055	02/19/21 18:52	
Cobalt	mg/L	ND	0.0050	0.00038	02/19/21 18:52	
Lead	mg/L	ND	0.0050	0.000036	02/19/21 18:52	
Lithium	mg/L	ND	0.030	0.00081	02/19/21 18:52	
Molybdenum	mg/L	ND	0.010	0.00069	02/19/21 18:52	
Selenium	mg/L	ND	0.010	0.0016	02/19/21 18:52	
Thallium	mg/L	ND	0.0010	0.00014	02/19/21 18:52	

LABORATORY CONTROL SAMPLE:	3167302					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.11	111	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	105	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SF	PIKE DUPLI	CATE: 3167	303		3167304							
			MS	MSD								
	(	92521583001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	0.00035J	0.1	0.1	0.12	0.11	117	110	75-125	5	20	
Arsenic	mg/L	0.0015J	0.1	0.1	0.11	0.10	106	103	75-125	2	20	
Barium	mg/L	0.036	0.1	0.1	0.14	0.13	104	95	75-125	7	20	
Beryllium	mg/L	0.00029J	0.1	0.1	0.095	0.088	95	88	75-125	7	20	

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



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 3167			3167304							
Parameter	Units	92521583001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	0.00042J	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	106	104	75-125	1	20	
Cobalt	mg/L	0.0023J	0.1	0.1	0.10	0.10	103	102	75-125	0	20	
Lead	mg/L	0.000088J	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Lithium	mg/L	0.024J	0.1	0.1	0.12	0.11	98	88	75-125	8	20	
Molybdenum	mg/L	0.0016J	0.1	0.1	0.11	0.11	108	108	75-125	1	20	
Selenium	mg/L	0.28	0.1	0.1	0.38	0.37	106	92	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	

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



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

QC Batch: 601867 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521578010, 92521578011

METHOD BLANK: 3171184 Matrix: Water

Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521578010, 92521578011

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	02/23/21 20:30	
Arsenic	mg/L	ND	0.0050	0.00078	02/23/21 20:30	
Barium	mg/L	ND	0.010	0.00071	02/23/21 20:30	
Beryllium	mg/L	ND	0.0030	0.000046	02/23/21 20:30	
Cadmium	mg/L	ND	0.0025	0.00012	02/23/21 20:30	
Chromium	mg/L	ND	0.010	0.00055	02/23/21 20:30	
Cobalt	mg/L	ND	0.0050	0.00038	02/23/21 20:30	
Lead	mg/L	ND	0.0050	0.000036	02/23/21 20:30	
Lithium	mg/L	ND	0.030	0.00081	02/23/21 20:30	
Molybdenum	mg/L	ND	0.010	0.00069	02/23/21 20:30	
Selenium	mg/L	ND	0.010	0.0016	02/23/21 20:30	
Thallium	mg/L	ND	0.0010	0.00014	02/23/21 20:30	

LABORATORY CONTROL SAMPLE:	3171185					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.11	108	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
₋ead	mg/L	0.1	0.099	99	80-120	
_ithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.090	90	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SF	PIKE DUPL	ICATE: 3171	186		3171187							
		92521578009	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L		0.1	0.1	0.11	0.11	110	108	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Barium	mg/L	0.078	0.1	0.1	0.18	0.18	105	99	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.093	0.096	93	96	75-125	2	20	

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



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

MATRIX SPIKE & MATRIX	SPIKE DUPI	LICATE: 3171	186 MS	MSD	3171187							
		92521578009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	mg/L	0.00052J	0.1	0.1	0.10	0.10	103	104	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	2	20	
Lithium	mg/L	0.0070J	0.1	0.1	0.10	0.10	93	93	75-125	1	20	
Molybdenum	mg/L	0.0012J	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.095	97	95	75-125	2	20	

MATRIX SPIKE & MATRIX	01 II.L D01 L	ICATE: 3171	MS	MSD	3171189							
		92521578011	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.11	103	106	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.093	0.096	93	96	75-125	3	20	
Barium	mg/L	0.0057J	0.1	0.1	0.10	0.10	95	97	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.090	0.093	90	93	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.096	0.099	96	98	75-125	3	20	
Cobalt	mg/L	0.00086J	0.1	0.1	0.093	0.097	92	96	75-125	4	20	
Lead	mg/L	0.000044J	0.1	0.1	0.094	0.098	94	98	75-125	3	20	
Lithium	mg/L	0.010J	0.1	0.1	0.10	0.11	90	96	75-125	5	20	
Molybdenum	mg/L	0.0080J	0.1	0.1	0.10	0.11	95	99	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.086	0.089	86	89	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	

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.



Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 600023 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521583002

METHOD BLANK: 3163248 Matrix: Water
Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521583002

Blank Reporting

Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury mg/L ND 0.00050 0.000078 02/16/21 11:30

LABORATORY CONTROL SAMPLE: 3163249

Date: 02/25/2021 03:00 PM

Spike LCS LCS % Rec Result % Rec Limits Qualifiers Parameter Units Conc. Mercury 0.0025 0.0025 100 80-120 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3163250 3163251

MS MSD

92521578009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result **RPD** RPD Qual Result % Rec % Rec Limits 0.0025 Mercury mg/L ND 0.0025 0.0024 0.0023 94 92 75-125 2 20

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



Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

QC Batch: 600356 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007,

92521581008, 92521581009, 92521581010, 92521581011, 92521581012, 92521581013, 92521581014,

92521581015, 92521581016, 92521581017

METHOD BLANK: 3164655 Matrix: Water

Associated Lab Samples: 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007,

92521581008, 92521581009, 92521581010, 92521581011, 92521581012, 92521581013, 92521581014,

92521581015, 92521581016, 92521581017

Blank Reporting Qualifiers Parameter Units Result Limit MDL Analyzed ND 0.00050 0.000078 02/18/21 11:24 Mercury mg/L LABORATORY CONTROL SAMPLE: 3164656 Spike LCS LCS % Rec % Rec Parameter Units Conc. Result Limits Qualifiers Mercury mg/L 0.0025 0.0024 94 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164657 3164658

MS MSD

92521581005 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Mercury ND 0.0025 0.0025 0.0024 0.0024 97 75-125 20 mg/L 96

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.



Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 601295 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92521578010, 92521578011

METHOD BLANK: 3168813 Matrix: Water

Associated Lab Samples: 92521578010, 92521578011

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury mg/L ND 0.00050 0.000078 02/23/21 13:14

LABORATORY CONTROL SAMPLE: 3168814

Date: 02/25/2021 03:00 PM

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury mg/L 0.0025 0.0023 92 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3168815 3168816

MSD MS 92521578011 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits ND 0.0025 Mercury mg/L 0.0025 0.0022 0.0022 88 89 75-125 20

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



Project: YATES AMA
Pace Project No.: 92521581

Parameter

Date: 02/25/2021 03:00 PM

Fluoride

QC Batch: 599663 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521581001, 92521581002, 92521581003, 92521581004,

Units

mg/L

METHOD BLANK: 3161251 Matrix: Water

Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521581001, 92521581002, 92521581003, 92521581004,

Conc.

2.5

92521581005, 92521581006, 92521581007, 92521581008, 92521581009, 92521581010

92521581005, 92521581006, 92521581007, 92521581008, 92521581009, 92521581010

Blank Reporting Qualifiers Limit MDL Parameter Units Result Analyzed Fluoride mg/L ND 0.10 0.050 02/12/21 20:16 LABORATORY CONTROL SAMPLE: 3161252 LCS LCS % Rec Spike

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161253 3161254 MSD MS 92521574009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Fluoride ND 2.5 2.5 2.7 2.7 109 108 10 mg/L 90-110

Result

2.6

% Rec

105

Limits

90-110

Qualifiers

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161255 3161256 MS MSD MSD 92521581005 Spike Spike MS MS MSD % Rec Max Parameter Conc. Conc. % Rec % Rec **RPD** RPD Units Result Result Result Limits Qual Fluoride ND 2.5 2.5 2.5 2.7 100 108 90-110 8 10 mg/L

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.



Project: YATES AMA Pace Project No.: 92521581

QC Batch: 599664 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

> Laboratory: Pace Analytical Services - Asheville

92521581011, 92521581012, 92521581013, 92521581014, 92521581015, 92521581016, 92521581017, Associated Lab Samples:

92521583002

mg/L

Date: 02/25/2021 03:00 PM

METHOD BLANK: 3161257 Matrix: Water

Associated Lab Samples: 92521581011, 92521581012, 92521581013, 92521581014, 92521581015, 92521581016, 92521581017,

92521583002 Blank Reporting Parameter Units Limit MDL Qualifiers Result Analyzed Fluoride mg/L ND 0.10 0.050 02/12/21 15:24 LABORATORY CONTROL SAMPLE: 3161258 Spike LCS LCS % Rec Units Conc. Result % Rec Limits Qualifiers Parameter Fluoride mg/L 2.5 2.6 103 90-110 MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161260 3161259 MSD MS 92521578009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Fluoride 0.066J 2.5 2.5 2.4 2.5 93 99 90-110 6 10 mg/L MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161575 3161576 MS MSD MSD MS MSD 92521143010 Spike Spike MS % Rec Max Parameter Conc. Conc. Result % Rec % Rec **RPD** RPD Qual Units Result Result Limits Fluoride 0.21 2.5 2.5 2.3 2.5 84 91 90-110 10 M1

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



EPA 300.0 Rev 2.1 1993

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 600235 Analysis Method:

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92521578010, 92521578011

METHOD BLANK: 3164171 Matrix: Water

Associated Lab Samples: 92521578010, 92521578011

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Fluoride mg/L ND 0.10 0.050 02/16/21 14:16

LABORATORY CONTROL SAMPLE: 3164172

Date: 02/25/2021 03:00 PM

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Fluoride 2.5 2.4 97 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164173 3164174

MS MSD

92522138001 Spike Spike MS MSD

92522138001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result **RPD** RPD Result % Rec % Rec Limits Qual ND Fluoride mg/L 2.5 2.5 2.4 2.5 95 97 90-110 2 10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164175 3164176

MS MSD 92521578011 MS MSD MS MSD % Rec Spike Spike Max RPD RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits Qual Fluoride 2.5 0.068J 2.5 2.6 2.6 100 100 10 mg/L 90-110

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.



### **QUALIFIERS**

Project: YATES AMA
Pace Project No.: 92521581

### **DEFINITIONS**

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

TNI - The NELAC Institute.

### **ANALYTE QUALIFIERS**

Date: 02/25/2021 03:00 PM

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.



## **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2521578002	YGWA-14S (021021)				
2521581003	YGWA-5I (020821)				
2521581004	YGWA-39 (021021)				
2521581005	YGWA-40 (021021)				
2521581007	YGWA-20S (020921)				
2521581008	YGWA-4I(020921)				
2521581009	YGWA-17S(020921)				
521581010	YGWA-18S(020921)				
521581011	YGWA-18I(020921)				
521581012	YGWA-21I(020921)				
521583002	YGWA-2I(021021)				
2521581013	YGWA-3I(021021)				
2521581014	YGWA-3D(021021)				
2521581015	YGWA-30I(021121)				
2521578010	YGWA-1I (021221)				
2521578011	YGWA-1D (021221)				
2521578001	EB-02 (021021)	EPA 3005A	601867	EPA 6020B	601989
2521578002	YGWA-14S (021021)	EPA 3005A	601867	EPA 6020B	601989
2521578003	DUP-1 (021021)	EPA 3005A	601867	EPA 6020B	601989
2521581001	YGWA-5D (020821)	EPA 3005A	600633	EPA 6020B	600737
2521581002	DUP-01(020821)	EPA 3005A	600633	EPA 6020B	600737
521581003	YGWA-ŚI (020821)	EPA 3005A	600633	EPA 6020B	600737
521581004	YGWA-39 (021021)	EPA 3005A	600633	EPA 6020B	600737
2521581005	YGWA-40 (021021)	EPA 3005A	600633	EPA 6020B	600737
2521581006	FB-01(021021)	EPA 3005A	600633	EPA 6020B	600737
2521581007	YGWA-20S (020921)	EPA 3005A	600633	EPA 6020B	600737
2521581008	YGWA-4I(020921)	EPA 3005A	600633	EPA 6020B	600737
521581009	YGWA-17S(020921)	EPA 3005A	600633	EPA 6020B	600737
2521581010	YGWA-18S(020921)	EPA 3005A	600633	EPA 6020B	600737
521581011	YGWA-18I(020921)	EPA 3005A	600633	EPA 6020B	600737
521581012	YGWA-21I(020921)	EPA 3005A	600633	EPA 6020B	600737
2521583002	YGWA-2I(021021)	EPA 3005A	600920	EPA 6020B	601040
2521581013	YGWA-3I(021021)	EPA 3005A	600633	EPA 6020B	600737
521581014	YGWA-3D(021021)	EPA 3005A	600633	EPA 6020B	600737
2521581015	YGWA-30I(021121)	EPA 3005A	600633	EPA 6020B	600737
2521581016	FB-01(021121)	EPA 3005A	600633	EPA 6020B	600737
2521581017	EB-01(021121)	EPA 3005A	600633	EPA 6020B	600737
521578010	YGWA-1I (021221)	EPA 3005A	601867	EPA 6020B	601989
2521578011	YGWA-1D (021221)	EPA 3005A	601867	EPA 6020B	601989
2521578001	EB-02 (021021)	EPA 7470A	600023	EPA 7470A	600226
2521578002	YGWA-14S (021021)	EPA 7470A	600023	EPA 7470A	600226
2521578003	DUP-1 (021021)	EPA 7470A	600023	EPA 7470A	600226
521581001	YGWA-5D (020821)	EPA 7470A	600356	EPA 7470A	600864
521581002	DUP-01(020821)	EPA 7470A	600356	EPA 7470A	600864
521581003	YGWA-5I (020821)	EPA 7470A	600356	EPA 7470A	600864

## **REPORT OF LABORATORY ANALYSIS**

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## **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES AMA
Pace Project No.: 92521581

Date: 02/25/2021 03:00 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
92521581004	YGWA-39 (021021)	EPA 7470A	600356	EPA 7470A	600864
2521581005	YGWA-40 (021021)	EPA 7470A	600356	EPA 7470A	600864
2521581006	FB-01(021021)	EPA 7470A	600356	EPA 7470A	600864
2521581007	YGWA-20S (020921)	EPA 7470A	600356	EPA 7470A	600864
2521581008	YGWA-4I(020921)	EPA 7470A	600356	EPA 7470A	600864
2521581009	YGWA-17S(020921)	EPA 7470A	600356	EPA 7470A	600864
2521581010	YGWA-18S(020921)	EPA 7470A	600356	EPA 7470A	600864
2521581011	YGWA-18I(020921)	EPA 7470A	600356	EPA 7470A	600864
2521581012	YGWA-21I(020921)	EPA 7470A	600356	EPA 7470A	600864
2521583002	YGWA-2I(021021)	EPA 7470A	600023	EPA 7470A	600226
2521581013	YGWA-3I(021021)	EPA 7470A	600356	EPA 7470A	600864
2521581014	YGWA-3D(021021)	EPA 7470A	600356	EPA 7470A	600864
2521581015	YGWA-30I(021121)	EPA 7470A	600356	EPA 7470A	600864
2521581016	FB-01(021121)	EPA 7470A	600356	EPA 7470A	600864
2521581017	EB-01(021121)	EPA 7470A	600356	EPA 7470A	600864
2521578010	YGWA-1I (021221)	EPA 7470A	601295	EPA 7470A	601814
92521578011	YGWA-1D (021221)	EPA 7470A	601295	EPA 7470A	601814
2521578001	EB-02 (021021)	EPA 300.0 Rev 2.1 1993	599663		
2521578002	YGWA-14S (021021)	EPA 300.0 Rev 2.1 1993	599663		
2521578003	DUP-1 (021021)	EPA 300.0 Rev 2.1 1993	599663		
2521581001	YGWA-5D (020821)	EPA 300.0 Rev 2.1 1993	599663		
2521581002	DUP-01(020821)	EPA 300.0 Rev 2.1 1993	599663		
2521581003	YGWA-5I (020821)	EPA 300.0 Rev 2.1 1993	599663		
2521581004	YGWA-39 (021021)	EPA 300.0 Rev 2.1 1993	599663		
2521581005	YGWA-40 (021021)	EPA 300.0 Rev 2.1 1993	599663		
2521581006	FB-01(021021)	EPA 300.0 Rev 2.1 1993	599663		
2521581007	YGWA-20S (020921)	EPA 300.0 Rev 2.1 1993	599663		
2521581008	YGWA-4I(020921)	EPA 300.0 Rev 2.1 1993	599663		
2521581009	YGWA-17S(020921)	EPA 300.0 Rev 2.1 1993	599663		
2521581010	YGWA-18S(020921)	EPA 300.0 Rev 2.1 1993	599663		
2521581011	YGWA-18I(020921)	EPA 300.0 Rev 2.1 1993	599664		
2521581012	YGWA-21I(020921)	EPA 300.0 Rev 2.1 1993	599664		
2521583002	YGWA-2I(021021)	EPA 300.0 Rev 2.1 1993	599664		
2521581013	YGWA-3I(021021)	EPA 300.0 Rev 2.1 1993	599664		
2521581014	YGWA-3D(021021)	EPA 300.0 Rev 2.1 1993	599664		
2521581015	YGWA-30I(021121)	EPA 300.0 Rev 2.1 1993	599664		
2521581016	FB-01(021121)	EPA 300.0 Rev 2.1 1993	599664		
2521581017	EB-01(021121)	EPA 300.0 Rev 2.1 1993	599664		
92521578010	YGWA-1I (021221)	EPA 300.0 Rev 2.1 1993	600235		
2521578011	YGWA-1D (021221)	EPA 300.0 Rev 2.1 1993	600235		

## Pace Analytical\*

## Document Name: Sample Condition Upon Receipt(SCUR)

Document No.: F-CAR-CS-033-Rev.07 Document Revised: October 28, 2020 Page 1 of 2

Issuing Authority: Pace Carolinas Quality Office

aboratory receiving samples: Asheville	nwood Huntersville	Raleigh 🗌	Mechanicsville Atlanta Kernersville
Sample Condition Upon Receipt  Courier: Commercial Ustody Seal Present?  Bubble Wrap hermometer: IR Gun ID:  Client Name: Fed Ex Pace Bubble Wrap Corr	Bubble Bags None  Type of ice:    Colored Colo	Projectiont No	UO# : 02524504
old samples originate in a quarantine zone w	vithin the United States: CA, NY, or SC	C (check maps)?	Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes
			Comments/Discrepancy:
Chain of Custody Present?	Yes No	□N/A 1,	
Samples Arrived within Hold Time?	☑res □no	□N/A 2.	·
Short Hold Time Analysis (<72 hr.)?	□Yes ⊡Nô	□N/A 3.	
Rush Turn Around Time Requested?	□Yes ŒÑo_	□n/a 4.	
Sufficient Volume?	©v€s □No	□N/A 5.	
Correct Containers Used?	ØYes □no	□N/A 6.	
-Pace Containers Used?	☑Yes □No	□n/a	41
Containers Intact?	☐Yes □No _	□N/A 7.	
Dissolved analysis: Samples Field Filter		EN/A 8:	
Sample Labels Match COC?	Aves Ono	□N/A 9.	
-includes Date/Time/ID/Analysis N	Matrix:		
Headspace in VOA Vials (>5-6mm)?	YesNo	□N/A 10.	
Trip Blank Present?	Yes No	ØN/A 11.	
Trip Blank Custody Seals Present?	☐Yes ☐No	□N/A	
COMMENTS/SAMPLE DISCREPANCY			Field Data Regulred? Yes No
		<u> </u>	ot ID of split containers:
CLIENT NOTIFICATION/RESOLUTION	• .		
Person contacted:		Date/Time:	
Project Manager SCURF Review:			Date:
Project Manager SRF Review:			Date:

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

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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.

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	Kathe Pythi	WT ST	WT	WIIW	WT	<u>                                     </u>	WT				WT	WT	MATRIX CODE (see valid co	S S S S S S S S S S S S S S S S S S S	Project #:	X		Copy To:	Report To: Barrier Steams	Section B
PROFIT Name of SAMPLER: Y	re Pythrwicz/Arcods 2					0501 RJ-7		2.10.21 1105	2/02/1658	2.102/10936	2-821 1620		START END  DATE TIME DATE T	COLLECTED				5	COSC ·	
AMPLER: VATO	7719 12012			2 1		/ / H		1 1/1/1	1 12/1	1 141	イ数ノト	10 / h	SAMPLE TEMP AT COLLECTI # OF CONTAINERS Unpreserved H2904 HN03		Pace Profile #: 10840	Pace Quote:	Addings	Company Name	Invoice information:	Section C
fyphewicz	The County			F									HGI NaOH Na2S203 Methanol Other	Preservatives	Keyin			**	don	
DATE Signed: 2	The Later	*   *	3	* *	* * *	× ×		V 4 2		K	×	×××	Analyses Trisk App IV Metals Fluoride RAD 931579320	YALS	Demng@pacesbs.com,					-
2-9-202)	10/21 17/10														OA (Ind)			7	]	- 1
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### CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

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DATE SIGNAL )			الفيالة	D. T.	×	1	×	×	×		×	×	×	×	×		*	RAD 9315/9320							
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eceived on III IN) ustody aledD poolerD IN) emples					깇	1		<b> </b>	Spr 46	<i> </i> -	Sin Ag	7	of 5.72			K	_	Residual Chlorine (Y/N)		GA.	STATE OF THE PARTY NAMED IN				

### 23 AL PROPERTY OF \*\*\*\*\* (770)334.6526 d Due Date: 1070 Bridge Mill Ave Sample ids must be unique One Character per box. (A-Z, 9-9 / , -SAMPLE ID 18. BM.91 1204297 (15. 6MA 12020 Purchase Order #; Project Name: y Project #: Required Project Information: Report To: Backy Sieever Copy To: TO COME OF THE COM MATRIX CODE (see valid codes to left) ¥ 3 ₹ ş SAMPLETYPE (G=GRAB C+COMP) 27.0 2/10 START 7775 16.40 PRINT Name of SAMPLER BOLLY, Steeling 1-49 The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately, 8 SAMPLE TEMP AT COLLECTION # OF CONTAINERS Address: Pace Quote: Company Name: Unpreserved H2504 HNO3 HCI NaOH Na23203 Methanol Other APRIVACE TOLL ... Y/N App IV Metals × Fluorida × × RAD 9315/9320 3 ТЕМР (л С Residual Chlorine (Y/N) Received on iceti (Y/N) Coc B SealedD CoolerD (Y/N) 잋 3 Samples IntactD (Y/N) 4 200

CHAIN-OF-CUSTODY / Analytical Request Document

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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.

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February 25, 2021

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

RE: Project: YATES AP-2

Pace Project No.: 92521578

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between February 10, 2021 and February 12, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services Asheville
- Pace Analytical Services Charlotte
- Pace Analytical Services Peachtree Corners, GA

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com

Kein Len

1(704)875-9092

**HORIZON** Database Administrator

Enclosures

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





### **CERTIFICATIONS**

Project: YATES AP-2
Pace Project No.: 92521578

**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

Florida/NELAP Certification #: E87627 Kentucky UST Certification #: 84 Virginia/VELAP Certification #: 460221

South Carolina Certification #: 99006001

**Pace Analytical Services Asheville** 

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

**Pace Analytical Services Peachtree Corners** 

110 Technology Pkwy, Peachtree Corners, GA 30092 Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812

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



### **SAMPLE SUMMARY**

Project: YATES AP-2
Pace Project No.: 92521578

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521578004	YGWC-26S (021021)	Water	02/10/21 10:00	02/10/21 17:10
92521578005	YGWC-26I (021021)	Water	02/10/21 11:00	02/10/21 17:10
92521578006	YGWC-27S (021021)	Water	02/10/21 12:10	02/10/21 17:10
92521578007	YGWC-27I (021021)	Water	02/10/21 13:15	02/10/21 17:10
92521578008	DUP-2 (021021)	Water	02/10/21 00:00	02/10/21 17:10
92521578009	YGWC-28I(021121)	Water	02/11/21 09:40	02/11/21 13:03
92521578012	YGWC-28S (021221)	Water	02/12/21 15:20	02/12/21 17:10
92521578013	YGWC-29I (021221)	Water	02/12/21 14:20	02/12/21 17:10
92521578014	EB-02 (021221)	Water	02/12/21 15:30	02/12/21 17:10



### **SAMPLE ANALYTE COUNT**

Project: YATES AP-2
Pace Project No.: 92521578

Lab ID	Sample ID	Method	Analysts	Analytes Reported	
92521578004	YGWC-26S (021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578005	YGWC-26I (021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578006	YGWC-27S (021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578007	YGWC-27I (021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578008	DUP-2 (021021)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578009	YGWC-28I(021121)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	CDC	1	
92521578012	YGWC-28S (021221)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	JLH	1	
92521578013	YGWC-29I (021221)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	JLH	1	
92521578014	EB-02 (021221)	EPA 6020B	CW1	12	
		EPA 7470A	VB	1	
		EPA 300.0 Rev 2.1 1993	JLH	1	

 ${\sf PASI-A = Pace\ Analytical\ Services\ -\ Asheville}$ 

PASI-C = Pace Analytical Services - Charlotte

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



### **SUMMARY OF DETECTION**

Project: YATES AP-2
Pace Project No.: 92521578

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2521578004	YGWC-26S (021021)					
	Performed by	CUSTOME			02/23/21 08:11	
	рН	R 5.18	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.031	mg/L	0.010	02/23/21 20:58	
EPA 6020B	Beryllium	0.00013J	mg/L	0.0030	02/23/21 20:58	
EPA 6020B	Chromium	0.00091J	mg/L	0.010	02/23/21 20:58	
EPA 6020B	Cobalt	0.0017J	mg/L	0.0050	02/23/21 20:58	
EPA 6020B	Lead	0.000050J	mg/L	0.0050	02/23/21 20:58	
2521578005	YGWC-26I (021021)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	5.96	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.060	mg/L	0.010	02/23/21 21:04	
PA 6020B	Chromium	0.00065J	mg/L	0.010	02/23/21 21:04	
PA 6020B	Lead	0.000051J	mg/L	0.0050	02/23/21 21:04	
EPA 6020B	Lithium	0.0067J	mg/L	0.030	02/23/21 21:04	
EPA 6020B	Selenium	0.0026J	mg/L	0.010	02/23/21 21:04	
PA 300.0 Rev 2.1 1993	Fluoride	0.050J	mg/L	0.10	02/12/21 23:09	
2521578006	YGWC-27S (021021)					
	Performed by	CUSTOME			02/23/21 08:11	
	На	R 6.21	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.088		0.010		
PA 6020B	Beryllium	0.00066J	mg/L mg/L	0.010	02/23/21 21:10	
	•		ū			
EPA 6020B	Chromium	0.0027J	mg/L	0.010	02/23/21 21:10	
PA 6020B	Cobalt	0.0025J	mg/L	0.0050	02/23/21 21:10	
EPA 6020B	Lead	0.00072J	mg/L	0.0050	02/23/21 21:10	
PA 6020B	Lithium	0.00081J	mg/L	0.030	02/23/21 21:10	
PA 300.0 Rev 2.1 1993	Fluoride	0.084J	mg/L	0.10	02/12/21 23:23	
2521578007	YGWC-27I (021021)	011070147				
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	6.29	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.080	mg/L	0.010	02/23/21 21:15	
EPA 6020B	Beryllium	0.00014J	mg/L	0.0030	02/23/21 21:15	
EPA 6020B	Cobalt	0.0048J	mg/L	0.0050	02/23/21 21:15	
PA 6020B	Lithium	0.0067J	mg/L		02/23/21 21:15	
PA 6020B	Molybdenum	0.0016J	mg/L		02/23/21 21:15	
EPA 300.0 Rev 2.1 1993	Fluoride	0.055J	mg/L		02/12/21 23:38	
2521578008	DUP-2 (021021)					
EPA 6020B	Barium	0.062	mg/L	0.010	02/23/21 21:21	
EPA 6020B	Chromium	0.00068J	mg/L		02/23/21 21:21	
EPA 6020B	Lead	0.000049J	mg/L	0.0050		
EPA 6020B	Lithium	0.0073J	mg/L	0.030		
.FA 0020D						

### **REPORT OF LABORATORY ANALYSIS**

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



### **SUMMARY OF DETECTION**

Project: YATES AP-2
Pace Project No.: 92521578

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521578009	YGWC-28I(021121)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	6.57	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.078	mg/L	0.010	02/23/21 21:38	
EPA 6020B	Cadmium	0.00052J	mg/L	0.0025	02/23/21 21:38	
EPA 6020B	Lithium	0.0070J	mg/L	0.030	02/23/21 21:38	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	02/23/21 21:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.066J	mg/L	0.10	02/12/21 18:52	
2521578012	YGWC-28S (021221)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	6.60	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.057	mg/L	0.010	02/23/21 22:24	
EPA 6020B	Cadmium	0.00048J	mg/L	0.0025	02/23/21 22:24	
EPA 6020B	Lead	0.000052J	mg/L	0.0050	02/23/21 22:24	
EPA 6020B	Lithium	0.0053J	mg/L	0.030	02/23/21 22:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.069J	mg/L	0.10	02/16/21 19:46	
2521578013	YGWC-29I (021221)					
	Performed by	CUSTOME R			02/23/21 08:11	
	рН	6.24	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.21	mg/L	0.010	02/23/21 22:30	
EPA 6020B	Cobalt	0.00094J	mg/L	0.0050	02/23/21 22:30	
EPA 6020B	Lead	0.000066J	mg/L	0.0050	02/23/21 22:30	
EPA 6020B	Molybdenum	0.00083J	mg/L	0.010	02/23/21 22:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	02/16/21 20:01	



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: YGWC-26S (021021)	Lab ID:	92521578004	Collecte	ed: 02/10/21	10:00	Received: 02/	/10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	5.18	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, G	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 20:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 20:58	7440-38-2	
Barium	0.031	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 20:58	7440-39-3	
Beryllium	0.00013J	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 20:58	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 20:58	7440-43-9	
Chromium	0.00091J	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 20:58	7440-47-3	
Cobalt	0.0017J	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 20:58	7440-48-4	
Lead	0.000050J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 20:58	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 20:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 20:58	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 20:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 20:58	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:49	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	- Asheville	;					
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 22:54	16984-48-8	



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: YGWC-26I (021021)	Lab ID:	92521578005	Collecte	ed: 02/10/21	11:00	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	;					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	5.96	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 21:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 21:04	7440-38-2	
Barium	0.060	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 21:04	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 21:04	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 21:04	7440-43-9	
Chromium	0.00065J	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 21:04	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 21:04	7440-48-4	
Lead	0.000051J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 21:04	7439-92-1	
Lithium	0.0067J	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 21:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 21:04	7439-98-7	
Selenium	0.0026J	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 21:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 21:04	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Prej	paration Met	hod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	SA.				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:51	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev 2	2.1 1993					
•	•	lytical Services							
Fluoride	0.050J	mg/L	0.10	0.050	1		02/12/21 23:09	16084-48-8	



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: YGWC-27S (021021)	Lab ID:	92521578006	Collecte	ed: 02/10/21	12:10	Received: 02/	/10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	6.21	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, G	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 21:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 21:10	7440-38-2	
Barium	0.088	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 21:10	7440-39-3	
Beryllium	0.000066J	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 21:10	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 21:10	7440-43-9	
Chromium	0.0027J	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 21:10	7440-47-3	
Cobalt	0.0025J	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 21:10	7440-48-4	
Lead	0.00072J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 21:10	7439-92-1	
Lithium	0.00081J	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 21:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 21:10	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 21:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 21:10	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	'470A Pre	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:54	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev	2.1 1993					
	Pace Ana	lytical Services	- Asheville	;					
Fluoride	0.084J	mg/L	0.10	0.050	1		02/12/21 23:23	16984-48-8	



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: YGWC-27I (021021)	Lab ID:	92521578007	Collecte	ed: 02/10/21	13:15	Received: 02	/10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	6.29	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 21:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 21:15	7440-38-2	
Barium	0.080	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 21:15	7440-39-3	
Beryllium	0.00014J	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 21:15	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 21:15	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 21:15	7440-47-3	
Cobalt	0.0048J	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 21:15	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 21:15	7439-92-1	
Lithium	0.0067J	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 21:15	7439-93-2	
Molybdenum	0.0016J	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 21:15	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 21:15	7782-49-2	
Γhallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 21:15	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:56	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev	2.1 1993					
	Pace Ana	lytical Services	- Asheville	;					
Fluoride	0.055J	mg/L	0.10	0.050	1		02/12/21 23:38	16984-48-8	
		-							



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: DUP-2 (021021)	Lab ID:	92521578008	Collecte	ed: 02/10/2	00:00	Received: 02/	10/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020 MET ICPMS	Analytical I	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Analy	tical Services	- Peachtre	e Corners, C	SA.				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 21:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 21:21	7440-38-2	
Barium	0.062	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 21:21	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 21:21	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 21:21	7440-43-9	
Chromium	0.00068J	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 21:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 21:21	7440-48-4	
Lead	0.000049J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 21:21	7439-92-1	
Lithium	0.0073J	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 21:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 21:21	7439-98-7	
Selenium	0.0024J	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 21:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 21:21	7440-28-0	
7470 Mercury	Analytical I	Method: EPA 7	470A Pre	paration Met	hod: EF	PA 7470A			
	Pace Analy	tical Services	- Peachtre	e Corners, C	SA.				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:59	7439-97-6	
300.0 IC Anions 28 Days	Analytical I	Method: EPA 3	00.0 Rev 2	2.1 1993					
·	Pace Analy	tical Services	- Asheville						
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 23:52	16984-48-8	



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: YGWC-28I(021121)	Lab ID:	92521578009	Collecte	ed: 02/11/21	09:40	Received: 02/	/11/21 13:03 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	6.57	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Metl	nod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 21:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 21:38	7440-38-2	
Barium	0.078	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 21:38	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 21:38	7440-41-7	
Cadmium	0.00052J	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 21:38	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 21:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 21:38	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 21:38	7439-92-1	
Lithium	0.0070J	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 21:38	7439-93-2	
Molybdenum	0.0012J	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 21:38	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 21:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 21:38	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Meth	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 12:25	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev	2.1 1993					
	Pace Ana	lytical Services	- Asheville						
Fluoride	0.066J	mg/L	0.10	0.050	1		02/12/21 18:52	16984-48-8	



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: YGWC-28S (021221)	Lab ID:	92521578012	Collecte	ed: 02/12/2	15:20	Received: 02/	12/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	6.60	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, C	€A				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 22:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 22:24	7440-38-2	
Barium	0.057	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 22:24	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 22:24	7440-41-7	
Cadmium	0.00048J	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 22:24	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 22:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 22:24	7440-48-4	
Lead	0.000052J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 22:24	7439-92-1	
Lithium	0.0053J	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 22:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 22:24	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 22:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 22:24	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	'470A Pre	paration Met	hod: EF	PA 7470A			
	Pace Ana	llytical Services	- Peachtre	ee Corners, C	€A				
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 14:00	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	- Asheville	)					
Fluoride	0.069J	mg/L	0.10	0.050	1		02/16/21 19:46	16984-48-8	
		-							



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: YGWC-29I (021221)	Lab ID:	92521578013	Collecte	ed: 02/12/21	14:20	Received: 02/	/12/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	•					
Performed by	CUSTOME R				1		02/23/21 08:11		
рН	6.24	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	nod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 22:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 22:30	7440-38-2	
Barium	0.21	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 22:30	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 22:30	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 22:30	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 22:30	7440-47-3	
Cobalt	0.00094J	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 22:30	7440-48-4	
Lead	0.000066J	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 22:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 22:30	7439-93-2	
Molybdenum	0.00083J	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 22:30	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 22:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 22:30	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Prep	paration Met	nod: EF	PA 7470A			
	Pace Ana	lytical Services	- Peachtre	e Corners, G	iΑ				
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 14:02	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	•	lytical Services							
Fluoride	0.17	mg/L	0.10	0.050	1		02/16/21 20:01	16084-48-8	



Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Sample: EB-02 (021221)	Lab ID:	92521578014	Collecte	ed: 02/12/2	1 15:30	Received: 02/	12/21 17:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, 0	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 22:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 22:53	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 22:53	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 22:53	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 22:53	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 22:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 22:53	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 22:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 22:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 22:53	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 22:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 22:53	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Pre	paration Met	hod: EF	PA 7470A			
	Pace Anal	ytical Services	- Peachtre	e Corners, 0	βA				
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 14:04	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
·	Pace Anal	ytical Services	- Asheville	•					
Fluoride	ND	mg/L	0.10	0.050	1		02/16/21 20:16	16984-48-8	



### **QUALITY CONTROL DATA**

Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

QC Batch: 601867 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92521578004, 92521578005, 92521578006, 92521578007, 92521578008, 92521578009, 92521578012,

92521578013, 92521578014

METHOD BLANK: 3171184 Matrix: Water

Associated Lab Samples: 92521578004, 92521578005, 92521578006, 92521578007, 92521578008, 92521578009, 92521578012,

92521578013, 92521578014

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND ND	0.0030	0.00028	02/23/21 20:30	
Arsenic	mg/L	ND	0.0050	0.00078	02/23/21 20:30	
Barium	mg/L	ND	0.010	0.00071	02/23/21 20:30	
Beryllium	mg/L	ND	0.0030	0.000046	02/23/21 20:30	
Cadmium	mg/L	ND	0.0025	0.00012	02/23/21 20:30	
Chromium	mg/L	ND	0.010	0.00055	02/23/21 20:30	
Cobalt	mg/L	ND	0.0050	0.00038	02/23/21 20:30	
Lead	mg/L	ND	0.0050	0.000036	02/23/21 20:30	
Lithium	mg/L	ND	0.030	0.00081	02/23/21 20:30	
Molybdenum	mg/L	ND	0.010	0.00069	02/23/21 20:30	
Selenium	mg/L	ND	0.010	0.0016	02/23/21 20:30	
Thallium	mg/L	ND	0.0010	0.00014	02/23/21 20:30	

LABORATORY CONTROL SAMPLE:	3171185					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.11	108	80-120	_
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.090	90	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SF	PIKE DUPL	ICATE: 3171	186		3171187		•	•	•			
			MS	MSD								
		92521578009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	110	108	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Barium	mg/L	0.078	0.1	0.1	0.18	0.18	105	99	75-125	3	20	

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.



### **QUALITY CONTROL DATA**

Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 3171			3171187							
Parameter	Units	92521578009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L		0.1	0.1	0.093	0.096	93	96	75-125	2	20	
Cadmium	mg/L	0.00052J	0.1	0.1	0.10	0.10	103	104	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	2	20	
Lithium	mg/L	0.0070J	0.1	0.1	0.10	0.10	93	93	75-125	1	20	
Molybdenum	mg/L	0.0012J	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.095	97	95	75-125	2	20	

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 3171	188		3171189							
			MS	MSD								
		92521578011	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.11	103	106	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.093	0.096	93	96	75-125	3	20	
Barium	mg/L	0.0057J	0.1	0.1	0.10	0.10	95	97	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.090	0.093	90	93	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.096	0.099	96	98	75-125	3	20	
Cobalt	mg/L	0.00086J	0.1	0.1	0.093	0.097	92	96	75-125	4	20	
Lead	mg/L	0.000044J	0.1	0.1	0.094	0.098	94	98	75-125	3	20	
Lithium	mg/L	0.010J	0.1	0.1	0.10	0.11	90	96	75-125	5	20	
Molybdenum	mg/L	0.0080J	0.1	0.1	0.10	0.11	95	99	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.086	0.089	86	89	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	

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.

Max

RPD

Qual

**RPD** 

2 20



### **QUALITY CONTROL DATA**

Project: YATES AP-2 Pace Project No.: 92521578

Mercury

Mercury

Date: 02/25/2021 02:15 PM

QC Batch: 600023 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92521578004, 92521578005, 92521578006, 92521578007, 92521578008, 92521578009

METHOD BLANK: 3163248 Matrix: Water

Associated Lab Samples: 92521578004, 92521578005, 92521578006, 92521578007, 92521578008, 92521578009

 Parameter
 Units
 Blank Reporting Result
 Limit
 MDL
 Analyzed
 Qualifiers

 mg/L
 ND
 0.00050
 0.000078
 02/16/21 11:30

LABORATORY CONTROL SAMPLE: 3163249

Spike LCS LCS % Rec Result % Rec Limits Qualifiers Parameter Units Conc. Mercury 0.0025 0.0025 100 80-120 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3163250 3163251

ND

mg/L

MSD MS 92521578009 Spike Spike MS MSD MS MSD % Rec Parameter Units Conc. Result Result Conc. Result % Rec % Rec Limits

0.0025

0.0024

0.0023

94

92

75-125

0.0025

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.



### **QUALITY CONTROL DATA**

Project: YATES AP-2
Pace Project No.: 92521578

QC Batch: 601295 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92521578012, 92521578013, 92521578014

METHOD BLANK: 3168813 Matrix: Water

Associated Lab Samples: 92521578012, 92521578013, 92521578014

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury mg/L ND 0.00050 0.000078 02/23/21 13:14

LABORATORY CONTROL SAMPLE: 3168814

Date: 02/25/2021 02:15 PM

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury mg/L 0.0025 0.0023 92 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3168815 3168816

MSD MS 92521578011 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits ND 0.0025 Mercury mg/L 0.0025 0.0022 0.0022 88 89 75-125 20

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



### **QUALITY CONTROL DATA**

Project: YATES AP-2 Pace Project No.: 92521578

QC Batch: 599663 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92521578004, 92521578005, 92521578006, 92521578007, 92521578008

METHOD BLANK: 3161251 Matrix: Water

Associated Lab Samples: 92521578004, 92521578005, 92521578006, 92521578007, 92521578008

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Fluoride mg/L ND 0.10 0.050 02/12/21 20:16

LABORATORY CONTROL SAMPLE: 3161252

Date: 02/25/2021 02:15 PM

Spike LCS LCS % Rec Conc. Limits Qualifiers Parameter Units Result % Rec Fluoride 2.5 2.6 105 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161253 3161254

MS MSD

92521574009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result RPD Result Conc. % Rec % Rec Limits **RPD** Qual Fluoride mg/L ND 2.5 2.5 2.7 2.7 109 108 90-110 10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161255 3161256

MS MSD 92521581005 MS MSD MS MSD % Rec Spike Spike Max RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD Qual Fluoride 2.5 2.5 ND 2.5 2.7 100 108 8 10 mg/L 90-110

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.

% Rec

Max



### **QUALITY CONTROL DATA**

Project: YATES AP-2
Pace Project No.: 92521578

QC Batch: 599664

QC Batch Method: EPA 300.0 Rev 2.1 1993

Analysis Method: EPA 300.0 Rev 2.1 1993

Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92521578009

METHOD BLANK: 3161257 Matrix: Water

Associated Lab Samples: 92521578009

Date: 02/25/2021 02:15 PM

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Fluoride mg/L ND 0.10 0.050 02/12/21 15:24

LABORATORY CONTROL SAMPLE: 3161258

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Fluoride 2.5 2.6 103 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161259 3161260

MSD MS 92521578009 Spike Spike MS MSD MS MSD Parameter Units Conc. Conc. Result Result Result % Rec % Rec

**RPD** RPD Limits Qual Fluoride mg/L 0.066J 2.5 2.5 2.4 2.5 93 99 90-110 6 10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161575 3161576

MS MSD 92521143010 MS MSD MS MSD % Rec Spike Spike Max **RPD** RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits Qual Fluoride 2.5 2.5 84 0.21 2.5 2.3 91 10 M1 mg/L 90-110

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.



### **QUALITY CONTROL DATA**

Project: YATES AP-2
Pace Project No.: 92521578

QC Batch: 600235 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92521578012, 92521578013, 92521578014

METHOD BLANK: 3164171 Matrix: Water

Associated Lab Samples: 92521578012, 92521578013, 92521578014

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Fluoride mg/L ND 0.10 0.050 02/16/21 14:16

LABORATORY CONTROL SAMPLE: 3164172

Date: 02/25/2021 02:15 PM

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Fluoride 2.5 2.4 97 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164173 3164174

MSD MS 92522138001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result **RPD** RPD Result % Rec % Rec Limits Qual

Fluoride mg/L ND 2.5 2.5 2.4 2.5 95 97 90-110 2 10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164175 3164176

MS MSD 92521578011 MS MSD MS MSD % Rec Spike Spike Max **RPD** RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits Qual Fluoride 2.5 0.068J 2.5 2.6 2.6 100 100 10 mg/L 90-110

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.



### **QUALIFIERS**

Project: YATES AP-2 Pace Project No.: 92521578

### **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**

Date: 02/25/2021 02:15 PM

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



### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES AP-2
Pace Project No.: 92521578

Date: 02/25/2021 02:15 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
92521578004	YGWC-26S (021021)				
92521578005	YGWC-26I (021021)				
92521578006	YGWC-27S (021021)				
92521578007	YGWC-27I (021021)				
92521578009	YGWC-28I(021121)				
92521578012	YGWC-28S (021221)				
92521578013	YGWC-29I (021221)				
92521578004	YGWC-26S (021021)	EPA 3005A	601867	EPA 6020B	601989
92521578005	YGWC-26I (021021)	EPA 3005A	601867	EPA 6020B	601989
92521578006	YGWC-27S (021021)	EPA 3005A	601867	EPA 6020B	601989
92521578007	YGWC-27I (021021)	EPA 3005A	601867	EPA 6020B	601989
92521578008	DUP-2 (021021)	EPA 3005A	601867	EPA 6020B	601989
92521578009	YGWC-28I(021121)	EPA 3005A	601867	EPA 6020B	601989
92521578012	YGWC-28S (021221)	EPA 3005A	601867	EPA 6020B	601989
92521578013	YGWC-29I (021221)	EPA 3005A	601867	EPA 6020B	601989
92521578014	EB-02 (021221)	EPA 3005A	601867	EPA 6020B	601989
92521578004	YGWC-26S (021021)	EPA 7470A	600023	EPA 7470A	600226
92521578005	YGWC-26I (021021)	EPA 7470A	600023	EPA 7470A	600226
92521578006	YGWC-27S (021021)	EPA 7470A	600023	EPA 7470A	600226
92521578007	YGWC-27I (021021)	EPA 7470A	600023	EPA 7470A	600226
92521578008	DUP-2 (021021)	EPA 7470A	600023	EPA 7470A	600226
92521578009	YGWC-28I(021121)	EPA 7470A	600023	EPA 7470A	600226
2521578012	YGWC-28S (021221)	EPA 7470A	601295	EPA 7470A	601814
92521578013	YGWC-29I (021221)	EPA 7470A	601295	EPA 7470A	601814
92521578014	EB-02 (021221)	EPA 7470A	601295	EPA 7470A	601814
92521578004	YGWC-26S (021021)	EPA 300.0 Rev 2.1 1993	599663		
92521578005	YGWC-26I (021021)	EPA 300.0 Rev 2.1 1993	599663		
92521578006	YGWC-27S (021021)	EPA 300.0 Rev 2.1 1993	599663		
92521578007	YGWC-27I (021021)	EPA 300.0 Rev 2.1 1993	599663		
92521578008	DUP-2 (021021)	EPA 300.0 Rev 2.1 1993	599663		
92521578009	YGWC-28I(021121)	EPA 300.0 Rev 2.1 1993	599664		
92521578012	YGWC-28S (021221)	EPA 300.0 Rev 2.1 1993	600235		
92521578013	YGWC-29I (021221)	EPA 300.0 Rev 2.1 1993	600235		
92521578014	EB-02 (021221)	EPA 300.0 Rev 2.1 1993	600235		

### Pace Analytical\*

### Document Name: Sample Condition Upon Receipt(SCUR)

Document No.: F-CAR-CS-033-Rev.07 Document Revised: October 28, 2020 Page 1 of 2

Page 1 of 2 Issuing Authority: Pace Carolinas Quality Office

aboratory receiving samples: Asheville	ood Huntersville Ral	eigh Mechanics	rille Atlanta Kernersville
Sample Condition Upon Receipt  Ourier: Fed Ex	A Po we Cours Dusps D	Project #: WO	‡:92521578 
Commercial Pace	Other:	92521	
rody Seal Present? 🔲 Yes 🔟 পত	Seals Intact? · 🔲 Yes 🔲		als Person Examining Contents 2/10/2-(
king Material: Bubble Wrap	☐Bubble Bags ☐None ☐	Other	Biological Tissue Frozen?
mometer:	Type of Ice:	□Blue □None	Yes No N/A
, ,	tion Factor: ubtract (°C) 0-0		e above freezing to 6°C ut of temp criteria. Samples on ice, cooling process
amples originate in a quarantine zone with  Yes   No	in the United States: CA, NY, or SC (check		inate from a foreign source (internationally, and Puerto Rico)?   Yes   No
1165MO		Tradom g rie wen	Comments/Discrepancy:
Chain of Custody Present?	Yes No NA	1	
Samples Arrived within Hold Time?	Prés Ono On/	2.	
Short Hold Time Analysis (<72 hr.)?	□Yes ☐No □N/A		
Rush Turn Around Time Requested?	□Yes ੴ □N/	4.	
Sufficient Volume?	DXES UNO UN/	5.	
Correct Containers Used?	☐Yes ☐No ☐N/		
-Pace Containers Used?	□1€s □No □N/s	<u> </u>	
Containers Intact?	□1es □No □N/	7	
Dissolved analysis: Samples Field Filtered?	Yes No EN	A 8.	
Sample Labels Match COC?	Aves Ino In/	4 9.	
-Includes Date/Time/ID/Analysis Mat	rix:		
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/	<u> </u>	
OMMENTS/SAMPLE DISCREPANCY			Field Data Required? Yes No
·		Lot ID of split con	tainers:
IENT NOTIFICATION/RESOLUTION			
erson contacted:	Dat	te/Time:	· · · · · · · · · · · · · · · · · · ·
Project Manager SCURF Review:		Date:	
		Date:	
Project Manager SRF Review:			

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

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					ADDITIONAL CO	Nome one Out - 2	YGWC-271	YGWC-275	YGWC-28I	YGWC-26S	10-1- Ord	YGWA-14S	YOUNGER (-B-O)	W. W. A. A. A. A. A. A. A. A. A. A. A. A. A.	YGWA-21	VSWA-18-	X2W-H	SAMPLE ID One Character per box. (A-Z, 4-8 f, - ) Sample lets must be unique		CC LANG.	me: (770)384-6526 Fax:		1070 Bridge Mill Ave	Georgia Power	quired Client information:
																		Witten Witten Witten Witten Witten Witten Witten Witten St. D. Ond O.C. Witten	MATRIXG CODEC	Project #:	Project Name:	Purchase O	Copy To:	Report To: Becky Steaver	Roquind P
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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.

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March 11, 2021

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

RE: Project: YATES AMA RADS

Pace Project No.: 92521568

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between February 10, 2021 and February 12, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

• Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com

Kein Slury

1(704)875-9092

**HORIZON** Database Administrator

**Enclosures** 

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



(770)734-4200



### **CERTIFICATIONS**

Project: YATES AMA RADS

Pace Project No.: 92521568

### Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734 Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040 Florida: Cert E871149 SEKS WET

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 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

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Missouri Certification #: 235

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

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

Texas/TNI Certification #: T104704188-17-3

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



### **SAMPLE SUMMARY**

Project: YATES AMA RADS

Pace Project No.: 92521568

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521568001	YGWA-5D (020821)	Water	02/08/21 16:45	02/10/21 17:10
92521568002	DUP-01(020821)	Water	02/08/21 00:00	02/10/21 17:10
92521568003	YGWA-5I (020821)	Water	02/08/21 16:20	02/10/21 17:10
2521568004	YGWA-39 (021021)	Water	02/10/21 09:30	02/10/21 17:10
92521568005	YGWA-40 (021021)	Water	02/10/21 10:50	02/10/21 17:10
2521568006	FB-01(021021)	Water	02/10/21 11:05	02/10/21 17:10
2521568007	YGWA-20S (020921)	Water	02/09/21 16:50	02/10/21 17:10
2521568008	YGWA-4I(020921)	Water	02/09/21 09:50	02/10/21 17:10
2521568009	YGWA-17S(020921)	Water	02/09/21 11:15	02/10/21 17:10
2521568010	YGWA-18S(020921)	Water	02/09/21 13:25	02/10/21 17:10
2521568011	YGWA-18I(020921)	Water	02/09/21 14:00	02/10/21 17:10
2521568012	YGWA-21I(020921)	Water	02/09/21 16:10	02/10/21 17:10
2521568013	YGWA-3I(021021)	Water	02/10/21 16:40	02/11/21 13:03
2521568014	YGWA-3D(021021)	Water	02/10/21 17:25	02/11/21 13:03
2521568015	YGWA-30I(021121)	Water	02/11/21 09:50	02/11/21 13:03
521568016	FB-01(021121)	Water	02/11/21 10:00	02/11/21 13:03
2521568017	EB-01(021121)	Water	02/11/21 12:05	02/11/21 13:03
2521568018	YGWA-40 (021021) MS	Water	02/10/21 10:50	02/10/21 17:10
2521568019	YGWA-40 (021021) MSD	Water	02/10/21 10:50	02/10/21 17:10
2521567001	EB-02 (021021)	Water	02/10/21 11:30	02/10/21 17:10
2521567003	DUP-1 (021021)	Water	02/10/21 00:00	02/10/21 17:10
2521567002	YGWA-14S (021021)	Water	02/10/21 08:50	02/10/21 17:10
2521567010	YGWA-1I (021221)	Water	02/12/21 13:20	02/12/21 17:10
2521567011	YGWA-1D (021221)	Water	02/12/21 11:55	02/12/21 17:10
2521567017	YGWA-1D (021221) MS	Water	02/12/21 11:55	02/12/21 17:10
2521567018	YGWA-1D (021221) MSD	Water	02/12/21 11:55	02/12/21 17:10
2521572002	YGWA-2I(021021)	Water	02/10/21 12:40	02/10/21 17:10



### **SAMPLE ANALYTE COUNT**

Project: YATES AMA RADS

Pace Project No.: 92521568

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92521568001	YGWA-5D (020821)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568002	DUP-01(020821)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568003	YGWA-5I (020821)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568004	YGWA-39 (021021)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568005	YGWA-40 (021021)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568006	FB-01(021021)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568007	YGWA-20S (020921)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568008	YGWA-4I(020921)	EPA 9315	LAL	1	PASI-PA
	,	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568009	YGWA-17S(020921)	EPA 9315	LAL	1	PASI-PA
	, ,	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568010	YGWA-18S(020921)	EPA 9315	LAL	1	PASI-PA
	, ,	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568011	YGWA-18I(020921)	EPA 9315	LAL	1	PASI-PA
	. ,	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568012	YGWA-21I(020921)	EPA 9315	LAL	1	PASI-PA
	. ,	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568013	YGWA-3I(021021)	EPA 9315	LAL	1	PASI-PA
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### **SAMPLE ANALYTE COUNT**

Project: YATES AMA RADS

Pace Project No.: 92521568

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568014	YGWA-3D(021021)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568015	YGWA-30I(021121)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568016	FB-01(021121)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568017	EB-01(021121)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521568018	YGWA-40 (021021) MS	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
2521568019	YGWA-40 (021021) MSD	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
2521567001	EB-02 (021021)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521567003	DUP-1 (021021)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521567002	YGWA-14S (021021)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
2521567010	YGWA-1I (021221)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2521567011	YGWA-1D (021221)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2521567017	YGWA-1D (021221) MS	EPA 9315	LAL	1	PASI-PA
	-	EPA 9320	VAL	1	PASI-PA
2521567018	YGWA-1D (021221) MSD	EPA 9315	LAL	1	PASI-PA
	• •				

### **REPORT OF LABORATORY ANALYSIS**



### **SAMPLE ANALYTE COUNT**

Project: YATES AMA RADS

Pace Project No.: 92521568

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92521572002	YGWA-2I(021021)	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg



Project: YATES AMA RADS

Pace Project No.: 92521568

Lab Sample ID	Client Sample ID			5		0 111
Method	Parameters —	Result	Units	Report Limit	Analyzed	Qualifiers
92521568001	YGWA-5D (020821)					
EPA 9315	Radium-226	2.30 ± 0.514 (0.306)	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	C:89% T:NA 0.591 ± 0.501 (1.00) C:79%	pCi/L		03/01/21 16:19	
Total Radium Calculation	Total Radium	T:67% 2.89 ± 1.02 (1.31)	pCi/L		03/05/21 14:00	
92521568002	DUP-01(020821)					
EPA 9315	Radium-226	0.171 ± 0.133 (0.235) C:92% T:NA	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	0.0142 ± 0.351 (0.815) C:80%	pCi/L		03/01/21 16:19	
Total Radium Calculation	Total Radium	7:79% 0.185 ± 0.484 (1.05)	pCi/L		03/05/21 14:00	
92521568003	YGWA-5I (020821)	,				
EPA 9315	Radium-226	0.476 ± 0.249 (0.427)	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	C:90% T:NÁ 0.137 ± 0.351 (0.783) C:82%	pCi/L		03/01/21 16:19	
Total Radium Calculation	Total Radium	T:79% 0.613 ± 0.600 (1.21)	pCi/L		03/05/21 14:00	
92521568004	YGWA-39 (021021)					
EPA 9315	Radium-226	0.363 ± 0.187 (0.306) C:96% T:NA	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	0.155 ± 0.298 (0.655) C:87% T:90%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.518 ± 0.485 (0.961)	pCi/L		03/05/21 14:00	



Project: YATES AMA RADS

Pace Project No.: 92521568

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521568005	YGWA-40 (021021)					
EPA 9315	Radium-226	0.346 ± 0.178	pCi/L	03	3/05/21 07:15	
EPA 9320	Radium-228	(0.255) C:93% T:NA 0.437 ± 0.487 (1.02)	pCi/L	03	3/01/21 16:19	
Total Radium Calculation	Total Radium	C:90% T:61% 0.783 ± 0.665 (1.28)	pCi/L	0:	3/05/21 14:00	
92521568006	FB-01(021021)					
EPA 9315	Radium-226	0.0756 ± 0.104 (0.217) C:87% T:NA	pCi/L	03	3/05/21 07:15	
EPA 9320	Radium-228	0.0378 ± 0.302 (0.696) C:86%	pCi/L	0:	3/01/21 16:20	
Total Radium Calculation	Total Radium	T:83% 0.113 ± 0.406 (0.913)	pCi/L	03	3/05/21 14:00	
92521568007	YGWA-20S (020921)					
EPA 9315	Radium-226	0.0222 ± 0.0899 (0.230) C:94% T:NA	pCi/L	03	3/05/21 07:27	
EPA 9320	Radium-228	0.262 ± 0.354 (0.756) C:84%	pCi/L	0:	3/01/21 16:20	
Total Radium Calculation	Total Radium	T:79% 0.284 ± 0.444 (0.986)	pCi/L	0:	3/05/21 14:00	
92521568008	YGWA-4I(020921)					
EPA 9315	Radium-226	0.492 ± 0.201 (0.224) C:89% T:NA	pCi/L	03	3/05/21 07:27	
EPA 9320	Radium-228	0.134 ± 0.379 (0.848) C:84% T:78%	pCi/L	0:	3/01/21 16:20	
Total Radium Calculation	Total Radium	0.626 ± 0.580 (1.07)	pCi/L	0:	3/05/21 14:00	

# **REPORT OF LABORATORY ANALYSIS**



Project: YATES AMA RADS

Pace Project No.: 92521568

Lab Sample ID	Client Sample ID Parameters	Danile	Lla 9 -	Report Limit	A mak :!	O. 1-1:4:
Method	— Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521568009	YGWA-17S(020921)					
EPA 9315	Radium-226	0.0845 ± 0.101 (0.203)	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	C:86% T:NA 0.444 ± 0.512 (1.08) C:89%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	T:63% 0.529 ± 0.613 (1.28)	pCi/L		03/05/21 14:00	
92521568010	YGWA-18S(020921)					
EPA 9315	Radium-226	0.0536 ± 0.0925 (0.208) C:92% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	0.205 ± 0.313 (0.676) C:82% T:78%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.259 ± 0.406 (0.884)	pCi/L		03/05/21 14:00	
92521568011	YGWA-18I(020921)					
EPA 9315	Radium-226	0.147 ± 0.123 (0.217) C:89% T:NA	pCi/L		03/05/21 07:48	
EPA 9320	Radium-228	0.167 ± 0.338 (0.745) C:86% T:79%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.314 ± 0.461 (0.962)	pCi/L		03/05/21 14:00	
92521568012	YGWA-21I(020921)					
EPA 9315	Radium-226	0.925 ± 0.287 (0.231)	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	C:91% T:NA 0.315 ± 0.363 (0.763) C:88%	pCi/L		03/01/21 16:21	
Total Radium Calculation	Total Radium	T:79% 1.24 ± 0.650 (0.994)	pCi/L		03/05/21 14:00	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES AMA RADS

Pace Project No.: 92521568

Lab Sample ID	Client Sample ID	5 "	11.5	Des 111 1	A l l	0 !!"
Method	Parameters —	Result	Units	Report Limit	Analyzed	Qualifiers
92521568013	YGWA-3I(021021)					
EPA 9315	Radium-226	1.10 ± 0.317 (0.250) C:91% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	1.36 ± 0.549 (0.874) C:90% T:68%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	2.46 ± 0.866 (1.12)	pCi/L		03/05/21 14:00	
92521568014	YGWA-3D(021021)					
EPA 9315	Radium-226	1.59 ± 0.397 (0.248) C:91% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	2.06 ± 0.635 (0.822) C:84% T:79%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	3.65 ± 1.03 (1.07)	pCi/L		03/05/21 14:00	
92521568015	YGWA-30I(021121)					
EPA 9315	Radium-226	0.0594 ± 0.0766 (0.153) C:94% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	0.619 ± 0.427 (0.833) C:86% T:79%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.678 ± 0.504 (0.986)	pCi/L		03/05/21 14:00	
92521568016	FB-01(021121)					
EPA 9315	Radium-226	0.0929 ± 0.0996 (0.196) C:96% T:NA	pCi/L		03/05/21 07:28	
EPA 9320	Radium-228	0.419 ± 0.398 (0.821) C:88% T:80%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.512 ± 0.498 (1.02)	pCi/L		03/05/21 14:00	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES AMA RADS

Pace Project No.: 92521568

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521568017	EB-01(021121)					
EPA 9315	Radium-226	0.0319 ± 0.0775 (0.187)	pCi/L		03/05/21 07:28	
EPA 9320	Radium-228	C:87% T:NA 0.648 ± 0.478 (0.941)	pCi/L	,	03/01/21 16:20	
Total Radium Calculation	Total Radium	C:86% T:67% 0.680 ± 0.556 (1.13)	pCi/L		03/05/21 14:00	
92521568018	YGWA-40 (021021) MS	, ,				
EPA 9315	Radium-226	102.72 %REC ± NA (NA) C:NA T:NA	pCi/L	•	03/05/21 07:28	
EPA 9320	Radium-228	82.38 %REC ± NA (NA) C:NA T:NA	pCi/L	1	03/01/21 16:20	
92521568019	YGWA-40 (021021) MSD					
EPA 9315	Radium-226	93.67%RE C 9.21RPD ± NA (NA)	pCi/L		03/05/21 07:28	
EPA 9320	Radium-228	C:NA T:NA 62.49 %REC 27.45 RPD ± NA (NA) C:NA T:NA	pCi/L	,	03/01/21 16:20	
92521567001	EB-02 (021021)					
EPA 9315	Radium-226	0.0550 ± 0.0861 (0.188) C:84% T:NA	pCi/L	•	03/05/21 07:30	
EPA 9320	Radium-228	-0.0344 ± 0.302 (0.716) C:69%	pCi/L		02/26/21 11:30	
Total Radium Calculation	Total Radium	T:90% 0.0550 ± 0.388 (0.904)	pCi/L	(	03/05/21 14:01	
92521567003	DUP-1 (021021)					
EPA 9315	Radium-226	0.0865 ± 0.0955 (0.184) C:82% T:NA	pCi/L	•	03/05/21 07:30	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES AMA RADS

Pace Project No.: 92521568

Lab Sample ID	Client Sample ID	Б. "	11.25	D	A = -1	0 !!"
Method	Parameters —	Result	Units	Report Limit	Analyzed	Qualifiers
2521567003	DUP-1 (021021)					
EPA 9320	Radium-228	0.528 ± 0.390 (0.755) C:71% T:78%	pCi/L		02/26/21 11:30	
Fotal Radium Calculation	Total Radium	0.615 ± 0.486 (0.939)	pCi/L		03/05/21 14:01	
2521567002	YGWA-14S (021021)					
EPA 9315	Radium-226	0.173 ± 0.123 (0.203) C:90% T:NA	pCi/L		03/05/21 07:30	
EPA 9320	Radium-228	0.180 ± 0.339 (0.746) C:73% T:75%	pCi/L		02/26/21 11:30	
Total Radium Calculation	Total Radium	0.353 ± 0.462 (0.949)	pCi/L		03/05/21 14:01	
2521567010	YGWA-1I (021221)					
EPA 9315	Radium-226	0.136 ± 0.0809 (0.131) C:94% T:NA	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	0.322 ± 0.541 (1.18) C:72% T:83%	pCi/L		03/09/21 17:17	
Total Radium Calculation	Total Radium	0.458 ± 0.622 (1.31)	pCi/L		03/10/21 15:19	
2521567011	YGWA-1D (021221)					
EPA 9315	Radium-226	0.275 ± 0.0990 (0.123) C:95% T:NA	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	0.0910 ± 0.322 (0.726) C:81% T:87%	pCi/L		03/09/21 15:27	
Total Radium Calculation	Total Radium	0.366 ± 0.421 (0.849)	pCi/L		03/10/21 14:15	
2521567017	YGWA-1D (021221) MS					
EPA 9315	Radium-226	98.68 %REC ± NA (NA) C:NA T:NA	pCi/L		03/09/21 19:03	

# **REPORT OF LABORATORY ANALYSIS**



Project: YATES AMA RADS

Pace Project No.: 92521568

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521567017	YGWA-1D (021221) MS					
EPA 9320	Radium-228	106.48 %REC ± NA (NA) C:NA T:NA	pCi/L		03/09/21 15:27	
92521567018	YGWA-1D (021221) MSD					
EPA 9315	Radium-226	91.79 %REC 7.24 RPD ± NA (NA) C:NA T:NA	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	91.25 %REC 15.40 RPD ± NA (NA) C:NA T:NA	pCi/L		03/09/21 15:28	
92521572002	YGWA-2I(021021)					
EPA 9315	Radium-226	0.209 ± 0.130 (0.198) C:83% T:NA	pCi/L		03/02/21 11:26	
EPA 9320	Radium-228	0.831 ± 0.551 (1.06) C:70% T:78%	pCi/L		02/24/21 15:31	
Total Radium Calculation	Total Radium	1.04 ± 0.681 (1.26)	pCi/L		03/02/21 16:35	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-5D (020821)</b> PWS:	<b>Lab ID: 9252</b> Site ID:	1568001 Collected: 02/08/21 16:45 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg		•		
Radium-226	EPA 9315	2.30 ± 0.514 (0.306) C:89% T:NA	pCi/L	03/05/21 07:1	5 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.591 ± 0.501 (1.00) C:79% T:67%	pCi/L	03/01/21 16:19	9 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	2.89 ± 1.02 (1.31)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: DUP-01(020821)</b> PWS:	Lab ID: 9252 Site ID:	<b>1568002</b> Collected: 02/08/21 00:00 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.171 ± 0.133 (0.235) C:92% T:NA	pCi/L	03/05/21 07:1	5 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.0142 ± 0.351 (0.815) C:80% T:79%	pCi/L	03/01/21 16:19	9 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.185 ± 0.484 (1.05)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-5I (020821)</b> PWS:	<b>Lab ID: 92521</b> Site ID:	568003 Collected: 02/08/21 16:20 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	ervices - Greensburg				
Radium-226	EPA 9315	0.476 ± 0.249 (0.427) C:90% T:NA	pCi/L	03/05/21 07:15	5 13982-63-3	
	Pace Analytical S	ervices - Greensburg				
Radium-228	EPA 9320	0.137 ± 0.351 (0.783) C:82% T:79%	pCi/L	03/01/21 16:19	9 15262-20-1	
	Pace Analytical S	ervices - Greensburg				
Total Radium	Total Radium Calculation	0.613 ± 0.600 (1.21)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-39 (021021)</b> PWS:	<b>Lab ID: 9252156</b> Site ID:	Sample Type: 02/10/21 09:30	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Se	rvices - Greensburg		•		
Radium-226	EPA 9315	0.363 ± 0.187 (0.306) C:96% T:NA	pCi/L	03/05/21 07:15	5 13982-63-3	
	Pace Analytical Se	rvices - Greensburg				
Radium-228	EPA 9320	0.155 ± 0.298 (0.655) C:87% T:90%	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Se	rvices - Greensburg				
Total Radium	Total Radium Calculation	0.518 ± 0.485 (0.961)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-40 (021021)</b> PWS:	Lab ID: 9252 Site ID:	1568005 Collected: 02/10/21 10:50 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.346 ± 0.178 (0.255) C:93% T:NA	pCi/L	03/05/21 07:1	5 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.437 ± 0.487 (1.02) C:90% T:61%	pCi/L	03/01/21 16:19	9 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.783 ± 0.665 (1.28)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: FB-01(021021)</b> PWS:	Lab ID: 9252° Site ID:	1568006 Collected: 02/10/21 11:05 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0756 ± 0.104 (0.217) C:87% T:NA	pCi/L	03/05/21 07:1	5 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.0378 ± 0.302 (0.696) C:86% T:83%	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.113 ± 0.406 (0.913)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-20S (020921)</b> PWS:	<b>Lab ID: 92521</b> : Site ID:	568007 Collected: 02/09/21 16:50 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	ervices - Greensburg				
Radium-226	EPA 9315	0.0222 ± 0.0899 (0.230) C:94% T:NA	pCi/L	03/05/21 07:27	7 13982-63-3	
	Pace Analytical S	ervices - Greensburg				
Radium-228	EPA 9320	0.262 ± 0.354 (0.756) C:84% T:79%	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical S	ervices - Greensburg				
Total Radium	Total Radium Calculation	0.284 ± 0.444 (0.986)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-4I(020921)</b> PWS:	Lab ID: 9252 Site ID:	1568008 Collected: 02/09/21 09:50 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.492 ± 0.201 (0.224) C:89% T:NA	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.134 ± 0.379 (0.848) C:84% T:78%	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.626 ± 0.580 (1.07)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-17S(020921)</b> PWS:	Lab ID: 9252 <sup>a</sup> Site ID:	1568009 Collected: 02/09/21 11:15 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0845 ± 0.101 (0.203) C:86% T:NA	pCi/L	03/05/21 07:23	7 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.444 ± 0.512 (1.08) C:89% T:63%	pCi/L	03/01/21 16:20	0 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.529 ± 0.613 (1.28)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-18S(020921)</b> PWS:	<b>Lab ID: 925215</b> Site ID:	<b>68010</b> Collected: 02/09/21 13:25 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Se	ervices - Greensburg				
Radium-226	EPA 9315	0.0536 ± 0.0925 (0.208) C:92% T:NA	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Se	ervices - Greensburg				
Radium-228	EPA 9320	0.205 ± 0.313 (0.676) C:82% T:78%	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Se	ervices - Greensburg				
Total Radium	Total Radium Calculation	0.259 ± 0.406 (0.884)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-18I(020921)</b> PWS:	<b>Lab ID: 92521</b> Site ID:	<b>568011</b> Collected: 02/09/21 14:00 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.147 ± 0.123 (0.217) C:89% T:NA	pCi/L	03/05/21 07:48	3 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.167 ± 0.338 (0.745) C:86% T:79%	pCi/L	03/01/21 16:20	) 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	0.314 ± 0.461 (0.962)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

Sample: YGWA-21I(020921) PWS:	<b>Lab ID: 92521</b> Site ID:	<b>568012</b> Collected: 02/09/21 16:10 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.925 ± 0.287 (0.231) C:91% T:NA	pCi/L	03/05/21 07:27	7 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.315 ± 0.363 (0.763) C:88% T:79%	pCi/L	03/01/21 16:2	1 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	1.24 ± 0.650 (0.994)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

Sample: YGWA-3I(021021) PWS:	<b>Lab ID: 92521</b> Site ID:	<b>568013</b> Collected: 02/10/21 16:40 Sample Type:	Received:	02/11/21 13:03	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	1.10 ± 0.317 (0.250) C:91% T:NA	pCi/L	03/05/21 07:27	7 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	1.36 ± 0.549 (0.874) C:90% T:68%	pCi/L	03/01/21 16:20	) 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	2.46 ± 0.866 (1.12)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

Sample: YGWA-3D(021021) PWS:	Lab ID: 9252 Site ID:	<b>1568014</b> Collected: 02/10/21 17:25 Sample Type:	Received:	02/11/21 13:03	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	1.59 ± 0.397 (0.248) C:91% T:NA	pCi/L	03/05/21 07:23	7 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	2.06 ± 0.635 (0.822) C:84% T:79%	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	3.65 ± 1.03 (1.07)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-30I(021121)</b> PWS:	Lab ID: 9252 Site ID:	1568015 Collected: 02/11/21 09:50 Sample Type:	Received:	02/11/21 13:03	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0594 ± 0.0766 (0.153) C:94% T:NA	pCi/L	03/05/21 07:27	7 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.619 ± 0.427 (0.833) C:86% T:79%	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.678 ± 0.504 (0.986)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: FB-01(021121)</b> PWS:	Lab ID: 9252° Site ID:	1568016 Collected: 02/11/21 10:00 Sample Type:	Received:	02/11/21 13:03	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0929 ± 0.0996 (0.196) C:96% T:NA	pCi/L	03/05/21 07:28	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.419 ± 0.398 (0.821) C:88% T:80%	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.512 ± 0.498 (1.02)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: EB-01(021121)</b> PWS:	Lab ID: 9252 Site ID:	<b>1568017</b> Collected: 02/11/21 12:05 Sample Type:	Received:	02/11/21 13:03	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0319 ± 0.0775 (0.187) C:87% T:NA	pCi/L	03/05/21 07:28	8 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.648 ± 0.478 (0.941) C:86% T:67%	pCi/L	03/01/21 16:20	0 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.680 ± 0.556 (1.13)	pCi/L	03/05/21 14:00	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

Sample: YGWA-40 (021021) MS Lab ID: 92521568018 Collected: 02/10/21 10:50 Received: 02/10/21 17:10 Matrix: Water

C:NA T:NA

PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac Units CAS No. **Parameters** Method Analyzed Qual Pace Analytical Services - Greensburg EPA 9315 102.72 %REC ± NA (NA) Radium-226 pCi/L 03/05/21 07:28 13982-63-3 C:NA T:NA Pace Analytical Services - Greensburg 82.38 %REC ± NA (NA) EPA 9320 Radium-228 03/01/21 16:20 15262-20-1

pCi/L



Project: YATES AMA RADS

Pace Project No.: 92521568

Sample: YGWA-40 (021021) MSD Lab ID: 92521568019 Collected: 02/10/21 10:50 Received: 02/10/21 17:10 Matrix: Water

> NA (NA) C:NA T:NA

Site ID: Sample Type:

PWS: Act ± Unc (MDC) Carr Trac CAS No. **Parameters** Method Units Analyzed Qual Pace Analytical Services - Greensburg EPA 9315 93.67%REC 9.21RPD ± NA Radium-226 pCi/L 03/05/21 07:28 13982-63-3 (NA) C:NA T:NA Pace Analytical Services - Greensburg EPA 9320 62.49 %REC 27.45 RPD ± Radium-228 pCi/L 03/01/21 16:20 15262-20-1



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: EB-02 (021021)</b> PWS:	<b>Lab ID: 92521</b> Site ID:	567001 Collected: 02/10/21 11:30 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	ervices - Greensburg				
Radium-226	EPA 9315	0.0550 ± 0.0861 (0.188) C:84% T:NA	pCi/L	03/05/21 07:30	13982-63-3	
	Pace Analytical S	ervices - Greensburg				
Radium-228	EPA 9320	-0.0344 ± 0.302 (0.716) C:69% T:90%	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical S	ervices - Greensburg				
Total Radium	Total Radium Calculation	0.0550 ± 0.388 (0.904)	pCi/L	03/05/21 14:01	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: DUP-1 (021021)</b> PWS:	Lab ID: 9252 Site ID:	<b>1567003</b> Collected: 02/10/21 00:00 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0865 ± 0.0955 (0.184) C:82% T:NA	pCi/L	03/05/21 07:30	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.528 ± 0.390 (0.755) C:71% T:78%	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.615 ± 0.486 (0.939)	pCi/L	03/05/21 14:0	1 7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-14S (021021)</b> PWS:	<b>Lab ID: 9252156</b> Site ID:	7002 Collected: 02/10/21 08:50 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	vices - Greensburg				
Radium-226	EPA 9315	0.173 ± 0.123 (0.203) C:90% T:NA	pCi/L	03/05/21 07:30	13982-63-3	
	Pace Analytical Ser	vices - Greensburg				
Radium-228	EPA 9320	0.180 ± 0.339 (0.746) C:73% T:75%	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical Ser	vices - Greensburg				
Total Radium	Total Radium Calculation	$0.353 \pm 0.462  (0.949)$	pCi/L	03/05/21 14:01	1 7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-1I (021221)</b> PWS:	<b>Lab ID: 9252</b> 1 Site ID:	<b>567010</b> Collected: 02/12/21 13:20 Sample Type:	Received:	02/12/21 17:10 M	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.136 ± 0.0809 (0.131) C:94% T:NA	pCi/L	03/09/21 19:03	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.322 ± 0.541 (1.18) C:72% T:83%	pCi/L	03/09/21 17:17	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.458 ± 0.622 (1.31)	pCi/L	03/10/21 15:19	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-1D (021221)</b> PWS:	Lab ID: 9252 Site ID:	<b>1567011</b> Collected: 02/12/21 11:55 Sample Type:	Received:	02/12/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.275 ± 0.0990 (0.123) C:95% T:NA	pCi/L	03/09/21 19:03	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.0910 ± 0.322 (0.726) C:81% T:87%	pCi/L	03/09/21 15:27	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.366 ± 0.421 (0.849)	pCi/L	03/10/21 14:15	7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

Sample: YGWA-1D (021221) MS Lab ID: 92521567017 Collected: 02/12/21 11:55 Received: 02/12/21 17:10 Matrix: Water

C:NA T:NA

PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac Units CAS No. **Parameters** Method Analyzed Qual Pace Analytical Services - Greensburg EPA 9315 98.68 %REC ± NA (NA) Radium-226 pCi/L 03/09/21 19:03 13982-63-3 C:NA T:NA Pace Analytical Services - Greensburg 106.48 %REC ± NA (NA) EPA 9320 Radium-228 pCi/L 03/09/21 15:27 15262-20-1



Project: YATES AMA RADS

Pace Project No.: 92521568

Sample: YGWA-1D (021221) MSD Lab ID: 92521567018 Collected: 02/12/21 11:55 Received: 02/12/21 17:10 Matrix: Water

PWS: Site ID: Sample Type:

Act ± Unc (MDC) Carr Trac CAS No. **Parameters** Method Units Analyzed Qual Pace Analytical Services - Greensburg 91.79 %REC 7.24 RPD ± Radium-226 EPA 9315 pCi/L 03/09/21 19:03 13982-63-3 NA (NA) C:NA T:ŃA Pace Analytical Services - Greensburg EPA 9320 91.25 %REC 15.40 RPD ± Radium-228 pCi/L 03/09/21 15:28 15262-20-1

NA (NA) C:NA T:NA



Project: YATES AMA RADS

Pace Project No.: 92521568

<b>Sample: YGWA-2I(021021)</b> PWS:	Lab ID: 9252 Site ID:	<b>1572002</b> Collected: 02/10/21 12:40 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.209 ± 0.130 (0.198) C:83% T:NA	pCi/L	03/02/21 11:26	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.831 ± 0.551 (1.06) C:70% T:78%	pCi/L	02/24/21 15:3	1 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.04 ± 0.681 (1.26)	pCi/L	03/02/21 16:3	5 7440-14-4	



Project: YATES AMA RADS

Pace Project No.: 92521568

QC Batch: 436983 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92521567010, 92521567011, 92521567017, 92521567018

METHOD BLANK: 2109306 Matrix: Water

Associated Lab Samples: 92521567010, 92521567011, 92521567017, 92521567018

ParameterAct  $\pm$  Unc (MDC) Carr TracUnitsAnalyzedQualifiersRadium-2260.0161  $\pm$  0.0615 (0.127) C:96% T:NApCi/L03/09/21 19:03

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.



Project: YATES AMA RADS

Pace Project No.: 92521568

QC Batch: 435783

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

EPA 9315

Associated Lab Samples: 92521567001, 92521567002, 92521567003

METHOD BLANK: 2103740 Matrix: Water

Associated Lab Samples: 92521567001, 92521567002, 92521567003

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.267 ± 0.143 (0.193) C:92% T:NA
 pCi/L
 03/05/21 07:29

Analysis Method:

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.



Project: YATES AMA RADS

Pace Project No.: 92521568

QC Batch: 435459

QC Batch Method: EPA 9315

Analysis Method:

EPA 9315

Analysis Description:

9315 Total Radium

Laboratory:

Pace Analytical Services - Greensburg

Associated Lab Samples: 92521572002

METHOD BLANK: 2102227

Matrix: Water

Associated Lab Samples: 92521572002

Parameter

Act ± Unc (MDC) Carr Trac

Units

Analyzed

Qualifiers

Radium-226

0.276 ± 0.140 (0.180) C:89% T:NA

pCi/L

03/02/21 07:53

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.



Project: YATES AMA RADS

Pace Project No.: 92521568

QC Batch: 435781 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92521568001, 92521568002, 92521568003, 92521568004, 92521568005, 92521568006, 92521568007,

92521568008, 92521568009, 92521568010, 92521568011, 92521568012, 92521568013, 92521568014,

92521568015, 92521568016, 92521568017, 92521568018, 92521568019

METHOD BLANK: 2103737 Matrix: Water

Associated Lab Samples: 92521568001, 92521568002, 92521568003, 92521568004, 92521568005, 92521568006, 92521568007,

92521568008, 92521568009, 92521568010, 92521568011, 92521568012, 92521568013, 92521568014,

92521568015, 92521568016, 92521568017, 92521568018, 92521568019

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.0349 ± 0.0874 (0.210) C:95% T:NA
 pCi/L
 03/05/21 07:14

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.



Project: YATES AMA RADS

Pace Project No.: 92521568

QC Batch: 435116 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92521572002

METHOD BLANK: 2100680 Matrix: Water

Associated Lab Samples: 92521572002

ParameterAct  $\pm$  Unc (MDC) Carr TracUnitsAnalyzedQualifiersRadium-2280.356  $\pm$  0.369 (0.763) C:72% T:87%pCi/L02/24/21 15:29

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



Project: YATES AMA RADS

Pace Project No.: 92521568

QC Batch: 435780 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

 $Associated \ Lab \ Samples: \qquad 92521568001, \ 92521568002, \ 92521568003, \ 92521568004, \ 92521568005, \ 92521568006, \ 92521568007, \ 9252$ 

92521568008, 92521568009, 92521568010, 92521568011, 92521568012, 92521568013, 92521568014, 92521568015, 92521568016, 92521568017, 92521568018, 92521568019

METHOD BLANK: 2103736 Matrix: Water

Associated Lab Samples: 92521568001, 92521568002, 92521568003, 92521568004, 92521568005, 92521568006, 92521568007,

92521568008, 92521568009, 92521568010, 92521568011, 92521568012, 92521568013, 92521568014,

92521568015, 92521568016, 92521568017, 92521568018, 92521568019

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.175 ± 0.283 (0.615) C:84% T:89%
 pCi/L
 03/01/21 16:20

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.

Qualifiers



### **QUALITY CONTROL - RADIOCHEMISTRY**

Project: YATES AMA RADS

Parameter

Pace Project No.: 92521568

QC Batch: 436984 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

> Pace Analytical Services - Greensburg Laboratory:

> > Units

 $92521567010,\,92521567011,\,92521567017,\,92521567018$ Associated Lab Samples:

METHOD BLANK: 2109307 Matrix: Water Associated Lab Samples: 92521567010, 92521567011, 92521567017, 92521567018

Act ± Unc (MDC) Carr Trac Analyzed

Radium-228  $0.0130 \pm 0.299$  (0.696) C:76% T:89% pCi/L 03/09/21 15:28

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



Project: YATES AMA RADS

Pace Project No.: 92521568

QC Batch: 435784 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92521567001, 92521567002, 92521567003

METHOD BLANK: 2103741 Matrix: Water

Associated Lab Samples: 92521567001, 92521567002, 92521567003

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.191 ± 0.338 (0.740) C:71% T:85%
 pCi/L
 02/26/21 11:33

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.



### **QUALIFIERS**

Project: YATES AMA RADS

Pace Project No.: 92521568

### **DEFINITIONS**

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Act - Activity

Date: 03/11/2021 10:39 AM

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.



### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES AMA RADS

Pace Project No.: 92521568

Date: 03/11/2021 10:39 AM

2521567002         Y GWA-14S (021021)         EPA 9315         435783           2521567003         DUP-1 (021021)         EPA 9315         435783           2521568001         Y GWA-5D (020821)         EPA 9315         435781           2521568002         DUP-01(020821)         EPA 9315         435781           2521568003         Y GWA-5D (020821)         EPA 9315         435781           2521568004         Y GWA-4D (021021)         EPA 9315         435781           2521568005         Y GWA-4D (021021)         EPA 9315         435781           2521568007         Y GWA-2DS (020921)         EPA 9315         435781           2521568007         Y GWA-2DS (020921)         EPA 9315         435781           2521568007         Y GWA-175(020921)         EPA 9315         435781           2521568009         Y GWA-18(020921)         EPA 9315         435781           2521568011         Y GWA-18(020921)         EPA 9315         435781           2521568012         Y GWA-21(020921)         EPA 9315         435781           2521568013         Y GWA-30(021021)         EPA 9315         435781           2521568014         Y GWA-30(021021)         EPA 9315         435781           2521568015         Y GWA-30(020121)	Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2521567003         DUP-1 (021021)         EPA 9315         435781           2521568001         YGWA-50 (020821)         EPA 9315         435781           2521568003         YGWA-51 (020821)         EPA 9315         435781           2521568003         YGWA-51 (020821)         EPA 9315         435781           2521568005         YGWA-40 (021021)         EPA 9315         435781           2521568006         FB-01(021021)         EPA 9315         435781           2521568007         YGWA-40 (020021)         EPA 9315         435781           2521568008         FB-01(021021)         EPA 9315         435781           2521568009         YGWA-178(020921)         EPA 9315         435781           2521568000         YGWA-178(020921)         EPA 9315         435781           2521568010         YGWA-188(020921)         EPA 9315         435781           2521568011         YGWA-21(020021)         EPA 9315         435781           2521568012         YGWA-21(021021)         EPA 9315         435781           2521568013         YGWA-31(021021)         EPA 9315         435781           2521568014         YGWA-30(02121)         EPA 9315         435781           2521568015         YGWA-30(021021)         EPA 9315 </td <td>92521567001</td> <td>EB-02 (021021)</td> <td>EPA 9315</td> <td>435783</td> <td>_</td> <td></td>	92521567001	EB-02 (021021)	EPA 9315	435783	_	
2521568001 YGWA-5D (020821) EPA 9315 435781 2521568002 DUP-01(020821) EPA 9315 435781 2521568003 YGWA-5B (020821) EPA 9315 435781 2521568004 YGWA-3B (020121) EPA 9315 435781 2521568006 YGWA-00 (021021) EPA 9315 435781 2521568006 FB-01(021021) EPA 9315 435781 2521568007 YGWA-208 (020921) EPA 9315 435781 2521568008 YGWA-40(020921) EPA 9315 435781 2521568009 YGWA-175(020921) EPA 9315 435781 2521568009 YGWA-175(020921) EPA 9315 435781 2521568009 YGWA-175(020921) EPA 9315 435781 2521568010 YGWA-186(020921) EPA 9315 435781 2521568011 YGWA-181(020921) EPA 9315 435781 2521568011 YGWA-181(020921) EPA 9315 435781 2521568011 YGWA-181(020921) EPA 9315 435781 2521568013 YGWA-3D(021021) EPA 9315 435781 2521568014 YGWA-3D(021021) EPA 9315 435781 2521568015 YGWA-3D(021021) EPA 9315 435781 2521568016 FB-01(021121) EPA 9315 435781 2521568017 EB-01(021121) EPA 9315 435781 2521568018 FB-01(021121) EPA 9315 435781 2521568019 FB-01(021121) EPA 9315 435781 2521568019 FB-01(021121) EPA 9315 435781 2521568019 FB-01(021121) EPA 9315 435781 2521568019 FB-01(021121) EPA 9315 435781 2521568019 FB-01(021121) EPA 9315 435781 2521568019 FB-01(021121) EPA 9315 435781 2521568019 FB-01(021121) EPA 9315 435781 2521568019 FB-01(021121) EPA 9315 435883 2521568019 FB-01(021121) EPA 9315 435883 2521568010 YGWA-10 (021221) MSD EPA 9315 435883 2521568010 YGWA-40 (021021) MSD EPA 9315 435781 2521568010 YGWA-40 (021021) MSD EPA 9315 435781 2521568010 YGWA-40 (021021) MSD EPA 9315 435780 2521568001 YGWA-40 (021021) MSD EPA 9315 435780 2521568001 YGWA-40 (021021) EPA 9320 435780 2521568001 YGWA-50 (020821) EPA 9320 435780 2521568000 YGWA-18(020021) EPA 9320 435780 2521568000 YGWA-18(020021) EPA 9320 435780 2521568000 YGWA-18(020021) EPA 9320 435780 2521568000 YGWA-18(020021) EPA 9320 435780 2521568001 YGWA-18(020021) EPA 9320 435780 2521568001 YGWA-18(020021) EPA 9320 435780 2521568001 YGWA-18(020021) EPA 9320 435780 2521568001 YGWA-18(020021) EPA 9320 435780 2521568001 YGWA-18(020021) EPA 9320 435780 2521568001 YGWA-18(020021) EPA 9320 435780 2521568001 Y	2521567002	YGWA-14S (021021)	EPA 9315	435783		
DUP-01(020e21)	2521567003	DUP-1 (021021)	EPA 9315	435783		
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2521568003 YGWA-51 (020621) EPA 9315 435781 2521568004 YGWA-30 (021021) EPA 9315 435781 2521568005 YGWA-40 (021021) EPA 9315 435781 2521568006 FB-01(021021) EPA 9315 435781 2521568007 YGWA-208 (020921) EPA 9315 435781 2521568008 YGWA-41(020921) EPA 9315 435781 2521568008 YGWA-41(020921) EPA 9315 435781 2521568009 YGWA-41(020921) EPA 9315 435781 2521568001 YGWA-41(020921) EPA 9315 435781 2521568010 YGWA-118(020921) EPA 9315 435781 2521568011 YGWA-18(020921) EPA 9315 435781 2521568011 YGWA-18(020921) EPA 9315 435781 2521568011 YGWA-18(020921) EPA 9315 435781 2521568011 YGWA-21(020021) EPA 9315 435781 2521568013 YGWA-30(021021) EPA 9315 435781 2521568014 YGWA-30(021021) EPA 9315 435781 2521568016 YGWA-30(021121) EPA 9315 435781 2521568016 FB-01(021121) EPA 9315 435781 2521568017 YGWA-10 (021221) EPA 9315 435781 2521568018 YGWA-10 (021021) EPA 9315 435781 2521568019 YGWA-10 (021021) EPA 9315 435781 2521568010 YGWA-10 (021021) BEPA 9315 436983 2521567010 YGWA-10 (021021) MS EPA 9315 436983 2521567011 YGWA-10 (021021) MS EPA 9315 436983 2521567010 YGWA-40 (021021) MS EPA 9315 436983 2521568018 YGWA-40 (021021) MS EPA 9315 436983 2521568019 YGWA-40 (021021) MS EPA 9315 435781 2521568010 YGWA-40 (021021) MS EPA 9315 435781 2521568010 YGWA-40 (021021) MS EPA 9315 435781 2521568010 YGWA-40 (021021) MS EPA 9315 435781 2521568010 YGWA-40 (021021) BEPA 9320 435780 2521568000 YGWA-40 (021021) EPA 9320 435780 2521568000 YGWA-40 (021021) EPA 9320 435780 2521568000 YGWA-40 (021021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA 9320 435780 2521568000 YGWA-41(020021) EPA	2521568002	DUP-01(020821)	EPA 9315	435781		
2821568004         YGWA-39 (021021)         EPA 3315         435781           2821568005         YGWA-40 (021021)         EPA 3315         435781           2821568006         FB-01(021021)         EPA 3315         435781           2821568007         YGWA-205 (020921)         EPA 3315         435781           2821568009         YGWA-14(020921)         EPA 9315         435781           2821568001         YGWA-148(020921)         EPA 9315         435781           282156801         YGWA-188(020921)         EPA 9315         435781           282156801         YGWA-21(020921)         EPA 9315         435781           282156801         YGWA-21(0201021)         EPA 9315         435781           2821568013         YGWA-21(020201)         EPA 9315         435781           2821568014         YGWA-3(021021)         EPA 9315         435781           2821568015         YGWA-3(021121)         EPA 9315         435781           2821568016         PB-01(021121)         EPA 9315         435781           2821568017         EB-01(021121)         EPA 9315         435781           2821567010         YGWA-10 (021221)         EPA 9315         435781           2821567017         YGWA-10 (021221)         EPA 9315	2521568003	• •	EPA 9315	435781		
2521568005         YGWA-40 (021021)         EPA 9315         435781           2521568006         FB-01(021021)         EPA 9315         435781           2521568007         YGWA-40(02021)         EPA 9315         435781           2521568008         YGWA-41(020921)         EPA 9315         435781           2521568009         YGWA-18(020921)         EPA 9315         435781           2521568010         YGWA-18(020921)         EPA 9315         435781           2521568011         YGWA-28(020921)         EPA 9315         435781           2521568012         YGWA-21(020921)         EPA 9315         435781           2521572002         YGWA-21(021021)         EPA 9315         435781           252158013         YGWA-30(021021)         EPA 9315         435781           2521568014         YGWA-30(021121)         EPA 9315         435781           2521568015         YGWA-30(021121)         EPA 9315         435781           2521568016         FB-01(021121)         EPA 9315         435781           2521568017         YGWA-10 (021221)         EPA 9315         435781           2521567010         YGWA-10 (021221)         EPA 9315         436983           2521567011         YGWA-10 (021221)         EPA 9315	2521568004	YGWA-39 (021021)	EPA 9315	435781		
2521568007       YGWA-20S (020021)       EPA 9315       435781         2521568008       YGWA-41(020921)       EPA 9315       435781         2521568010       YGWA-18S(020921)       EPA 9315       435781         2521568011       YGWA-18S(020921)       EPA 9315       435781         2521568012       YGWA-21(020921)       EPA 9315       435781         2521568012       YGWA-21(020121)       EPA 9315       435781         2521568012       YGWA-3(021021)       EPA 9315       435781         2521568013       YGWA-3(021021)       EPA 9315       435781         2521568014       YGWA-30(021121)       EPA 9315       435781         2521568015       YGWA-30(021121)       EPA 9315       435781         2521568016       FB-01(021121)       EPA 9315       435781         2521568017       EB-01(021121)       EPA 9315       435781         2521567010       YGWA-11 (021221)       EPA 9315       435781         2521567011       YGWA-10 (021221) MS       EPA 9315       436983         2521567017       YGWA-10 (021021) MS       EPA 9315       436983         2521568018       YGWA-40 (021021) MS       EPA 9315       435781         2521568019       YGWA-40 (021021) MS	2521568005		EPA 9315	435781		
2521568008         YGWA-4I(020921)         EPA 9315         435781           2521568009         YGWA-17S(020921)         EPA 9315         435781           2521568010         YGWA-188(020921)         EPA 9315         435781           2521568011         YGWA-21I(020921)         EPA 9315         435781           2521568012         YGWA-2I(020921)         EPA 9315         435781           2521572002         YGWA-2I(021021)         EPA 9315         435781           2521568013         YGWA-3I(021021)         EPA 9315         435781           2521568014         YGWA-3D(021021)         EPA 9315         435781           2521568015         YGWA-3D(021121)         EPA 9315         435781           2521568016         FB-01(021121)         EPA 9315         435781           2521568017         EB-01(021121)         EPA 9315         435781           2521567010         YGWA-1D (021221)         EPA 9315         435781           2521567011         YGWA-1D (021221)         EPA 9315         435781           2521567017         YGWA-1D (021221)         EPA 9315         436983           2521567018         YGWA-4D (021021)         EPA 9315         436983           2521568019         YGWA-4D (021021)         EPA 9315	2521568006	FB-01(021021)	EPA 9315	435781		
2521568008         YGWA-4I(020921)         EPA 9315         435781           2521568009         YGWA-17S(020921)         EPA 9315         435781           2521568010         YGWA-188(020921)         EPA 9315         435781           2521568011         YGWA-21I(020921)         EPA 9315         435781           2521568012         YGWA-2I(020921)         EPA 9315         435781           2521568013         YGWA-2I(021021)         EPA 9315         435781           2521568014         YGWA-3D(021021)         EPA 9315         435781           2521568015         YGWA-3D(021021)         EPA 9315         435781           2521568016         FB-01(021121)         EPA 9315         435781           2521568017         FB-01(021121)         EPA 9315         435781           2521567017         EB-01(021121)         EPA 9315         435781           2521567010         YGWA-1D (021221)         EPA 9315         435781           2521567017         YGWA-1D (021221)         EPA 9315         435781           2521567018         YGWA-1D (021221)         EPA 9315         436983           2521567018         YGWA-1D (021221)         EPA 9315         436983           2521568019         YGWA-1D (021221)         EPA 9315 </td <td>2521568007</td> <td>YGWA-20S (020921)</td> <td>EPA 9315</td> <td>435781</td> <td></td> <td></td>	2521568007	YGWA-20S (020921)	EPA 9315	435781		
2521588010         YGWA-18(020921)         EPA 9315         435781           2521586011         YGWA-18(020921)         EPA 9315         435781           2521586012         YGWA-21(020921)         EPA 9315         435781           2521572002         YGWA-21(021021)         EPA 9315         435781           2521586013         YGWA-30(021021)         EPA 9315         435781           2521586014         YGWA-30(021121)         EPA 9315         435781           2521586015         YGWA-30(021121)         EPA 9315         435781           2521586016         FB-01(021121)         EPA 9315         435781           2521587017         YGWA-10 (021221)         EPA 9315         435781           2521587010         YGWA-1D (021221)         EPA 9315         435781           2521587017         YGWA-1D (021221)         EPA 9315         436983           2521587017         YGWA-1D (021221)         BPA 9315         436983           2521586018         YGWA-40 (021021)         EPA 9315         435781           2521586018         YGWA-40 (021021)         EPA 9315         435781           2521567002         YGWA-40 (021021)         EPA 9315         435781           2521568018         YGWA-40 (021021)         EPA 93	2521568008		EPA 9315	435781		
2521588010         YGWA-18(020921)         EPA 9315         435781           2521586011         YGWA-18(020921)         EPA 9315         435781           2521586012         YGWA-21(020921)         EPA 9315         435781           2521572002         YGWA-21(021021)         EPA 9315         435781           2521586013         YGWA-30(021021)         EPA 9315         435781           2521586014         YGWA-30(021121)         EPA 9315         435781           2521586015         YGWA-30(021121)         EPA 9315         435781           2521586016         FB-01(021121)         EPA 9315         435781           2521587017         YGWA-10 (021221)         EPA 9315         435781           2521587010         YGWA-1D (021221)         EPA 9315         435781           2521587017         YGWA-1D (021221)         EPA 9315         436983           2521587017         YGWA-1D (021221)         BPA 9315         436983           2521586018         YGWA-40 (021021)         EPA 9315         435781           2521586018         YGWA-40 (021021)         EPA 9315         435781           2521567002         YGWA-40 (021021)         EPA 9315         435781           2521568018         YGWA-40 (021021)         EPA 93		•				
2521588011         YGWA-18(020921)         EPA 9315         435781           252158012         YGWA-21(020921)         EPA 9315         435781           2521572002         YGWA-2(021021)         EPA 9315         435781           2521568013         YGWA-3(021021)         EPA 9315         435781           2521568014         YGWA-30(021121)         EPA 9315         435781           2521568015         YGWA-30(021121)         EPA 9315         435781           2521568017         EB-01(021121)         EPA 9315         435781           2521567010         YGWA-11 (021221)         EPA 9315         435781           2521567011         YGWA-1D (021221)         EPA 9315         436983           2521567017         YGWA-1D (021221)         EPA 9315         436983           2521567018         YGWA-1D (021221) MSD         EPA 9315         436983           2521567018         YGWA-1D (021221) MSD         EPA 9315         436983           2521568018         YGWA-40 (021021) MSD         EPA 9315         435781           2521567017         YGWA-40 (021021) MSD         EPA 9315         435781           2521568018         YGWA-40 (021021)         EPA 9316         435781           2521568019         YGWA-14S (0201021)	2521568010	· · ·	EPA 9315	435781		
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2521568002       DUP-01(020821)       EPA 9320       435780         2521568003       YGWA-5I (020821)       EPA 9320       435780         2521568004       YGWA-39 (021021)       EPA 9320       435780         2521568005       YGWA-40 (021021)       EPA 9320       435780         2521568006       FB-01(021021)       EPA 9320       435780         2521568007       YGWA-20S (020921)       EPA 9320       435780         2521568008       YGWA-4I(020921)       EPA 9320       435780         2521568010       YGWA-17S(020921)       EPA 9320       435780         2521568011       YGWA-18I(020921)       EPA 9320       435780         2521568012       YGWA-2I(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435780	2521567003	DUP-1 (021021)	EPA 9320	435784		
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2521568004       YGWA-39 (021021)       EPA 9320       435780         2521568005       YGWA-40 (021021)       EPA 9320       435780         2521568006       FB-01(021021)       EPA 9320       435780         2521568007       YGWA-20S (020921)       EPA 9320       435780         2521568008       YGWA-4I(020921)       EPA 9320       435780         2521568009       YGWA-17S(020921)       EPA 9320       435780         2521568010       YGWA-18S(020921)       EPA 9320       435780         2521568011       YGWA-18I(020921)       EPA 9320       435780         2521568012       YGWA-2I(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116	2521568002	DUP-01(020821)	EPA 9320	435780		
2521568005       YGWA-40 (021021)       EPA 9320       435780         2521568006       FB-01(021021)       EPA 9320       435780         2521568007       YGWA-20S (020921)       EPA 9320       435780         2521568008       YGWA-4I(020921)       EPA 9320       435780         2521568009       YGWA-17S(020921)       EPA 9320       435780         2521568010       YGWA-18S(020921)       EPA 9320       435780         2521568011       YGWA-18I(020921)       EPA 9320       435780         2521568012       YGWA-2I(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116	2521568003	YGWA-5I (020821)	EPA 9320	435780		
2521568006       FB-01(021021)       EPA 9320       435780         2521568007       YGWA-20S (020921)       EPA 9320       435780         2521568008       YGWA-4I(020921)       EPA 9320       435780         2521568009       YGWA-17S(020921)       EPA 9320       435780         2521568010       YGWA-18S(020921)       EPA 9320       435780         2521568011       YGWA-18I(020921)       EPA 9320       435780         2521568012       YGWA-2I(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116	2521568004	YGWA-39 (021021)	EPA 9320	435780		
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2521568007       YGWA-20S (020921)       EPA 9320       435780         2521568008       YGWA-4I(020921)       EPA 9320       435780         2521568009       YGWA-17S(020921)       EPA 9320       435780         2521568010       YGWA-18S(020921)       EPA 9320       435780         2521568011       YGWA-18I(020921)       EPA 9320       435780         2521568012       YGWA-2II(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116	2521568006					
2521568008       YGWA-4I(020921)       EPA 9320       435780         2521568009       YGWA-17S(020921)       EPA 9320       435780         2521568010       YGWA-18S(020921)       EPA 9320       435780         2521568011       YGWA-18I(020921)       EPA 9320       435780         2521568012       YGWA-2II(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116	2521568007		EPA 9320	435780		
2521568009       YGWA-17S(020921)       EPA 9320       435780         2521568010       YGWA-18S(020921)       EPA 9320       435780         2521568011       YGWA-18I(020921)       EPA 9320       435780         2521568012       YGWA-2II(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116			EPA 9320	435780		
2521568011       YGWA-18I(020921)       EPA 9320       435780         2521568012       YGWA-2II(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116	2521568009	, ,	EPA 9320	435780		
2521568012       YGWA-21I(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116	2521568010	YGWA-18S(020921)	EPA 9320	435780		
2521568012       YGWA-21I(020921)       EPA 9320       435780         2521572002       YGWA-2I(021021)       EPA 9320       435116	2521568011	· · ·	EPA 9320	435780		
· · ·	2521568012	· ,	EPA 9320	435780		
<b>2521568013 YGWA-3I(021021)</b> EPA 9320 435780	92521572002	YGWA-2I(021021)	EPA 9320	435116		
	2521568013	YGWA-3I(021021)	EPA 9320	435780		



### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES AMA RADS

Pace Project No.: 92521568

Date: 03/11/2021 10:39 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521568014	YGWA-3D(021021)	EPA 9320	435780		
92521568015	YGWA-30I(021121)	EPA 9320	435780		
92521568016	FB-01(021121)	EPA 9320	435780		
92521568017	EB-01(021121)	EPA 9320	435780		
92521567010	YGWA-1I (021221)	EPA 9320	436984		
92521567011	YGWA-1D (021221)	EPA 9320	436984		
92521567017	YGWA-1D (021221) MS	EPA 9320	436984		
92521567018	YGWA-1D (021221) MSD	EPA 9320	436984		
92521568018	YGWA-40 (021021) MS	EPA 9320	435780		
92521568019	YGWA-40 (021021) MSD	EPA 9320	435780		
92521567001	EB-02 (021021)	Total Radium Calculation	437456		
92521567002	YGWA-14S (021021)	Total Radium Calculation	437456		
92521567003	DUP-1 (021021)	Total Radium Calculation	437456		
92521568001	YGWA-5D (020821)	Total Radium Calculation	437454		
92521568002	DUP-01(020821)	Total Radium Calculation	437454		
92521568003	YGWA-SI (020821)	Total Radium Calculation	437454		
92521568004	YGWA-39 (021021)	Total Radium Calculation	437454		
92521568005	YGWA-40 (021021)	Total Radium Calculation	437454		
92521568006	FB-01(021021)	Total Radium Calculation	437454		
92521568007	YGWA-20S (020921)	Total Radium Calculation	437454		
92521568008	YGWA-4I(020921)	Total Radium Calculation	437454		
92521568009	YGWA-17S(020921)	Total Radium Calculation	437454		
92521568010	YGWA-18S(020921)	<b>Total Radium Calculation</b>	437454		
92521568011	YGWA-18I(020921)	Total Radium Calculation	437454		
92521568012	YGWA-21I(020921)	<b>Total Radium Calculation</b>	437454		
92521572002	YGWA-2I(021021)	Total Radium Calculation	436928		
92521568013	YGWA-3I(021021)	Total Radium Calculation	437454		
92521568014	YGWA-3D(021021)	Total Radium Calculation	437454		
92521568015	YGWA-30I(021121)	Total Radium Calculation	437454		
92521568016	FB-01(021121)	Total Radium Calculation	437454		
92521568017	EB-01(021121)	<b>Total Radium Calculation</b>	437454		
92521567010	YGWA-1I (021221)	Total Radium Calculation	438070		
92521567011	YGWA-1D (021221)	Total Radium Calculation	438070		

### Pace Analytical\*

### Document Name: Sample Condition Upon Receipt(SCUR)

Document No.: F-CAR-CS-033-Rev.07 Document Revised: October 28, 2020 Page 1 of 2

Issuing Authority:
Pace Carolinas Quality Office

ooratory receiving samples: isheville Eden Greenwood	Huntersville	Raleigh	Mechanicsville Atlanta Kernersville
Sample Condition Upon Receipt  Client Name:  CHAPAU	10 1/	Proje	ect#: WO#:92521568
urier: Fed Ex UPS Commercial Pace	USPS Other:	Client	92521568
ody Seal Present? Yes Ano Seals	Intact? A TYes	□No	Date/Initials Person Examining Contents
rmometer:    IR Gun ID: 230   Correction Factor	Type of Ice:	Other Wet Blue	Biological Tissue Frazen?  Yes No No NA
ler Temp: Add/Subtract (* ler Temp Corrected (*C): 2 t  A Regulated Soil ( N/A, water sample)			Temp should be above freezing to 6°C  Samples out of temp criteria. Samples on ice, cooling process has begun
samples originate in a quarantine zone within the Uni Yes No	ted States: CA, NY, or SC	. (cneck maps)?	Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?   Yes
			Comments/Discrepancy:
Chain of Custody Present?	Yes No	□N/A 1.	
Samples Arrived within Hold Time?	Tes ONO	□N/A 2.	
Short Hold Time Analysis (<72 hr.)?	□Yes ⊟Nổ	□N/A 3.	
Rush Turn Around Time Requested?	□Yes ☑Ño	□N/A 4.	
Sufficient Volume?	Ør€s □No	□N/A 5.	
Correct Containers Used?	☑Yes ☐No	□N/A 6.	
-Pace Containers Used?	□/€ □No	□N/A U.	.i
Containers Intact?	☐fes □No	□N/A 7.	i
Dissolved analysis: Samples Field Filtered?	☐Yes ☐No	EN/A 8	
Sample Labels Match COC?	ATES DNO	□N/A 9.	
-Includes Date/Time/ID/Analysis Matrix:	<u> </u>		
\\ Headspace in VOA Vials (>5-6mm)?	☐Yes ☐No	□N/A 10	1.
Trip Blank Present?	Yes No	ZN/A 1:	
Trip Blank Custody Seals Present?	□Yes □No	□N/A	
DMMENTS/SAMPLE DISCREPANCY			Field Data Required? Yes No
· · · · · · · · · · · · · · · · · · ·			
			Lot ID of split containers:
ENT NOTIFICATION/RESOLUTION			
erson contacted:		Date/Time:	
Project Manager SCURF Review:			Date:
Project Manager SRF Review:			Date:

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iv.			A SEPTIMENT OF SECTION	WT	WT	TW	12-11-2 LIM	WT PH-C	WT 2 I-G	W	WT.	TW TW	TW	W	WT	MATRIX CODE: (800 V SAMPLE TYPE: (G=G	ald codes to left		Project is: Yales Ap.2	Purchase Order #;		Report To: Becky Sleever	
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C DATE Signed:	***	) How	PALITY REPLY BURE		*		**************************************	×	×	*	* *	X 2	*	**************************************	7 3 2	Methanol Other App IV Metals Fluoride RAD 9315/9320			vherring@pacelabs.com,				
127(-2) EMB		1305	OME THE																				Page
Received on icet: (Y/N) Custody Sealed:: Cooler:: (Y/N) Samples Intack:: (Y/N)			Section of the Park	distance of the state of the st			٥/>		10 275年				The state of the s			Realdual Chlorine (YAN)		No.	State of the Contract of the State of the St	Assess County County	100 J	3	2 2 3

**Quality Control Sample Performance Assessment** 

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			Aliaiyst Must Maildaily Einel All Fleids Highlighted III Tellow.	GIOW.	
/ Test:	Ra-226				
Analyst:	LAL		Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Date:	2/26/2021		Sample Collection Date:	2/10/2021	
Worklist:	58911		Sample I.D.	92521568005	
Matrix:	MQ		Sample MS I.D.	92521568018	
			Sample MSD I.D.	92521568019	
Method Blank Assessment			Spike I.D.:	19-033	
MB Sample ID	2103737		MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.040	
MB concentration:	0.035		Spike Volume Used in MS (mL):	0.20	
M/B Counting Uncertainty:	0.087		Spike Volume Used in MSD (mL):	0.20	
MB MDC:	0.210		MS Aliquot (L, g, F):	0.507	
MB Numerical Performance Indicator:	0.78		MS Target Conc. (pCi/L, g, F):	9.481	
MB Status vs Numerical Indicator:	N/A		MSD Aliquot (L, g, F):	0.504	
MB Status vs. MDC:	Pass		MSD Target Conc. (pCi/L, g, F):	9.531	
			MS Spike Uncertainty (calculated):	0.114	
Laboratory Control Sample Assessment	-CSD (Y or N)?	Y	MSD Spike Uncertainty (calculated):	0.114	
	LCS58911	LCSD58911	Sample Result:	0.346	
Count Date:	3/5/2021	3/5/2021	Sample Result Counting Uncertainty (pCi/L, g, F):	0.170	
Spike I.D.:	19-033	19-033	Sample Matrix Spike Result:	10.085	
Decay Corrected Spike Concentration (pCi/mL):	24.040	24.040	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	0.759	
Volume Used (mL):	0.10	0.10	Sample Matrix Spike Duplicate Result:	9.274	
Aliquot Volume (L, g, F):	0.508	0.501	Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.719	
Target Conc. (pCi/L, g, F):	4.737	4.795	MS Numerical Performance Indicator:	0.643	
Uncertainty (Calculated):	0.057	0.058	MSD Numerical Performance Indicator:	-1.581	
Result (pCi/L, g, F):	4.762	4.738	MS Percent Recovery:	102.72%	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.526	0.516	MSD Percent Recovery:	93.67%	
Numerical Performance Indicator:	60.0	-0.21	MS Status vs Numerical Indicator:	N/A	
Percent Recovery:	100.53%	98.83%	MSD Status vs Numerical Indicator:	N/A	
Status vs Numerical Indicator:	A/A	A/N	MS Status vs Recovery:	Pass	
Status vs Recovery:	Pass	Pass	MSD Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	125%	MS/MSD Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	75%	MS/MSD Lower % Recovery Limits:	75%	

	9/6/	9/6/	MONITOR TO MAKE TO MAKE THE STREET	0/0/
Duplicate Sample Assessment			Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	LCS58911	Enter Duplicate	Sample I.D.	92521568005
Duplicate Sample I.D.	LCSD58911	sample IDs if	Sample MS I.D.	92521568018
Sample Result (pCi/L, g, F):	4.762	other than	Sample MSD I.D.	92521568019
Sample Result Counting Uncertainty (pCi/L, g, F):	0.526	LCS/LCSD in the	Sample Matrix Spike Result:	10.085
Sample Duplicate Result (pCi/L, g, F):	4.738	space below.	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	0.759
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.516		Sample Matrix Spike Duplicate Result:	9.274
Are sample and/or duplicate results below RL?	ON.		Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.719
Duplicate Numerical Performance Indicator:	0.062		Duplicate Numerical Performance Indicator:	1.522
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.71%		(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.21%
Duplicate Status vs Numerical Indicator:	A/N		MS/ MSD Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass		MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%		% RPD Limit:	25%

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

Comments:

TAR\_58911\_W Total Alpha Radium (R104-3 11Feb2019).xls

### Face Analytical"

### **Quality Control Sample Performance Assessment**

Ra-228

Test:

Analyst Must Manually Enter All Fields Highlighted in Yellow.

	Z GSW/SW																														
	MS/MSD 1	2/10/2021	92521568005	92521568018	92521568019	21-003	38.879	0.20	0.20	0.805	9.656	0.808	9.628	0.473	0.472	0.437	0.487	8.391	1,709	6.453	1.402	-1.814	4.545	82.38%	62.49%	Pass	Failt	Pass	Pass	135%	%09
	Sample Matrix Spike Control Assessment	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 (pCl/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:
															Z	LCSD58910															
77 57	۸٩۲	2/24/2021	58910	LM			2103736	0.175	0.283	0.615	1,21	Pass	Pass		LCSD (Y or N)?	LCS58910	3/1/2021	21-003	38.633	0.10	0.813	4.751	0.233	3.106	0.756	4.07	65,39%	A/N	Pass	135%	%09
300	Analyst:	Date:	Worklist:	Matrix			MB Sample ID	MB concentration:	M/B 2 Sigma CSU;	MB MDC:	B Numerical Performance Indicator;	MB Status vs Numerical Indicator:	MB Status vs. MDC:		ssessment	ı	Count Date:	Spike 1.D.:	ected Spike Concentration (pCi/mL):	Volume Used (mL):	Aliquot Volume (L, g, F):	Target Conc. (pCi/L, g, F):	Uncertainty (Calculated):	Result (pCi/L, g, F):	S/LCSD 2 Sigma CSU (pCi/L, g, F):	Numerical Performance Indicator:	Percent Recovery:	Status vs Numerical Indicator:	Status vs Recovery:	Upper % Recovery Limits:	Lower % Recovery Limits:

MB Numerica

Method Blank Assessment

Laboratory Control Sample Assessment

Sample Result:	Sample Result 2 Sigma CSU (pCi/L, g, F): Sample Martix Snike Result:	Matrix Spike Result 2 Sigma CSU (pCt/L, g, F):	Sample Matrix Spike Duplicate Result:	Matrix Spike Duplicate Result 2 Sigma CSU (pCi/l, g, F):	MS Numerical Performance Indicator;	MSD Numerical Performance Indicator:	MS Percent Recovery:	MSD Percent Recovery:	MS Status vs Numerical Indicator;	MSD Status vs Numerical Indicator:	MS Status vs Recovery:	MSD Status vs Recovery:	MS/MSD Upper % Recovery Limits:	MS/MSD Lower % Recovery Limits;	Matrix Spike/Matrix Spike Duplicate Sample Assessment	Sample I.D.	Sample MS I.D.	Sample MSD I.D.	Sample Matrix Spike Result:	Matrix Spike Result 2 Sigma CSU (pCi/l., g, F);	Sample Matrix Spike Duplicate Result:	Matrix Spike Duplicate Result 2 Sigma CSU (pCi/l., g, F):	Duplicate Numerical Performance Indicator:	(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	MS/ MSD Duplicate Status vs Numerical Indicator:	MS/ MSD Duplicate Status vs RPD:	S RATO LIMIT
LCSD58910																Enter Duplicate	sample IDs if	other than	LCS/LCSD in	the space below.			The Control of the				
LCS58910	3/1/2021 21-003	38.633	0.10	0.813	4.751	0.233	3,106	0.756	4.07	65,39%	K/N	Pass	135%	60%								See Below ##					
	Count Date: Spike I.D.:	Decay Corrected Spike Concentration (pCl/mt.):	Volume Used (mL):	Aliquot Volume (L, g, F):	Target Conc. (pCl/L, g, F):	Uncertainty (Calculated):	Result (pCi/L, g, F):	LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	Numerical Performance Indicator:	Percent Recovery:	Status vs Numerical Indicator:	Status vs Recovery:	Upper % Recovery Limits:	Lower % Recovery Limits:	Duplicate Sample Assessment	Sample I.D.:	Duplicate Sample I.D.	Sample Result (pCi/L, g, F):	Sample Result 2 Sigma CSU (pCi/L, g, F):	Sample Duplicate Result (pCVL, g, F):	Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator.	Duplicate RPD:	Duplicate Status vs Numerical Indicator;	Duplicate Status vs RPD:	Salar V Salar Sala

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

92521568005 92521568018 92521568019 8.391 1.709 6.453 1.718 27.45% Pass Pass

Comments:

Ra-228 NELAC DW2 Printed: 3/2/2021 8:57 AM





March 11, 2021

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

RE: Project: YATES AP-2 RADS

Pace Project No.: 92521567

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between February 10, 2021 and February 12, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

• Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com

Kein Slury

1(704)875-9092

**HORIZON** Database Administrator

**Enclosures** 

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



(770)734-4200



**CERTIFICATIONS** 

Project: YATES AP-2 RADS

Pace Project No.: 92521567

### 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 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

Missouri Certification #: 235

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

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

Texas/TNI Certification #: T104704188-17-3

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



### **SAMPLE SUMMARY**

Project: YATES AP-2 RADS

Pace Project No.: 92521567

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521567004	YGWC-26S (021021)	Water	02/10/21 10:00	02/10/21 17:10
92521567005	YGWC-26I (021021)	Water	02/10/21 11:00	02/10/21 17:10
92521567006	YGWC-27S (021021)	Water	02/10/21 12:10	02/10/21 17:10
92521567007	YGWC-27I (021021)	Water	02/10/21 13:15	02/10/21 17:10
92521567008	DUP-2 (021021)	Water	02/10/21 00:00	02/10/21 17:10
92521567009	YGWC-28I(021121)	Water	02/11/21 09:40	02/11/21 13:03
92521567012	YGWC-28S (021221)	Water	02/12/21 15:20	02/12/21 17:10
92521567013	YGWC-29I (021221)	Water	02/12/21 14:20	02/12/21 17:10
92521567014	EB-02 (021221)	Water	02/12/21 15:30	02/12/21 17:10
92521567015	YGWC-28I(021121) MS	Water	02/11/21 09:40	02/11/21 13:03
92521567016	YGWC-28I(021121) MSD	Water	02/11/21 09:40	02/11/21 13:03



### **SAMPLE ANALYTE COUNT**

Project: YATES AP-2 RADS

Pace Project No.: 92521567

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92521567004	YGWC-26S (021021)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567005	YGWC-26I (021021)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567006	YGWC-27S (021021)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567007	YGWC-27I (021021)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567008	DUP-2 (021021)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567009	YGWC-28I(021121)	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567012	YGWC-28S (021221)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521567013	YGWC-29I (021221)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521567014	EB-02 (021221)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521567015	YGWC-28I(021121) MS	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92521567016	YGWC-28I(021121) MSD	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg



### **SUMMARY OF DETECTION**

Project: YATES AP-2 RADS

Pace Project No.: 92521567

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit Ana	llyzed	Qualifiers
92521567004	YGWC-26S (021021)					
EPA 9315	Radium-226	0.0274 ± 0.0730	pCi/L	03/05/2	21 07:43	
EPA 9320	Radium-228	(0.179) C:86% T:NA 0.383 ± 0.365	pCi/L	02/26/2	21 11:30	
Total Radium Calculation	Total Radium	(0.748) C:71% T:86% 0.410 ± 0.438 (0.927)	pCi/L	03/05/2	21 14:01	
92521567005	YGWC-26I (021021)	(0.02.)				
EPA 9315	Radium-226	0.240 ± 0.141 (0.192)	pCi/L	03/05/2	21 07:43	
EPA 9320	Radium-228	C:83% T:NA 0.273 ± 0.374 (0.802) C:74%	pCi/L	02/26/2	21 11:30	
Total Radium Calculation	Total Radium	T:81% 0.513 ± 0.515 (0.994)	pCi/L	03/05/2	21 14:01	
92521567006	YGWC-27S (021021)					
EPA 9315	Radium-226	0.179 ± 0.157 (0.307) C:84% T:NA	pCi/L	03/05/2	21 07:43	
EPA 9320	Radium-228	0.484 ± 0.373 (0.732) C:75%	pCi/L	02/26/2	21 11:30	
Total Radium Calculation	Total Radium	T:79% 0.663 ± 0.530 (1.04)	pCi/L	03/05/2	21 14:01	
92521567007	YGWC-27I (021021)					
EPA 9315	Radium-226	1.57 ± 0.386 (0.235) C:87% T:NA	pCi/L	03/05/2	21 07:43	
EPA 9320	Radium-228	0.900 ± 0.418 (0.698) C:75%	pCi/L	02/26/2	21 11:31	
Total Radium Calculation	Total Radium	T:84% 2.47 ± 0.804 (0.933)	pCi/L	03/05/2	21 14:01	

### **REPORT OF LABORATORY ANALYSIS**

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### **SUMMARY OF DETECTION**

Project: YATES AP-2 RADS

Pace Project No.: 92521567

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521567008	DUP-2 (021021)					
EPA 9315	Radium-226	0.209 ± 0.140 (0.222)	pCi/L		03/05/21 07:43	
EPA 9320	Radium-228	C:80% T:NA -0.0571 ± 0.352 (0.830) C:74%	pCi/L		02/26/21 11:31	
Total Radium Calculation	Total Radium	T:81% 0.209 ± 0.492 (1.05)	pCi/L		03/05/21 14:01	
92521567009	YGWC-28I(021121)					
EPA 9315	Radium-226	0.181 ± 0.145 (0.267) C:84% T:NA	pCi/L		03/05/21 07:43	
EPA 9320	Radium-228	0.891 ± 0.393 (0.645) C:82% T:86%	pCi/L		02/26/21 11:31	
Total Radium Calculation	Total Radium	1.07 ± 0.538 (0.912)	pCi/L		03/05/21 14:01	
92521567012	YGWC-28S (021221)					
EPA 9315	Radium-226	0.295 ± 0.102 (0.124) C:93% T:NA	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	0.124 ± 0.277 (0.616) C:77% T:87%	pCi/L		03/09/21 15:27	
Total Radium Calculation	Total Radium	0.419 ± 0.379 (0.740)	pCi/L		03/10/21 14:15	
92521567013	YGWC-29I (021221)					
EPA 9315	Radium-226	0.332 ± 0.108 (0.130)	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	C:95% T:NA 0.494 ± 0.334 (0.632) C:80% T:89%	pCi/L		03/09/21 15:27	
Total Radium Calculation	Total Radium	0.826 ± 0.442 (0.762)	pCi/L		03/10/21 14:15	



### **SUMMARY OF DETECTION**

Project: YATES AP-2 RADS

Pace Project No.: 92521567

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521567014	EB-02 (021221)					
EPA 9315	Radium-226	-0.0448 ± 0.0859 (0.187) C:97% T:NA	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	-0.0392 ± 0.349 (0.818) C:79% T:83%	pCi/L		03/09/21 15:27	
Total Radium Calculation	Total Radium	0.000 ± 0.435 (1.01)	pCi/L		03/10/21 14:15	
92521567015	YGWC-28I(021121) MS					
EPA 9315	Radium-226	107.09 %REC ± NA (NA) C:NA T:NA	pCi/L		03/05/21 07:43	
EPA 9320	Radium-228	82.63 %REC ± NA (NA) C:NA T:NA	pCi/L		02/26/21 11:31	
92521567016	YGWC-28I(021121) MSD					
EPA 9315	Radium-226	90.68 %REC 16.60RPD ± NA (NA) C:NA T:NA	pCi/L		03/05/21 07:44	
EPA 9320	Radium-228	80.99 %REC 2.01 RPD ± NA (NA) C:NA T:NA	pCi/L		02/26/21 14:46	



Project: YATES AP-2 RADS

Pace Project No.: 92521567

<b>Sample: YGWC-26S (021021)</b> PWS:	Lab ID: 9252 Site ID:	<b>1567004</b> Collected: 02/10/21 10:00 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0274 ± 0.0730 (0.179) C:86% T:NA	pCi/L	03/05/21 07:43	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.383 ± 0.365 (0.748) C:71% T:86%	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.410 ± 0.438 (0.927)	pCi/L	03/05/21 14:01	1 7440-14-4	



Project: YATES AP-2 RADS

Pace Project No.: 92521567

<b>Sample: YGWC-26I (021021)</b> PWS:	<b>Lab ID: 9252156</b> 7 Site ID:	7005 Collected: 02/10/21 11:00 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	vices - Greensburg				
Radium-226	EPA 9315	0.240 ± 0.141 (0.192) C:83% T:NA	pCi/L	03/05/21 07:43	3 13982-63-3	
	Pace Analytical Serv	vices - Greensburg				
Radium-228	EPA 9320	0.273 ± 0.374 (0.802) C:74% T:81%	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical Serv	vices - Greensburg				
Total Radium	Total Radium Calculation	0.513 ± 0.515 (0.994)	pCi/L	03/05/21 14:01	7440-14-4	



Project: YATES AP-2 RADS

Pace Project No.: 92521567

<b>Sample: YGWC-27S (021021)</b> PWS:	Lab ID: 9252 Site ID:	1567006 Collected: 02/10/21 12:10 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.179 ± 0.157 (0.307) C:84% T:NA	pCi/L	03/05/21 07:43	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.484 ± 0.373 (0.732) C:75% T:79%	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.663 ± 0.530 (1.04)	pCi/L	03/05/21 14:01	7440-14-4	



Project: YATES AP-2 RADS

Pace Project No.: 92521567

Sample: YGWC-27I (021021) Lab ID: 92521567007 Collected: 02/10/21 13:15 Received: 02/10/21 17:10 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual Pace Analytical Services - Greensburg EPA 9315 1.57 ± 0.386 (0.235) Radium-226 pCi/L 03/05/21 07:43 13982-63-3 C:87% T:NA Pace Analytical Services - Greensburg EPA 9320  $0.900 \pm 0.418 \quad (0.698)$ Radium-228 pCi/L 02/26/21 11:31 15262-20-1 C:75% T:84% Pace Analytical Services - Greensburg Total Radium Total Radium  $2.47 \pm 0.804 \quad (0.933)$ pCi/L 03/05/21 14:01 7440-14-4 Calculation



Project: YATES AP-2 RADS

Pace Project No.: 92521567

<b>Sample: DUP-2 (021021)</b> PWS:	<b>Lab ID: 9252156</b> Site ID:	67008 Collected: 02/10/21 00:00 Sample Type:	Received:	02/10/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Se	rvices - Greensburg				
Radium-226	EPA 9315	0.209 ± 0.140 (0.222) C:80% T:NA	pCi/L	03/05/21 07:43	3 13982-63-3	
	Pace Analytical Se	rvices - Greensburg				
Radium-228	EPA 9320	-0.0571 ± 0.352 (0.830) C:74% T:81%	pCi/L	02/26/21 11:31	15262-20-1	
	Pace Analytical Se	rvices - Greensburg				
Total Radium	Total Radium Calculation	0.209 ± 0.492 (1.05)	pCi/L	03/05/21 14:0	1 7440-14-4	



Project: YATES AP-2 RADS

Pace Project No.: 92521567

<b>Sample: YGWC-28I(021121)</b> PWS:	Lab ID: 9252 Site ID:	<b>1567009</b> Collected: 02/11/21 09:40 Sample Type:	Received:	02/11/21 13:03	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.181 ± 0.145 (0.267) C:84% T:NA	pCi/L	03/05/21 07:43	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.891 ± 0.393 (0.645) C:82% T:86%	pCi/L	02/26/21 11:31	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.07 ± 0.538 (0.912)	pCi/L	03/05/21 14:01	1 7440-14-4	



Project: YATES AP-2 RADS

Pace Project No.: 92521567

<b>Sample: YGWC-28S (021221)</b> PWS:	Lab ID: 92521 Site ID:	<b>Collected:</b> 02/12/21 15:20 Sample Type:	Received:	02/12/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.295 ± 0.102 (0.124) C:93% T:NA	pCi/L	03/09/21 19:03	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.124 ± 0.277 (0.616) C:77% T:87%	pCi/L	03/09/21 15:27	7 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.419 ± 0.379 (0.740)	pCi/L	03/10/21 14:15	7440-14-4	



Project: YATES AP-2 RADS

Pace Project No.: 92521567

<b>Sample: YGWC-29I (021221)</b> PWS:	Lab ID: 9252 Site ID:	<b>1567013</b> Collected: 02/12/21 14:20 Sample Type:	Received:	02/12/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.332 ± 0.108 (0.130) C:95% T:NA	pCi/L	03/09/21 19:03	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.494 ± 0.334 (0.632) C:80% T:89%	pCi/L	03/09/21 15:27	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.826 ± 0.442 (0.762)	pCi/L	03/10/21 14:15	7440-14-4	



Project: YATES AP-2 RADS

Pace Project No.: 92521567

<b>Sample: EB-02 (021221)</b> PWS:	Lab ID: 9252 Site ID:	21567014 Collected: 02/12/21 15:30 Sample Type:	Received:	02/12/21 17:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	-0.0448 ± 0.0859 (0.187) C:97% T:NA	pCi/L	03/09/21 19:03	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	-0.0392 ± 0.349 (0.818) C:79% T:83%	pCi/L	03/09/21 15:27	7 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.000 ± 0.435 (1.01)	pCi/L	03/10/21 14:15	7440-14-4	



Project: YATES AP-2 RADS

EPA 9320

Pace Project No.: 92521567

Radium-228

Sample: YGWC-28I(021121) MS Lab ID: 92521567015 Collected: 02/11/21 09:40 Received: 02/11/21 13:03 Matrix: Water

C:NA T:NA

PWS: Site ID: Sample Type: **Parameters** Act ± Unc (MDC) Carr Trac Units CAS No. Method Analyzed Qual Pace Analytical Services - Greensburg 107.09 %REC ± NA (NA) EPA 9315 Radium-226 pCi/L 03/05/21 07:43 13982-63-3 C:NA T:NA Pace Analytical Services - Greensburg 82.63 %REC ± NA (NA)

pCi/L

02/26/21 11:31 15262-20-1



### **ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: YATES AP-2 RADS

Pace Project No.: 92521567

Sample: YGWC-28I(021121) MSD Lab ID: 92521567016 Collected: 02/11/21 09:40 Received: 02/11/21 13:03 Matrix: Water

Site ID:

PWS: Sample Type: Act ± Unc (MDC) Carr Trac CAS No. **Parameters** Method Units Analyzed Qual Pace Analytical Services - Greensburg 90.68 %REC 16.60RPD ± Radium-226 EPA 9315 pCi/L 03/05/21 07:44 13982-63-3 NA (NA) C:NA T:ŃA Pace Analytical Services - Greensburg EPA 9320 80.99 %REC 2.01 RPD ± Radium-228 pCi/L 02/26/21 14:46 15262-20-1

NA (NA) C:NA T:NA



Project: YATES AP-2 RADS

Pace Project No.: 92521567

QC Batch: 435783 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92521567004, 92521567005, 92521567006, 92521567007, 92521567008, 92521567009, 92521567015,

92521567016

METHOD BLANK: 2103740 Matrix: Water

Associated Lab Samples: 92521567004, 92521567005, 92521567006, 92521567007, 92521567008, 92521567009, 92521567015,

92521567016

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.267 ± 0.143 (0.193) C:92% T:NA
 pCi/L
 03/05/21 07:29

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



Project: YATES AP-2 RADS

EPA 9315

Pace Project No.: 92521567

QC Batch Method:

QC Batch: 436983

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

EPA 9315

Associated Lab Samples: 92521567012, 92521567013, 92521567014

METHOD BLANK: 2109306 Matrix: Water

Associated Lab Samples: 92521567012, 92521567013, 92521567014

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.0161 ± 0.0615 (0.127) C:96% T:NA
 pCi/L
 03/09/21 19:03

Analysis Method:

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.



Project: YATES AP-2 RADS

Pace Project No.: 92521567

QC Batch: 436984 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92521567012, 92521567013, 92521567014

METHOD BLANK: 2109307 Matrix: Water

Associated Lab Samples: 92521567012, 92521567013, 92521567014

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.0130 ± 0.299 (0.696) C:76% T:89%
 pCi/L
 03/09/21 15:28

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.



Project: YATES AP-2 RADS

Pace Project No.: 92521567

QC Batch: 435784 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92521567004, 92521567005, 92521567006, 92521567007, 92521567008, 92521567009, 92521567015,

92521567016

METHOD BLANK: 2103741 Matrix: Water

Associated Lab Samples: 92521567004, 92521567005, 92521567006, 92521567007, 92521567008, 92521567009, 92521567015,

92521567016

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.191 ± 0.338 (0.740) C:71% T:85%
 pCi/L
 02/26/21 11:33

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



### **QUALIFIERS**

Project: YATES AP-2 RADS

Pace Project No.: 92521567

### **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

Date: 03/11/2021 10:39 AM

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.



### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES AP-2 RADS

Pace Project No.: 92521567

Date: 03/11/2021 10:39 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521567004	YGWC-26S (021021)	EPA 9315	435783		
92521567005	YGWC-26I (021021)	EPA 9315	435783		
92521567006	YGWC-27S (021021)	EPA 9315	435783		
92521567007	YGWC-27I (021021)	EPA 9315	435783		
92521567008	DUP-2 (021021)	EPA 9315	435783		
92521567009	YGWC-28I(021121)	EPA 9315	435783		
92521567012	YGWC-28S (021221)	EPA 9315	436983		
92521567013	YGWC-29I (021221)	EPA 9315	436983		
92521567014	EB-02 (021221)	EPA 9315	436983		
92521567015	YGWC-28I(021121) MS	EPA 9315	435783		
92521567016	YGWC-28I(021121) MSD	EPA 9315	435783		
92521567004	YGWC-26S (021021)	EPA 9320	435784		
92521567005	YGWC-26I (021021)	EPA 9320	435784		
92521567006	YGWC-27S (021021)	EPA 9320	435784		
92521567007	YGWC-27I (021021)	EPA 9320	435784		
92521567008	DUP-2 (021021)	EPA 9320	435784		
92521567009	YGWC-28I(021121)	EPA 9320	435784		
92521567012	YGWC-28S (021221)	EPA 9320	436984		
92521567013	YGWC-29I (021221)	EPA 9320	436984		
92521567014	EB-02 (021221)	EPA 9320	436984		
92521567015	YGWC-28I(021121) MS	EPA 9320	435784		
92521567016	YGWC-28I(021121) MSD	EPA 9320	435784		
92521567004	YGWC-26S (021021)	Total Radium Calculation	437456		
92521567005	YGWC-26I (021021)	Total Radium Calculation	437457		
92521567006	YGWC-27S (021021)	Total Radium Calculation	437457		
92521567007	YGWC-27I (021021)	Total Radium Calculation	437457		
92521567008	DUP-2 (021021)	Total Radium Calculation	437457		
92521567009	YGWC-28I(021121)	Total Radium Calculation	437457		
92521567012	YGWC-28S (021221)	Total Radium Calculation	438070		
92521567013	YGWC-29I (021221)	Total Radium Calculation	438070		
92521567014	EB-02 (021221)	Total Radium Calculation	438070		

### Pace Analytical\*

### Document Name: Sample Condition Upon Receipt(SCUR)

Document No.: F-CAR-CS-033-Rev.07 Document Revised: October 28, 2020 Page 1 of 2

Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples: Asheville Eden Greenwood	Huntersville Raleig	h Mechanicsville Atlanta Kernersville
Courier:  Commercial  Client Name:  GAR  Fed Ex UPS	USPS Other:	Project #: WO#:92521567
Custody Seal Present? Yes 4No Sea	als Intact? Yes No	92521567  Date/initials Person Examining Contents 2/10/2/
Packing Material: Bubble Wrap 6 Thermometer: 230 Correction Fac	Type of Ice:	ther Biological Tissue Frozen?  Yes No N/A  None
Cooler Temp: Add/Subtract  Cooler Temp Corrected (°C): 2 (  USDA Regulated Soil ( N/A, water sample)  Did samples originate in a quarantine zone within the U		Temp should be above freezing to 6°C  Samples out of temp criteria. Samples on ice, cooling process has begun  aps)?  Did samples originate from a foreign source (internationally, including the distribution of the process of the pr
□Yes □No		including Hawaii and Puerto Rico)? Yes No  Comments/Discrepancy:
Chain of Custody Present?	Yes ONO ON/A	1.
Samples Arrived within Hold Time?	☐res ☐no ☐n/A ☐res ☐no ☐n/A	3.
Short Hold Time Analysis (<72 hr.)?  Rush Turn Around Time Requested?	☐Yes ☐No ☐N/A	4.
		5.
Sufficient Volume?  Correct Containers Used?		6.
-Pace Containers Used?	Øfes □No □N/A	<u> </u>
Containers Intact?	☐Yes ☐No ☐N/A	7.
Dissolved analysis: Samples Field Filtered?	□Yes □No ÈN/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 NA	11.
Trip Biank Custody Seals Present?	□Yes □No □N/A	
COMMENTS/SAMPLE DISCREPANCY		Field Data Required? ☐Yes ☐No
CLICATE MATERIAL PROPERTY IN THE STATE OF TH		Lot ID of split containers:
CLIENT NOTIFICATION/RESOLUTION		
Person contacted:	Date/	Time:
Project Manager SCURF Review:		Date:
Project Manager SRF Review:		Date:

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

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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.

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### Quality Control Sample Performance Assessment

Worklist: Matrix:

MB Sample ID

Method Blank Assessment

M/B Counting Uncertainty:
M/B MDC;

MB Numerical Performance Indicator: MB Status vs Numerical Indicator: MB Status vs. MDC:

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Test Analyst: Date:

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MK1		Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
2/26/2021		Sample Collection Date:	2/11/2021	2/11/2021
58912		Sample 1.D.	92521567009	92521564001
ΜO		Sample MS I.D.	92521567015	92521564011
		Sample MSD I.D.	92521567016	92521564012
		Spike I.D.:	19-033	19-033
2103740		MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.040	24.040
0.267		Spike Volume Used in MS (mL):	0.20	0.20
0.137		Spike Volume Used in MSD (mL):	0.20	0.20
0.193		MS Aliquot (L, g, F):	0.505	0.511
3.81		MS Target Conc.(pCi/L, g, F):	9.519	9.411
A/A		MSD Aliquot (L. g, F):	0.508	0,505
See Comment*		MSD Target Conc. (pCi/L, g, F):	9.464	9.529
		MS Spike Uncertainty (calculated):	0.114	0.113
LCSD (Y or N)?	Z	MSD Spike Uncertainty (calculated):	0.114	0.114
LCS58912	LCSD58912	Sample Result:	0.181	0.302
3/5/2021		Sample Result Counting Uncertainty (pCi/L, g, F):	0.143	0.154
19-033		Sample Matrix Spike Result:	10.375	9.287
24.040		Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	0.766	0.714
0,10	•	Sample Matrix Spike Duplicate Result:	8.763	9.868
0.508	•	Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	669'0	0.770
4.733		MS Numerical Performance Indicator:	1.680	-1.128
0.057		MSD Numerical Performance Indicator:	-2,392	0.091
4.870		MS Percent Recovery:	107.09%	95.48%
0.530		MSD Percent Recovery:	90.68%	100.39%
0.50		MS Status vs Numerical Indicator:	N/A	N/A
102.88%		MSD Status vs Numerical Indicator:	N/A	N/A
N/A		MS Status vs Recovery:	Pass	Pass
Pass		MSD Status vs Recovery:	Pass	Pass
125%		MS/MSD Upper % Recovery Limits:	125%	125%
75%		MS/MSD Lower % Recovery Limits:	75%	75%

aboratory Control Sample Assessment	LCSD (Y or N)?	Z	
	LCS58912	LCSD58912	
Count Date:	3/5/2021		
Spike I.D.:	19-033		
Decay Corrected Spike Concentration (pCi/mL):	24.040		
Volume Used (mL):	0,10		
Aliquot Volume (L, g, F):	0.508	•	Ma
Target Conc. (pCi/L, g, F):	4.733		
Uncertainty (Calculated):	0.057		
Result (pCi/L, g, F):	4.870		
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.530		
Numerical Performance Indicator:	0.50		
Percent Recovery:	102.88%		
Status vs Numerical Indicator:	N/A		
Status vs Recovery:	Pass		
Upper % Recovery Limits:	125%		
Lower % Recovery Limits:	75%		

**Duplicate Sample Assessment** 

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;
	Enter Duplicate	sample IDs if	other than	LCS/LCSD in	the space below.							
							See Below ##					
cate Sample Assessment	Sample I.D.:	Duplicate Sample I.D.	Sample Result (pCi/L, g, F):	Sample Result Counting Uncertainty (pCi/l., g, F):	Sample Duplicate Result (pCi/L, g, F):	Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator:	Duplicate RPD:	Duplicate Status vs Numerical Indicator:	Duplicate Status vs RPD:	% RPD Limit:

92521564001 92521564011 92521564012 9.287 0.714 9.868 0.770 -1.083 5.01%

92521567009 92521567015 92521567016 10.375 0.766 8.763 0.699 3.046 16.60%

N/A Pass 25%

N/A Pass 25%

## 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.

15/2/ HAM3/5/21

101

### **Quality Control Sample Performance Assessment**

LAL 3/8/2021 59076 DW Test Worklist: Matrix: Analyst Date:

Face Analytical"

MS/MSD 2

MS/MSD 2/12/202

Sample Collection Date:

Sample Matrix Spike Control Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow

Method Blank Assessmen

0.016 0.061 N/A Pass 0.51 MB Sample ID MB Numerical Performance Indicator: MB Status vs Numerical Indicator. MB Status vs. MDC: MB concentration; M/B Counting Uncertainty: MB MDC

Laboratory Control Sample Assessme

Count Date:

Spike I.D.

92521567011 92521567017 92521567018 19-033 24.040 0.516 9.321 0.113 0.112 0.275 0.091 9.592 0.420 8.832 0.389 -0.549 -3.620 98.68% 0.20 0.20 0.509 9.441 Sample I.D. Sample MS I.D. Sample MSD I.D. MSD Aliquot (L, g, F): MSD Target Conc. (pCi/l., g, F): MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Target Conc.(pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated): Spike I.D.: MS Aliquot (L. g, F): Sample Result:

Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result. Sample Matrix Spike Duplicate Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F):

19-033 24.039

3/9/2021 19-033 24.039 0.10 0.515 4.670 0.056 4.824

Aliquot Volume (L, g, F); Farget Conc. (pCi/L, g, F):

Uncertainty (Calculated):

Volume Used (mL):

Decay Corrected Spike Concentration (pCi/mL):

Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Numerical Performance Indicator MSD Numerical Performance Indicator MS Percent Recovery

0.10 0.504 4.770 0.057 4.558 0.307 -1.34 95.54% N/A Pass 125%

0.322 0.92 103.30%

Result (pCi/L, g, F): LCS/LCSD Counting Uncertainty (pCi/L, g, F):

×

Percent Recovery: Status vs Numerical Indicator: Status vs Recovery. Upper % Recovery Limits: Lower % Recovery Limits:

Numerical Performance Indicator

MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits: MSD Percent Recovery MS Status vs Numerical Indicator MSD Status vs Numerical Indicator MS Status vs Recovery MSD Status vs Recover

92521567017 92521567018 92521567011 Matrix Spike Result Counting Uncertainty (pCi/I., g, F): Sample Matrix Spike Duplicate Result: Sample I.D. Sample MS I.D. Sample MSD I.D. Matrix Spike Duplicate Result Counting Uncertainty (pCVL, g, F): (Based on the Percent Recoveries) MS/ MSD Duplicate RPD: MS/ MSD Duplicate Status vs Numerical Indicator: MS/ MSD Duplicate Status vs RPD: Sample Matrix Spike Result: Duplicate Numerical Performance Indicator. Matrix Spike/Matrix Spike Duplicate Sample Assessment

Enter Duplicate sample IDs if

Sample I.D.: Duplicate Sample I.D.

Duplicate Sample Assessmen

9.592 0.420 8.832 0.389 2.607 7.24%

N/A Pass 25%

% RPD Limit

other than LCS/LCSD in the space below NO 1.175 7.80% 4.824 0.322 4.558 0.307 N/A Pass 25% Sample Result (pCl/l., g, F):
Sample Result Counting Uncertainty (pCl/l., g, F):
Sample Duplicate Result (pCl/l., g, F):
Sample Duplicate Result (pCl/l., g, F): Are sample and/or duplicate results below RL? Duplicate Numerical Performance Indicator: (Based on the LCS/LCSD Percent Recovenes) Duplicate RPD: Duplicate Status vs Numerical Indicator,

Duplicate Status vs RPD: % RPD Limit:

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

Comments:

## **Quality Control Sample Performance Assessment**

VAL 2/24/2021

Test. Analyst: Date: Worklist: Matrix:

58913 WT

0.191 0.338 0.740 1.11 Pass Pass

MB Numerical Performance Indicator:
MB Status vs Numerical Indicator:
MB Status vs. MDC:

Count Date:

Laboratory Control Sample Assessment

Spike I.D.

Decay Corrected Spike Concentration (pCi/mt.):

Volume Used (mL):

MB Sample ID MB concentration; M/B 2 Sigma CSU; MB MDC;

Method Blank Assessment

Ra-228

Analyst Must Manually Enter All Fields Highlighted in Yellow.

	Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
	Sample Collection Date:	2/11/2021	2/9/2021
	Sample I.D.	92521567009	92521564001
	Sample MS I.D.	92521567015	92521564011
	Sample MSD I.D.	92521567016	92521564012
	Spike I.D.:	21-003	21-003
	MS/MSD Decay Corrected Spike Concentration (pCi/mL):	38.867	38.867
	Spike Volume Used in MS (ml.):	0.20	0.20
	Spike Volume Used in MSD (mL):		0.20
	MS Aliquot (L. g, F):	0.807	0.808
	MS Target Conc.(pCi/L, g, F):	9.638	9.616
	MSD Aliquot (L, g, F):	0.804	0.808
	MSD Target Conc. (pCi/L, g, F):	9.668	9.623
	MS Spike Uncertainty (calculated):	0.472	0.471
22	MSD Spike Uncertainty (calculated):	0.474	0.472
<b>D58913</b>	Sample Result:	0.891	0.320
	Sample Result 2 Sigma CSU (pCi/L, g, F):		0.348
	Sample Matrix Spike Result:	8.855	10.063
	Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.785	2.018
	Sample Matrix Spike Duplicate Result:	8.720	9.243
	Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		1.842
	MS Numerical Performance Indicator:	-1.738	0.118
	MSD Numerical Performance Indicator:	-1.939	-0.709
	MS Percent Recovery:	82.63%	101.32%
	MSD Percent Recovery:	80.99%	92.73%
	MS Status vs Numerical Indicator:	Pass	Pass
	MSD Status vs Numerical Indicator:	Pass	Pass
	MS Status vs Recovery:	Pass	Pass
	MSD Status vs Recovery:	Pass	Pass
	MS/MSD Upper % Recovery Limits:	135%	135%

7.4.0	0.474	0.891	0.393	8.855	1.785	8.720	1.753	-1.738	-1.939	82.63%	80.99%	Pass	Pass	Pass	Pass	135%	%09
was spine officer all ity (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:
	2	LCSD58913															
	LCSD (Y or N)?	LCS58913	2/26/2021	21-003	38.674	0.10	0.817	4.733	0,232	3.843	0.893	-1.89	81.20%	ΑN	Pass	135%	%09
3			1.5				~	"				1.	L	, ,	1.	• •	

Percent Recovery: Status vs Numerical Indicator: Status vs Recovery:

Upper % Recovery Limits: Lower % Recovery Limits:

Aliquot Volume (L. g. F):
Target Conc. (pCi/L. g. F):
Uncertainty (Calculated):
Result (pCi/L. g. F):
LCS/LCSD 2 Sigma CSU (pCi/L. g. F):
Numerical Performance Indicator:

Duplicate Sample Assessment			Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.:		Enter Duplicate	Sample
Duplicate Sample I.D.		sample IDs if	Sample MS
Sample Result (pCi/L, g, F):		other than	Sample MSE
Sample Result 2 Sigma CSU (pCi/L, g, F):		LCS/LCSD in	Sample Matrix Spike Re
Sample Duplicate Result (pCi/L, g, F);		the space below.	Matrix Spike Result 2 Sigma CSU (pCif., c
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):			Sample Matrix Spike Duplicate Re
Are sample and/or duplicate results below RL?	See Below 非		Matrix Spike Duplicate Result 2 Sigma CSU (pCl/L, g
Duplicate Numerical Performance Indicator;			Duplicate Numerical Performance Indic
Duplicate RPD:			(Based on the Percent Recoveries) MS/ MSD Duplicate F
Duplicate Status vs Numerical Indicator:			MS/ MSD Duplicate Status vs Numerical Indic
Duplicate Status vs RPD:			MS/ MSD Duplicate Status vs F
% RPD Limit			Napol

	3
36%	% RPD Limit:
Pass	MS/ MSD Duplicate Status vs RPD:
Pass	MS/ MSD Duplicate Status vs Numerical Indicator:
2.01%	ised on the Percent Recoveries) MS/ MSD Duplicate RPD:
0.105	Duplicate Numerical Performance Indicator:
1.753	Matrix Spike Duplicate Result 2 Sigma CSU (pCI/L, g, F):
8.720	Sample Matrix Spike Duplicate Result:
1.785	Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):
8.855	Sample Matrix Spike Result:
92521567015	Sample MS 1.D.
92521567009	Sample I.D.

92521564001 92521564011 92521564012 10.063 2.018 9.243 1.842 0.588 8.85% Pass Pass 96%

90%

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

<u></u>

6 of 10

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Ra-228 VAL 3/5/2021

Test: Analyst: Date:

Pace Analytical"

59077 WT

Worklist: Matrix: 0.013 0.299 0.696 0.09 Pass Pass

> MB Status vs Numerical Indicator: MB Status vs. MDC:

Laboratory Control Sample Assessmer

MB Numerical Performance Indicator:

MB concentration: M/B 2 Sigma CSU: MB MDC:

MB Sample ID

Method Blank Assessment

	Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
	Sample Collection Date:	2/12/2021	
	Sample I.D.	92521567011	
	Sample MSD I.D.	92521567018	
	Spike I.D.:	21-003	
	MS/MSD Decay Corrected Spike Concentration (pCi/mL):	38.853	
	Spike Volume Used in MS (mL):	0.20	
	Spike Volume Used in MSD (mL):	0.20	
	MS Aliquot (L, g, F):	0.802	
	MS Target Conc.(pCi/L, g, F):	9.694	
	MSD Aliquot (L, g, F):	0.817	
	MSD Target Conc. (pCi/L, g, F):	9.511	
	MS Spike Uncertainty (calculated):	0.475	
Z	MSD Spike Uncertainty (calculated):	0.466	
LCSD59077	Sample Result:	0.091	
	Sample Result 2 Sigma CSU (pCi/L, g, F):	0.322	
	Sample Matrix Spike Result:	10.413	
	Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.066	
	Sample Matrix Spike Duplicate Result:	8.770	
	Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.764	
	MS Numerical Performance Indicator:	0.574	
	MSD Numerical Performance Indicator:	-0.880	
	MS Percent Recovery:	106.48%	
	MSD Percent Recovery:	91.25%	
	MS Status vs Numerical Indicator:	Pass	
	MSD Status vs Numerical Indicator:	Pass	
	MS Status vs Recovery:	Pass	
	MSD Status vs Recovery:	Pass	
	MS/MSD Upper % Recovery Limits:	135%	
	MS/MSD Lower % Recovery Limits:	%09	

0.10 0.804 4.794 0.235 4.455 1.022 -0.63 92.93% N/A Pass 135%

> Result (pC/L, g, F): LCS/LCSD 2 Sigma CSU (pC/L, g, F): Numerical Performance Indicator:

Percent Recovery:
Status vs Numerical Indicator:
Status vs Recovery:
Upper % Recovery Limits:
Lower % Recovery Limits:

Aliquot Volume (L, g, F): Target Conc. (pCi/L, g, F): Uncertainty (Calculated):

3/9/2021 21-003 38.532

Count Date:

Spike I.D.

Decay Corrected Spike Concentration (pCi/mL):

Volume Used (mL):

Duplicate Sample Assessment			Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:		Enter Duplicate	Sample I.D.	92521567011
Duplicate Sample I.D.		sample IDs if	Sample MS I.D.	92521567017
Sample Result (pCi/L, g, F):		other than	Sample MSD I.D.	92521567018
Sample Result 2 Sigma CSU (pCi/L, g, F):		LCS/LCSD in the	Sample Matrix Spike Result:	10.413
Sample Duplicate Result (pCi/L, g, F):		space below.	Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.066
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):			Sample Matrix Spike Duplicate Result:	8.770
	See Below ##		Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.764
Duplicate Numerical Performance Indicator:			Duplicate Numerical Performance Indicator:	1.186
Duplicate RPD:			(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	15.40%
Duplicate Status vs Numerical Indicator:			MS/ MSD Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:			MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:			% RPD Limit:	36%

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

Comments:

### **March 2021**

**Semiannual Event** 



### Georgia Power Co. – Plant Yates

### **DATA REVIEW**

Metals, Radium, and General Chemistry Analyses SDGs # 92525214, 92525245, 92525335 and 92525346

Analyses Performed By:

Pace Analytical Services – Asheville, North Carolina Pace Analytical Services – Peachtree Corners, Georgia Pace Analytical Services – Greensburg, Pennsylvania

Report #41025R Review Level: Tier II

Project: 30052923.00004 and 30052922.00004

### **SUMMARY**

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) # 92525214, 92525245, 92525335 and 92525346 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

				Sample			Analy	
SDG	Sample ID	Lab ID	Matrix	Collection Date	Parent Sample	RAD	MET	GEN CHEM
	YGWA-5I	92525214-1 92525335-1	Water	03/02/21		X	Χ	Х
	YGWA-5D	92525214-2 92525335-2	Water	03/02/21		Х	X	Х
	DUP-1E DUP-1S	92525214-3 92525335-3	Water	03/02/21	YGWA-5D	x	Х	Х
	YGWA-14S	92525214-5 92525335-5	Water	03/02/21		х	Х	Х
	YGWA-30I	92525214-6 92525335-6	Water	03/01/21		х	X	Х
	FB-01	92525214-7 92525335-7	Water	03/02/21		Х	Х	Х
92525214 92525335	DUP-01G DUP-01P	92525214-8 92525335-8	Water	03/02/21	YGWA-14S	X	Х	Х
0202000	FB-01	92525214-9 92525335-9	Water	03/02/21		х	Х	X
	YGWA-40	92525214-11 92525335-11	Water	03/04/21		Х	Х	Х
	YGWA-17S	92525214-12 92525335-12	Water	03/03/21		Х	Χ	Х
	YGWA-18S	92525214-13 92525335-13	Water	03/03/21		Х	Χ	Х
	YGWA-18I	92525214-14 92525335-14	Water	03/03/21		Х	Х	Х
	YGWA-39	92525214-15 92525335-15	Water	03/04/21		Х	Х	Х
	YGWA-1D	92525214-16	Water	03/03/21		Х	X	Х

				Sample			Analy	sis
SDG	Sample ID	Lab ID	Matrix	Collection Date	Parent Sample	RAD	MET	GEN CHEM
		92525335-16						
	YGWA-1I	92525214-17 92525335-17	Water	03/03/21		х	Х	Х
	YGWA-2I	92525214-18 92525335-18	Water	03/03/21		x	Х	Х
	YGWA-3I	92525214-19 92525335-19	Water	03/03/21		x	Х	Х
92525214	YGWA-3D	92525214-20 92525335-20	Water	03/03/21		x	X	X
92525335	EB-02	92525214-21 92525335-21	Water	03/03/21		X	Х	X
	YGWA-4I	92525214-22 92525335-22	Water	03/03/21		X	Х	X
	YGWA-20S	92525214-23 92525335-23	Water	03/03/21		Х	Х	Х
	YGWA-21I	92525214-24 92525335-24	Water	03/04/21		Х	Х	Х
	YGWC-26S	92525245-1 92525346-1	Water	03/02/21		Х	Х	Х
	YGWC-28I	92525245-2 92525346-2	Water	03/03/21		х	Х	Х
	YGWC-29I	92525245-3 92525346-3	Water	03/03/21		х	Х	Х
	EB-01	92525245-4 92525346-4	Water	03/03/21		х	Х	Х
92525245	DUP-02	92525245-5 92525346-5	Water	03/03/21	YGWC-26I	х	Х	Х
92525346	YGWC-26I	92525245-6 92525346-6	Water	03/03/21		х	Х	Х
	YGWV-27S	92525245-7 92525346-7	Water	03/03/21		Х	Х	Х
	YGWC-27I	92525245-8 92525346-8	Water	03/03/21		X	Х	Х
	YGWC-28S	92525245-9 92525346-9	Water	03/03/21		X	Х	Х
	EB-01	92525237-7 92525346-10	Water	03/03/21		Х	х	Х

### Notes:

- 1. Metals and total dissolved solids (TDS) were performed by Pace Analytical Services Peachtree Corners, Georgia.
- 2. Anions (chloride, fluoride and sulfide) 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.

	Rep	Reported Acceptable		Not	
Items Reviewed	No	Yes	No	Yes	Required
Sample receipt condition		Х		Х	
2. Requested analyses and sample results		Х		Х	
Master tracking list		Х		Х	
4. Methods of analysis		Х		Х	
5. Reporting limits		Х		Х	
6. Sample collection date		Х		Х	
7. Laboratory sample received date		Х		Х	
8. Sample preservation verification (as applicable)		Х		Х	
9. Sample preparation/extraction/analysis dates		Х		Х	
10. Fully executed Chain-of-Custody (COC) form		Х		Х	
11. Narrative summary of QA or sample problems provided		Х		Х	
12. Data Package Completeness and Compliance		Х		X	

Note:

QA - Quality Assurance

### **INORGANIC ANALYSIS INTRODUCTION**

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 7470A, 9315, and 9320; Standard Method (SM) SM4500-H+ B and SM 2540C; 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.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

### 2. Blank Contamination

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

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

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
YGWA-2I YGWA-3I	Barium (EB)	Detected sample results <rl <bal<="" and="" td=""><td>"UB" at the RL</td></rl>	"UB" at the RL
YGWA-18S	Calcium (EB)	Detected sample results <rl <bal<="" and="" td=""><td>"UB" at the RL</td></rl>	"UB" at the RL
DUP-01G DUP-1E YGWA-14S YGWA-15D YGWA-5I YGWA-5D	Calcium (FB) Barium (FB)	Detected sample results >RL and <bal< td=""><td>"UB" at detected sample concentration</td></bal<>	"UB" at detected sample concentration

Sample Locations	Analytes	Sample Result	Qualification
YGWA-17S YGWA-18I	Calcium (EB)	Detected sample results >RL and <bal< td=""><td>"UB" at detected sample concentration</td></bal<>	"UB" at detected sample concentration
YGWA-1D YGWA-21 YGWA-20S YGWA-2I YGWA-3D YGWA-3I YGWA-4I	Calcium (EB)	Detected sample results >RL and <bal< td=""><td>"UB" at detected sample concentration</td></bal<>	"UB" at detected sample concentration
YGWA-17S YGWA-18I YGWA-18S YGWA-1D YGWA-1I YGWA-20S YGWA-3D YGWA-4I	Barium (EB)	Detected sample results >RL and <bal< td=""><td>"UB" at detected sample concentration</td></bal<>	"UB" at detected sample concentration
YGWA-17S YGWA-18I YGWA-18S YGWA-4I	Chromium (EB)	Detected sample results <rl <bal<="" and="" td=""><td>"UB" at the RL</td></rl>	"UB" at the RL
YGWA-18I YGWA-18S YGWA-1I YGWA-2I YGWA-3D YGWA-4I	Lithium (EB)	Detected sample results <rl <bal<="" and="" td=""><td>"UB" at the RL</td></rl>	"UB" at the RL

### Note:

EB = Equipment blank

RL = Reporting limit

FB = Field Blank

### 3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

### 3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the

analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

The MS/MSD performed on samples YGWA-5I, YGWA-40, YGWA-5D, YGWA-17S and YGWC-28I exhibited recoveries and RPDs within the control limits.

### 3.2 Laboratory Duplicate Analysis

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

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

### 4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Antimony	0.0030 U	0.0015 J	AC
	Barium	0.014	0.014	0.0%
YGWA-5D / DUP-1E	Boron	0.0068 J	0.013 J	AC
	Lead	0.000051 J	0.000069 J	AC
	Lithium	0.0018 J	0.0016 J	AC
	Barium	0.0076	0.0078	AC
YGWA-14S / DUP-01G	Beryllium	0.00018 J	0.00020 J	AC
	Boron	0.017 J	0.016 J	AC
	Barium	0.064	0.065	1.6%
	Boron	0.69	0.69	0.0%
YGWC-26I / DUP-02	Chromium	0.0050 U	0.00072 J	AC
	Lithium	0.0077 J	0.0078 J	AC
	Selenium	0.0034 J	0.0029 J	AC

Note:

AC = Acceptable

The RPD between the parent samples and the field duplicate samples were acceptable.

### 5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

### 6. System Performance and Overall Assessment

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

### **DATA VALIDATION CHECKLIST FOR METALS**

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not	
	No	Yes	No	Yes	Required	

Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)

Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)

Atomic Absorption - Manual Cold Vapor (CV)

Tier II Validation				
Holding Times	X		X	
Reporting limits (units)	X		X	
Blanks				
A. Method Blanks	X	X		
B. Equipment/Field Blanks	X	X		
Laboratory Control Sample (LCS) %R	X		X	
Matrix Spike (MS) %R	X		X	
Matrix Spike Duplicate (MSD) %R	X		X	
MS/MSD Precision (RPD)	X		X	
Field/Lab Duplicate (RPD)	X		X	
Reporting Limit Verification	X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

### **GENERAL CHEMISTRY ANALYSES**

### 1. Holding Times

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

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Fluoride by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C
Total Dissolved Solids by SM2540C	Water	7 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

### 2. Blank Contamination

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

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

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
YGWA-1D YGWA-2I YGWA-3I	Chloride (EB)	Detected sample results <rl <bal<="" and="" td=""><td>"UB" at the RL</td></rl>	"UB" at the RL
DUP-01G DUP-1E YGWA-14S YGWA-15D YGWA-5I YGWA-5D YGWA-4I	Chloride (FB) Sulfate (FB)	Detected sample results >RL and <bal< td=""><td>"UB" at detected sample concentration</td></bal<>	"UB" at detected sample concentration

Sample Locations	Analytes	Sample Result	Qualification
YGWA-17S YGWA-18I	Chloride (EB)	Detected sample results >RL and <bal< td=""><td>"UB" at detected sample concentration</td></bal<>	"UB" at detected sample concentration
YGWA-18S YGWA-1I YGWA-20S YGWA-3D	Chloride (EB)	Detected sample results >RL and <bal< td=""><td>"UB" at detected sample concentration</td></bal<>	"UB" at detected sample concentration
YGWA-17S YGWA-18S YGWA-1D YGWA-1I YGWA-2I YGWA-3D YGWA-3I	Sulfate (EB)	Detected sample results >RL and <bal< td=""><td>"UB" at detected sample concentration</td></bal<>	"UB" at detected sample concentration

Note:

EB = Equipment blank

RL = Reporting limit

MB = Method Blank

### Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

### 3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD performed on sample YGWA-5I for the anions exhibited recoveries and RPDs within the control limits.

All analytes associated with MS/MSD recoveries were within control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
YGWA-3I	Sulfate	65.5%	64.7%
DUP-02	Sulfate	53.0%	56.0%

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. The qualifications are applied to the parent sample.

Control limit	Sample Result	Qualification
No. No.	Non-detect	UJ
MS/MSD percent recovery 30% to 74%	Detect	J
MOMOR	Non-detect	R
MS/MSD percent recovery <30%	Detect	J
M0/M0D	Non-detect	No Action
MS/MSD percent recovery >125%	Detect	J

### 3.2 Laboratory Duplicate Analysis

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

The laboratory duplicate performed on sample YGWC-28S for TDS exhibited an RPD within the control limits.

All analytes associated with laboratory duplicate RPD were within the control limit, with the exception of the analytes presented in the following table.

Sample Location	Analytes	Laboratory RPD
YGWA-30I	TDS	56%

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. The qualifications are applied to the parent sample result associated with this SDG.

Sample Concentration	Control Limit	Sample Result	Qualification
Parent sample and laboratory sample	Water 200/	Non-detect	UJ
concentration >5 times RL	Water 20%	Detect	J
Parent sample and/or laboratory duplicate		Non-detect	UJ
sample result ≤ five times the RL and difference between samples >RL	Water one times RL	Detect	J

### 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
	TDS	52	48	8.0%
YGWA-5D / DUP-1E	Chloride	3.2	3.0	AC
	Sulfate	2.6	2.0	AC
YGWA-14S / DUP-01G	TDS	67	32	NC
	Chloride	4.9	5.0	AC
	Sulfate	6.0	6.1	1.7%
	TDS	205	216	5.2%
YGWC-26I / DUP-02	Chloride	16.6	16.6	0.0%
	Fluoride	0.050 J	0.10 U	AC
	Sulfate	89.3	88.8	0.6%

### Notes:

AC = Acceptable

NC = Non Compliant

The analyte TDS associated with samples locations YGWA-14S and DUP-01G exhibited a field duplicate RPD greater than the control limit. The associated sample results from sample locations for the listed analyte were qualified as estimated.

### 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	Reported		Performance Acceptable		Not Required
and USEPA 300.0	No	Yes	No	Yes	Required
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		Х		X	
Reporting limits (units)		Х		X	
Blanks					
A. Method Blanks		Х		Х	
B. Equipment blanks		Х	Х		
Laboratory Control Sample (LCS) %R		Х		Х	
Matrix Spike (MS) %R		Х	Х		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD Precision (RPD)		Х		Х	
Field/Lab Duplicate (RPD)		Х	Х		
Dilution Factor		Х		Х	
Moisture Content	Х				Х

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:

Usample = uncertainty of the sample

U<sub>Blank</sub> = 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*

<sup>\*=</sup> 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.

A MS/MSD was not included in the data package.

### 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:

$$Z_{\text{Dup}} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

 $x_1$ ,  $x_2$  = two measured activity concentrations.

 $u^2(x_1)$ ,  $u^2(x_2)$  = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

The laboratory duplicate performed on sample YGWA-5I exhibited RPDs within the control limits.

### 4. Field Duplicate Analysis

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

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

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. For results greater than five times the MDC, a control limit of 35 percent for water matrices is applied to the RPD between the parent and field duplicate sample results. If the parent and field duplicate sample results are less than five times the MDC, for water matrices a control limit of two times the MDC is applied to the difference between the results.

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

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWA-5D / DUP-1S	Radium-226	1.21 +/- 0.344	0.838 +/- 0.268	
	Radium-228	0.457 +/- 0.363	0.784 +/- 0.426	AC
	Total Radium	1.67 +/- 0.707	1.62 +/- 0.694	
YGWA-14S / DUP-01P	Radium-226	0.283 +/- 0.267	0.118 +/- 0.120	AC

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Radium-228	0.427 +/- 0.338	0.809 +/- 0.394	
	Total Radium	0.710 +/- 0.605	0.927 +/- 0.514	
	Radium-226	0.247 +/- 0.138	0.132 +/- 0.133	
YGWC-26I / DUP-02	Radium-228	0.172 +/- 0.331	0.222 +/- 0.291	AC
	Total Radium	0.419 +/- 0.469	0.354 +/- 0.424	

Notes:

AC = Acceptable

The RPD between the parent samples and the field duplicate samples were acceptable.

### 5. Tracer or Carrier

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

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

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

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

The numerical performance indicator for a laboratory control sample is calculated

by:

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

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

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

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

LCS performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

### 7. Isotope Identification

For sample results to be considered "non-detect", evaluate data based on the following two criteria. <u>If</u> either one of these criteria is true, the sample result is considered "non-detect".

- 1. Sample result is less than the uncertainty and less than the MDC/MDA; or
- 2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- YGWA-5I Radium 226, Radium 228 and Total Radium
- YGWA-5D Radium-228
- YGWA-14S Radium 226, Radium 228 and Total Radium
- YGWA-30I Radium 226, Radium 228 and Total Radium
- FB-01 Radium 226, Radium 228 and Total Radium
- DUP-01P Radium 226 and Total Radium
- FB-01 Radium 226 and Total Radium
- GWA-2 Radium 226 and Total Radium
- YGWA-40 Radium 226, Radium 228 and Total Radium
- YGWA-17S Radium 226, Radium 228 and Total Radium
- YGWA-18S Radium 226, Radium 228 and Total Radium
- YGWA-18I Radium 228 and Total Radium
- YGWA-39 Radium 228 and Total Radium
- YGWA-1D Radium 226, Radium 228 and Total Radium
- YGWA-1I Radium 226, Radium 228 and Total Radium
- YGWA-2I Radium 226, Radium 228 and Total Radium
- YGWA-3D Radium 226 and Total Radium
- EB-02 Radium 226, Radium 228 and Total Radium
- YGWA-4I Radium 228
- YGWA-20S Radium 226, Radium 228 and Total Radium
- YGWA-21I Radium 228
- YGWC-26S Radium 226, Radium 228 and Total Radium
- YGWC-28I Radium 226, Radium 228 and Total Radium
- YGWC-29I Radium 228
- EB-01 Radium 226, Radium 228 and Total Radium
- DUP-02 Radium 226, Radium 228 and Total Radium

- YGWC-26I Radium 228 and Total Radium
- YGWC-27S Radium 226, Radium 228 and Total Radium
- YGWC-27I Radium 228
- YGWC-28S Radium 228
- EB-01 Radium 226, Radium 228 and Total Radium

### 8. System Performance and Overall Assessment

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

### **DATA VALIDATION CHECKLIST FOR RADIOLOGICALS**

RADIOLOGICALS: SW-846 9315/9320	Rep	orted		rmance ptable	Not
	No	Yes	No	Yes	Required
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		Х		Х	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Rachelle Borne

SIGNATURE:

DATE: May 14, 2021

Jachelle Band

PEER REVIEW: Jennifer Singer

DATE: May 18, 2021

### CHAIN OF CUSTODY / DATA QUALIFIER SUMMARY TABLE

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sted Due Date:	Project #: Yates Gypsom-Lf Up. Gr	Manager: kevin.l	renting@pacetabs.com,	State / Location	cation
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action over Paties		Pace Project Manager: kevin.herring@pacelabs.com, Pace Profile #: 10840	State / Location
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SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier
		6010D	Calcium	2.6	mg/L	UB
	)/O)A/A 51	6020B	Barium	0.019	mg/L	UB
	YGWA-5I	300	Chloride	4.3	mg/L	UB
		300	Sulfate	2.3	mg/L	UB
		6010D	Calcium	1.6	mg/L	UB
	VOWA FD	6020B	Barium	0.014	mg/L	UB
	YGWA-5D	300	Chloride	3.2	mg/L	UB
		300	Sulfate	2.6	mg/L	UB
		6010D	Calcium	1.5	mg/L	UB
	DUD 4E	6020B	Barium	0.014	mg/L	UB
	DUP-1E	300	Chloride	3.0	mg/L	UB
		300	Sulfate	2.0	mg/L	UB
		6010D	Calcium	1.2	mg/L	UB
		6020B	Barium	0.0076	mg/L	UB
	YGWA-14S	300	Chloride	4.9	mg/L	UB
		300	Sulfate	6.0	mg/L	UB
		SM2540C	TDS	67.0	mg/L	J
		6010D	Calcium	1.2	mg/L	UB
		6020B	Barium	0.0078	mg/L	UB
	DUP-01G	300	Chloride	5.0	mg/L	UB
	DUP-01G	300	Sulfate	6.1	mg/L	UB
		SM2540C	TDS	32.0	mg/L	J
		6010D	Calcium	2.5	mg/L	UB
		6020B	Barium	0.017	mg/L	UB
	YGWA-17S	6020B	Chromium	0.005	mg/L	UB
		300	Chloride	7.1	mg/L	UB
		300	Sulfate	5.2	mg/L	UB
		6010D	Calcium	1.0	mg/L	UB
		6020B	Barium	0.017	mg/L	UB
	VOVVA 400	6020B	Chromium	0.005	mg/L	UB
	YGWA-18S	6020B	Lithium	0.03	mg/L	UB
		300	Chloride	7.2	mg/L	UB
		300	Sulfate	1.0	mg/L	UB
		6010D	Calcium	5.2	mg/L	UB
		6020B	Barium	0.023	mg/L	UB
	YGWA-18I	6020B	Chromium	0.005	mg/L	UB
92525335		6020B	Lithium	0.03	mg/L	UB
		300	Chloride	7.0	mg/L	UB
		6010D	Calcium	14.1	mg/L	UB
		6020B	Barium	0.0068	mg/L	UB
	YGWA-1D	6020B	Lithium	0.03	mg/L	UB
		300	Chloride	1.0	mg/L	UB
		300	Sulfate	9.0	mg/L	UB
		6010D	Calcium	1.8	mg/L	UB



SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier
Ĭ		6020B	Barium	0.0094	mg/L	UB
	YGWA-1I	6020B	Lithium	0.03	mg/L	UB
		300	Chloride	1.2	mg/L	UB
		300	Sulfate	4.4	mg/L	UB
l		6010D	Calcium	25.6	mg/L	UB
		6020B	Barium	0.0050	mg/L	UB
	YGWA-2I	6020B	Lithium	0.03	mg/L	UB
		300	Chloride	1.0	mg/L	UB
		300	Sulfate	10.6	mg/L	UB
l		6010D	Calcium	20.6	mg/L	UB
		6020B	Barium	0.0050	mg/L	UB
	YGWA-3I	6020B	Lithium	0.03	mg/L	UB
		300	Chloride	1.0	mg/L	UB
		300	Sulfate	9.6	mg/L	UBJ
		6010D	Calcium	29.8	mg/L	UB
		6020B	Barium	0.0064	mg/L	UB
	YGWA-3D	6020B	Lithium	0.03	mg/L	UB
	YGWA-3D	300	Chloride	1.1	mg/L	UB
		300	Sulfate	7.0	mg/L	UB
		6010D	Calcium	7.7	mg/L	UB
		6020B	Barium	0.014	mg/L	UB
	YGWA-4I	6020B	Chromium	0.005	mg/L	UB
	rGWA-4i	6020B	Lithium	0.03	mg/L	UB
		300	Chloride	4.1	mg/L	UB
		300	Sulfate	7.8	mg/L	UB
l l		6010D	Calcium	2.4	mg/L	UB
	YGWA-20S	6020B	Barium	0.015	mg/L	UB
		300	Chloride	2.7	mg/L	UB
	YGWA-30I	SM2540C	TDS	23.0	mg/L	J
92525214				N	o Qualif	iers Added
92525245				N	o Qualif	iers Added
92525346 <b>Abbreviation</b>	DUP-02	300	Sulfate	88.8 Qualifiers:	mg/L	J

Abbreviations:

mg/L = milligrams per liter

Qualifiers:

UB = not detected due to blank contamina
J/UJ = Estimated





March 22, 2021

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

RE: Project: YATES

Pace Project No.: 92525346

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services Asheville
- Pace Analytical Services Charlotte
- Pace Analytical Services Peachtree Corners, GA

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com

Kein Len

1(704)875-9092

**HORIZON** Database Administrator

Enclosures

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





### **CERTIFICATIONS**

Project: YATES
Pace Project No.: 92525346

**Pace Analytical Services Charlotte** 

9800 Kincey Ave. Ste 100, Huntersville, NC 28078 Louisiana/NELAP Certification # LA170028 North Carolina Drinking Water Certification #: 37706 North Carolina Field Services Certification #: 5342 North Carolina Wastewater Certification #: 12 South Carolina Certification #: 99006001 Florida/NELAP Certification #: E87627 Kentucky UST Certification #: 84 Virginia/VELAP Certification #: 460221

**Pace Analytical Services Asheville** 

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

**Pace Analytical Services Peachtree Corners** 

110 Technology Pkwy, Peachtree Corners, GA 30092 Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812

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



### **SAMPLE SUMMARY**

Project: YATES
Pace Project No.: 92525346

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525346001	YGWC-26S	Water	03/02/21 14:00	03/02/21 17:30
92525346002	YGWC-28I	Water	03/03/21 13:40	03/05/21 09:20
92525346003	YGWC-29I	Water	03/03/21 10:45	03/05/21 09:20
92525346004	EB-01	Water	03/03/21 16:25	03/05/21 09:20
92525346005	DUP-02	Water	03/03/21 00:00	03/05/21 09:20
92525346006	YGWC-26I	Water	03/03/21 09:15	03/05/21 09:20
92525346007	YGWC-27S	Water	03/03/21 14:40	03/05/21 09:20
92525346008	YGWC-27I	Water	03/03/21 15:40	03/05/21 09:20
92525346009	YGWC-28S	Water	03/03/21 11:55	03/05/21 09:20
92525346010	EB-01	Water	03/03/21 10:20	03/05/21 09:20



### **SAMPLE ANALYTE COUNT**

Project: YATES
Pace Project No.: 92525346

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92525346001	YGWC-26S	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525346002	YGWC-28I	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525346003	YGWC-29I	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525346004	EB-01	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525346005	DUP-02	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525346006	YGWC-26I	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525346007	YGWC-27S	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525346008	YGWC-27I	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525346009	YGWC-28S	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525346010	EB-01	EPA 6010D	KH	1

### **REPORT OF LABORATORY ANALYSIS**

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### **SAMPLE ANALYTE COUNT**

Project: YATES
Pace Project No.: 92525346

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6020B	CW1	12
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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



### **SUMMARY OF DETECTION**

Project: YATES
Pace Project No.: 92525346

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifier
92525346001	YGWC-26S					
	Performed by	CUSTOME R			03/08/21 09:06	
	рН	5.38	Std. Units		03/08/21 09:06	
EPA 6010D	Calcium	12.9	mg/L	1.0	03/09/21 04:03	
EPA 6020B	Barium	0.031	mg/L	0.0050	03/05/21 19:12	
EPA 6020B	Beryllium	0.00016J	mg/L	0.00050	03/05/21 19:12	
EPA 6020B	Boron	0.57	mg/L	0.040	03/05/21 19:12	
EPA 6020B	Chromium	0.0010J	mg/L	0.0050	03/05/21 19:12	
EPA 6020B	Cobalt	0.0021J	mg/L	0.0050	03/05/21 19:12	
EPA 6020B	Lead	0.000056J	mg/L	0.0010	03/05/21 19:12	
SM 2450C-2011	Total Dissolved Solids	154	mg/L	10.0	03/05/21 11:05	
EPA 300.0 Rev 2.1 1993	Chloride	13.2	mg/L	1.0	03/07/21 02:24	
EPA 300.0 Rev 2.1 1993	Sulfate	92.7	mg/L	1.0	03/07/21 02:24	
2525346002	YGWC-28I		•			
	Performed by	CUSTOME			03/08/21 09:06	
	pН	R 66.51	Std. Units		03/08/21 09:06	
EPA 6010D	Calcium	30.9	mg/L	1.0	03/10/21 04:02	
EPA 6020B	Barium	0.077	-	0.0050	03/10/21 04:02	
EPA 6020B	Boron	1.8	mg/L	0.0030	03/11/21 15:19	
EPA 6020B			mg/L		03/11/21 15:19	
	Cadmium	0.00014J	mg/L	0.00050		
EPA 6020B	Lithium	0.0063J	mg/L	0.030	03/11/21 15:19	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	03/11/21 15:19	
SM 2450C-2011	Total Dissolved Solids	184	mg/L	10.0	03/06/21 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	14.6	mg/L	1.0	03/13/21 23:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.072J	mg/L	0.10	03/13/21 23:51	
EPA 300.0 Rev 2.1 1993	Sulfate	8.6	mg/L	1.0	03/13/21 23:51	
2525346003	YGWC-29I	OLIOTOME				
	Performed by	CUSTOME R			03/08/21 09:06	
	рН	6.27	Std. Units		03/08/21 09:06	
EPA 6010D	Calcium	9.5	mg/L	1.0	03/10/21 04:22	
EPA 6020B	Barium	0.059	mg/L	0.0050	03/11/21 15:38	
EPA 6020B	Boron	0.62	mg/L	0.040	03/11/21 15:38	
EPA 6020B	Cadmium	0.00029J	mg/L	0.00050	03/11/21 15:38	
EPA 6020B	Lead	0.00016J	mg/L	0.0010	03/11/21 15:38	
EPA 6020B	Lithium	0.0054J	mg/L		03/11/21 15:38	
SM 2450C-2011	Total Dissolved Solids	110	mg/L	10.0	03/06/21 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	6.7	mg/L		03/14/21 00:06	
EPA 300.0 Rev 2.1 1993	Fluoride	0.056J	mg/L	0.10	03/14/21 00:06	
EPA 300.0 Rev 2.1 1993	Sulfate	26.6	mg/L	1.0	03/14/21 00:06	
2525346005	DUP-02					
PA 6010D	Calcium	16.0	mg/L	1.0	03/10/21 04:31	
EPA 6020B	Barium	0.065	mg/L	0.0050	03/11/21 15:50	
EPA 6020B	Boron	0.69	mg/L	0.040	03/11/21 15:50	
EPA 6020B	Chromium	0.00072J	mg/L	0.0050	03/11/21 15:50	



### **SUMMARY OF DETECTION**

Project: YATES
Pace Project No.: 92525346

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifier
2525346005	DUP-02					
EPA 6020B	Lithium	0.0078J	mg/L	0.030	03/11/21 15:50	
EPA 6020B	Selenium	0.0029J	mg/L	0.0050	03/11/21 15:50	
SM 2450C-2011	Total Dissolved Solids	216	mg/L	10.0	03/06/21 13:12	
EPA 300.0 Rev 2.1 1993	Chloride	16.6	mg/L	1.0	03/14/21 01:08	
EPA 300.0 Rev 2.1 1993	Sulfate	88.8	mg/L	1.0	03/14/21 01:08	M1
2525346006	YGWC-26I					
	Performed by	CUSTOME R			03/08/21 09:06	
	Нq	5.93	Std. Units		03/08/21 09:06	
EPA 6010D	Calcium	16.1	mg/L	1.0	03/10/21 04:36	
EPA 6020B	Barium	0.064	mg/L	0.0050	03/11/21 15:56	
PA 6020B	Boron	0.69	mg/L	0.040	03/11/21 15:56	
EPA 6020B	Lithium	0.0077J	mg/L	0.030	03/11/21 15:56	
EPA 6020B	Selenium	0.0034J	mg/L	0.0050	03/11/21 15:56	
SM 2450C-2011	Total Dissolved Solids	205	mg/L	10.0	03/06/21 13:12	
EPA 300.0 Rev 2.1 1993	Chloride	16.6	mg/L	1.0	03/14/21 01:55	
PA 300.0 Rev 2.1 1993	Fluoride	0.050J	mg/L	0.10	03/14/21 01:55	
EPA 300.0 Rev 2.1 1993	Sulfate	89.3	mg/L		03/14/21 01:55	
2525346007	YGWC-27S					
	Performed by	CUSTOME R			03/08/21 09:06	
	рН	6.35	Std. Units		03/08/21 09:06	
PA 6010D	Calcium	30.2	mg/L	1.0	03/10/21 04:50	
PA 6020B	Barium	0.075	mg/L	0.0050	03/11/21 16:01	
EPA 6020B	Boron	1.2	mg/L	0.040	03/11/21 16:01	
PA 6020B	Chromium	0.00058J	mg/L	0.0050	03/11/21 16:01	
PA 6020B	Cobalt	0.0017J	mg/L	0.0050	03/11/21 16:01	
SM 2450C-2011	Total Dissolved Solids	178	mg/L	10.0	03/06/21 13:12	
PA 300.0 Rev 2.1 1993	Chloride	4.0	mg/L	1.0	03/14/21 03:10	
EPA 300.0 Rev 2.1 1993	Sulfate	451	mg/L	11.0	03/14/21 05:13	
2525346008	YGWC-27I					
	Performed by	CUSTOME R			03/08/21 09:06	
	рН	6.43	Std. Units		03/08/21 09:06	
EPA 6010D	Calcium	25.7	mg/L	1.0	03/10/21 04:55	
EPA 6020B	Barium	0.080	mg/L	0.0050	03/11/21 16:07	
PA 6020B	Beryllium	0.00013J	mg/L	0.00050	03/11/21 16:07	
PA 6020B	Boron	2.0	mg/L	0.040	03/11/21 16:07	
PA 6020B	Cobalt	0.0042J	mg/L	0.0050	03/11/21 16:07	
PA 6020B	Lithium	0.0066J	mg/L	0.030	03/11/21 16:07	
PA 6020B	Molybdenum	0.0017J	mg/L	0.010	03/11/21 16:07	
SM 2450C-2011	Total Dissolved Solids	173	mg/L	10.0	03/06/21 13:12	
PA 300.0 Rev 2.1 1993	Chloride	13.0	mg/L	1.0	03/14/21 03:26	
PA 300.0 Rev 2.1 1993	Fluoride	0.058J	mg/L	0.10	03/14/21 03:26	
PA 300.0 Rev 2.1 1993	Sulfate	2.6	mg/L	1.0	03/14/21 03:26	



### **SUMMARY OF DETECTION**

Project: YATES
Pace Project No.: 92525346

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
92525346009	YGWC-28S						
	Performed by	CUSTOME R			03/08/21 09:06		
	pН	6.61	Std. Units		03/08/21 09:06		
EPA 6010D	Calcium	28.4	mg/L	1.0	03/10/21 05:00		
EPA 6020B	Barium	0.25	mg/L	0.0050	03/11/21 16:13		
EPA 6020B	Boron	2.3	mg/L	0.040	03/11/21 16:13		
EPA 6020B	Cobalt	0.0010J	mg/L	0.0050	03/11/21 16:13		
EPA 6020B	Molybdenum	0.00083J	mg/L	0.010	03/11/21 16:13		
SM 2450C-2011	Total Dissolved Solids	217	mg/L	10.0	03/06/21 12:29		
EPA 300.0 Rev 2.1 1993	Chloride	18.0	mg/L	1.0	03/14/21 03:41		
EPA 300.0 Rev 2.1 1993	Fluoride	0.13	mg/L	0.10	03/14/21 03:41		
EPA 300.0 Rev 2.1 1993	Sulfate	4.9	mg/L	1.0	03/14/21 03:41		



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: YGWC-26S	Lab ID:	92525346001	Collecte	ed: 03/02/2	1 14:00	Received: 03/	/02/21 17:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
- Turamotoro						- 11000100			
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	;					
Performed by	CUSTOME				1		03/08/21 09:06		
nl l	R	Ctd Unito			4		02/09/24 00:06		
pH	5.38	Std. Units			1		03/08/21 09:06		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Me	thod: El	PA 3010A			
	Pace Ana	lytical Services	- Peachtre	e Corners, (	ЭΑ				
Calcium	12.9	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 04:03	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	thod: Ef	PA 3005A			
		lytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 19:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 19:12		
Barium	0.031	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 19:12		
Beryllium	0.00016J	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 19:12		
Boron	0.57	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 19:12		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 19:12		
Chromium	0.0010J	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 19:12		
Cobalt	0.0021J	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 19:12	7440-48-4	
Lead	0.000056J	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 19:12		
Lithium	ND	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 19:12		
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 19:12		
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 19:12	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	•	lytical Services		e Corners, 0	GΑ				
Total Dissolved Solids	154	mg/L	10.0	10.0	1		03/05/21 11:05		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
-	-	lytical Services							
Chloride	13.2	mg/L	1.0	0.60	1		03/07/21 02:24	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/07/21 02:24	16984-48-8	
Sulfate	92.7	mg/L	1.0	0.50	1		03/07/21 02:24	14808-79-8	



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: YGWC-28I	Lab ID:	92525346002	Collecte	ed: 03/03/21	1 13:40	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		03/08/21 09:06		
Н	66.51	Std. Units			1		03/08/21 09:06		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	hod: Ef	PA 3010A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Calcium	30.9	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 04:02	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	€A				
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 15:19	7440-36-0	В
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 15:19	7440-38-2	
Barium	0.077	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 15:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 15:19	7440-41-7	
Boron	1.8	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 15:19	7440-42-8	
Cadmium	0.00014J	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 15:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 15:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 15:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 15:19	7439-92-1	
_ithium	0.0063J	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 15:19	7439-93-2	
Molybdenum	0.0011J	mg/L	0.010	0.00069	1	03/09/21 12:48	03/11/21 15:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 15:19	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Total Dissolved Solids	184	mg/L	10.0	10.0	1		03/06/21 13:11		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	- Asheville						
Chloride	14.6	mg/L	1.0	0.60	1		03/13/21 23:51	16887-00-6	
Fluoride	0.072J	mg/L	0.10	0.050	1		03/13/21 23:51	16984-48-8	
Sulfate	8.6	mg/L	1.0	0.50	1		03/13/21 23:51	14808-79-8	



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: YGWC-29I	Lab ID:	92525346003	Collecte	ed: 03/03/2	1 10:45	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	)					
Performed by	CUSTOME				1		03/08/21 09:06		
рН	R 6.27	Std. Units			1		03/08/21 09:06		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	thod: El	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Calcium	9.5	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 04:22	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: El	PA 3005A			
-		ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 15:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 15:38	7440-38-2	
Barium	0.059	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 15:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 15:38	7440-41-7	
Boron	0.62	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 15:38	7440-42-8	
Cadmium	0.00029J	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 15:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 15:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 15:38	7440-48-4	
Lead	0.00016J	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 15:38	7439-92-1	
Lithium	0.0054J	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 15:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/09/21 12:48	03/11/21 15:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 15:38	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Total Dissolved Solids	110	mg/L	10.0	10.0	1		03/06/21 13:11		
300.0 IC Anions 28 Days		Method: EPA 3							
		lytical Services							
Chloride	6.7	mg/L	1.0	0.60	1		03/14/21 00:06	16887-00-6	
Fluoride	0.056J	mg/L	0.10	0.050	1		03/14/21 00:06	16984-48-8	
Sulfate	26.6	mg/L	1.0	0.50	1		03/14/21 00:06	14808-79-8	



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: EB-01	Lab ID:	92525346004	4 Collecte	ed: 03/03/2	16:25	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: El	PA 3010A			
	Pace Anal	ytical Service	s - Peachtre	e Corners, C	€A				
Calcium	ND	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 04:26	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Prej	paration Met	hod: El	PA 3005A			
	Pace Anal	ytical Service	s - Peachtre	e Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 15:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 15:44	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 15:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 15:44	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 15:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 15:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 15:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 15:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 15:44	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 15:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/09/21 12:48	03/11/21 15:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 15:44	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2450C-2011						
	Pace Anal	ytical Service	s - Peachtre	e Corners, C	€A				
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/06/21 13:12		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Service	s - Asheville						
Chloride	ND	mg/L	1.0	0.60	1		03/14/21 00:22	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 00:22	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/14/21 00:22	14808-79-8	



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: DUP-02	Lab ID:	92525346005	Collecte	ed: 03/03/21	00:00	Received: 03/	05/21 09:20 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
						•	· <u> </u>	-	
6010D ATL ICP	•	Method: EPA 6				PA 3010A			
	Pace Analy	tical Services	- Peachtre	e Corners, G	βA				
Calcium	16.0	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 04:31	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Prep	paration Met	hod: Ef	PA 3005A			
	Pace Analy	tical Services	- Peachtre	e Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 15:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 15:50	7440-38-2	
Barium	0.065	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 15:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 15:50	7440-41-7	
Boron	0.69	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 15:50	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 15:50	7440-43-9	
Chromium	0.00072J	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 15:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 15:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 15:50	7439-92-1	
Lithium	0.0078J	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 15:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/09/21 12:48	03/11/21 15:50	7439-98-7	
Selenium	0.0029J	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 15:50	7782-49-2	
2540C Total Dissolved Solids	Analytical I	Method: SM 24	150C-2011						
	Pace Analy	tical Services	- Peachtre	e Corners, G	βA				
Total Dissolved Solids	216	mg/L	10.0	10.0	1		03/06/21 13:12		
300.0 IC Anions 28 Days	Analytical I	Method: EPA 3	00.0 Rev 2	2.1 1993					
·	Pace Analy	tical Services	- Asheville						
Chloride	16.6	mg/L	1.0	0.60	1		03/14/21 01:08	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 01:08		
Sulfate	88.8	mg/L	1.0	0.50	1		03/14/21 01:08		M1



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: YGWC-26I	Lab ID:	92525346006	Collecte	ed: 03/03/2	1 09:15	Received: 03/	05/21 09:20 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical								
	Pace Anal	ytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		03/08/21 09:06		
рН	5.93	Std. Units			1		03/08/21 09:06		
6010D ATL ICP	-	Method: EPA 6				PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Calcium	16.1	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 04:36	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 15:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 15:56	7440-38-2	
Barium	0.064	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 15:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 15:56	7440-41-7	
Boron	0.69	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 15:56	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 15:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 15:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 15:56	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 15:56	7439-92-1	
Lithium	0.0077J	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 15:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/09/21 12:48	03/11/21 15:56	7439-98-7	
Selenium	0.0034J	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 15:56	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 24	150C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Total Dissolved Solids	205	mg/L	10.0	10.0	1		03/06/21 13:12		
300.0 IC Anions 28 Days	•	Method: EPA 3 ytical Services							
Chloride	16.6	mg/L	1.0	0.60	1		03/14/21 01:55	16887-00-6	
Fluoride	0.050J	mg/L	0.10	0.050	1		03/14/21 01:55	16984-48-8	
Sulfate	89.3	mg/L	1.0	0.50	1		03/14/21 01:55	14808-79-8	



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: YGWC-27S	Lab ID:	92525346007	Collecte	ed: 03/03/2	1 14:40	Received: 03/	05/21 09:20 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical								
	Pace Anal	lytical Services	- Charlotte	<b>:</b>					
Performed by	CUSTOME				1		03/08/21 09:06		
pH	R 6.35	Std. Units			1		03/08/21 09:06		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	thod: El	PA 3010A			
	-	ytical Services							
Calcium	30.2	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 04:50	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: Ef	PA 3005A			
	-	ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 16:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 16:01		
Barium	0.075	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 16:01		
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 16:01	7440-41-7	
Boron	1.2	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 16:01		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 16:01		
Chromium	0.00058J	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 16:01	7440-47-3	
Cobalt	0.0017J	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 16:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 16:01		
Lithium	ND	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 16:01		
Molybdenum	ND	mg/L	0.010	0.00069	1	03/09/21 12:48	03/11/21 16:01		
Selenium	ND	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 16:01	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Total Dissolved Solids	178	mg/L	10.0	10.0	1		03/06/21 13:12		
300.0 IC Anions 28 Days	•	Method: EPA 3 ytical Services							
Chloride	4.0	mg/L	1.0	0.60	1		03/14/21 03:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 03:10	16984-48-8	
Sulfate	451	mg/L	11.0	5.5	11		03/14/21 05:13	14808-79-8	



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: YGWC-27I	Lab ID:	92525346008	Collecte	ed: 03/03/2	1 15:40	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	<b>:</b>					
Performed by	CUSTOME				1		03/08/21 09:06		
рН	R 6.43	Std. Units			1		03/08/21 09:06		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	thod: El	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Calcium	25.7	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 04:55	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: El	PA 3005A			
		ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 16:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 16:07	7440-38-2	
Barium	0.080	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 16:07	7440-39-3	
Beryllium	0.00013J	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 16:07	7440-41-7	
Boron	2.0	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 16:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 16:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 16:07	7440-47-3	
Cobalt	0.0042J	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 16:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 16:07	7439-92-1	
Lithium	0.0066J	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 16:07	7439-93-2	
Molybdenum	0.0017J	mg/L	0.010	0.00069	1	03/09/21 12:48	03/11/21 16:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 16:07	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Total Dissolved Solids	173	mg/L	10.0	10.0	1		03/06/21 13:12		
300.0 IC Anions 28 Days		Method: EPA 3							
Chloride	13.0	mg/L	1.0	0.60	1		03/14/21 03:26	16887-00-6	
Fluoride	0.058J	mg/L	0.10	0.050	1		03/14/21 03:26	16984-48-8	
Sulfate	2.6	mg/L	1.0	0.50	1		03/14/21 03:26	14808-79-8	



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: YGWC-28S	Lab ID:	92525346009	Collecte	ed: 03/03/2	1 11:55	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	ytical Services	- Charlotte	<b>;</b>					
Performed by	CUSTOME				1		03/08/21 09:06		
-11	R	Ctal I laita					02/00/04 00:00		
pH	6.61	Std. Units			1		03/08/21 09:06		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	hod: E	PA 3010A			
	Pace Ana	ytical Services	- Peachtre	e Corners, C	€A				
Calcium	28.4	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 05:00	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: El	PA 3005A			
		ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 16:13	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 16:13		
Barium	0.25	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 16:13		
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 16:13		
Boron	2.3	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 16:13		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 16:13		
Chromium	ND	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 16:13	7440-47-3	
Cobalt	0.0010J	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 16:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 16:13		
Lithium	ND	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 16:13	7439-93-2	
Molybdenum	0.00083J	mg/L	0.010	0.00069	1		03/11/21 16:13		
Selenium	ND	mg/L	0.0050	0.0016	1		03/11/21 16:13		
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Ana	ytical Services	- Peachtre	e Corners, C	SA.				
Total Dissolved Solids	217	mg/L	10.0	10.0	1		03/06/21 12:29		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
	Pace Ana	ytical Services	- Asheville						
Chloride	18.0	mg/L	1.0	0.60	1		03/14/21 03:41	16887-00-6	
Fluoride	0.13	mg/L	0.10	0.050	1		03/14/21 03:41		
Sulfate	4.9	mg/L	1.0	0.50	1		03/14/21 03:41		



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Sample: EB-01	Lab ID:	92525346010	Collecte	ed: 03/03/2	10:20	Received: 03/	05/21 09:20 Ma	atrix: Water		
	Report									
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua	
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: El	PA 3010A				
	Pace Anal	ytical Service	s - Peachtre	e Corners, C	βA					
Calcium	ND	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 05:05	7440-70-2		
6020 MET ICPMS	Analytical	Method: EPA	6020B Prep	paration Met	hod: El	PA 3005A				
	Pace Anal	ytical Service	s - Peachtre	e Corners, C	βA					
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 16:18	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 16:18	7440-38-2		
Barium	ND	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 16:18	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 16:18	7440-41-7		
Boron	ND	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 16:18	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 16:18	7440-43-9		
Chromium	ND	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 16:18	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 16:18	7440-48-4		
_ead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 16:18	7439-92-1		
_ithium	ND	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 16:18	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00069	1	03/09/21 12:48	03/11/21 16:18	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 16:18	7782-49-2		
2540C Total Dissolved Solids	Analytical	Method: SM 2	2450C-2011							
	Pace Anal	ytical Service	s - Peachtre	e Corners, C	βA					
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/06/21 12:29			
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993						
	Pace Anal	ytical Service	s - Asheville							
Chloride	ND	mg/L	1.0	0.60	1		03/14/21 12:36	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 12:36			
Sulfate	ND	mg/L	1.0	0.50	1		03/14/21 12:36			



Date: 03/22/2021 01:10 PM

#### **QUALITY CONTROL DATA**

YATES Project: Pace Project No.: 92525346 QC Batch: 604223 Analysis Method: **EPA 6010D** QC Batch Method: **EPA 3010A** Analysis Description: 6010D ATL Laboratory: Pace Analytical Services - Peachtree Corners, GA Associated Lab Samples: 92525346001 METHOD BLANK: 3183140 Matrix: Water Associated Lab Samples: 92525346001 Blank Reporting MDL Qualifiers Parameter Units Result Limit Analyzed Calcium ND 1.0 0.070 03/09/21 01:57 mg/L LABORATORY CONTROL SAMPLE: 3183141 Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Calcium mg/L 1.0 103 80-120 MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183142 3183143 MSD MS 92525335001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits 105 20 Calcium mg/L 2.6 3.6 3.5 75-125 3

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.



Project: YATES
Pace Project No.: 92525346

QC Batch: 605191 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525346002, 92525346003, 92525346004, 92525346005, 92525346006, 92525346007, 92525346008,

92525346009, 92525346010

METHOD BLANK: 3188288 Matrix: Water

Associated Lab Samples: 92525346002, 92525346003, 92525346004, 92525346005, 92525346006, 92525346007, 92525346008,

92525346009, 92525346010

Blank Reporting
Result Limit MDL Analyzed Qualifiers

Calcium mg/L ND 1.0 0.070 03/10/21 03:52

LABORATORY CONTROL SAMPLE: 3188289

Date: 03/22/2021 01:10 PM

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3188290 3188291

MSD MS 92525346002 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual 2 20 Calcium 30.9 1 32.1 31.3 120 75-125 mg/L

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.



Project: YATES
Pace Project No.: 92525346

QC Batch: 604224 QC Batch Method: EPA 3005A Analysis Method: EPA 6020B

Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525346001

METHOD BLANK: 3183148

Date: 03/22/2021 01:10 PM

Matrix: Water

Associated Lab Samples: 92525346001

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/05/21 16:31	
Arsenic	mg/L	ND	0.0050	0.00078	03/05/21 16:31	
Barium	mg/L	ND	0.0050	0.00071	03/05/21 16:31	
Beryllium	mg/L	ND	0.00050	0.000046	03/05/21 16:31	
Boron	mg/L	ND	0.040	0.0052	03/05/21 16:31	
Cadmium	mg/L	ND	0.00050	0.00012	03/05/21 16:31	
Chromium	mg/L	ND	0.0050	0.00055	03/05/21 16:31	
Cobalt	mg/L	ND	0.0050	0.00038	03/05/21 16:31	
Lead	mg/L	ND	0.0010	0.000036	03/05/21 16:31	
Lithium	mg/L	ND	0.030	0.00081	03/05/21 16:31	
Molybdenum	mg/L	ND	0.010	0.00069	03/05/21 16:31	
Selenium	mg/L	ND	0.0050	0.0016	03/05/21 16:31	

LABORATORY CONTROL SAMPLE:	3183149					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.91	91	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SP	PIKE DUPL	ICATE: 3183		3183151								
		92525335002	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	105	106	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.096	0.093	96	93	75-125	3	20	
Barium	mg/L	0.014	0.1	0.1	0.11	0.11	96	99	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.093	95	93	75-125	2	20	

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



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 3183		3183151								
		92525335002	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Boron	mg/L	0.0068J	1	1	0.96	0.96	96	96	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.098	99	98	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Lead	mg/L	0.000051J	0.1	0.1	0.098	0.095	98	95	75-125	3	20	
Lithium	mg/L	0.0018J	0.1	0.1	0.10	0.097	98	95	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.092	94	92	75-125	2	20	

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.



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

QC Batch: 605211 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525346002, 92525346003, 92525346004, 92525346005, 92525346006, 92525346007, 92525346008,

92525346009, 92525346010

METHOD BLANK: 3188368 Matrix: Water

Associated Lab Samples: 92525346002, 92525346003, 92525346004, 92525346005, 92525346006, 92525346007, 92525346008,

92525346009, 92525346010

ъ.		Blank	Reporting	MDI		0 ""
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00043J	0.0030	0.00028	03/11/21 14:28	
Arsenic	mg/L	ND	0.0050	0.00078	03/11/21 14:28	
Barium	mg/L	ND	0.0050	0.00071	03/11/21 14:28	
Beryllium	mg/L	ND	0.00050	0.000046	03/11/21 14:28	
Boron	mg/L	ND	0.040	0.0052	03/11/21 14:28	
Cadmium	mg/L	ND	0.00050	0.00012	03/11/21 14:28	
Chromium	mg/L	ND	0.0050	0.00055	03/11/21 14:28	
Cobalt	mg/L	ND	0.0050	0.00038	03/11/21 14:28	
Lead	mg/L	ND	0.0010	0.000036	03/11/21 14:28	
Lithium	mg/L	ND	0.030	0.00081	03/11/21 14:28	
Molybdenum	mg/L	ND	0.010	0.00069	03/11/21 14:28	
Selenium	mg/L	ND	0.0050	0.0016	03/11/21 14:28	

LABORATORY CONTROL SAMPLE:	3188369					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	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	0.094	94	80-120	
Boron	mg/L	1	0.98	98	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	0.099	99	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SI	PIKE DUPL	ICATE: 3188		3188371								
		92525662001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	0.012	0.1	0.1	0.11	0.11	97	101	75-125	4	20	
Arsenic	mg/L	0.13	0.1	0.1	0.23	0.23	92	93	75-125	0	20	
Barium	mg/L	0.12	0.1	0.1	0.26	0.27	138	146	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.



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

MATRIX SPIKE & MATRIX	SPIKE DUPLI	CATE: 3188			3188371							
Parameter	g Units	92525662001 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	0.078	0.080	78	80	75-125	2	20	
Boron	mg/L	1.1	1	1	1.9	1.9	79	85	75-125	3	20	
Cadmium	mg/L	0.00021J	0.1	0.1	0.093	0.094	93	94	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.090	0.092	89	92	75-125	3	20	
Cobalt	mg/L	0.0030J	0.1	0.1	0.092	0.094	89	91	75-125	2	20	
Lead	mg/L	0.000081J	0.1	0.1	0.088	0.091	87	91	75-125	4	20	
Lithium	mg/L	0.19	0.1	0.1	0.26	0.27	73	77	75-125	2	20	M1
Molybdenum	mg/L	0.035	0.1	0.1	0.12	0.13	89	91	75-125	2	20	
Selenium	mg/L	0.086	0.1	0.1	0.18	0.18	89	97	75-125	4	20	

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



Total Dissolved Solids

Date: 03/22/2021 01:10 PM

#### **QUALITY CONTROL DATA**

YATES Project: Pace Project No.: 92525346 QC Batch: 604527 Analysis Method: SM 2450C-2011 QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids Laboratory: Pace Analytical Services - Peachtree Corners, GA Associated Lab Samples: 92525346001 METHOD BLANK: 3184654 Matrix: Water Associated Lab Samples: 92525346001 Blank Reporting MDL Qualifiers Parameter Units Result Limit Analyzed Total Dissolved Solids ND 10.0 10.0 03/05/21 11:03 mg/L LABORATORY CONTROL SAMPLE: 3184655 Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units **Total Dissolved Solids** mg/L 400 375 94 90-111 SAMPLE DUPLICATE: 3184656 92525799001 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 2090 **Total Dissolved Solids** 6 mg/L 1960 10 SAMPLE DUPLICATE: 3184657 92525341004 Dup Max RPD RPD Parameter Units Result Result Qualifiers

167

mg/L

152

9

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.



Project: YATES
Pace Project No.: 92525346

QC Batch: 604764 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: 92525346002, 92525346003, 92525346004, 92525346005, 92525346006, 92525346007, 92525346008

METHOD BLANK: 3186295 Matrix: Water

Associated Lab Samples: 92525346002, 92525346003, 92525346004, 92525346005, 92525346006, 92525346007, 92525346008

Blank Reporting

ParameterUnitsResultLimitMDLAnalyzedQualifiersTotal Dissolved Solidsmg/LND10.010.003/06/21 13:06

LABORATORY CONTROL SAMPLE: 3186296

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Total Dissolved Solids mg/L 400 368 92 90-111

SAMPLE DUPLICATE: 3186298

 Parameter
 Units
 Result
 Dup Result
 Max RPD
 RPD
 Qualifiers

 Total Dissolved Solids
 mg/L
 102
 101
 1
 10

SAMPLE DUPLICATE: 3186336

Date: 03/22/2021 01:10 PM

92525919008 Dup Max RPD RPD Parameter Units Result Result Qualifiers Total Dissolved Solids 267 mg/L 283 6 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.



YATES Project: Pace Project No.: 92525346

QC Batch: 604765 QC Batch Method:

SM 2450C-2011

Analysis Method: Analysis Description: SM 2450C-2011

2540C Total Dissolved Solids

MDL

Laboratory:

Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525346009, 92525346010

METHOD BLANK: 3186310

Matrix: Water

Associated Lab Samples: 92525346009, 92525346010

> Blank Result

Reporting Limit

Analyzed

Qualifiers

Total Dissolved Solids

**Total Dissolved Solids** 

**Total Dissolved Solids** 

Units mg/L

ND

10.0

10.0 03/06/21 12:29

LABORATORY CONTROL SAMPLE:

Parameter

Parameter

3186311

Units

mg/L

mg/L

mg/L

Spike Conc.

LCS Result

LCS % Rec % Rec Limits

Qualifiers

SAMPLE DUPLICATE: 3186312

Parameter Units

92525346009 Result

217

400

Dup Result

220

371

**RPD** 

93

Max **RPD** 

10

10 D6

90-111

Qualifiers

SAMPLE DUPLICATE: 3186313

Date: 03/22/2021 01:10 PM

Parameter Units Total Dissolved Solids

92525824003 Result 45.0

Dup Result 61.0

RPD 30

Max RPD

Qualifiers

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.



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

QC Batch: 604544 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525346001

METHOD BLANK: 3184710 Matrix: Water

Associated Lab Samples: 92525346001

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/06/21 20:08	
Fluoride	mg/L	ND	0.10	0.050	03/06/21 20:08	
Sulfate	mg/L	ND	1.0	0.50	03/06/21 20:08	

LABORATORY CONTROL SAMPLE:	3184711					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	50	48.3	97	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	48.7	97	90-110	

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 3184	712		3184713							
		0050505004	MS	MSD	MC	MCD	MC	MCD	0/ Doo		Mov	
		92525335001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	4.3	50	50	53.4	53.9	98	99	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	104	105	90-110	1	10	
Sulfate	mg/L	2.3	50	50	51.8	52.4	99	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184714 3184715												
			MS	MSD								
		92525341001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	5.5	50	50	54.6	54.8	98	98	90-110	0	10	
Fluoride	mg/L	0.18	2.5	2.5	3.3	3.3	124	125	90-110	1	10	M1
Sulfate	mg/L	94.2	50	50	135	135	81	82	90-110	0	10	M1

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.



Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

QC Batch: 606456 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525346002, 92525346003, 92525346004, 92525346005, 92525346006, 92525346007, 92525346008,

92525346009, 92525346010

METHOD BLANK: 3195140 Matrix: Water

Associated Lab Samples: 92525346002, 92525346003, 92525346004, 92525346005, 92525346006, 92525346007, 92525346008,

92525346009, 92525346010

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 20:29	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 20:29	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 20:29	

LABORATORY CONTROL SAMPLE:	3195141					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	50	48.5	97	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SP	IKE DUPLI	CATE: 3195	142		3195143							
			MS	MSD								
	9	92525335019	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	0.99J	50	50	52.8	52.3	104	103	90-110	1	10	
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.7	106	104	90-110	2	10	
Sulfate	mg/L	9.6	50	50	65.5	64.7	112	110	90-110	1	10	M1

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 3195	144		3195145							
			MS	MSD								
		92525346005	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	16.6	50	50	66.4	68.7	100	104	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	98	103	90-110	5	10	
Sulfate	mg/L	88.8	50	50	115	117	53	56	90-110	1	10	M1

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.



#### **QUALIFIERS**

Project: YATES
Pace Project No.: 92525346

#### **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**

Date: 03/22/2021 01:10 PM

- B Analyte was detected in the associated method blank.
- D6 The precision between the sample and sample duplicate exceeded laboratory control limits.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2525346001	YGWC-26S			_	
92525346002	YGWC-28I				
2525346003	YGWC-29I				
2525346006	YGWC-26I				
2525346007	YGWC-27S				
2525346008	YGWC-27I				
2525346009	YGWC-28S				
2525346001	YGWC-26S	EPA 3010A	604223	EPA 6010D	604309
2525346002	YGWC-28I	EPA 3010A	605191	EPA 6010D	605246
2525346003	YGWC-29I	EPA 3010A	605191	EPA 6010D	605246
2525346004	EB-01	EPA 3010A	605191	EPA 6010D	605246
2525346005	DUP-02	EPA 3010A	605191	EPA 6010D	605246
2525346006	YGWC-26I	EPA 3010A	605191	EPA 6010D	605246
2525346007	YGWC-27S	EPA 3010A	605191	EPA 6010D	605246
2525346008	YGWC-27I	EPA 3010A	605191	EPA 6010D	605246
2525346009	YGWC-28S	EPA 3010A	605191	EPA 6010D	605246
2525346010	EB-01	EPA 3010A	605191	EPA 6010D	605246
2525346001	YGWC-26S	EPA 3005A	604224	EPA 6020B	604329
2525346002	YGWC-28I	EPA 3005A	605211	EPA 6020B	605315
2525346003	YGWC-29I	EPA 3005A	605211	EPA 6020B	605315
2525346004	EB-01	EPA 3005A	605211	EPA 6020B	605315
2525346005	DUP-02	EPA 3005A	605211	EPA 6020B	605315
2525346006	YGWC-26I	EPA 3005A	605211	EPA 6020B	605315
2525346007	YGWC-27S	EPA 3005A	605211	EPA 6020B	605315
2525346008	YGWC-27I	EPA 3005A	605211	EPA 6020B	605315
2525346009	YGWC-28S	EPA 3005A	605211	EPA 6020B	605315
2525346010	EB-01	EPA 3005A	605211	EPA 6020B	605315
2525346001	YGWC-26S	SM 2450C-2011	604527		
2525346002	YGWC-28I	SM 2450C-2011	604764		
2525346003	YGWC-29I	SM 2450C-2011	604764		
2525346004	EB-01	SM 2450C-2011	604764		
2525346005	DUP-02	SM 2450C-2011	604764		
2525346006	YGWC-26I	SM 2450C-2011	604764		
2525346007	YGWC-27S	SM 2450C-2011	604764		
2525346008	YGWC-27I	SM 2450C-2011	604764		
2525346009	YGWC-28S	SM 2450C-2011	604765		
2525346010	EB-01	SM 2450C-2011	604765		
2525346001	YGWC-26S	EPA 300.0 Rev 2.1 1993	604544		
2525346002	YGWC-28I	EPA 300.0 Rev 2.1 1993	606456		
2525346003	YGWC-29I	EPA 300.0 Rev 2.1 1993	606456		
2525346004	EB-01	EPA 300.0 Rev 2.1 1993	606456		
2525346005	DUP-02	EPA 300.0 Rev 2.1 1993	606456		
2525346006	YGWC-26I	EPA 300.0 Rev 2.1 1993	606456		
2525346007	YGWC-27S	EPA 300.0 Rev 2.1 1993	606456		

# **REPORT OF LABORATORY ANALYSIS**

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



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES
Pace Project No.: 92525346

Date: 03/22/2021 01:10 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525346008	YGWC-27I	EPA 300.0 Rev 2.1 1993	606456		
92525346009	YGWC-28S	EPA 300.0 Rev 2.1 1993	606456		
92525346010	EB-01	EPA 300.0 Rev 2.1 1993	606456		

# Pace Analytical\*

# Document Name: Sample Condition Upon Receipt(SCUR)

Document No.: F-CAR-C5-033-Rev.07 Document Revised: October 28, 2020

Page 1 of 2 Issuing Authority: Pace Carolinas Quality Office

Sample Condition Client Name:  Upon Receipt  Greenic (**)	mer	Ргој	ect#: WO#:92525346
ourier: Fed Ex UPS Commercial Pace	USPS Other:	Client	92525346
tody Seal Present? Yes No Sea	ls Intact? . Yes	ØN∘	Date/Initials Person Examining Contents: 14 T 3/3/2
Primometer:    IR Gun ID: 270   Correction Fact Add/Subtract   Correction Fact   Cor	tor: $+ 0$	e Other	Biological Tiesue Frozen?  [Yes ] No ] N/A  [None  Temp should be above freezing to 6°C  [Samples out of temp criteria. Samples on ice, cooling process
oler Temp Corrected (°C):  DA Regulated Soil (  N/A, water sample)  samples originate in a quarantine zone within the Un  Yes  No		C (check maps)	has begun  Poid samples originate from a foreign source (internationally,
			including Hawaii and Puerto Rico)?Yes
Chain of Custody Present?	Yes 🗆 No	□N/A 1	
Samples Arrived within Hold Time?	ØYes □No	□N/A 2	· · · · · · · · · · · · · · · · · · ·
Short Hold Time Analysis (<72 hr.)?	Yes ZNo	□N/A 3	
Rush Turn Around Time Requested?	□Yes ☑No	□N/A 4	
Sufficient Volume?  Correct Containers Used?	Yes □No	□N/A 5	
-Pace Containers Used?	Yes No	□N/A 6	•
Containers Intact?	√[Yes □No	□N/A 7	
Dissolved analysis: Samples Field Filtered?	Yes No	□N/A 8	
Sample Labels Match COC?		□N/A S	
-Includes Date/Time/ID/Analysis Matrix:	wT		
. Headspace in VOA Vials (>5-6mm)?	□Yes □No	I IN/A 1	0.
Trip Blank Present?	Yes No		1.
Trip Blank Custody Seals Present?	Yes No		41
COMMENTS/SAMPLE DISCREPANCY			Field Data Required? ☐Yes ☐No
		· · · · · · · · · · · · · · · · · · ·	Lot ID of split containers:
JENT NOTIFICATION/RESOLUTION			
Person contacted:		Date/Time	
			pow nº
Project Manager SCURF Review:			Date:

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

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#### (770) 384-6526 red Due Date: YGWC 29 YGWC-2% Georgia Power 1070 Sringe Mill Ave Semple ids must be unique One Character per box (A-Z, 0-9 / , -SAMPLE ID continuos tenologias Required Project Information: Report To: Bachy Sleever Copy To: Purchase Order #: Project Name: Y Project #: S CONTRACTOR OF STATE MATRIX CODE (see valid codes to left) š \$ ¥ ş Š 5 \$ SAMPLE TYPE (G=GRAB C=COMP) Yates AP-2 334 134<sub>0</sub> START # / APPLIATION Ē COLLECTED AMPLEK NAME AND SIGNATURE SIGNATURE of SAMPLER: PRINT Name of SAMPLER: The Chain-of-Custody is a LEGAL DOCUMENT, All relevant fields must be completed accurately. **CHAIN-OF-CUSTODY / Analytical Request Document** 8 **2十四** 12十5 31.00 SAMPLE TEMP AT COLLECTION Attention: Autention: Company Name: Address: Page Quote: # OF CONTAINERS S Pace Project Manager: Pace Profile #: 106 Unpreserved H2S04 **Preservatives** HNO3 10640 HCI Mary. NaOH といろれる kevin.hesting@pacelabs.com **POCESTED BY LABORATION** Na28203 Methanol Other Analyses Test Y/N TDS CI, F, 804 DATE Signed: App liviv Metals X × RAD 9315/9320 × × × Page: Regulatory Agency State / Location TEMP in C Residual Chlorine (Y/N) STATUTE CONDUCTIONS Received on Signal Control ice ( (Y/N) 下5 62 Cuslody Sealed() ₽ CoolerD (Y/N) Samples Intact© (Y/N)

#### ITEM # julred Client Information: YGWC-27S **GWC-27** GWC-261 (770)384-6526 Georgia Power 1070 Bridge Mill Ave SAMPLE ID One Character per box. (A-Z, 0-9 /.upholids must be up ELECTROS PROLUCE 天-02 20-12 Project Name: Required Project Information: Report To: Bucky Steever Copy To: Purchase Order#: NAMES OF STREET WAS COOR MATRIX CODE (see valid codes to left) 3 S S \$ S 3 5 Yates AP-2 SAMPLE TYPE (G. GRAB C. COMP) が近 5/11915 START TIME. COLLECTED MPLER, MAKE AND SIGHATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER: The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. CHAIN-OF-CUSTODY / Analytical Request Document DATE 뿡 3.4.21 SPA. TIME SAMPLE TEMP AT COLLECTION Attention: Address: Pake Quote: Pace Project Manager: V IJΪ VI. # OF CONTAINERS Unpreserved H2504 HNO3 HCI NaOH のていいっ eres WOLL WILLIAM SECOND Na2S203 hevin.herring apparelabs.com Methanol Analyses Test YIN TDS CI, F, 504 X App III/IV Metals RAD 9315/9320 TEMP (o C Residual Chiorine (Y/N) Received on iceD (Y/N) H. W. W 1. 643 ر 2 6.35 Custody Sealed© Q CoolerD Samples intecto (Y/N)





March 26, 2021

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

RE: Project: YATES

Pace Project No.: 92525335

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services Asheville
- Pace Analytical Services Charlotte
- Pace Analytical Services Peachtree Corners, GA

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

Sincerely,

Tyler Forney for Kevin Herring

teft Fager

kevin.herring@pacelabs.com

1(704)875-9092

HORIZON Database Administrator

Enclosures

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





#### **CERTIFICATIONS**

Project: YATES
Pace Project No.: 92525335

**Pace Analytical Services Charlotte** 

9800 Kincey Ave. Ste 100, Huntersville, NC 28078 Louisiana/NELAP Certification # LA170028 North Carolina Drinking Water Certification #: 37706 North Carolina Field Services Certification #: 5342 North Carolina Wastewater Certification #: 12 South Carolina Certification #: 99006001 Florida/NELAP Certification #: E87627 Kentucky UST Certification #: 84 Virginia/VELAP Certification #: 460221

**Pace Analytical Services Asheville** 

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Driving Water Certification #: 277

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40 South Carolina Certification #: 99030001 Virginia/VELAP Certification #: 460222

**Pace Analytical Services Peachtree Corners** 

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



# **SAMPLE SUMMARY**

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525335001	YGWA-5I	Water	03/02/21 14:05	03/02/21 17:30
92525335002	YGWA-5D	Water	03/02/21 14:40	03/02/21 17:30
92525335003	DUP-1	Water	03/02/21 00:00	03/02/21 17:30
92525335005	YGWA-14S	Water	03/02/21 11:20	03/02/21 17:30
92525335006	YGWA-30I	Water	03/01/21 16:25	03/02/21 17:30
92525335007	FB-01	Water	03/02/21 11:30	03/02/21 17:30
92525335008	DUP-01	Water	03/02/21 00:00	03/02/21 17:30
92525335009	FB-01	Water	03/02/21 15:20	03/02/21 17:30
92525335011	YGWA-40	Water	03/04/21 10:10	03/05/21 09:20
92525335012	YGWA-17S	Water	03/03/21 12:20	03/05/21 09:20
92525335013	YGWA-18S	Water	03/03/21 13:50	03/05/21 09:20
92525335014	YGWA-18I	Water	03/03/21 15:00	03/05/21 09:20
92525335015	YGWA-39	Water	03/04/21 10:20	03/05/21 09:20
92525335016	YGWA-1D (030321)	Water	03/03/21 14:25	03/05/21 09:20
92525335017	YGWA-1I (030321)	Water	03/03/21 13:35	03/05/21 09:20
92525335018	YGWA-2I (030321)	Water	03/03/21 11:45	03/05/21 09:20
92525335019	YGWA-3I (030321)	Water	03/03/21 17:00	03/05/21 09:20
92525335020	YGWA-3D (030321)	Water	03/03/21 16:00	03/05/21 09:20
92525335021	EB-02 (03032021)	Water	03/03/21 17:15	03/05/21 09:20
92525335022	YGWA-4I	Water	03/03/21 10:35	03/05/21 09:20
92525335023	YGWA-20S	Water	03/03/21 09:40	03/05/21 09:20
92525335024	YGWA-21I	Water	03/04/21 09:35	03/05/21 09:20



# **SAMPLE ANALYTE COUNT**

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92525335001	YGWA-5I	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335002	YGWA-5D	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335003	DUP-1	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335005	YGWA-14S	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335006	YGWA-30I	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335007	FB-01	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335008	DUP-01	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335009	FB-01	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1

# **REPORT OF LABORATORY ANALYSIS**

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# **SAMPLE ANALYTE COUNT**

Project: YATES
Pace Project No.: 92525335

PA 300.0 Rev 2.1 1993	Lab ID	Sample ID	Method	Analysts	Analytes Reported
Page			EPA 300.0 Rev 2.1 1993	 JLH	3
PAT 7470A   VB   1	92525335011	YGWA-40	EPA 6010D	KH	1
SM 2450C-2011   ALW   1			EPA 6020B	CW1	12
92525335012 YGWA-17S			EPA 7470A	VB	1
92525335012         YGWA-17S         EPA 6010D         KH         1           EPA 6020B         CW1         12           EPA 7470A         VB         1           SM 2450C-2011         ALW         1           EPA 300.0 Rev 2.1 1993         CDC         3           92525335013         YGWA-18S         EPA 6010D         KH         1           EPA 6020B         CW1         12         EPA 6020B         CW1         12           EPA 7470A         VB         1         MLW         1         1           SM 2450C-2011         ALW         1 <td></td> <td></td> <td>SM 2450C-2011</td> <td>ALW</td> <td>1</td>			SM 2450C-2011	ALW	1
PA 6020B			EPA 300.0 Rev 2.1 1993	CDC	3
PAT   PAT	92525335012	YGWA-17S	EPA 6010D	KH	1
SM 2450C-2011			EPA 6020B	CW1	12
PA 300.0 Rev 2.1 1993   CDC   3   3   3   3   3   3   3   3   3			EPA 7470A	VB	1
92525335013       YGWA-18S       EPA 6010D       KH       1         EPA 6020B       CW1       12         EPA 7470A       VB       1         SM 2450C-2011       ALW       1         EPA 300.0 Rev 2.1 1993       CDC       3         92525335014       YGWA-18I       EPA 6010D       KH       1         EPA 6020B       CW1       12         EPA 7470A       VB       1         EPA 7470A       VB       1         EPA 300.0 Rev 2.1 1993       CDC       3         92525335015       YGWA-39       EPA 6010D       KH       1         EPA 6020B       CW1       12         EPA 6020B       CW1       12         EPA 6020B       CW1       1         SM 2450C-2011       ALW       1         EPA 6010D       KH       1         EPA 6010D       KH       1         EPA 6010D       KH       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 6010D       KH       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1			SM 2450C-2011	ALW	1
Page   Page			EPA 300.0 Rev 2.1 1993	CDC	3
Page	92525335013	YGWA-18S	EPA 6010D	KH	1
SM 2450C-2011   ALW   1     EPA 300.0 Rev 2.1 1993   CDC   3     P2525335014   YGWA-18I   EPA 6010D   KH   1     EPA 6020B   CW1   12     EPA 7470A   VB   1     SM 2450C-2011   AW1   1     EPA 300.0 Rev 2.1 1993   CDC   3     P2525335015   YGWA-39   EPA 6010D   KH   1     EPA 6020B   CW1   12     EPA 6020B   CW1   12     EPA 6020B   CW1   12     EPA 6020B   CW1   12     EPA 6020B   CW1   12     EPA 4020B   CW1   12     EPA 4020B   CW1   1     EPA 300.0 Rev 2.1 1993   CDC   3     P2525335016   YGWA-1D (030321)   EPA 6010D   KH   1     EPA 6020B   CW1   12     EPA			EPA 6020B	CW1	12
Page   Page			EPA 7470A	VB	1
92525335014       YGWA-18I       EPA 6010D       KH       1         EPA 6020B       CW1       12         EPA 7470A       VB       1         SM 2450C-2011       AW1       1         EPA 300.0 Rev 2.1 1993       CDC       3         P2525335015       YGWA-39       EPA 6010D       KH       1         EPA 6020B       CW1       12         EPA 7470A       VB       1         SM 2450C-2011       ALW       1         EPA 300.0 Rev 2.1 1993       CDC       3         P2525335016       YGWA-1D (030321)       EPA 6010D       KH       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 300.0 Rev 2.1 1993       CDC       3         P2525335017       YGWA-1I (030321)       EPA 6010D       KH       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 6010D       KH       1			SM 2450C-2011	ALW	1
PAGO20B CW1 12 EPA 7470A VB 1 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335015 YGWA-39 EPA 6010D KH 1 EPA 7470A VB 1 EPA 6020B CW1 12 EPA 7470A VB 1 EPA 6020B CW1 12 EPA 7470A VB 1 SM 2450C-2011 ALW 1 EPA 6020B CW1 12 EPA 7470A VB 1 SM 2450C-2011 ALW 1 EPA 6010D KH 1 EPA 6020B CW1 12 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12			EPA 300.0 Rev 2.1 1993	CDC	3
PAT   PAT   PAT   PAT   PAT	92525335014	YGWA-18I	EPA 6010D	KH	1
SM 2450C-2011			EPA 6020B	CW1	12
P2525335015 YGWA-39 EPA 6010D KH 1 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  P2525335017 YGWA-1I (030321) EPA 6010D KH 1 EPA 6020B CW1 12			EPA 7470A	VB	1
92525335015       YGWA-39       EPA 6010D       KH       1         EPA 6020B       CW1       12         EPA 7470A       VB       1         SM 2450C-2011       ALW       1         EPA 300.0 Rev 2.1 1993       CDC       3         P2525335016       YGWA-1D (030321)       EPA 6010D       KH       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 6010D       KH       1         EPA 6010D       KH       1         EPA 6020B       CW1       12         SM 2450C-2011       KH       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 6020B       CW1       12         EPA 6010D       KH       1         EPA 6020B       KH       1         EPA 6020B       CW1       12			SM 2450C-2011	AW1	1
PAGO20B CW1 12 EPA 6020B CW1 12 EPA 7470A VB 1 SM 2450C-2011 ALW 1 EPA 300.0 Rev 2.1 1993 CDC 3  P2525335016 YGWA-1D (030321) EPA 6010D KH 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6010D KH 1 EPA 6010D KH 1  EPA 6010D KH 1  EPA 6010D KH 1  EPA 6020B CW1 12  SM 2450C-2011 AW1 1  EPA 6020B CW1 12  EPA 6020B CW1 12  SM 2450C-2011 AW1 1  EPA 6020B CW1 12  SM 2450C-2011 KH 1  EPA 6020B CW1 12  SM 2450C-2011 KH 1  EPA 6020B CW1 12  SM 2450C-2011 KW 1 12  EPA 6020B CW1 12  SM 2450C-2011 KW 1 12  EPA 6020B CW1 12  EPA 6020B CW1 12  SM 2450C-2011 CW1 12  EPA 6020B CW1 12  EPA 6020B CW1 12  EPA 6020B CW1 12  EPA 6020B CW1 12			EPA 300.0 Rev 2.1 1993	CDC	3
P2525335016 YGWA-1D (030321)  P2525335016 YGWA-1D (030321)  P2525335016 YGWA-1D (030321)  P2525335016 YGWA-1D (030321)  P2525335017 YGWA-1I (030321)  P2525335017 YGWA-1I (030321)  P2525335017 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)  P2525335018 YGWA-2I (030321)	92525335015	YGWA-39	EPA 6010D	KH	1
SM 2450C-2011 ALW 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335016 YGWA-1D (030321) EPA 6010D KH 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335017 YGWA-1I (030321) EPA 6010D KH 1 EPA 6020B CW1 12 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 KH 1 EPA 6020B CW1 12 EPA 300.0 Rev 2.1 1993 CDC 3  92525335018 YGWA-2I (030321) EPA 6010D KH 1 EPA 6020B CW1 12			EPA 6020B	CW1	12
P2525335016 YGWA-1D (030321)  EPA 6010D KH 1  EPA 6020B CW1 12  SM 2450C-2011 AW1 1  EPA 6010D KH 1  SM 2450C-2011 AW1 1  EPA 6010D KH 1  EPA 6010D TW1 12  SM 2450C-2011 AW1 1  EPA 6010D KH 1  EPA 6020B CW1 12  SM 2450C-2011 AW1 1  EPA 6020B CW1 12  EPA 6020B CW1 12  SM 2450C-2011 AW1 1  EPA 6020B CW1 12  SM 2450C-2011 AW1 1  EPA 6020B CW1 12  EPA 6010D KH 1  EPA 6020B CW1 12  EPA 6010D KH 1  EPA 6020B CW1 12  EPA 6010D KH 1  EPA 6010D KH 1  EPA 6010D KH 1  EPA 6010D KH 1			EPA 7470A	VB	1
92525335016 YGWA-1D (030321) EPA 6010D KH 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335017 YGWA-1I (030321) EPA 6010D KH 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335018 YGWA-2I (030321) EPA 6010D KH 1 EPA 6020B CW1 12 EPA 6020B CW1 12			SM 2450C-2011	ALW	1
EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335017 YGWA-1I (030321) EPA 6010D KH 1  EPA 6020B CW1 12  SM 2450C-2011 AW1 1  EPA 6020B CW1 12  SM 2450C-2011 AW1 1  EPA 300.0 Rev 2.1 1993 CDC 3  92525335018 YGWA-2I (030321) EPA 6010D KH 1  EPA 6020B CW1 12			EPA 300.0 Rev 2.1 1993	CDC	3
SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335017 YGWA-1I (030321) EPA 6010D KH 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335018 YGWA-2I (030321) EPA 6010D KH 1 EPA 6020B CW1 12	92525335016	YGWA-1D (030321)	EPA 6010D	KH	1
P2525335017 YGWA-1I (030321) EPA 300.0 Rev 2.1 1993 CDC 3 EPA 6010D KH 1 EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3 P2525335018 YGWA-2I (030321) EPA 6010D KH 1 EPA 6020B CW1 12			EPA 6020B	CW1	12
92525335017       YGWA-1I (030321)       EPA 6010D       KH       1         EPA 6020B       CW1       12         SM 2450C-2011       AW1       1         EPA 300.0 Rev 2.1 1993       CDC       3         92525335018       YGWA-2I (030321)       EPA 6010D       KH       1         EPA 6020B       CW1       12			SM 2450C-2011	AW1	1
EPA 6020B CW1 12 SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3  92525335018 YGWA-2I (030321) EPA 6010D KH 1 EPA 6020B CW1 12			EPA 300.0 Rev 2.1 1993	CDC	3
SM 2450C-2011 AW1 1 EPA 300.0 Rev 2.1 1993 CDC 3 92525335018 YGWA-2I (030321) EPA 6010D KH 1 EPA 6020B CW1 12	92525335017	YGWA-1I (030321)	EPA 6010D	KH	1
EPA 300.0 Rev 2.1 1993 CDC 3  92525335018 YGWA-2I (030321) EPA 6010D KH 1  EPA 6020B CW1 12			EPA 6020B	CW1	12
92525335018       YGWA-2I (030321)       EPA 6010D       KH       1         EPA 6020B       CW1       12			SM 2450C-2011	AW1	1
EPA 6020B CW1 12			EPA 300.0 Rev 2.1 1993	CDC	3
	92525335018	YGWA-2I (030321)	EPA 6010D	KH	1
SM 2450C-2011 AW1 1			EPA 6020B	CW1	12
			SM 2450C-2011	AW1	1

# **REPORT OF LABORATORY ANALYSIS**

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# **SAMPLE ANALYTE COUNT**

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335019	YGWA-3I (030321)	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335020	YGWA-3D (030321)	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335021	EB-02 (03032021)	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
2525335022	YGWA-4I	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335023	YGWA-20S	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335024	YGWA-21I	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

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



Project: YATES
Pace Project No.: 92525335

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335001	YGWA-5I					
	Performed by	CUSTOME R			03/08/21 09:07	
	рН	5.63	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	2.6	mg/L	1.0	03/09/21 02:21	
EPA 6020B	Barium	0.019	mg/L	0.0050	03/05/21 16:43	
EPA 6020B	Boron	0.011J	mg/L	0.040	03/05/21 16:43	
EPA 6020B	Lead	0.000092J	mg/L	0.0010	03/05/21 16:43	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	03/05/21 16:43	
SM 2450C-2011	Total Dissolved Solids	67.0	mg/L	10.0	03/04/21 14:30	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	03/06/21 20:37	
EPA 300.0 Rev 2.1 1993	Sulfate	2.3	mg/L	1.0	03/06/21 20:37	
2525335002	YGWA-5D					
	Performed by	CUSTOME R			03/08/21 09:07	
	Нq	7.15	Std. Units		03/08/21 09:07	
EPA 6010D	, Calcium	1.6	mg/L	1.0	03/09/21 02:41	
EPA 6020B	Barium	0.014	mg/L	0.0050		
EPA 6020B	Boron	0.0068J	mg/L	0.040		
EPA 6020B	Lead	0.000051J	mg/L	0.0010		
EPA 6020B	Lithium	0.0018J	mg/L	0.030		
SM 2450C-2011	Total Dissolved Solids	52.0	mg/L	10.0		
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	03/06/21 21:49	
EPA 300.0 Rev 2.1 1993	Sulfate	2.6	mg/L	1.0	03/06/21 21:49	
2525335003	DUP-1					
EPA 6010D	Calcium	1.5	mg/L	1.0	03/09/21 02:46	
EPA 6020B	Antimony	0.0015J	mg/L	0.0030	03/05/21 17:11	
EPA 6020B	Barium	0.014	mg/L	0.0050	03/05/21 17:11	
EPA 6020B	Boron	0.013J	mg/L	0.040	03/05/21 17:11	
EPA 6020B	Lead	0.000069J	mg/L	0.0010	03/05/21 17:11	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	03/05/21 17:11	
SM 2450C-2011	Total Dissolved Solids	48.0	mg/L	10.0	03/04/21 14:30	
EPA 300.0 Rev 2.1 1993	Chloride	3.0	mg/L	1.0	03/06/21 22:04	
EPA 300.0 Rev 2.1 1993	Sulfate	2.0	mg/L		03/06/21 22:04	
2525335005	YGWA-14S					
	Performed by	CUSTOME R			03/08/21 09:07	
	рН	5.49	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	1.2	mg/L	1.0	03/09/21 02:56	
EPA 6020B	Barium	0.0076	mg/L	0.0050	03/05/21 17:23	
EPA 6020B	Beryllium	0.00018J	mg/L	0.00050	03/05/21 17:23	
EPA 6020B	Boron	0.017J	mg/L	0.040	03/05/21 17:23	
SM 2450C-2011	Total Dissolved Solids	67.0	mg/L	10.0	03/04/21 14:30	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L	1.0	03/06/21 22:32	
EPA 300.0 Rev 2.1 1993	Sulfate	6.0	mg/L	1.0	03/06/21 22:32	



Project: YATES
Pace Project No.: 92525335

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2525335006	YGWA-30I					
	Performed by	CUSTOME R			03/08/21 09:07	
	рН	5.78	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	1.2	mg/L	1.0	03/09/21 03:00	
EPA 6020B	Barium	0.0070	mg/L	0.0050	03/05/21 17:58	
EPA 6020B	Cobalt	0.0061	mg/L	0.0050	03/05/21 17:58	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	03/05/21 17:58	
SM 2450C-2011	Total Dissolved Solids	23.0	mg/L	10.0	03/04/21 10:19	D6
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	03/06/21 22:47	
EPA 300.0 Rev 2.1 1993	Sulfate	0.88J	mg/L	1.0	03/06/21 22:47	
2525335007	FB-01					
EPA 6010D	Calcium	34.4	mg/L		03/09/21 03:05	
EPA 6020B	Barium	0.022	mg/L	0.0050		
EPA 6020B	Chromium	0.00062J	mg/L	0.0050		
EPA 6020B	Lithium	0.0016J	mg/L	0.030	03/05/21 18:04	
SM 2450C-2011	Total Dissolved Solids	65.0	mg/L	10.0	03/05/21 11:04	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	03/06/21 23:01	
PA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	03/06/21 23:01	
2525335008	DUP-01					
EPA 6010D	Calcium	1.2	mg/L	1.0	03/09/21 03:20	
EPA 6020B	Barium	0.0078	mg/L	0.0050	03/05/21 18:09	
PA 6020B	Beryllium	0.00020J	mg/L	0.00050	03/05/21 18:09	
PA 6020B	Boron	0.016J	mg/L	0.040	03/05/21 18:09	
SM 2450C-2011	Total Dissolved Solids	32.0	mg/L	10.0	03/05/21 11:04	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	03/06/21 23:16	
EPA 300.0 Rev 2.1 1993	Sulfate	6.1	mg/L	1.0	03/06/21 23:16	
2525335011	YGWA-40					
	Performed by	CUSTOME			03/08/21 09:07	
	рН	R 5.23	Std. Units		03/08/21 09:07	
PA 6010D	Calcium	4.6	mg/L	1.0	03/10/21 05:29	
EPA 6020B	Barium	0.032	mg/L	0.0050		
EPA 6020B	Beryllium	0.00021J	mg/L	0.00050	03/09/21 15:48	
EPA 6020B	Boron	0.00218	mg/L	0.040		
SM 2450C-2011	Total Dissolved Solids	57.0	mg/L		03/06/21 12:32	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L		03/13/21 17:54	
EPA 300.0 Rev 2.1 1993	Sulfate	21.5	mg/L		03/13/21 17:54	
2525335012	YGWA-17S		J			
	Performed by	CUSTOME			03/08/21 09:07	
	·	R	0.1.7.			
-DA 0040D	pH	5.52	Std. Units	4.5	03/08/21 09:07	
EPA 6010D	Calcium	2.5	mg/L		03/10/21 05:59	
EPA 6020B	Barium	0.017	mg/L	0.0050		
PA 6020B	Beryllium	0.000099J	mg/L	0.00050		
PA 6020B	Boron	0.010J	mg/L	0.040		
EPA 6020B	Chromium	0.00082J	mg/L	0.0050	03/09/21 15:54	

# **REPORT OF LABORATORY ANALYSIS**

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Project: YATES
Pace Project No.: 92525335

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2525335012	YGWA-17S					
SM 2450C-2011	Total Dissolved Solids	57.0	mg/L	10.0	03/05/21 15:36	
EPA 300.0 Rev 2.1 1993	Chloride	7.1	mg/L	1.0	03/13/21 18:10	
EPA 300.0 Rev 2.1 1993	Sulfate	5.2	mg/L	1.0	03/13/21 18:10	
2525335013	YGWA-18S					
	Performed by	CUSTOME R			03/08/21 09:07	
	рН	5.31	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	0.96J	mg/L	1.0	03/10/21 06:03	
EPA 6020B	Antimony	0.00067J	mg/L	0.0030	03/09/21 16:17	
EPA 6020B	Barium	0.017	mg/L	0.0050	03/09/21 16:17	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	03/09/21 16:17	
EPA 6020B	Boron	0.0094J	mg/L	0.040	03/09/21 16:17	
EPA 6020B	Chromium	0.0010J	mg/L	0.0050	03/09/21 16:17	
EPA 6020B	Lead	0.000076J	mg/L	0.0010	03/09/21 16:17	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	03/09/21 16:17	
SM 2450C-2011	Total Dissolved Solids	37.0	mg/L	10.0	03/05/21 15:36	
EPA 300.0 Rev 2.1 1993	Chloride	7.2	mg/L	1.0	03/13/21 18:56	
EPA 300.0 Rev 2.1 1993	Sulfate	1.0	mg/L	1.0	03/13/21 18:56	
2525335014	YGWA-18I	1.0	9/2	1.0	00/10/21 10:00	
202000014	Performed by	CUSTOME			03/08/21 09:07	
	·	R	October		00/00/04 00 07	
-D4 0040D	pH	5.89	Std. Units	4.0	03/08/21 09:07	
EPA 6010D	Calcium	5.2	mg/L		03/10/21 06:08	
EPA 6020B	Barium	0.023	mg/L	0.0050	03/09/21 16:23	
EPA 6020B	Chromium	0.00087J	mg/L	0.0050	03/09/21 16:23	
EPA 6020B	Lithium	0.0034J	mg/L	0.030	03/09/21 16:23	
SM 2450C-2011	Total Dissolved Solids	95.0	mg/L	10.0	03/06/21 13:09	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	03/13/21 19:12	
2525335015	YGWA-39	OUOTOME				
	Performed by	CUSTOME R			03/08/21 09:07	
	pН	5.54	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	8.2	mg/L	1.0	03/10/21 06:13	
EPA 6020B	Barium	0.028	mg/L	0.0050	03/09/21 16:28	
EPA 6020B	Boron	0.033J	mg/L	0.040	03/09/21 16:28	
EPA 6020B	Cadmium	0.00030J	mg/L	0.00050	03/09/21 16:28	
EPA 6020B	Cobalt	0.00071J	mg/L	0.0050	03/09/21 16:28	
EPA 6020B	Lithium	0.0084J	mg/L	0.030	03/09/21 16:28	
EPA 6020B	Molybdenum	0.0014J	mg/L	0.010	03/09/21 16:28	
SM 2450C-2011	Total Dissolved Solids	168	mg/L	10.0	03/06/21 12:32	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L	1.0	03/13/21 19:28	
EPA 300.0 Rev 2.1 1993	Sulfate	12.0	mg/L	1.0	03/13/21 19:28	
2525335016	YGWA-1D (030321)					
		CUSTOME			03/08/21 09:07	
	Performed by	R			03/00/21 03.07	

# **REPORT OF LABORATORY ANALYSIS**

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Project: YATES
Pace Project No.: 92525335

_ab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
			Offics	- Report Limit	Analyzeu	Qualifiers
2525335016	YGWA-1D (030321)					
EPA 6010D	Calcium	14.1	mg/L	1.0	03/10/21 06:18	
EPA 6020B	Barium	0.0068	mg/L	0.0050	03/09/21 17:01	
PA 6020B	Lead	0.000056J	mg/L	0.0010	03/09/21 17:01	
EPA 6020B	Lithium	0.012J	mg/L	0.030	03/09/21 17:01	
PA 6020B	Molybdenum	0.0088J	mg/L	0.010	03/09/21 17:01	
SM 2450C-2011	Total Dissolved Solids	99.0	mg/L	10.0	03/06/21 13:09	
EPA 300.0 Rev 2.1 1993	Chloride	0.96J	mg/L	1.0	03/13/21 19:43	
EPA 300.0 Rev 2.1 1993	Fluoride	0.078J	mg/L	0.10	03/13/21 19:43	
EPA 300.0 Rev 2.1 1993	Sulfate	9.0	mg/L	1.0	03/13/21 19:43	
2525335017	YGWA-1I (030321)					
	Performed by	CUSTOME			03/08/21 09:07	
		R	0.1.11.7		00/00/04 00 07	
-DA 0040D	pH	5.38	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	1.8	mg/L	1.0	03/10/21 06:23	
EPA 6020B	Barium	0.0094	mg/L	0.0050	03/09/21 17:07	
EPA 6020B	Cobalt	0.0030J	mg/L	0.0050	03/09/21 17:07	
EPA 6020B	Lithium	0.0025J	mg/L	0.030	03/09/21 17:07	
EPA 6020B	Molybdenum	0.0049J	mg/L	0.010	03/09/21 17:07	
SM 2450C-2011	Total Dissolved Solids	39.0	mg/L	10.0	03/06/21 13:09	
EPA 300.0 Rev 2.1 1993	Chloride	1.2	mg/L	1.0	03/13/21 19:59	
EPA 300.0 Rev 2.1 1993	Sulfate	4.4	mg/L	1.0	03/13/21 19:59	
2525335018	YGWA-2I (030321)					
	Performed by	CUSTOME R			03/08/21 09:07	
	рН	7.92	Std. Units		03/08/21 09:07	
PA 6010D	Calcium	25.6	mg/L	1.0	03/10/21 06:28	
PA 6020B	Arsenic	0.00098J	mg/L	0.0050	03/09/21 17:12	
PA 6020B	Barium	0.0041J	mg/L	0.0050	03/09/21 17:12	
PA 6020B	Lithium	0.0016J	mg/L	0.030	03/09/21 17:12	
PA 6020B	Molybdenum	0.0074J	mg/L	0.010	03/09/21 17:12	
SM 2450C-2011	Total Dissolved Solids	138	mg/L	10.0	03/06/21 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	0.86J	mg/L	1.0	03/13/21 20:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.085J	mg/L	0.10	03/13/21 20:14	
EPA 300.0 Rev 2.1 1993	Sulfate	10.6	mg/L	1.0	03/13/21 20:14	
2525335019	YGWA-3I (030321)					
	Performed by	CUSTOME R			03/08/21 09:07	
	рН	8.23	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	20.6	mg/L	1.0	03/10/21 06:32	
PA 6020B	Barium	0.0031J	mg/L	0.0050	03/09/21 17:18	
EPA 6020B	Lithium	0.017J	mg/L	0.030	03/09/21 17:18	
PA 6020B	Molybdenum	0.0036J	mg/L	0.010	03/09/21 17:18	
SM 2450C-2011	Total Dissolved Solids	111	mg/L	10.0	03/06/21 13:10	
= .~~ <b>~ =~</b>			•			
PA 300.0 Rev 2 1 1993	Chloride	() 99.1	ma/I	1 ()	0.3/1.3/21 21 00	
PA 300.0 Rev 2.1 1993 PA 300.0 Rev 2.1 1993	Chloride Fluoride	0.99J 0.10	mg/L mg/L	1.0 0.10	03/13/21 21:00 03/13/21 21:00	



Project: YATES
Pace Project No.: 92525335

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335020	YGWA-3D (030321)					
	Performed by	CUSTOME			03/08/21 09:07	
	pH	R 8.39	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	29.8	mg/L	1.0	03/10/21 06:47	
EPA 6020B	Barium	0.0064	mg/L	0.0050	03/09/21 17:24	
EPA 6020B	Lithium	0.024J	mg/L	0.030	03/09/21 17:24	
EPA 6020B	Molybdenum	0.013	mg/L	0.010	03/09/21 17:24	
SM 2450C-2011	Total Dissolved Solids	137	mg/L	10.0	03/06/21 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	03/13/21 22:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.44	mg/L	0.10	03/13/21 22:18	
EPA 300.0 Rev 2.1 1993	Sulfate	7.0	mg/L	1.0	03/13/21 22:18	
2525335021	EB-02 (03032021)					
EPA 6010D	Calcium	33.3	mg/L	1.0	03/10/21 06:52	
EPA 6020B	Barium	0.023	mg/L	0.0050	03/09/21 17:29	
EPA 6020B	Chromium	0.00057J	mg/L	0.0050	03/09/21 17:29	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	03/09/21 17:29	
SM 2450C-2011	Total Dissolved Solids	102	mg/L	10.0	03/06/21 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	03/13/21 22:33	
EPA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	03/13/21 22:33	
2525335022	YGWA-4I					
	Performed by	CUSTOME R			03/08/21 09:07	
	рН	6.21	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	7.7	mg/L	1.0	03/10/21 06:56	
EPA 6020B	Barium	0.014	mg/L	0.0050	03/09/21 17:35	
EPA 6020B	Boron	0.0056J	mg/L	0.040	03/09/21 17:35	
EPA 6020B	Chromium	0.0013J	mg/L	0.0050	03/09/21 17:35	
EPA 6020B	Lithium	0.012J	mg/L	0.030	03/09/21 17:35	
EPA 6020B	Selenium	0.0019J	mg/L	0.0050	03/09/21 17:35	
SM 2450C-2011	Total Dissolved Solids	80.0	mg/L	10.0	03/06/21 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	03/13/21 22:49	
EPA 300.0 Rev 2.1 1993	Sulfate	7.8	mg/L	1.0	03/13/21 22:49	
2525335023	YGWA-20S					
	Performed by	CUSTOME			03/08/21 09:07	
	рН	R 5.89	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	2.4	mg/L	1.0	03/10/21 07:01	
EPA 6020B	Barium	0.015	mg/L	0.0050	03/09/21 17:56	
EPA 6020B	Beryllium	0.000068J	mg/L	0.00050	03/09/21 17:56	
EPA 6020B	Lead	0.000045J	mg/L	0.0010	03/09/21 17:56	
SM 2450C-2011	Total Dissolved Solids	53.0	mg/L	10.0	03/06/21 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	03/13/21 23:04	
2525335024	YGWA-21I					
	Performed by	CUSTOME			03/08/21 09:07	
		R				

# **REPORT OF LABORATORY ANALYSIS**

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Project: YATES
Pace Project No.: 92525335

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335024	YGWA-21I					
EPA 6010D	Calcium	8.7	mg/L	1.0	03/10/21 07:06	
EPA 6020B	Antimony	0.0014J	mg/L	0.0030	03/09/21 18:02	
EPA 6020B	Arsenic	0.00078J	mg/L	0.0050	03/09/21 18:02	
EPA 6020B	Barium	0.011	mg/L	0.0050	03/09/21 18:02	
EPA 6020B	Boron	0.0079J	mg/L	0.040	03/09/21 18:02	
EPA 6020B	Cobalt	0.0065	mg/L	0.0050	03/09/21 18:02	
EPA 6020B	Lithium	0.0062J	mg/L	0.030	03/09/21 18:02	
SM 2450C-2011	Total Dissolved Solids	110	mg/L	10.0	03/06/21 12:32	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	03/13/21 23:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.091J	mg/L	0.10	03/13/21 23:20	
EPA 300.0 Rev 2.1 1993	Sulfate	4.5	mg/L	1.0	03/13/21 23:20	



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-5I	Lab ID:	92525335001	Collecte	ed: 03/02/2	1 14:05	Received: 03/	/02/21 17:30 Ma	atrix: Water	
D	Danilla	11-2-	Report	MDI	DE	Danasasal	Anaborad	040 N	0
Parameters	Results -	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	;					
Performed by	CUSTOME R				1		03/08/21 09:07		
рН	5.63	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA 6	6010D Pre	paration Met	hod: El	PA 3010A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Calcium	2.6	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 02:21	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 16:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 16:43	7440-38-2	
Barium	0.019	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 16:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 16:43	7440-41-7	
Boron	0.011J	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 16:43		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 16:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 16:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 16:43	7440-48-4	
Lead	0.000092J	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 16:43	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 16:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 16:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 16:43	7782-49-2	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
·	Pace Ana	lytical Services	- Peachtre	e Corners, C	SA.				
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 10:52	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Ana	lytical Services	- Peachtre	e Corners, C	<b>S</b> A				
Total Dissolved Solids	67.0	mg/L	10.0	10.0	1		03/04/21 14:30		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	- Asheville						
Chloride	4.3	mg/L	1.0	0.60	1		03/06/21 20:37	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 20:37		
Sulfate	2.3	mg/L	1.0	0.50	1		03/06/21 20:37		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-5D	Lab ID:	92525335002	Collecte	ed: 03/02/2 <sup>2</sup>	1 14:40	Received: 03/	/02/21 17:30 Ma	atrix: Water	
_			Report						_
Parameters	Results _	Units	Limit	MDL	DF	Prepared	_ Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	<b>:</b>					
Performed by	CUSTOME R				1		03/08/21 09:07		
рН	7.15	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	thod: El	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Calcium	1.6	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 02:41	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 16:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 16:49		
Barium	0.014	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 16:49		
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 16:49		
Boron	0.0068J	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 16:49		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29			
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 16:49		
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 16:49		
Lead	0.000051J	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 16:49		
Lithium	0.0018J	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 16:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 16:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 16:49	7782-49-2	
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 10:55	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Total Dissolved Solids	52.0	mg/L	10.0	10.0	1		03/04/21 14:30		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
-	-	ytical Services							
Chloride	3.2	mg/L	1.0	0.60	1		03/06/21 21:49	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 21:49		
Sulfate	2.6	mg/L	1.0	0.50	1		03/06/21 21:49		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: DUP-1	Lab ID:	92525335003	Collecte	ed: 03/02/2	00:00	Received: 03/	02/21 17:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	SA.				
Calcium	1.5	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 02:46	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Prep	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	SA.				
Antimony	0.0015J	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 17:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 17:11	7440-38-2	
Barium	0.014	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 17:11	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 17:11	7440-41-7	
Boron	0.013J	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 17:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 17:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 17:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 17:11	7440-48-4	
_ead	0.000069J	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 17:11	7439-92-1	
_ithium	0.0016J	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 17:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 17:11	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 17:11	7782-49-2	
7470 Mercury	Analytical	Method: EPA 7	470A Prep	paration Met	hod: EF	A 7470A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 10:57	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 24	150C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	SA.				
Total Dissolved Solids	48.0	mg/L	10.0	10.0	1		03/04/21 14:30		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0 Rev 2	2.1 1993					
·	Pace Anal	ytical Services	- Asheville						
Chloride	3.0	mg/L	1.0	0.60	1		03/06/21 22:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 22:04		
Sulfate	2.0	mg/L	1.0	0.50	1		03/06/21 22:04		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-14S	Lab ID:	92525335005	Collecte	ed: 03/02/2	1 11:20	Received: 03/	02/21 17:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	<b>:</b>					
Performed by	CUSTOME				1		03/08/21 09:07		
	R	0.1.1.					00/00/04 00 07		
рН	5.49	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	thod: E	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	ЭΑ				
Calcium	1.2	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 02:56	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: El	PA 3005A			
	-	ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 17:23	7440-36-0	
Arsenic	ND ND	mg/L	0.0050	0.00028	1	03/04/21 11:29	03/05/21 17:23		
Barium	0.0076	mg/L	0.0050	0.00073	1	03/04/21 11:29	03/05/21 17:23		
Beryllium	0.00018J	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 17:23		
Boron	0.017J	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 17:23		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 17:23		
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 17:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 17:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 17:23		
Lithium	ND	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 17:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 17:23		
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 17:23		
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	ЭΑ				
Total Dissolved Solids	67.0	mg/L	10.0	10.0	1		03/04/21 14:30		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Services	- Asheville						
Chloride	4.9	mg/L	1.0	0.60	1		03/06/21 22:32	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 22:32		
Sulfate	6.0	mg/L	1.0	0.50	1		03/06/21 22:32		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-30I	Lab ID:	92525335006	Collecte	ed: 03/01/2	1 16:25	Received: 03/	/02/21 17:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		03/08/21 09:07		
pH	5.78	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Me	thod: El	PA 3010A			
	Pace Ana	lytical Services	- Peachtre	e Corners, 0	GΑ				
Calcium	1.2	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:00	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	thod: Ef	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, 0	GΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 17:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 17:58	7440-38-2	
Barium	0.0070	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 17:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 17:58	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 17:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 17:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 17:58	7440-47-3	
Cobalt	0.0061	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 17:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 17:58	7439-92-1	
Lithium	0.0011J	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 17:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 17:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 17:58	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Ana	lytical Services	- Peachtre	e Corners, 0	GΑ				
Total Dissolved Solids	23.0	mg/L	10.0	10.0	1		03/04/21 10:19		D6
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	- Asheville	:					
Chloride	1.6	mg/L	1.0	0.60	1		03/06/21 22:47	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 22:47	16984-48-8	
Sulfate	0.88J	mg/L	1.0	0.50	1		03/06/21 22:47	14808-79-8	



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: FB-01	Lab ID:	92525335007	Collecte	ed: 03/02/2	1 11:30	Received: 03/	02/21 17:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical I	Method: EPA 6	010D Pre	paration Me	hod: EF	PA 3010A			
	Pace Analy	tical Services	- Peachtre	e Corners, 0	βA				
Calcium	34.4	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:05	7440-70-2	
6020 MET ICPMS	Analytical I	Method: EPA 6	020B Prep	paration Met	hod: EF	A 3005A			
	Pace Analy	tical Services	- Peachtre	e Corners, 0	€A				
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:04	7440-38-2	
Barium	0.022	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:04	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:04	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:04	7440-43-9	
Chromium	0.00062J	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:04	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:04	7439-92-1	
Lithium	0.0016J	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 18:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:04	7782-49-2	
7470 Mercury	Analytical I	Method: EPA 7	470A Prep	paration Met	hod: EP	A 7470A			
	Pace Analy	tical Services	- Peachtre	e Corners, 0	βA				
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 11:07	7439-97-6	
2540C Total Dissolved Solids	Analytical I	Method: SM 24	50C-2011						
	Pace Analy	tical Services	- Peachtre	e Corners, 0	SA.				
Total Dissolved Solids	65.0	mg/L	10.0	10.0	1		03/05/21 11:04		
300.0 IC Anions 28 Days	Analytical I	Method: EPA 3	00.0 Rev 2	2.1 1993					
•	Pace Analy	tical Services	- Asheville						
Chloride	1.6	mg/L	1.0	0.60	1		03/06/21 23:01	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 23:01	16984-48-8	
Sulfate	2.2	mg/L	1.0	0.50	1		03/06/21 23:01	14808-79-8	



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: DUP-01	Lab ID:	92525335008	Collecte	ed: 03/02/2	1 00:00	Received: 03/	02/21 17:30 Ma	atrix: Water	
			Report					0.10.11	
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Me	thod: El	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	ЭΑ				
Calcium	1.2	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:20	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Prep	paration Met	thod: Ef	PA 3005A			
	Pace Anal	ytical Services	- Peachtre	e Corners, 0	ЭΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:09	7440-38-2	
Barium	0.0078	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:09	7440-39-3	
Beryllium	0.00020J	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:09	7440-41-7	
Boron	0.016J	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:09	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 18:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:09	7782-49-2	
7470 Mercury	Analytical	Method: EPA 7	470A Prep	paration Met	hod: EF	PA 7470A			
	Pace Anal	ytical Services	- Peachtre	e Corners, (	GΑ				
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 11:09	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, 0	GΑ				
Total Dissolved Solids	32.0	mg/L	10.0	10.0	1		03/05/21 11:04		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
•	Pace Anal	ytical Services	- Asheville						
Chloride	5.0	mg/L	1.0	0.60	1		03/06/21 23:16	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 23:16	16984-48-8	
Sulfate	6.1	mg/L	1.0	0.50	1		03/06/21 23:16	14808-79-8	



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: FB-01	Lab ID:	92525335009	Collecte	ed: 03/02/2	15:20	Received: 03/	02/21 17:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
1 diameters	<u> </u>					- Trepared	Analyzeu		- Qua
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services	s - Peachtre	e Corners, C	βA				
Calcium	ND	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:24	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	s - Peachtre	e Corners, C	SA.				
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:15	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:15	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:15	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:15	7440-48-4	
₋ead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:15	7439-92-1	
₋ithium	ND	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 18:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:15	7782-49-2	
7470 Mercury	Analytical	Method: EPA	7470A Prep	paration Met	hod: EF	PA 7470A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 11:11	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/05/21 11:05		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
•	Pace Anal	ytical Services	s - Asheville						
Chloride	ND	mg/L	1.0	0.60	1		03/06/21 23:30	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 23:30		
Sulfate	ND	mg/L	1.0	0.50	1		03/06/21 23:30		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-40	Lab ID:	92525335011	Collecte	ed: 03/04/2	1 10:10	Received: 03/	/05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte						
Performed by	CUSTOME				1		03/08/21 09:07		
рН	R 5.23	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA	6010D Pra	naration Met	hod: El	<b>2</b> Δ 3010Δ			
0010D ATE ICI	•	ytical Services		•		A 30 10A			
Calcium	4.6	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 05:29	7440-70-2	
CO20 MET ICOME	Analytical	Method: EPA	SOOOD Dro	ooration Mat	had: El	3A 200EA			
6020 MET ICPMS		ytical Services				A 3003A			
		•		·					
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 15:48		
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 15:48		
Barium	0.032	mg/L	0.0050	0.00071	1	03/08/21 11:57			
Beryllium	0.00021J	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 15:48		
Boron	0.078	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 15:48		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57			
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 15:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 15:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 15:48	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 15:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 15:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 15:48	7782-49-2	
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
•	Pace Anal	ytical Services	s - Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 10:52	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	•	ytical Services		e Corners, C	3A				
Total Dissolved Solids	57.0	mg/L	10.0	10.0	1		03/06/21 12:32		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
•	-	ytical Services							
Chloride	4.9	mg/L	1.0	0.60	1		03/13/21 17:54	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 17:54		
Sulfate	21.5	mg/L	1.0	0.50	1		03/13/21 17:54		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-17S	Lab ID:	92525335012	Collecte	ed: 03/03/2	1 12:20	Received: 03/	/05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL_	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	<b>;</b>					
Performed by	CUSTOME				1		03/08/21 09:07		
рН	R 5.52	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	thod: El	PA 3010A			
	•	ytical Services		•					
Calcium	2.5	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 05:59	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
-		ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 15:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 15:54		
Barium	0.017	mg/L	0.0050	0.00071	1	03/08/21 11:57			
Beryllium	0.000099J	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 15:54		
Boron	0.010J	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 15:54		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57			
Chromium	0.00082J	mg/L	0.0050	0.00055	1	03/08/21 11:57			
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57			
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 15:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 15:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 15:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 15:54	7782-49-2	
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
•	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 10:54	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Total Dissolved Solids	57.0	mg/L	10.0	10.0	1		03/05/21 15:36		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
•	-	ytical Services							
Chloride	7.1	mg/L	1.0	0.60	1		03/13/21 18:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 18:10		
Sulfate	5.2	mg/L	1.0	0.50	1		03/13/21 18:10		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-18S	Lab ID:	92525335013	Collecte	ed: 03/03/2	13:50	Received: 03/	05/21 09:20 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical								
	Pace Ana	lytical Services	- Charlotte	<b>)</b>					
Performed by	CUSTOME R				1		03/08/21 09:07		
рН	5.31	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	hod: EF	PA 3010A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Calcium	0.96J	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:03	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	€A				
Antimony	0.00067J	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 16:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57			
Barium	0.017	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 16:17	7440-39-3	
Beryllium	0.00011J	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 16:17	7440-41-7	
Boron	0.0094J	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 16:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 16:17	7440-43-9	
Chromium	0.0010J	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 16:17	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 16:17	7440-48-4	
Lead	0.000076J	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 16:17	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.00081	1	03/08/21 11:57			
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57			
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 16:17	7782-49-2	
7470 Mercury	•	Method: EPA 7				A 7470A			
Mercury	ND	mg/L		0.000078	1	03/08/21 13:30	03/09/21 10:57	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Ana	lytical Services	- Peachtre	e Corners, C	SA .				
Total Dissolved Solids	37.0	mg/L	10.0	10.0	1		03/05/21 15:36		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	- Asheville						
Chloride	7.2	mg/L	1.0	0.60	1		03/13/21 18:56	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 18:56		
Sulfate	1.0	mg/L	1.0	0.50	1		03/13/21 18:56		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-18I	Lab ID:	92525335014	Collecte	ed: 03/03/2	1 15:00	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters —	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	<b>;</b>					
Performed by	CUSTOME				1		03/08/21 09:07		
рН	R 5.89	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	thod: Ef	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Calcium	5.2	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:08	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
		ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 16:23	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 16:23		
Barium	0.023	mg/L	0.0050	0.00071	1	03/08/21 11:57			
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 16:23		
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 16:23		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 16:23	7440-43-9	
Chromium	0.00087J	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 16:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 16:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 16:23	7439-92-1	
Lithium	0.0034J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 16:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 16:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 16:23	7782-49-2	
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 10:59	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Total Dissolved Solids	95.0	mg/L	10.0	10.0	1		03/06/21 13:09		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
•	-	ytical Services							
Chloride	7.0	mg/L	1.0	0.60	1		03/13/21 19:12	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 19:12		
Sulfate	ND	mg/L	1.0	0.50	1		03/13/21 19:12		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-39	Lab ID:	92525335015	Collecte	ed: 03/04/2	1 10:20	Received: 03/	05/21 09:20 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical Pace Ana	Method: lytical Services	- Charlotte						
Performed by	CUSTOME				1		03/08/21 09:07		
рН	R 5.54	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	-	Method: EPA 6 lytical Services				PA 3010A			
Calcium	8.2	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:13	7440-70-2	
6020 MET ICPMS	•	Method: EPA 6 lytical Services				A 3005A			
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 16:28		
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 16:28		
Barium	0.028	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 16:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 16:28	7440-41-7	
Boron	0.033J	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 16:28	7440-42-8	
Cadmium	0.00030J	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 16:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 16:28	7440-47-3	
Cobalt	0.00071J	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 16:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 16:28	7439-92-1	
Lithium	0.0084J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 16:28	7439-93-2	
Molybdenum	0.0014J	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 16:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 16:28	7782-49-2	
7470 Mercury	•	Method: EPA 7 lytical Services				A 7470A			
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:01	7439-97-6	
2540C Total Dissolved Solids	•	Method: SM 2- lytical Services		e Corners, (	ЭA				
Total Dissolved Solids	168	mg/L	10.0	10.0	1		03/06/21 12:32		
300.0 IC Anions 28 Days		Method: EPA 3							
Chloride	4.9	mg/L	1.0	0.60	1		03/13/21 19:28	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 19:28		
Sulfate	12.0	mg/L	1.0	0.50	1		03/13/21 19:28		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-1D (030321)	Lab ID:	9252533501	6 Collecte	ed: 03/03/2°	1 14:25	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Service	s - Charlotte	<del>)</del>					
Performed by	CUSTOME R				1		03/08/21 09:07		
Н	7.20	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	thod: E	PA 3010A			
	Pace Anal	ytical Service	s - Peachtre	e Corners, C	βA				
Calcium	14.1	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:18	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: El	PA 3005A			
	-	ytical Service							
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:01	7440-36-0	
rsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:01	7440-38-2	
Barium	0.0068	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:01	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:01		
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:01	7440-48-4	
_ead	0.000056J	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:01		
ithium	0.012J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:01	7439-93-2	
Molybdenum	0.0088J	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:01		
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:01		
2540C Total Dissolved Solids	Analytical	Method: SM 2	2450C-2011						
	Pace Anal	ytical Service	s - Peachtre	e Corners, C	ЭΑ				
Total Dissolved Solids	99.0	mg/L	10.0	10.0	1		03/06/21 13:09		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
-	Pace Anal	ytical Service	s - Asheville						
Chloride	0.96J	mg/L	1.0	0.60	1		03/13/21 19:43	16887-00-6	
Fluoride	0.078J	mg/L	0.10	0.050	1		03/13/21 19:43	16984-48-8	
Sulfate	9.0	mg/L	1.0	0.50	1		03/13/21 19:43	14808-79-8	



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-1I (030321)	Lab ID:	92525335017	Collecte	ed: 03/03/2	1 13:35	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	)					
Performed by	CUSTOME				1		03/08/21 09:07		
pH	R 5.38	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Calcium	1.8	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:23	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: El	PA 3005A			
		ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:07	7440-38-2	
Barium	0.0094	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:07	7440-47-3	
Cobalt	0.0030J	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:07	7439-92-1	
Lithium	0.0025J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:07	7439-93-2	
Molybdenum	0.0049J	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:07		
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	<b>S</b> A				
Total Dissolved Solids	39.0	mg/L	10.0	10.0	1		03/06/21 13:09		
300.0 IC Anions 28 Days		Method: EPA 3							
Chloride	1.2	mg/L	1.0	0.60	1		03/13/21 19:59	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 19:59	16984-48-8	
Sulfate	4.4	mg/L	1.0	0.50	1		03/13/21 19:59	14808-79-8	



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-2I (030321)	Lab ID:	92525335018	Collecte	ed: 03/03/2	1 11:45	Received: 03/	05/21 09:20 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	<b>;</b>					
Performed by	CUSTOME R				1		03/08/21 09:07		
рН	7.92	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Me	thod: El	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, 0	GΑ				
Calcium	25.6	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:28	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	thod: El	PA 3005A			
	-	ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:12	7440-36-0	
Arsenic	0.00098J	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:12	7440-38-2	
Barium	0.0041J	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:12	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:12	7439-92-1	
Lithium	0.0016J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:12	7439-93-2	
Molybdenum	0.0074J	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:12	7782-49-2	
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, 0	GΑ				
Total Dissolved Solids	138	mg/L	10.0	10.0	1		03/06/21 13:10		
300.0 IC Anions 28 Days	•	Method: EPA 3							
Chloride	0.86J	mg/L	1.0	0.60	1		03/13/21 20:14	16887-00-6	
Fluoride	0.085J	mg/L	0.10	0.050	1		03/13/21 20:14	16984-48-8	
Sulfate	10.6	mg/L	1.0	0.50	1		03/13/21 20:14	14808-79-8	



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-3I (030321)	Lab ID:	92525335019	Collecte	ed: 03/03/2	17:00	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	)					
Performed by	CUSTOME R				1		03/08/21 09:07		
Н	8.23	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA 6	010D Pre	paration Met	hod: El	PA 3010A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	€A				
Calcium	20.6	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:32	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	€A				
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:18	7440-38-2	
Barium	0.0031J	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:18	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:18	7440-48-4	
_ead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:18	7439-92-1	
Lithium	0.017J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:18	7439-93-2	
Molybdenum	0.0036J	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57			
2540C Total Dissolved Solids	Analytical	Method: SM 24	450C-2011						
	Pace Ana	lytical Services	- Peachtre	e Corners, C	<b>S</b> A				
Total Dissolved Solids	111	mg/L	10.0	10.0	1		03/06/21 13:10		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
	Pace Ana	lytical Services	- Asheville	!					
Chloride	0.99J	mg/L	1.0	0.60	1		03/13/21 21:00	16887-00-6	
Fluoride	0.10	mg/L	0.10	0.050	1		03/13/21 21:00	16984-48-8	
Sulfate	9.6	mg/L	1.0	0.50	1		03/13/21 21:00	14808-79-8	M1



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-3D (030321)	Lab ID:	92525335020	Collecte	ed: 03/03/21	16:00	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	<b>;</b>					
Performed by	CUSTOME R				1		03/08/21 09:07		
Н	8.39	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Peachtre	e Corners, G	βA				
Calcium	29.8	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:47	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Anal	ytical Services	s - Peachtre	e Corners, G	βA				
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:24	7440-38-2	
Barium	0.0064	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:24	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:24	7440-48-4	
_ead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:24		
Lithium	0.024J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:24	7439-93-2	
Molybdenum	0.013	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:24		
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:24		
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, G	βA				
Total Dissolved Solids	137	mg/L	10.0	10.0	1		03/06/21 13:10		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Services	- Asheville						
Chloride	1.1	mg/L	1.0	0.60	1		03/13/21 22:18	16887-00-6	
Fluoride	0.44	mg/L	0.10	0.050	1		03/13/21 22:18	16984-48-8	
Sulfate	7.0	mg/L	1.0	0.50	1		03/13/21 22:18	14808-79-8	



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: EB-02 (03032021)	Lab ID:	92525335021	Collecte	ed: 03/03/2 <sup>-</sup>	1 17:15	Received: 03/	05/21 09:20 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical I	Method: EPA	6010D Pre	paration Me	thod: El	PA 3010A			
	Pace Analy	tical Services	- Peachtre	ee Corners, 0	ЭΑ				
Calcium	33.3	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:52	7440-70-2	
6020 MET ICPMS	Analytical I	Method: EPA	6020B Pre	paration Met	thod: Ef	PA 3005A			
	Pace Analy	tical Services	- Peachtre	e Corners, 0	ЭΑ				
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:29	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:29	7440-38-2	
Barium	0.023	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:29	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:29	7440-43-9	
Chromium	0.00057J	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:29	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:29	7439-92-1	
Lithium	0.0016J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:29	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/08/21 11:57	03/09/21 17:29	7440-28-0	
7470 Mercury	Analytical I	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
	Pace Analy	tical Services	- Peachtre	e Corners, 0	ЭΑ				
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:04	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Analy	tical Services	- Peachtre	ee Corners, 0	ЭΑ				
Total Dissolved Solids	102	mg/L	10.0	10.0	1		03/06/21 13:10		
300.0 IC Anions 28 Days	•	Method: EPA : vtical Services							
Chloride	1.6	mg/L	1.0	0.60	1		03/13/21 22:33	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 22:33		
Sulfate	2.2	mg/L	1.0	0.50	1		03/13/21 22:33		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-4I	Lab ID:	92525335022	Collecte	ed: 03/03/21	1 10:35	Received: 03/	/05/21 09:20 Ma	atrix: Water	
			Report						
Parameters —	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	- Charlotte	<b>!</b>					
Performed by	CUSTOME				1		03/08/21 09:07		
рН	R 6.21	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	thod: Ef	PA 3010A			
	•	ytical Services		•					
Calcium	7.7	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:56	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
		ytical Services							
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00028	1	03/08/21 11:57	03/09/21 17:35		
Barium	0.014	mg/L	0.0050	0.00070	1	03/08/21 11:57			
Beryllium	ND	mg/L	0.0050	0.000046	1	03/08/21 11:57	03/09/21 17:35		
Boron	0.0056J	mg/L	0.040	0.0052	1	03/08/21 11:57		_	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57			
Chromium	0.0013J	mg/L	0.0050	0.00055	1	03/08/21 11:57			
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57			
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57			
Lithium	0.012J	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:35		
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:35		
Selenium	0.0019J	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:35		
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
•	Pace Anal	ytical Services	- Peachtre	e Corners, C	βA				
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:11	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Anal	ytical Services	- Peachtre	e Corners, C	3A				
Total Dissolved Solids	80.0	mg/L	10.0	10.0	1		03/06/21 13:11		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
•		ytical Services							
Chloride	4.1	mg/L	1.0	0.60	1		03/13/21 22:49	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 22:49		
Sulfate	7.8	mg/L	1.0	0.50	1		03/13/21 22:49		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-20S	Lab ID:	92525335023	Collecte	ed: 03/03/2	09:40	Received: 03/	/05/21 09:20 Ma	atrix: Water	
Doromotoro	Dogulto	Units	Report Limit	MDL	DF	Dranarad	Analyzad	CACNo	0
Parameters	Results	Units	LIMIL	IVIDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Services	- Charlotte	9					
Performed by	CUSTOME R				1		03/08/21 09:07		
рН	5.89	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA 6	6010D Pre	paration Met	hod: EF	PA 3010A			
	Pace Ana	lytical Services	- Peachtre	e Corners, C	βA				
Calcium	2.4	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 07:01	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Ana	lytical Services	- Peachtre	ee Corners, C	SA.				
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:56		
Barium	0.015	mg/L	0.0050	0.00071	1	03/08/21 11:57			
Beryllium	0.000068J	mg/L	0.00050	0.000046	1	03/08/21 11:57			
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57			
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57			
Chromium	ND	mg/L	0.0050	0.00055	1		03/09/21 17:56		
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57			
Lead	0.000045J	mg/L	0.0010	0.000036	1	03/08/21 11:57			
Lithium	ND	mg/L	0.030	0.00081	1	03/08/21 11:57			
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:56		
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57			
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
•	•	lytical Services							
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:13	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	450C-2011						
	Pace Ana	lytical Services	- Peachtre	e Corners, C	€A				
Total Dissolved Solids	53.0	mg/L	10.0	10.0	1		03/06/21 13:11		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
•	· ·	lytical Services							
Chloride	2.7	mg/L	1.0	0.60	1		03/13/21 23:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 23:04		
Sulfate	ND	mg/L	1.0	0.50	1		03/13/21 23:04		



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Sample: YGWA-21I	Lab ID:	92525335024	4 Collecte	ed: 03/04/2	1 09:35	Received: 03/	/05/21 09:20 Ma	atrix: Water	
	<b>.</b>		Report					0.0.1	
Parameters	Results _	Units	Limit	MDL_	DF	Prepared	_ Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Ana	lytical Service	s - Charlotte	)					
Performed by	CUSTOME R				1		03/08/21 09:07		
рН	6.80	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: Ef	PA 3010A			
	Pace Ana	lytical Service	s - Peachtre	e Corners, C	SA.				
Calcium	8.7	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 07:06	7440-70-2	
6020 MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
	-	lytical Service							
Antimony	0.0014J	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 18:02	7440-36-0	
Arsenic	0.00078J	mg/L	0.0050	0.00028	1	03/08/21 11:57			
Barium	0.011	mg/L	0.0050	0.00070	1	03/08/21 11:57			
Beryllium	ND	mg/L	0.0050	0.00071	1	03/08/21 11:57			
Boron	0.0079J	mg/L	0.040	0.0052	1	03/08/21 11:57			
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57			
Chromium	ND	mg/L	0.0050	0.00055	1		03/09/21 18:02		
Cobalt	0.0065	mg/L	0.0050	0.00038	1	03/08/21 11:57			
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57			
Lithium	0.0062J	mg/L	0.030	0.00081	1	03/08/21 11:57			
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 18:02		
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57			
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
•	Pace Ana	lytical Service	s - Peachtre	ee Corners, C	βA				
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:16	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2450C-2011						
	Pace Ana	lytical Service	s - Peachtre	ee Corners, C	βA				
Total Dissolved Solids	110	mg/L	10.0	10.0	1		03/06/21 12:32		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	· ·	lytical Service							
Chloride	1.8	mg/L	1.0	0.60	1		03/13/21 23:20	16887-00-6	
Fluoride	0.091J	mg/L	0.10	0.050	1		03/13/21 23:20		
Sulfate	4.5	mg/L	1.0	0.050	1		03/13/21 23:20		



Project: YATES
Pace Project No.: 92525335

QC Batch: 604223 QC Batch Method: EPA 3010A Analysis Method: EPA 6010D Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335006, 92525335006, 92525335007, 92525335008,

92525335009

METHOD BLANK: 3183140

Matrix: Water

Associated Lab Samples:

Date: 03/26/2021 11:31 AM

Calcium

92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008,

92525335009

 Parameter
 Units
 Blank Reporting Result
 Limit
 MDL
 Analyzed
 Qualifiers

 mg/L
 ND
 1.0
 0.070
 03/09/21 01:57

LABORATORY CONTROL SAMPLE: 3183141

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183142 3183143

MS MSD

92525335001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Calcium 2.6 3.5 20 1 3.6 105 94 75-125 3 mg/L

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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

QC Batch: 604893 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017,

92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

METHOD BLANK: 3186898 Matrix: Water

Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017,

92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

Blank Reporting

 Parameter
 Units
 Result
 Limit
 MDL
 Analyzed
 Qualifiers

 Calcium
 mg/L
 ND
 1.0
 0.070
 03/10/21 05:19

LABORATORY CONTROL SAMPLE: 3186899

LCS LCS % Rec Spike % Rec Limits Qualifiers Parameter Units Conc. Result Calcium mg/L 0.98J 98 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186900 3186901

MS MSD

92525335011 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual 20 Calcium 4.6 1 5.5 5.4 92 76 75-125 3 mg/L

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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

QC Batch: 604224 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008,

92525335009

METHOD BLANK: 3183148 Matrix: Water

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008,

92525335009

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND ND	0.0030	0.00028	03/05/21 16:31	
Arsenic	mg/L	ND	0.0050	0.00078	03/05/21 16:31	
Barium	mg/L	ND	0.0050	0.00071	03/05/21 16:31	
Beryllium	mg/L	ND	0.00050	0.000046	03/05/21 16:31	
Boron	mg/L	ND	0.040	0.0052	03/05/21 16:31	
Cadmium	mg/L	ND	0.00050	0.00012	03/05/21 16:31	
Chromium	mg/L	ND	0.0050	0.00055	03/05/21 16:31	
Cobalt	mg/L	ND	0.0050	0.00038	03/05/21 16:31	
Lead	mg/L	ND	0.0010	0.000036	03/05/21 16:31	
Lithium	mg/L	ND	0.030	0.00081	03/05/21 16:31	
Molybdenum	mg/L	ND	0.010	0.00069	03/05/21 16:31	
Selenium	mg/L	ND	0.0050	0.0016	03/05/21 16:31	

LABORATORY CONTROL SAMPLE:	3183149					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.91	91	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 3183	150	•	3183151							
		92525335002	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	 ND	0.1	0.1	0.11	0.11	105	106	75-125		20	
Arsenic	mg/L	ND	0.1	0.1	0.096	0.093	96	93	75-125	3	20	
Barium	mg/L	0.014	0.1	0.1	0.11	0.11	96	99	75-125	2	20	

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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

			MS	MSD								
	9	2525335002	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Beryllium	mg/L	ND	0.1	0.1	0.095	0.093	95	93	75-125	2	20	
Boron	mg/L	0.0068J	1	1	0.96	0.96	96	96	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.098	99	98	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Lead	mg/L	0.000051J	0.1	0.1	0.098	0.095	98	95	75-125	3	20	
_ithium	mg/L	0.0018J	0.1	0.1	0.10	0.097	98	95	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.092	94	92	75-125	2	20	

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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

QC Batch: 604916 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

METHOD BLANK: 3187128 Matrix: Water

Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017,

92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/09/21 15:37	
Arsenic	mg/L	ND	0.0050	0.00078	03/09/21 15:37	
Barium	mg/L	ND	0.0050	0.00071	03/09/21 15:37	
Beryllium	mg/L	ND	0.00050	0.000046	03/09/21 15:37	
Boron	mg/L	ND	0.040	0.0052	03/09/21 15:37	
Cadmium	mg/L	ND	0.00050	0.00012	03/09/21 15:37	
Chromium	mg/L	ND	0.0050	0.00055	03/09/21 15:37	
Cobalt	mg/L	ND	0.0050	0.00038	03/09/21 15:37	
Lead	mg/L	ND	0.0010	0.000036	03/09/21 15:37	
Lithium	mg/L	ND	0.030	0.00081	03/09/21 15:37	
Molybdenum	mg/L	ND	0.010	0.00069	03/09/21 15:37	
Selenium	mg/L	ND	0.0050	0.0016	03/09/21 15:37	
Thallium	mg/L	ND	0.0010	0.00014	03/09/21 15:37	

LABORATORY CONTROL SAMP	LE: 3'	187129										
			Spike	LC	S	LCS	% R	ec				
Parameter		Units	Conc.	Res	sult	% Rec	Lim	its (	Qualifiers			
Antimony		mg/L		<u> </u>	0.097	9	7	80-120		_		
Arsenic		mg/L	0	).1	0.093	9	3	80-120				
Barium		mg/L	0	).1	0.094	9	4	80-120				
Beryllium		mg/L	0	).1	0.098	9	8	80-120				
Boron		mg/L		1	1.0	10	4	80-120				
Cadmium		mg/L	0	).1	0.095	9	5	80-120				
Chromium		mg/L	0	).1	0.10	10	2	80-120				
Cobalt		mg/L	0	).1	0.10	10	0	80-120				
Lead		mg/L	0	).1	0.096	9	6	80-120				
Lithium		mg/L	0	).1	0.10	10	4	80-120				
Molybdenum		mg/L	0	).1	0.094	9	4	80-120				
Selenium		mg/L	0	).1	0.091	9	1	80-120				
Thallium		mg/L	0	).1	0.092	9.	2	80-120				
MATRIX SPIKE & MATRIX SPIKE	DUPLIC	CATE: 3187	130		3187131							
			MS	MSD								
	9	2525335012	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.094	0.096	94	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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 3187			3187131							
Parameter	Units	92525335012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.092	0.092	92	92	75-125	0	20	
Barium	mg/L	0.017	0.1	0.1	0.11	0.11	90	94	75-125	3	20	
Beryllium	mg/L	0.000099J	0.1	0.1	0.093	0.095	93	95	75-125	3	20	
Boron	mg/L	0.010J	1	1	0.98	0.99	97	98	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Chromium	mg/L	0.00082J	0.1	0.1	0.098	0.098	97	97	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.10	97	100	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.089	0.087	88	86	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.089	0.090	89	90	75-125	1	20	

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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

QC Batch: 604308 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335007, 92525335008, 92525335009

METHOD BLANK: 3183676 Matrix: Water

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335007, 92525335008, 92525335009

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury mg/L ND 0.00020 0.000078 03/05/21 10:07

LABORATORY CONTROL SAMPLE: 3183677

Spike LCS LCS % Rec Result % Rec Limits Qualifiers Parameter Units Conc. Mercury 0.0025 0.0023 92 80-120 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183678 3183679

MSD MS 92524632013 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. **RPD** RPD Qual Result Conc. Result Result % Rec % Rec Limits Mercury mg/L ND 0.0025 0.0025 0.0026 0.0026 102 102 75-125 0 20

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



Project: YATES
Pace Project No.: 92525335

QC Batch: 604928 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

ND

0.0025

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335021, 92525335022,

92525335023, 92525335024

METHOD BLANK: 3187260 Matrix: Water

mg/L

Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335022,

92525335023, 92525335024

 Parameter
 Units
 Blank Reporting Result
 Reporting Limit
 MDL
 Analyzed
 Qualifiers

 Mercury
 mg/L
 ND
 0.00020
 0.000078
 03/09/21 10:42

LABORATORY CONTROL SAMPLE: 3187261

Mercury

Date: 03/26/2021 11:31 AM

Spike LCS LCS % Rec Parameter Units Result % Rec Limits Qualifiers Conc. 94 Mercury mg/L 0.0025 0.0024 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3187262 3187263 MSD MS 92525375013 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD

0.0025

0.0023

0.0019

93

78

75-125

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**

Qual

20

18



Parameter

Total Dissolved Solids

Date: 03/26/2021 11:31 AM

Units

mg/L

#### **QUALITY CONTROL DATA**

Project: YATES Pace Project No.: 92525335 QC Batch: 604206 Analysis Method: SM 2450C-2011 QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids Laboratory: Pace Analytical Services - Peachtree Corners, GA 92525335006 Associated Lab Samples: METHOD BLANK: 3183000 Matrix: Water Associated Lab Samples: 92525335006 Blank Reporting MDL Qualifiers Parameter Units Result Limit Analyzed Total Dissolved Solids ND 10.0 10.0 03/04/21 10:17 mg/L LABORATORY CONTROL SAMPLE: 3183001 Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units **Total Dissolved Solids** mg/L 387 97 90-111 SAMPLE DUPLICATE: 3183002 92525485001 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 84.0 **Total Dissolved Solids** mg/L 85.0 10 SAMPLE DUPLICATE: 3183003 92525335006

Dup

Result

41.0

Result

23.0

RPD

56

Max

RPD

Qualifiers

10 D6

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



Project: YATES
Pace Project No.: 92525335

QC Batch: 604300 Analysis Method: SM 2450C-2011

QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005

METHOD BLANK: 3183609 Matrix: Water

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005

Blank Reporting

ParameterUnitsResultLimitMDLAnalyzedQualifiersTotal Dissolved Solidsmg/LND10.010.003/04/21 14:27

LABORATORY CONTROL SAMPLE: 3183610

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

SAMPLE DUPLICATE: 3183611

92525102001 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 175 **Total Dissolved Solids** mg/L 2 171 10

SAMPLE DUPLICATE: 3183612

Date: 03/26/2021 11:31 AM

		92524831010	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Total Dissolved Solids	mg/L	513	520	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.



Project: YATES
Pace Project No.: 92525335

QC Batch: 604527 Analysis Method: SM 2450C-2011

QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335007, 92525335008, 92525335009

METHOD BLANK: 3184654 Matrix: Water

Associated Lab Samples: 92525335007, 92525335008, 92525335009

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Dissolved Solids mg/L ND 10.0 03/05/21 11:03

LABORATORY CONTROL SAMPLE: 3184655

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units **Total Dissolved Solids** mg/L 400 375 94 90-111

SAMPLE DUPLICATE: 3184656

92525799001 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 2090 **Total Dissolved Solids** 6 mg/L 1960 10

SAMPLE DUPLICATE: 3184657

Date: 03/26/2021 11:31 AM

92525341004 Dup Max RPD RPD Parameter Units Result Result Qualifiers Total Dissolved Solids 167 152 mg/L 9 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.



Project: YATES
Pace Project No.: 92525335

QC Batch: 604626 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: 92525335012, 92525335013

METHOD BLANK: 3185317 Matrix: Water

Associated Lab Samples: 92525335012, 92525335013

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Dissolved Solids mg/L ND 10.0 10.0 03/05/21 15:33

LABORATORY CONTROL SAMPLE: 3185318

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units **Total Dissolved Solids** mg/L 400 390 98 90-111

SAMPLE DUPLICATE: 3185319

92525822001 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 274 **Total Dissolved Solids** 6 mg/L 290 10

SAMPLE DUPLICATE: 3185328

Date: 03/26/2021 11:31 AM

92524831016 Dup Max RPD RPD Parameter Units Result Result Qualifiers Total Dissolved Solids 325 mg/L 354 9 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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

QC Batch: 604764 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: 92525335014, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021,

92525335022, 92525335023

METHOD BLANK: 3186295 Matrix: Water

Associated Lab Samples: 92525335014, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021,

92525335022, 92525335023

Blank Reporting Parameter Units Limit MDL Qualifiers Result Analyzed **Total Dissolved Solids** mg/L ND 10.0 10.0 03/06/21 13:06 LABORATORY CONTROL SAMPLE: 3186296 LCS LCS % Rec Spike Parameter Units Result % Rec Limits Qualifiers Conc. **Total Dissolved Solids** mg/L 400 368 92 90-111 SAMPLE DUPLICATE: 3186298 92525335021 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers **Total Dissolved Solids** 102 101 10 1 mg/L SAMPLE DUPLICATE: 3186336 92525919008 Dup Max RPD RPD Parameter Units Result Result Qualifiers **Total Dissolved Solids** mg/L 267 283 6 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.



Project: YATES
Pace Project No.: 92525335

QC Batch: 604765 Analysis Method: SM 2450C-2011

QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525335011, 92525335015, 92525335024

METHOD BLANK: 3186310 Matrix: Water

Associated Lab Samples: 92525335011, 92525335015, 92525335024

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Dissolved Solids mg/L ND 10.0 03/06/21 12:29

LABORATORY CONTROL SAMPLE: 3186311

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units **Total Dissolved Solids** 400 371 93 90-111 mg/L

SAMPLE DUPLICATE: 3186312

Parameter Units Pesult Result RPD Max Result RPD Qualifiers

Total Dissolved Solids mg/L 217 220 1 10

SAMPLE DUPLICATE: 3186313

Date: 03/26/2021 11:31 AM

92525824003 Dup Max RPD RPD Parameter Units Result Result Qualifiers Total Dissolved Solids 45.0 10 D6 mg/L 61.0 30

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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

QC Batch: 604544 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008,

92525335009

METHOD BLANK: 3184710 Matrix: Water

Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335006, 92525335006, 92525335007, 92525335008,

92525335009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/06/21 20:08	
Fluoride	mg/L	ND	0.10	0.050	03/06/21 20:08	
Sulfate	mg/L	ND	1.0	0.50	03/06/21 20:08	

LABORATORY CONTROL SAMPLE:	3184711					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	50	48.3	97	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	48.7	97	90-110	

MATRIX SPIKE & MATRIX SP	3184713											
			MS	MSD								
		92525335001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	4.3	50	50	53.4	53.9	98	99	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	104	105	90-110	1	10	
Sulfate	mg/L	2.3	50	50	51.8	52.4	99	100	90-110	1	10	

MATRIX SPIKE & MATRIX SP		3184715										
		92525341001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	5.5	50	50	54.6	54.8	98	98	90-110	0	10	
Fluoride	mg/L	0.18	2.5	2.5	3.3	3.3	124	125	90-110	1	10	M1
Sulfate	mg/L	94.2	50	50	135	135	81	82	90-110	0	10	M1

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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

QC Batch: 606455 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017,

92525335018

METHOD BLANK: 3195134 Matrix: Water

Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017,

92525335018

Doromotor	Lloito	Blank	Reporting	MDI	Analyzad	Qualifiara
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 12:45	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 12:45	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 12:45	

LABORATORY CONTROL SAMPLE:	3195135	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L		49.8	100	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	52.8	106	90-110	

MATRIX SPIKE & MATRIX SP		3195137										
			MS	MSD								
		92525912007	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	ND	50	50	50.5	51.0	101	102	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	102	103	90-110	1	10	
Sulfate	mg/L	ND	50	50	53.6	54.2	107	108	90-110	1	10	

MATRIX SPIKE & MATRIX SP		3195139										
			MS	MSD								
		92525919009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	1.6	50	50	54.1	53.7	105	104	90-110	1	10	
Fluoride	mg/L	0.12	2.5	2.5	2.8	2.8	106	105	90-110	1	10	
Sulfate	mg/L	39.2	50	50	95.4	95.1	112	112	90-110	0	10	M1

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.



Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

QC Batch: 606456 Analysis Method: EPA 300.0 Rev 2.1 1993

QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

METHOD BLANK: 3195140 Matrix: Water

Associated Lab Samples: 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 20:29	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 20:29	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 20:29	

LABORATORY CONTROL SAMPLE:	3195141					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L		48.5	97	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	ma/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SP		3195143										
			MS	MSD								
		92525335019	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	0.99J	50	50	52.8	52.3	104	103	90-110	1	10	
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.7	106	104	90-110	2	10	
Sulfate	mg/L	9.6	50	50	65.5	64.7	112	110	90-110	1	10	M1

MATRIX SPIKE & MATRIX SP	3195145											
			MS	MSD								
		92525346005	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	16.6	50	50	66.4	68.7	100	104	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	98	103	90-110	5	10	
Sulfate	mg/L	88.8	50	50	115	117	53	56	90-110	1	10	M1

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.



#### **QUALIFIERS**

Project: YATES
Pace Project No.: 92525335

#### **DEFINITIONS**

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

TNI - The NELAC Institute.

#### **ANALYTE QUALIFIERS**

Date: 03/26/2021 11:31 AM

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.



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

_ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytic Batch
92525335001	YGWA-5I				
92525335002	YGWA-5D				
2525335005	YGWA-14S				
2525335006	YGWA-30I				
2525335011	YGWA-40				
2525335012	YGWA-17S				
2525335013	YGWA-18S				
2525335014	YGWA-18I				
2525335015	YGWA-39				
2525335016	YGWA-1D (030321)				
2525335017	YGWA-1I (030321)				
2525335018	YGWA-2I (030321)				
2525335010	YGWA-3I (030321)				
2525335019	YGWA-3D (030321)				
2525335020 2525335022	YGWA-4I				
2525335022 2525335023	YGWA-20S				
2525335025 2525335024	YGWA-21I				
2525335001	YGWA-5I	EPA 3010A	604223	EPA 6010D	604309
2525335002	YGWA-5D	EPA 3010A	604223	EPA 6010D	604309
2525335003	DUP-1	EPA 3010A	604223	EPA 6010D	604309
2525335005	YGWA-14S	EPA 3010A	604223	EPA 6010D	604309
2525335006	YGWA-30I	EPA 3010A	604223	EPA 6010D	604309
2525335007	FB-01	EPA 3010A	604223	EPA 6010D	604309
2525335008	DUP-01	EPA 3010A	604223	EPA 6010D	604309
2525335009	FB-01	EPA 3010A	604223	EPA 6010D	604309
2525335011	YGWA-40	EPA 3010A	604893	EPA 6010D	604969
2525335012	YGWA-17S	EPA 3010A	604893	EPA 6010D	604969
2525335013	YGWA-18S	EPA 3010A	604893	EPA 6010D	604969
2525335014	YGWA-18I	EPA 3010A	604893	EPA 6010D	604969
2525335015	YGWA-39	EPA 3010A	604893	EPA 6010D	604969
2525335016	YGWA-1D (030321)	EPA 3010A	604893	EPA 6010D	604969
2525335017	YGWA-1I (030321)	EPA 3010A	604893	EPA 6010D	604969
2525335018	YGWA-2I (030321)	EPA 3010A	604893	EPA 6010D	604969
2525335019	YGWA-3I (030321)	EPA 3010A	604893	EPA 6010D	604969
2525335020	YGWA-3D (030321)	EPA 3010A	604893	EPA 6010D	604969
2525335020 2525335021	EB-02 (03032021)	EPA 3010A	604893	EPA 6010D	604969
2525335021	YGWA-4I	EPA 3010A	604893	EPA 6010D	604969
2525335022 2525335023	YGWA-20S	EPA 3010A	604893	EPA 6010D	604969
2525335025 2525335024	YGWA-21I	EPA 3010A	604893	EPA 6010D	604969
2525335001	YGWA-5I	EPA 3005A	604224	EPA 6020B	604329
2525335002	YGWA-5D	EPA 3005A	604224	EPA 6020B	604329
2525335003	DUP-1	EPA 3005A	604224	EPA 6020B	604329
2525335005	YGWA-14S	EPA 3005A	604224	EPA 6020B	604329
2525335005 2525335006	YGWA-30I	EPA 3005A	604224	EPA 6020B	604329
2525335006 2525335007	FB-01	EPA 3005A EPA 3005A	604224	EPA 6020B	604329
2525335007 2525335008	DUP-01	EPA 3005A EPA 3005A	604224	EPA 6020B	604329
20200000	וטי וטע	LI A JUUJA	004224	L1 / 0020D	004329



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

_ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2525335011	YGWA-40	EPA 3005A	604916	EPA 6020B	605023
2525335012	YGWA-17S	EPA 3005A	604916	EPA 6020B	605023
2525335013	YGWA-18S	EPA 3005A	604916	EPA 6020B	605023
2525335014	YGWA-18I	EPA 3005A	604916	EPA 6020B	605023
2525335015	YGWA-39	EPA 3005A	604916	EPA 6020B	605023
2525335016	YGWA-1D (030321)	EPA 3005A	604916	EPA 6020B	605023
2525335017	YGWA-1I (030321)	EPA 3005A	604916	EPA 6020B	605023
2525335018	YGWA-2I (030321)	EPA 3005A	604916	EPA 6020B	605023
2525335019	YGWA-3I (030321)	EPA 3005A	604916	EPA 6020B	605023
2525335020	YGWA-3D (030321)	EPA 3005A	604916	EPA 6020B	605023
2525335021	EB-02 (03032021)	EPA 3005A	604916	EPA 6020B	605023
2525335022	YGWA-4I	EPA 3005A	604916	EPA 6020B	605023
2525335023	YGWA-20S	EPA 3005A	604916	EPA 6020B	605023
2525335024	YGWA-21I	EPA 3005A	604916	EPA 6020B	605023
	1011A EII			L. 7. 0020D	
2525335001	YGWA-5I	EPA 7470A	604308	EPA 7470A	604504
2525335002	YGWA-5D	EPA 7470A	604308	EPA 7470A	604504
2525335003	DUP-1	EPA 7470A	604308	EPA 7470A	604504
2525335007	FB-01	EPA 7470A	604308	EPA 7470A	604504
2525335008	DUP-01	EPA 7470A	604308	EPA 7470A	604504
2525335009	FB-01	EPA 7470A	604308	EPA 7470A	604504
2525335011	YGWA-40	EPA 7470A	604928	EPA 7470A	605029
2525335012	YGWA-17S	EPA 7470A	604928	EPA 7470A	605029
2525335013	YGWA-18S	EPA 7470A	604928	EPA 7470A	605029
2525335014	YGWA-18I	EPA 7470A	604928	EPA 7470A	605029
2525335015	YGWA-39	EPA 7470A	604928	EPA 7470A	605029
2525335021	EB-02 (03032021)	EPA 7470A	604928	EPA 7470A	605029
2525335022	YGWA-4I	EPA 7470A	604928	EPA 7470A	605029
2525335023	YGWA-20S	EPA 7470A	604928	EPA 7470A	605029
2525335024	YGWA-21I	EPA 7470A	604928	EPA 7470A	605029
2525335001	YGWA-5I	SM 2450C-2011	604300		
2525335002	YGWA-5D	SM 2450C-2011	604300		
2525335003	DUP-1	SM 2450C-2011	604300		
2525335005	YGWA-14S	SM 2450C-2011	604300		
2525335006	YGWA-30I	SM 2450C-2011	604206		
2525335007	FB-01	SM 2450C-2011	604527		
2525335008	DUP-01	SM 2450C-2011	604527		
2525335009	FB-01	SM 2450C-2011	604527		
2525335011	YGWA-40	SM 2450C-2011	604765		
2525335012	YGWA-17S	SM 2450C-2011	604626		
2525335013	YGWA-18S	SM 2450C-2011	604626		
2525335014	YGWA-18I	SM 2450C-2011	604764		
2525335015	YGWA-39	SM 2450C-2011	604765		
2525335016	YGWA-1D (030321)	SM 2450C-2011	604764		

# **REPORT OF LABORATORY ANALYSIS**

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### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES
Pace Project No.: 92525335

Date: 03/26/2021 11:31 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525335018	YGWA-2I (030321)	SM 2450C-2011	604764		
92525335019	YGWA-3I (030321)	SM 2450C-2011	604764		
92525335020	YGWA-3D (030321)	SM 2450C-2011	604764		
92525335021	EB-02 (03032021)	SM 2450C-2011	604764		
92525335022	YGWA-4I	SM 2450C-2011	604764		
92525335023	YGWA-20S	SM 2450C-2011	604764		
92525335024	YGWA-21I	SM 2450C-2011	604765		
92525335001	YGWA-5I	EPA 300.0 Rev 2.1 1993	604544		
92525335002	YGWA-5D	EPA 300.0 Rev 2.1 1993	604544		
92525335003	DUP-1	EPA 300.0 Rev 2.1 1993	604544		
92525335005	YGWA-14S	EPA 300.0 Rev 2.1 1993	604544		
92525335006	YGWA-30I	EPA 300.0 Rev 2.1 1993	604544		
92525335007	FB-01	EPA 300.0 Rev 2.1 1993	604544		
92525335008	DUP-01	EPA 300.0 Rev 2.1 1993	604544		
92525335009	FB-01	EPA 300.0 Rev 2.1 1993	604544		
92525335011	YGWA-40	EPA 300.0 Rev 2.1 1993	606455		
92525335012	YGWA-17S	EPA 300.0 Rev 2.1 1993	606455		
92525335013	YGWA-18S	EPA 300.0 Rev 2.1 1993	606455		
92525335014	YGWA-18I	EPA 300.0 Rev 2.1 1993	606455		
92525335015	YGWA-39	EPA 300.0 Rev 2.1 1993	606455		
92525335016	YGWA-1D (030321)	EPA 300.0 Rev 2.1 1993	606455		
92525335017	YGWA-1I (030321)	EPA 300.0 Rev 2.1 1993	606455		
92525335018	YGWA-2I (030321)	EPA 300.0 Rev 2.1 1993	606455		
92525335019	YGWA-3I (030321)	EPA 300.0 Rev 2.1 1993	606456		
92525335020	YGWA-3D (030321)	EPA 300.0 Rev 2.1 1993	606456		
92525335021	EB-02 (03032021)	EPA 300.0 Rev 2.1 1993	606456		
92525335022	YGWA-4I	EPA 300.0 Rev 2.1 1993	606456		
92525335023	YGWA-20S	EPA 300.0 Rev 2.1 1993	606456		
92525335024	YGWA-21I	EPA 300.0 Rev 2.1 1993	606456		

### Pace Analytical\*

### Document Name:

Document Revised: October 28, 2020

Page 1 of 2 Issuing Authority: Sample Condition Upon Receipt(SCUR) Document No.: Pace Carolinas Quality Office F-CAR-CS-033-Rev.07 Laboratory receiving samples:

Asheville Eden Greenwood H	lunters	/ille 🔲	Raleig	h	Mechanicsville Atlanta Kernersville
Sample Condition Upon Receipt  Client Name:  Georgia frame	· <b>b</b> ~		p	roject	# W0#:92525335
Courier: Fed Ex UPS Commercial Pace  ustody Seal Present? Yes No Seals Interest.	USPS Other	: ∐Yes		ent	92525335
istory sear Present. Tres. Tho sears mu	acti ,	Пієз	₹140	اس	Date/Initials Person Examining Contents: 147 3/3/2 (
Bubble Wrap Bubble  Bubble Wrap Bubble  Bubble	Bags Type of lo	J'ag.			Biological Tissue Frozen?  Yes No N/A  None  Temp should be above freezing to 6°C  Samples out of temp criteria. Samples on ice, cooling process has begun
SDA Regulated Soil ( N/A, water sample) id samples originate in a quarantine zone within the United Yes No	States: CA	, NY, or SC	(check ma	ps)?	Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes
					Comments/Discrepancy:
Chain of Custody Present?	Yes	□No	□N/A	1.	
Samples Arrived within Hold Time?	Ves	□No	□N/A	2.	444
Short Hold Time Analysis (<72 hr.)?	□Yes	MNO	□N/A	3.	
Rush Turn Around Time Requested?	Yes	ØNo.	□n/a	4.	
Sufficient Volume?	Yes	□No	□N/A	5.	
Correct Containers Used? -Pace Containers Used?	Yes Yes	□No □No	□n/a □n/a	6.	
Containers Intact?	11Yes	□No	□N/A	7.	
Dissolved analysis: Samples Field Filtered?	□Yes	No	□N/A	8.	
Sample Labels Match COC?	Yes	No	□N/A	9.	Section 1
-Includes Date/Time/ID/Analysis Matrix:			***************************************		
Headspace in VOA Vials (>5-6mm)?	Yes	□No	<b>Ø</b> N/A	10.	
Trip Blank Present?	□Yes	□No	DAVÍA Dava	11.	
Trip Blank Custody Seals Present?  COMMENTS/SAMPLE DISCREPANCY	□Yes	□No	Шуу		Field Data Required? ☐Yes ☐No
				Lo	t ID of split containers:
CLIENT NOTIFICATION/RESOLUTION			Data/Ti	me.	
Project Manager SCURF Review:					Date:



### **Document Name:** Sample Condition Upon Receipt(SCUR)

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

Project #

Document Revised: October 28, 2020 Page 2 of 2

> Issuing Authority: Pace Carolinas Quality Office

Due Date: 03/16/21 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 bottles

							4													22.35								
kem#	BP4U-125 mi. 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)	BP45-125 mL Plastic H2SO4 (pH < 2) (CI-)	<b>BP3N-</b> 250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	<b>BP4C-1</b> 25 mL Plastic NaOH {pH > 12} (CI-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CI-)	<b>AG1H-1</b> (iter Amber HC! {pH < 2}	AG3U-250 mL Amber Unpreserved (N/A) (CI-)	AG15-1 lite? Amber H2SO4 {pH < 2}	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4C! (N/A)(CI-)	DG9H-40 mL VOA HCI (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 – łab)	BPIN	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		l	1			V								/										2				
2	/	l	l		/	Z		/		***************************************	/	***********	7	/	/						~~			Z				
3	/	l	1			Z	$\angle$			,,,,,,,,			/	/										Z				
4	/	l	1		7	1	7	/			$\angle$		/	/										Q	7			
5		1	l		/	X	7	$\angle$				***************************************						•						Q	7			
6	/		1			1	7	7	***************************************	••••••	$\subset$		7	/										X				
7	7	-			/	1		7					$\angle$						-					Z	1			
8			l		/	X		7			7		/	/				•						Z	1			
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11		-	,			/,	7						/								$\neg$			7	1			
12					$\sum$		7	7			$\angle$		$\angle$											7				

		pH Ad	ljustment Log for Pres	served Samples	· ·	
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot#

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

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

		ADDISTONAL COMMERTS	2 Yout He			3 YGWA-18C-	YEMATE DUP-1	YGWAS YGWA SD	5 Names 1 Jens 4-21					SAMPLE ID  One Character per box. (AZ, 0-9 /,  Sample lds must be unique	NATE Dring	POWER CIT DAIS.	Me: (770)384-6526  Fax	alt:	tion. GA 30114	"	불
SS Programmes States	7883	PELAGUSET SYLVERULISH	WI WI	×	TW	WT	WT 3/2 -	WT 3/2 1440	WT 3/2 1405	TA	TW	WT	TW	Wisher of ART  MATRIX CODE: (See valid of SAMPLE TYPE  MATRIX CODE: (See Valid of SAMP	odes to left)	41	Project Name: Yates AMA	Purchase Order #:	Copy To:	Report To: Becky Steever	Required Project Information:
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SKINATURE of SAMPLER:		The Take					(UXIS)	***	\$ 8					SAMPLE TEMP AT COLLECT # OF CONTAINERS Unpreserved	COLLECTED	Расе Р	Page P	Address:	Сопра	Attention:	Section C
Supplicy The	muria	36												H2SO4 HNO3 HC! NaOH Na2S2O3 Methanol Other	Preservatives		Page Project Manager	S.	Company Name:	Attention:	n C seriormanian
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### CHAIN-OF-CUSTODY / Analytical Request Document

		**************************************	ADDITIONAL COMMENTS	Course	CWG-ID.	SC 2000	GWC 1R	ewa-six	OWO-OR	GWA-2	1-8-0	1		SAMPLE ID  One Character per box.  (A.Z. 0-8 f  Sample ids must be unique		sted Due Date	1770)384-6526 Fax	, GA 30114	SS: 1070 Bridge Mill Ave	any: Georgia Power	n A red Cilent information:
SAMPLER N		T SW	NOULTH ALL BALL WATER	WT	<b>&amp;</b> 1	W	WT	WT	WT	w 6/2 1510	WT 3/2 1520	W.T	WT TW	MATRIX CODE (See vehicle Codes to loft)  MATRIX CODE (See vehicle Codes to loft)  MATRIX CODE (See vehicle Codes to loft)  SAMPLE TYPE  MATRIX CODE (See Vehicle Codes to loft)  SAMPLE TYPE  DATE  TIME  DATE			Yates Gypsem Lf	Purchase Order #	Copy To:	Report To: Becky Steever	Section B Required Project Information:
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:	3.00 1738 mi	3/12 520 Kroft	DATE TIME ACCEPTED							0/	Ut			SAMPLE TEMP AT COLLECTION # OF CONTAINERS Unpreserved H2SO4 HNO3 HCI NaOH Na2S2O3 Methanol		Pace Profile #: 10840	Page Project Manager: Kevin N	Address:	Company Name:	Attention:	Section C
DATE Signed: 3/9	Gave Yun	for a communication of the second	TED BY I AFFILIATION DATE	× × ×	×	××××	×	××××	×	x x x	×	× × ×	x x x	Other  Analyses Test Y/N TDS CI, F, 904 App I/I/III/IV Metals RAD 9316/9320	Requested Analysis Filtered (YRI	SCHRITCH SERVICES CONTRACTOR CONT					
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March 28, 2021

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

RE: Project: YATES RADS

Pace Project No.: 92525214

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

• Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com

Kein Slury

1(704)875-9092

**HORIZON** Database Administrator

**Enclosures** 

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



(770)734-4200



### **CERTIFICATIONS**

Project: YATES RADS
Pace Project No.: 92525214

### Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734 Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040 Florida: Cert E871149 SEKS WET

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190

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

Ohio EPA Rad Approval: #41249

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



### **SAMPLE SUMMARY**

Project: YATES RADS
Pace Project No.: 92525214

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525214001	YGWA-5I	Water	03/02/21 14:05	03/02/21 17:30
92525214002	YGWA-5D	Water	03/02/21 14:40	03/02/21 17:30
92525214003	DUP-1	Water	03/02/21 00:00	03/02/21 17:30
92525214004	YGWA-47	Water	03/01/21 12:10	03/02/21 17:30
92525214005	YGWA-14S	Water	03/02/21 11:20	03/02/21 17:30
92525214006	YGWA-30I	Water	03/01/21 16:25	03/02/21 17:30
92525214007	FB-01	Water	03/02/21 11:30	03/02/21 17:30
92525214008	DUP-01	Water	03/02/21 00:00	03/02/21 17:30
92525214009	FB-01	Water	03/02/21 15:20	03/02/21 17:30
92525214010	GWA-2	Water	03/02/21 15:10	03/02/21 17:30
92525214011	YGWA-40	Water	03/04/21 10:10	03/05/21 09:20
92525214012	YGWA-17S	Water	03/03/21 12:20	03/05/21 09:20
92525214013	YGWA-18S	Water	03/03/21 13:50	03/05/21 09:20
92525214014	YGWA-18I	Water	03/03/21 15:00	03/05/21 09:20
92525214015	YGWA-39	Water	03/04/21 10:20	03/05/21 09:20
92525214016	YGWA-1D (030321)	Water	03/03/21 14:25	03/05/21 09:20
92525214017	YGWA-1I (030321)	Water	03/03/21 13:35	03/05/21 09:20
92525214018	YGWA-2I (030321)	Water	03/03/21 11:45	03/05/21 09:20
92525214019	YGWA-3I (030321)	Water	03/03/21 17:00	03/05/21 09:20
92525214020	YGWA-3D (030321)	Water	03/03/21 16:00	03/05/21 09:20
92525214021	EB-02 (03032021)	Water	03/03/21 17:15	03/05/21 09:20
92525214022	YGWA-4I	Water	03/03/21 10:35	03/05/21 09:20
92525214023	YGWA-20S	Water	03/03/21 09:40	03/05/21 09:20
92525214024	YGWA-21I	Water	03/03/21 09:35	03/05/21 09:20



### **SAMPLE ANALYTE COUNT**

Project: YATES RADS
Pace Project No.: 92525214

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92525214001	YGWA-5I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214002	YGWA-5D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214003	DUP-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214004	YGWA-47	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214005	YGWA-14S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214006	YGWA-30I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214007	FB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214008	DUP-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214009	FB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214010	GWA-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214011	YGWA-40	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214012	YGWA-17S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
	YGWA-18S			•	



### **SAMPLE ANALYTE COUNT**

Project: YATES RADS
Pace Project No.: 92525214

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214014	YGWA-18I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214015	YGWA-39	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214016	YGWA-1D (030321)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214017	YGWA-1I (030321)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214018	YGWA-2I (030321)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214019	YGWA-3I (030321)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214020	YGWA-3D (030321)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214021	EB-02 (03032021)	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214022	YGWA-4I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214023	YGWA-20S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525214024	YGWA-21I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg



Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID	Client Sample ID					
Method	Parameters —	Result	Units	Report Limit	Analyzed	Qualifiers
92525214001	YGWA-5I					
EPA 9315	Radium-226	0.114 ± 0.190 (0.428)	pCi/L		03/22/21 08:37	
EPA 9320	Radium-228	C:68% T:NA 0.465 ± 0.327 (0.633) C:78%	pCi/L		03/18/21 12:44	
Total Radium Calculation	Total Radium	T:92% 0.579 ± 0.517 (1.06)	pCi/L		03/26/21 14:34	
92525214002	YGWA-5D					
EPA 9315	Radium-226	1.21 ± 0.344 (0.294) C:69% T:NA	pCi/L		03/22/21 08:37	
EPA 9320	Radium-228	0.457 ± 0.363 (0.727) C:76% T:95%	pCi/L		03/18/21 12:45	
Total Radium Calculation	Total Radium	1.67 ± 0.707 (1.02)	pCi/L		03/26/21 14:34	
92525214003	DUP-1					
EPA 9315	Radium-226	0.838 ± 0.268 (0.250) C:76% T:NA	pCi/L		03/22/21 08:37	
EPA 9320	Radium-228	0.784 ± 0.426 (0.783) C:78% T:87%	pCi/L		03/18/21 12:45	
Total Radium Calculation	Total Radium	1.62 ± 0.694 (1.03)	pCi/L		03/26/21 14:34	
92525214004	YGWA-47					
EPA 9315	Radium-226	0.387 ± 0.184 (0.224)	pCi/L		03/22/21 08:40	
EPA 9320	Radium-228	C:64% T:NA 0.816 ± 0.389 (0.666) C:75%	pCi/L		03/18/21 12:45	
Total Radium Calculation	Total Radium	T:89% 1.20 ± 0.573 (0.890)	pCi/L		03/26/21 14:37	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214005	YGWA-14S					
EPA 9315	Radium-226	0.283 ± 0.267 (0.565)	pCi/L		03/22/21 08:41	
EPA 9320	Radium-228	C:72% T:NA 0.427 ± 0.338 (0.673) C:76%	pCi/L		03/18/21 12:45	
Total Radium Calculation	Total Radium	T:92% 0.710 ± 0.605 (1.24)	pCi/L		03/26/21 14:37	
92525214006	YGWA-30I					
EPA 9315	Radium-226	0.0562 ± 0.172 (0.408) C:79% T:NA	pCi/L		03/22/21 08:41	
EPA 9320	Radium-228	0.356 ± 0.278 (0.545) C:76% T:92%	pCi/L		03/18/21 12:46	
Total Radium Calculation	Total Radium	0.412 ± 0.450 (0.953)	pCi/L		03/26/21 14:37	
92525214007	FB-01					
EPA 9315	Radium-226	0.121 ± 0.131 (0.267) C:78% T:NA	pCi/L		03/22/21 08:41	
EPA 9320	Radium-228	0.512 ± 0.332 (0.620) C:73% T:88%	pCi/L		03/18/21 12:46	
Total Radium Calculation	Total Radium	0.633 ± 0.463 (0.887)	pCi/L		03/26/21 14:37	
92525214008	DUP-01					
EPA 9315	Radium-226	0.118 ± 0.120 (0.237)	pCi/L		03/22/21 08:48	
EPA 9320	Radium-228	C:78% T:NA 0.809 ± 0.394 (0.692) C:79%	pCi/L		03/18/21 12:46	
Total Radium Calculation	Total Radium	T:90% 0.927 ± 0.514 (0.929)	pCi/L		03/26/21 14:37	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214009	FB-01					
EPA 9315	Radium-226	-0.00506 ± 0.0722 (0.204)	pCi/L	(	03/22/21 08:48	
EPA 9320	Radium-228	C:84% T:NA 0.675 ± 0.361 (0.652) C:76%	pCi/L	(	03/18/21 12:46	
Total Radium Calculation	Total Radium	T:96% 0.675 ± 0.433 (0.856)	pCi/L	(	03/26/21 14:37	
92525214010	GWA-2					
EPA 9315	Radium-226	0.170 ± 0.157 (0.313) C:75% T:NA	pCi/L	(	03/22/21 08:47	
EPA 9320	Radium-228	0.778 ± 0.413 (0.738) C:76% T:81%	pCi/L	(	03/18/21 12:46	
Total Radium Calculation	Total Radium	0.948 ± 0.570 (1.05)	pCi/L	(	03/26/21 14:37	
92525214011	YGWA-40					
EPA 9315	Radium-226	0.268 ± 0.187 (0.319) C:74% T:NA	pCi/L	(	03/15/21 09:11	
EPA 9320	Radium-228	0.550 ± 0.416 (0.827) C:81% T:90%	pCi/L	C	03/15/21 16:10	
Total Radium Calculation	Total Radium	0.818 ± 0.603 (1.15)	pCi/L	(	03/22/21 10:37	
92525214012	YGWA-17S					
EPA 9315	Radium-226	0.192 ± 0.156 (0.276) C:74% T:NA	pCi/L	(	03/15/21 09:11	
EPA 9320	Radium-228	0.398 ± 0.319 (0.627) C:80% T:89%	pCi/L	(	03/15/21 16:10	
Total Radium Calculation	Total Radium	0.590 ± 0.475 (0.903)	pCi/L	(	03/22/21 10:37	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214013	YGWA-18S					
EPA 9315	Radium-226	0.141 ± 0.166 (0.344)	pCi/L		03/15/21 09:16	
EPA 9320	Radium-228	C:59% T:NA 0.211 ± 0.322 (0.695) C:73%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	T:89% 0.352 ± 0.488 (1.04)	pCi/L		03/22/21 10:37	
92525214014	YGWA-18I					
EPA 9315	Radium-226	0.381 ± 0.207 (0.351) C:65% T:NA	pCi/L		03/15/21 09:16	
EPA 9320	Radium-228	0.184 ± 0.282 (0.608) C:76% T:92%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.565 ± 0.489 (0.959)	pCi/L		03/22/21 10:37	
92525214015	YGWA-39					
EPA 9315	Radium-226	0.636 ± 0.257 (0.332) C:86% T:NA	pCi/L		03/15/21 09:11	
EPA 9320	Radium-228	-0.00538 ± 0.293 (0.687) C:78% T:93%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.636 ± 0.550 (1.02)	pCi/L		03/22/21 10:37	
92525214016	YGWA-1D (030321)					
EPA 9315	Radium-226	0.265 ± 0.193 (0.356) C:78% T:NA	pCi/L		03/15/21 09:13	
EPA 9320	Radium-228	0.227 ± 0.376 (0.819) C:76% T:90%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.492 ± 0.569 (1.18)	pCi/L		03/22/21 10:37	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID	Client Sample ID	5 "	11.5	D (11 %	A = -1	0 !!!!
Method	Parameters —	Result	Units	Report Limit	Analyzed	Qualifiers
92525214017	YGWA-1I (030321)					
EPA 9315	Radium-226	0.0715 ± 0.137 (0.315)	pCi/L		03/15/21 09:13	
EPA 9320	Radium-228	C:73% T:NA 0.0339 ± 0.361 (0.831) C:764	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	T:84% 0.105 ± 0.498 (1.15)	pCi/L		03/26/21 13:42	
92525214018	YGWA-2I (030321)					
EPA 9315	Radium-226	0.236 ± 0.183 (0.351) C:83% T:NA	pCi/L		03/15/21 09:13	
EPA 9320	Radium-228	0.223 ± 0.344 (0.744) C:72% T:93%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.459 ± 0.527 (1.10)	pCi/L		03/26/21 13:42	
92525214019	YGWA-3I (030321)					
EPA 9315	Radium-226	1.19 ± 0.315 (0.200) C:81% T:NA	pCi/L		03/22/21 09:34	
EPA 9320	Radium-228	0.837 ± 0.390 (0.655) C:82% T:90%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	2.03 ± 0.705 (0.855)	pCi/L		03/26/21 13:42	
92525214020	YGWA-3D (030321)					
EPA 9315	Radium-226	1.88 ± 0.434 (0.259)	pCi/L		03/22/21 08:28	
EPA 9320	Radium-228	C:80% T:NA 1.70 ± 0.544 (0.701) C:74%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	T:90% 3.58 ± 0.978 (0.960)	pCi/L		03/26/21 13:42	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214021	EB-02 (03032021)					
EPA 9315	Radium-226	0.0547 ± 0.0827 (0.178)	pCi/L		03/22/21 08:29	
EPA 9320	Radium-228	C:78% T:NA 0.157 ± 0.333 (0.736) C:76%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	T:95% 0.212 ± 0.416 (0.914)	pCi/L		03/26/21 13:42	
92525214022	YGWA-4I					
EPA 9315	Radium-226	0.783 ± 0.243 (0.164) C:76% T:NA	pCi/L		03/22/21 08:30	
EPA 9320	Radium-228	0.217 ± 0.319 (0.687) C:79% T:90%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	1.000 ± 0.562 (0.851)	pCi/L		03/26/21 13:42	
92525214023	YGWA-20S					
EPA 9315	Radium-226	0.133 ± 0.114 (0.212) C:89% T:NA	pCi/L		03/22/21 08:30	
EPA 9320	Radium-228	-0.163 ± 0.291 (0.711) C:79% T:96%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	0.133 ± 0.405 (0.923)	pCi/L		03/26/21 13:42	
92525214024	YGWA-21I					
EPA 9315	Radium-226	0.861 ± 0.270 (0.318)	pCi/L		03/22/21 08:31	
EPA 9320	Radium-228	C:89% T:NA 0.338 ± 0.394 (0.829) C:72%	pCi/L		03/19/21 15:15	
Total Radium Calculation	Total Radium	T:86% 1.20 ± 0.664 (1.15)	pCi/L		03/26/21 13:56	

### **REPORT OF LABORATORY ANALYSIS**



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-5I PWS:	Lab ID: 9252 Site ID:	<b>5214001</b> Collected: 03/02/21 14:05 Sample Type:	Received:	03/02/21 17:30 N	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.114 ± 0.190 (0.428) C:68% T:NA	pCi/L	03/22/21 08:37	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.465 ± 0.327 (0.633) C:78% T:92%	pCi/L	03/18/21 12:44	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.579 ± 0.517 (1.06)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-5D PWS:	Lab ID: 9252 Site ID:	<b>5214002</b> Collected: 03/02/21 14:40 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	1.21 ± 0.344 (0.294) C:69% T:NA	pCi/L	03/22/21 08:37	7 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.457 ± 0.363 (0.727) C:76% T:95%	pCi/L	03/18/21 12:45	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.67 ± 0.707 (1.02)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: DUP-1 PWS:	Lab ID: 9252 Site ID:	<b>5214003</b> Collected: 03/02/21 00:00 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.838 ± 0.268 (0.250) C:76% T:NA	pCi/L	03/22/21 08:37	7 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.784 ± 0.426 (0.783) C:78% T:87%	pCi/L	03/18/21 12:45	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.62 ± 0.694 (1.03)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-47 PWS:	Lab ID: 9252 Site ID:	<b>5214004</b> Collected: 03/01/21 12:10 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.387 ± 0.184 (0.224) C:64% T:NA	pCi/L	03/22/21 08:40	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.816 ± 0.389 (0.666) C:75% T:89%	pCi/L	03/18/21 12:45	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.20 ± 0.573 (0.890)	pCi/L	03/26/21 14:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-14S PWS:	Lab ID: 9252 Site ID:	5214005 Collected: 03/02/21 11:20 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.283 ± 0.267 (0.565) C:72% T:NA	pCi/L	03/22/21 08:4	1 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.427 ± 0.338 (0.673) C:76% T:92%	pCi/L	03/18/21 12:45	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.710 ± 0.605 (1.24)	pCi/L	03/26/21 14:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-30I PWS:	Lab ID: 9252 Site ID:	<b>5214006</b> Collected: 03/01/21 16:25 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0562 ± 0.172 (0.408) C:79% T:NA	pCi/L	03/22/21 08:4	1 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.356 ± 0.278 (0.545) C:76% T:92%	pCi/L	03/18/21 12:46	6 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.412 ± 0.450 (0.953)	pCi/L	03/26/21 14:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: FB-01 PWS:	<b>Lab ID:</b> 9252521 Site ID:	4007 Collected: 03/02/21 11:30 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
-		1 21	11.29		0404	0 1
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Se	rvices - Greensburg				
Radium-226	EPA 9315	0.121 ± 0.131 (0.267) C:78% T:NA	pCi/L	03/22/21 08:4	1 13982-63-3	
	Pace Analytical Se	rvices - Greensburg				
Radium-228	EPA 9320	0.512 ± 0.332 (0.620) C:73% T:88%	pCi/L	03/18/21 12:46	5 15262-20-1	
	Pace Analytical Se	rvices - Greensburg				
Total Radium	Total Radium Calculation	0.633 ± 0.463 (0.887)	pCi/L	03/26/21 14:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: DUP-01 PWS:	Lab ID: 9252 Site ID:	25214008 Collected: 03/02/21 00:00 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.118 ± 0.120 (0.237) C:78% T:NA	pCi/L	03/22/21 08:48	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.809 ± 0.394 (0.692) C:79% T:90%	pCi/L	03/18/21 12:46	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.927 ± 0.514 (0.929)	pCi/L	03/26/21 14:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: FB-01 PWS:	Lab ID: 9252 Site ID:	<b>5214009</b> Collected: 03/02/21 15:20 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	-0.00506 ± 0.0722 (0.204) C:84% T:NA	pCi/L	03/22/21 08:48	8 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.675 ± 0.361 (0.652) C:76% T:96%	pCi/L	03/18/21 12:46	6 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.675 ± 0.433 (0.856)	pCi/L	03/26/21 14:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: GWA-2 PWS:	Lab ID: 9252 Site ID:	<b>5214010</b> Collected: 03/02/21 15:10 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.170 ± 0.157 (0.313) C:75% T:NA	pCi/L	03/22/21 08:47	7 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.778 ± 0.413 (0.738) C:76% T:81%	pCi/L	03/18/21 12:46	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.948 ± 0.570 (1.05)	pCi/L	03/26/21 14:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-40 PWS:	Lab ID: 9252 Site ID:	25214011 Collected: 03/04/21 10:10 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.268 ± 0.187 (0.319) C:74% T:NA	pCi/L	03/15/21 09:11	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.550 ± 0.416 (0.827) C:81% T:90%	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.818 ± 0.603 (1.15)	pCi/L	03/22/21 10:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-17S PWS:	Lab ID: 9252 Site ID:	5214012 Collected: 03/03/21 12:20 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.192 ± 0.156 (0.276) C:74% T:NA	pCi/L	03/15/21 09:11	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.398 ± 0.319 (0.627) C:80% T:89%	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.590 ± 0.475 (0.903)	pCi/L	03/22/21 10:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-18S PWS:	Lab ID: 9252 Site ID:	<b>P5214013</b> Collected: 03/03/21 13:50 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.141 ± 0.166 (0.344) C:59% T:NA	pCi/L	03/15/21 09:16	6 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.211 ± 0.322 (0.695) C:73% T:89%	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	$0.352 \pm 0.488  (1.04)$	pCi/L	03/22/21 10:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-18I PWS:	Lab ID: 9252 Site ID:	<b>5214014</b> Collected: 03/03/21 15:00 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.381 ± 0.207 (0.351) C:65% T:NA	pCi/L	03/15/21 09:16	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.184 ± 0.282 (0.608) C:76% T:92%	pCi/L	03/15/21 16:10	) 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.565 ± 0.489 (0.959)	pCi/L	03/22/21 10:37	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-39 PWS:	Lab ID: 9252 Site ID:	<b>5214015</b> Collected: 03/04/21 10:20 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg		-		
Radium-226	EPA 9315	0.636 ± 0.257 (0.332) C:86% T:NA	pCi/L	03/15/21 09:1	1 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	-0.00538 ± 0.293 (0.687) C:78% T:93%	pCi/L	03/15/21 16:1	0 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.636 ± 0.550 (1.02)	pCi/L	03/22/21 10:3	7 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

<b>Sample: YGWA-1D (030321)</b> PWS:	Lab ID: 9252 Site ID:	<b>5214016</b> Collected: 03/03/21 14:25 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.265 ± 0.193 (0.356) C:78% T:NA	pCi/L	03/15/21 09:13	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.227 ± 0.376 (0.819) C:76% T:90%	pCi/L	03/15/21 16:10	) 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.492 ± 0.569 (1.18)	pCi/L	03/22/21 10:37	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

<b>Sample: YGWA-1I (030321)</b> PWS:	Lab ID: 9252 Site ID:	<b>5214017</b> Collected: 03/03/21 13:35 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.0715 ± 0.137 (0.315) C:73% T:NA	pCi/L	03/15/21 09:13	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.0339 ± 0.361 (0.831) C:76% T:84%	pCi/L	03/15/21 16:10	) 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.105 ± 0.498 (1.15)	pCi/L	03/26/21 13:42	2 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

<b>Sample: YGWA-2I (030321)</b> PWS:	Lab ID: 9252 Site ID:	<b>5214018</b> Collected: 03/03/21 11:45 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.236 ± 0.183 (0.351) C:83% T:NA	pCi/L	03/15/21 09:13	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.223 ± 0.344 (0.744) C:72% T:93%	pCi/L	03/15/21 16:10	) 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.459 ± 0.527 (1.10)	pCi/L	03/26/21 13:42	2 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

<b>Sample: YGWA-3I (030321)</b> PWS:	Lab ID: 9252 Site ID:	<b>5214019</b> Collected: 03/03/21 17:00 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	1.19 ± 0.315 (0.200) C:81% T:NA	pCi/L	03/22/21 09:34	1 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.837 ± 0.390 (0.655) C:82% T:90%	pCi/L	03/19/21 15:13	3 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	2.03 ± 0.705 (0.855)	pCi/L	03/26/21 13:42	2 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

<b>Sample: YGWA-3D (030321)</b> PWS:	Lab ID: 9252 Site ID:	<b>5214020</b> Collected: 03/03/21 16:00 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	1.88 ± 0.434 (0.259) C:80% T:NA	pCi/L	03/22/21 08:28	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	1.70 ± 0.544 (0.701) C:74% T:90%	pCi/L	03/19/21 15:13	3 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	3.58 ± 0.978 (0.960)	pCi/L	03/26/21 13:42	2 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

<b>Sample: EB-02 (03032021)</b> PWS:	<b>Lab ID: 92525</b> Site ID:	<b>214021</b> Collected: 03/03/21 17:15 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.0547 ± 0.0827 (0.178) C:78% T:NA	pCi/L	03/22/21 08:29	9 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.157 ± 0.333 (0.736) C:76% T:95%	pCi/L	03/19/21 15:13	3 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	0.212 ± 0.416 (0.914)	pCi/L	03/26/21 13:42	2 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-4I PWS:	Lab ID: 9252 Site ID:	5214022 Collected: 03/03/21 10:35 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.783 ± 0.243 (0.164) C:76% T:NA	pCi/L	03/22/21 08:30	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.217 ± 0.319 (0.687) C:79% T:90%	pCi/L	03/19/21 15:13	3 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.000 ± 0.562 (0.851)	pCi/L	03/26/21 13:42	2 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-20S PWS:	Lab ID: 9252 Site ID:	<b>5214023</b> Collected: 03/03/21 09:40 Sample Type:	Received:	03/05/21 09:20 N	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.133 ± 0.114 (0.212) C:89% T:NA	pCi/L	03/22/21 08:30	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	-0.163 ± 0.291 (0.711) C:79% T:96%	pCi/L	03/19/21 15:13	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.133 ± 0.405 (0.923)	pCi/L	03/26/21 13:42	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-21I PWS:	Lab ID: 9252 Site ID:	<b>5214024</b> Collected: 03/03/21 09:35 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.861 ± 0.270 (0.318) C:89% T:NA	pCi/L	03/22/21 08:31	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.338 ± 0.394 (0.829) C:72% T:86%	pCi/L	03/19/21 15:15	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.20 ± 0.664 (1.15)	pCi/L	03/26/21 13:56	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437643 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525214001, 92525214002, 92525214003, 92525214004, 92525214005, 92525214006, 92525214007,

92525214008, 92525214009, 92525214010

METHOD BLANK: 2112540 Matrix: Water

Associated Lab Samples: 92525214001, 92525214002, 92525214003, 92525214004, 92525214005, 92525214006, 92525214007,

92525214008, 92525214009, 92525214010

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.387 ± 0.316 (0.633) C:83% T:90%
 pCi/L
 03/18/21 12:44

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.



Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437642 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525214019, 92525214020, 92525214021, 92525214022, 92525214023, 92525214024

METHOD BLANK: 2112539 Matrix: Water

Associated Lab Samples: 92525214019, 92525214020, 92525214021, 92525214022, 92525214023, 92525214024

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.219 ± 0.271 (0.570) C:75% T:92%
 pCi/L
 03/19/21 15:12

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.



Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437601 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525214019, 92525214020, 92525214021, 92525214022, 92525214023, 92525214024

METHOD BLANK: 2112394 Matrix: Water

Associated Lab Samples: 92525214019, 92525214020, 92525214021, 92525214022, 92525214023, 92525214024

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.0425 ± 0.110 (0.264) C:81% T:NA
 pCi/L
 03/22/21 08:26

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.



Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437599 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525214011, 92525214012, 92525214013, 92525214014, 92525214015, 92525214016, 92525214017,

92525214018

METHOD BLANK: 2112389 Matrix: Water

Associated Lab Samples: 92525214011, 92525214012, 92525214013, 92525214014, 92525214015, 92525214016, 92525214017,

92525214018

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 -0.00470 ± 0.0712 (0.214) C:85% T:NA
 pCi/L
 03/15/21 09:18

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.



Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437641 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525214011, 92525214012, 92525214013, 92525214014, 92525214015, 92525214016, 92525214017,

92525214018

METHOD BLANK: 2112538 Matrix: Water

Associated Lab Samples: 92525214011, 92525214012, 92525214013, 92525214014, 92525214015, 92525214016, 92525214017,

92525214018

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.312 ± 0.330 (0.686) C:82% T:90%
 pCi/L
 03/15/21 16:07

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.



Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437602 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525214001, 92525214002, 92525214003, 92525214004, 92525214005, 92525214006, 92525214007,

92525214008, 92525214009, 92525214010

METHOD BLANK: 2112395 Matrix: Water

Associated Lab Samples: 92525214001, 92525214002, 92525214003, 92525214004, 92525214005, 92525214006, 92525214007,

92525214008, 92525214009, 92525214010

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.0514 ± 0.104 (0.242) C:82% T:NA
 pCi/L
 03/22/21 08:37

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.



#### **QUALIFIERS**

Project: YATES RADS
Pace Project No.: 92525214

#### **DEFINITIONS**

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Act - Activity

Date: 03/28/2021 10:46 PM

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.



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES RADS
Pace Project No.: 92525214

Date: 03/28/2021 10:46 PM

ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2525214001	YGWA-5I	EPA 9315	437602	_	
2525214002	YGWA-5D	EPA 9315	437602		
2525214003	DUP-1	EPA 9315	437602		
2525214004	YGWA-47	EPA 9315	437602		
2525214005	YGWA-14S	EPA 9315	437602		
525214006	YGWA-30I	EPA 9315	437602		
525214007	FB-01	EPA 9315	437602		
2525214008	DUP-01	EPA 9315	437602		
525214009	FB-01	EPA 9315	437602		
2525214010	GWA-2	EPA 9315	437602		
2525214011	YGWA-40	EPA 9315	437599		
2525214012	YGWA-17S	EPA 9315	437599		
525214013	YGWA-18S	EPA 9315	437599		
525214014	YGWA-18I	EPA 9315	437599		
525214015	YGWA-39	EPA 9315	437599		
525214016	YGWA-1D (030321)	EPA 9315	437599		
525214017	YGWA-1I (030321)	EPA 9315	437599		
2525214018	YGWA-2I (030321)	EPA 9315	437599		
2525214019	YGWA-3I (030321)	EPA 9315	437601		
525214020	YGWA-3D (030321)	EPA 9315	437601		
525214021	EB-02 (03032021)	EPA 9315	437601		
525214022	YGWA-4I	EPA 9315	437601		
525214023	YGWA-20S	EPA 9315	437601		
525214024	YGWA-21I	EPA 9315	437601		
2525214001	YGWA-5I	EPA 9320	437643		
525214002	YGWA-5D	EPA 9320	437643		
525214003	DUP-1	EPA 9320	437643		
525214004	YGWA-47	EPA 9320	437643		
525214005	YGWA-14S	EPA 9320	437643		
525214006	YGWA-30I	EPA 9320	437643		
525214007	FB-01	EPA 9320	437643		
525214008	DUP-01	EPA 9320	437643		
525214009	FB-01	EPA 9320	437643		
2525214010	GWA-2	EPA 9320	437643		
525214011	YGWA-40	EPA 9320	437641		
2525214012	YGWA-17S	EPA 9320	437641		
525214013	YGWA-18S	EPA 9320	437641		
2525214014	YGWA-18I	EPA 9320	437641		
525214015	YGWA-39	EPA 9320	437641		
525214016	YGWA-1D (030321)	EPA 9320	437641		
525214017	YGWA-1I (030321)	EPA 9320	437641		
2525214018	YGWA-2I (030321)	EPA 9320	437641		
2525214019	YGWA-3I (030321)	EPA 9320	437642		
2525214020	YGWA-3D (030321)	EPA 9320	437642		
2525214021	EB-02 (03032021)	EPA 9320	437642		
2525214022	YGWA-4I	EPA 9320	437642		



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES RADS
Pace Project No.: 92525214

Date: 03/28/2021 10:46 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525214023	YGWA-20S	EPA 9320	437642		
92525214024	YGWA-21I	EPA 9320	437642		
92525214001	YGWA-5I	Total Radium Calculation	440666		
92525214002	YGWA-5D	Total Radium Calculation	440666		
92525214003	DUP-1	Total Radium Calculation	440666		
92525214004	YGWA-47	Total Radium Calculation	440668		
92525214005	YGWA-14S	Total Radium Calculation	440668		
92525214006	YGWA-30I	Total Radium Calculation	440668		
92525214007	FB-01	Total Radium Calculation	440668		
92525214008	DUP-01	Total Radium Calculation	440668		
92525214009	FB-01	Total Radium Calculation	440668		
92525214010	GWA-2	Total Radium Calculation	440668		
92525214011	YGWA-40	Total Radium Calculation	439752		
92525214012	YGWA-17S	Total Radium Calculation	439752		
92525214013	YGWA-18S	Total Radium Calculation	439752		
92525214014	YGWA-18I	Total Radium Calculation	439752		
92525214015	YGWA-39	Total Radium Calculation	439752		
92525214016	YGWA-1D (030321)	Total Radium Calculation	439752		
92525214017	YGWA-1I (030321)	Total Radium Calculation	440644		
92525214018	YGWA-2I (030321)	Total Radium Calculation	440644		
92525214019	YGWA-3I (030321)	Total Radium Calculation	440644		
92525214020	YGWA-3D (030321)	Total Radium Calculation	440644		
92525214021	EB-02 (03032021)	Total Radium Calculation	440644		
92525214022	YGWA-4I	Total Radium Calculation	440644		
92525214023	YGWA-20S	Total Radium Calculation	440644		
92525214024	YGWA-21I	Total Radium Calculation	440647		

# Document Name: Sample Condition Upon Receipt(SCUR)

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

Document Revised: October 28, 2020

Page 1 of 2 Issuing Authority: Pace Carolinas Quality Office

Asheville Eden Greenwood	Huntersy	ile 🗌	Raleig	gh []	Mechanicsville Atlanta Kernersville
Courier:  Commercial  Custody Seal Present?  Customy Material:  Client Name:  Cernix per  Cernix per  Courier:  Pace  Customy Seal Present?	USPS Other	: Yes  None		Project #	Biological Tiesue Frozen?
Thermometer:    IR Gun ID: 230		)	-	Te	Mone  Imp should be above freezing to 6°C  ☐ Samples out of temp criteria. Samples on ice, cooling process has begun  Id samples originate from a foreign source (internationally, cluding 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	ØNo	□N/A	3.	
Rush Turn Around Time Requested?	□Yes	DNo.	□N/A	4.	17. 20.00 Aug 100 Aug
Sufficient Volume?	₽\ves	□No	□N/A	5.	
Correct Containers Used? -Pace Containers Used?	Yes Yes	□No □No	□N/A □N/A	6.	
Containers Intact?	Tyes	□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:	Τ	_			
Headspace in VOA Vials (>5-6mm)?	Yes	□No	<b>⊠</b> N/A	10.	A
Trip Blank Present?	□Yes	□No	□N/A	11.	
Trip Blank Custody Seals Present?	□Yes	□No	Dyrk		
COMMENTS/SAMPLE DISCREPANCY					Field Data Required? ☐Yes ☐No
CLIENT NOTIFICATION/RESOLUTION				Lot II	D of split containers:
Person contacted:					
Project Manager SCURF Review:					Date:
Project Manager SRF Review:					Date:

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MZSZAZB	Residual Chlorine (Y/N)			CI, F, SO4 App III/IV Metals RAD 9315/9320	Analyses Test	Na2S2O3 Methanol Other	HC! NaOH	H2SO4 HNO3	# OF CONTAINERS Unpreserved	SAMPLE TEMP AT COLLE	ENO	START	2	MATRIX CODE (see yall SAMPLE TYPE (G=GRA	2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Producti SeeSpoted OED Wheel Aw 0 Other 0	SAMPLE ID One Character per box. (A-Z, 0-91, ) Sample ids must be unique	SAU One Ch ( Sample
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tion and the	GA GA				CENTER		5	offie #:	Pace Pr				11	11				
		An object to the object of the	8	38.00TL	n.hemng@pacelabs.com	kevin.hem	ger:	Pace Project Manager:	Pace Pa				Yates AMA		Project #:			uested Due Date:
c	Regulatory Agen		(5)					Ole (	Address:					rder#:	Purchase Order #:		SOC Far	1770777
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April 01, 2021

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

RE: Project: YATES RADS

Pace Project No.: 92525245

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

• Pace Analytical Services - Greensburg

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

Sincerely,

Tyler Forney for Kevin Herring

tegh Jugar

kevin.herring@pacelabs.com

1(704)875-9092

**HORIZON** Database Administrator

Enclosures

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



(770)734-4200



#### **CERTIFICATIONS**

Project: YATES RADS
Pace Project No.: 92525245

#### 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 Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457

North Carolina Certification #: 42706

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



# **SAMPLE SUMMARY**

Project: YATES RADS
Pace Project No.: 92525245

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525245001	YGWC-26S	Water	03/02/21 14:00	03/02/21 17:30
92525245002	YGWC-28I	Water	03/03/21 13:40	03/05/21 09:20
92525245003	YGWC-29I	Water	03/03/21 10:45	03/05/21 09:20
92525245004	EB-01	Water	03/03/21 16:25	03/05/21 09:20
92525245005	DUP-02	Water	03/03/21 00:00	03/05/21 09:20
92525245006	YGWC-26I	Water	03/03/21 09:15	03/05/21 09:20
92525245007	YGWC-27S	Water	03/03/21 14:40	03/05/21 09:20
92525245008	YGWC-27I	Water	03/03/21 15:40	03/05/21 09:20
92525245009	YGWC-28S	Water	03/03/21 11:55	03/05/21 09:20
92525237007	EB-01	Water	03/03/21 10:20	03/05/21 09:20



# **SAMPLE ANALYTE COUNT**

Project: YATES RADS
Pace Project No.: 92525245

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92525245001	YGWC-26S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525245002	YGWC-28I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525245003	YGWC-29I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525245004	EB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525245005	DUP-02	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525245006	YGWC-26I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525245007	YGWC-27S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525245008	YGWC-27I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525245009	YGWC-28S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2525237007	EB-01	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg



# **SUMMARY OF DETECTION**

Project: YATES RADS
Pace Project No.: 92525245

Lab Sample ID	Client Sample ID					
Method	Parameters —	Result	Units	Report Limit	Analyzed	Qualifiers
92525245001	YGWC-26S					
EPA 9315	Radium-226	0.174 ± 0.161 (0.324)	pCi/L		03/22/21 08:47	
EPA 9320	Radium-228	C:79% T:NA 0.220 ± 0.328 (0.707) C:76%	pCi/L		03/18/21 16:20	
Total Radium Calculation	Total Radium	T:84% 0.394 ± 0.489 (1.03)	pCi/L		03/26/21 14:37	
92525245002	YGWC-28I					
EPA 9315	Radium-226	0.185 ± 0.134 (0.232) C:79% T:NA	pCi/L		03/22/21 08:31	
EPA 9320	Radium-228	0.0761 ± 0.370 (0.842) C:77% T:84%	pCi/L		03/19/21 15:16	
Total Radium Calculation	Total Radium	0.261 ± 0.504 (1.07)	pCi/L		03/26/21 14:34	
92525245003	YGWC-29I					
EPA 9315	Radium-226	0.706 ± 0.253 (0.319) C:75% T:NA	pCi/L		03/22/21 08:32	
EPA 9320	Radium-228	0.249 ± 0.300 (0.631) C:78% T:90%	pCi/L		03/19/21 15:16	
Total Radium Calculation	Total Radium	0.955 ± 0.553 (0.950)	pCi/L		03/26/21 14:34	
92525245004	EB-01					
EPA 9315	Radium-226	0.235 ± 0.154 (0.266)	pCi/L		03/22/21 08:32	
EPA 9320	Radium-228	C:81% T:NA 0.278 ± 0.304 (0.631) C:81%	pCi/L		03/19/21 15:16	
Total Radium Calculation	Total Radium	T:86% 0.513 ± 0.458 (0.897)	pCi/L		03/26/21 14:34	

# **REPORT OF LABORATORY ANALYSIS**

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# **SUMMARY OF DETECTION**

Project: YATES RADS
Pace Project No.: 92525245

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525245005	DUP-02					
EPA 9315	Radium-226	0.132 ± 0.133 (0.268)	pCi/L		03/22/21 08:32	
EPA 9320	Radium-228	C:81% T:NA 0.222 ± 0.291 (0.619) C:80%	pCi/L		03/19/21 15:16	
Total Radium Calculation	Total Radium	T:87% 0.354 ± 0.424 (0.887)	pCi/L		03/26/21 14:34	
92525245006	YGWC-26I					
EPA 9315	Radium-226	0.247 ± 0.138 (0.196) C:85% T:NA	pCi/L		03/22/21 08:35	
EPA 9320	Radium-228	0.172 ± 0.331 (0.728) C:79% T:83%	pCi/L		03/19/21 15:16	
Total Radium Calculation	Total Radium	0.419 ± 0.469 (0.924)	pCi/L		03/26/21 14:34	
92525245007	YGWC-27S					
EPA 9315	Radium-226	0.106 ± 0.158 (0.352) C:75% T:NA	pCi/L		03/22/21 08:35	
EPA 9320	Radium-228	0.221 ± 0.341 (0.738) C:81% T:91%	pCi/L		03/19/21 15:16	
Total Radium Calculation	Total Radium	0.327 ± 0.499 (1.09)	pCi/L		03/26/21 14:34	
92525245008	YGWC-27I					
EPA 9315	Radium-226	1.24 ± 0.329 (0.257)	pCi/L		03/22/21 08:35	
EPA 9320	Radium-228	C:81% T:NA 0.147 ± 0.332 (0.737) C:80% T:89%	pCi/L		03/19/21 15:16	
Total Radium Calculation	Total Radium	1:89% 1.39 ± 0.661 (0.994)	pCi/L		03/26/21 14:34	

# **REPORT OF LABORATORY ANALYSIS**

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# **SUMMARY OF DETECTION**

Project: YATES RADS
Pace Project No.: 92525245

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525245009	YGWC-28S					
EPA 9315	Radium-226	0.474 ± 0.200 (0.258) C:76% T:NA	pCi/L		03/22/21 08:35	
EPA 9320	Radium-228	0.561 ± 0.364 (0.687) C:80% T:87%	pCi/L		03/19/21 15:16	
Total Radium Calculation	Total Radium	1.04 ± 0.564 (0.945)	pCi/L		03/26/21 14:34	
92525237007	EB-01					
EPA 9315	Radium-226	0.246 ± 0.217 (0.430) C:89% T:NA	pCi/L		03/16/21 09:12	
EPA 9320	Radium-228	-0.235 ± 0.356 (0.889) C:63% T:86%	pCi/L		03/19/21 15:12	
Total Radium Calculation	Total Radium	0.246 ± 0.573 (1.32)	pCi/L		03/27/21 10:18	



Project: YATES RADS
Pace Project No.: 92525245

Sample: YGWC-26S PWS:	<b>Lab ID: 9252</b> Site ID:	5245001 Collected: 03/02/21 14:00 Sample Type:	Received:	03/02/21 17:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.174 ± 0.161 (0.324) C:79% T:NA	pCi/L	03/22/21 08:47	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.220 ± 0.328 (0.707) C:76% T:84%	pCi/L	03/18/21 16:20	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	$0.394 \pm 0.489  (1.03)$	pCi/L	03/26/21 14:37	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

Sample: YGWC-28I PWS:	Lab ID: 9252 Site ID:	<b>5245002</b> Collected: 03/03/21 13:40 Sample Type:	Received:	03/05/21 09:20 N	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.185 ± 0.134 (0.232) C:79% T:NA	pCi/L	03/22/21 08:31	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.0761 ± 0.370 (0.842) C:77% T:84%	pCi/L	03/19/21 15:16	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.261 ± 0.504 (1.07)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

Sample: YGWC-29I PWS:	Lab ID: 9252 Site ID:	<b>5245003</b> Collected: 03/03/21 10:45 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg			-,	
Radium-226	EPA 9315	0.706 ± 0.253 (0.319) C:75% T:NA	pCi/L	03/22/21 08:32	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.249 ± 0.300 (0.631) C:78% T:90%	pCi/L	03/19/21 15:16	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.955 ± 0.553 (0.950)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

Sample: EB-01 PWS:	<b>Lab ID: 92525</b> Site ID:	<b>Collected:</b> 03/03/21 16:25 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.235 ± 0.154 (0.266) C:81% T:NA	pCi/L	03/22/21 08:32	2 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.278 ± 0.304 (0.631) C:81% T:86%	pCi/L	03/19/21 15:16	5 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	0.513 ± 0.458 (0.897)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

Sample: DUP-02 PWS:	Lab ID: 9252 Site ID:	<b>5245005</b> Collected: 03/03/21 00:00 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.132 ± 0.133 (0.268) C:81% T:NA	pCi/L	03/22/21 08:32	2 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.222 ± 0.291 (0.619) C:80% T:87%	pCi/L	03/19/21 15:16	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.354 ± 0.424 (0.887)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

Sample: YGWC-26l PWS:	Lab ID: 9252 Site ID:	<b>5245006</b> Collected: 03/03/21 09:15 Sample Type:	Received:	03/05/21 09:20 M	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.247 ± 0.138 (0.196) C:85% T:NA	pCi/L	03/22/21 08:35	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.172 ± 0.331 (0.728) C:79% T:83%	pCi/L	03/19/21 15:16	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.419 ± 0.469 (0.924)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

Sample: YGWC-27S PWS:	Lab ID: 9252 Site ID:	<b>5245007</b> Collected: 03/03/21 14:40 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.106 ± 0.158 (0.352) C:75% T:NA	pCi/L	03/22/21 08:35	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.221 ± 0.341 (0.738) C:81% T:91%	pCi/L	03/19/21 15:16	3 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.327 ± 0.499 (1.09)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

Sample: YGWC-27I PWS:	Lab ID: 9252 Site ID:	25245008 Collected: 03/03/21 15:40 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	1.24 ± 0.329 (0.257) C:81% T:NA	pCi/L	03/22/21 08:35	5 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.147 ± 0.332 (0.737) C:80% T:89%	pCi/L	03/19/21 15:16	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.39 ± 0.661 (0.994)	pCi/L	03/26/21 14:34	7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

Sample: YGWC-28S PWS:	Lab ID: 92529 Site ID:	5245009 Collected: 03/03/21 11:55 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 9315	0.474 ± 0.200 (0.258) C:76% T:NA	pCi/L	03/22/21 08:3	5 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	0.561 ± 0.364 (0.687) C:80% T:87%	pCi/L	03/19/21 15:16	6 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.04 ± 0.564 (0.945)	pCi/L	03/26/21 14:34	4 7440-14-4	



Project: YATES RADS
Pace Project No.: 92525245

<b>Sample: EB-01</b> PWS:	<b>Lab ID: 92525</b> Site ID:	<b>237007</b> Collected: 03/03/21 10:20 Sample Type:	Received:	03/05/21 09:20	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.246 ± 0.217 (0.430) C:89% T:NA	pCi/L	03/16/21 09:12	2 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	-0.235 ± 0.356 (0.889) C:63% T:86%	pCi/L	03/19/21 15:12	2 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	0.246 ± 0.573 (1.32)	pCi/L	03/27/21 10:18	3 7440-14-4	



Project: YATES RADS 92525245

Pace Project No.:

QC Batch: 437953 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

> Pace Analytical Services - Greensburg Laboratory:

Associated Lab Samples: 92525237007

METHOD BLANK: 2114136 Matrix: Water

Associated Lab Samples: 92525237007

Act ± Unc (MDC) Carr Trac Units Analyzed Qualifiers Parameter Radium-228 0.856 ± 0.495 (0.916) C:71% T:73% pCi/L 03/19/21 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.



Project: YATES RADS Pace Project No.: 92525245

QC Batch:

QC Batch Method:

437937

EPA 9315

Analysis Method:

EPA 9315

Analysis Description:

9315 Total Radium

Laboratory:

Pace Analytical Services - Greensburg

Associated Lab Samples: 92525237007

METHOD BLANK: 2114109

Matrix: Water

Associated Lab Samples: 92525237007

Parameter

Act ± Unc (MDC) Carr Trac

Units

Analyzed

Qualifiers

Radium-226

0.0804 ± 0.198 (0.468) C:67% T:NA

pCi/L

03/16/21 08:04

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.



Project: YATES RADS Pace Project No.: 92525245

QC Batch:

QC Batch Method:

437643

EPA 9320

Analysis Method: Analysis Description:

Laboratory:

EPA 9320

9320 Radium 228

Pace Analytical Services - Greensburg

Associated Lab Samples: 92525245001

METHOD BLANK: 2112540

Matrix: Water

Associated Lab Samples: 92525245001

Parameter

Act ± Unc (MDC) Carr Trac

Units

Analyzed 03/18/21 12:44 Qualifiers

Radium-228

0.387 ± 0.316 (0.633) C:83% T:90% pCi/L

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.



Project: YATES RADS
Pace Project No.: 92525245

QC Batch: 437642 Analysis Method: EPA 9320

QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525245002, 92525245003, 92525245004, 92525245005, 92525245006, 92525245007, 92525245008,

92525245009

METHOD BLANK: 2112539 Matrix: Water

Associated Lab Samples: 92525245002, 92525245003, 92525245004, 92525245005, 92525245006, 92525245007, 92525245008,

92525245009

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.219 ± 0.271 (0.570) C:75% T:92%
 pCi/L
 03/19/21 15:12

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.



Project: YATES RADS
Pace Project No.: 92525245

QC Batch: 437601 Analysis Method: EPA 9315

QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525245002, 92525245003, 92525245004, 92525245005, 92525245006, 92525245007, 92525245008,

92525245009

METHOD BLANK: 2112394 Matrix: Water

Associated Lab Samples: 92525245002, 92525245003, 92525245004, 92525245005, 92525245006, 92525245007, 92525245008,

92525245009

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.0425 ± 0.110 (0.264) C:81% T:NA
 pCi/L
 03/22/21 08:26

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.



Project: YATES RADS Pace Project No.: 92525245

QC Batch:

437602 QC Batch Method: EPA 9315

Analysis Method:

EPA 9315 9315 Total Radium

Analysis Description: Laboratory:

Pace Analytical Services - Greensburg

Associated Lab Samples: 92525245001

METHOD BLANK: 2112395

Matrix: Water

Associated Lab Samples: 92525245001

Parameter

Act ± Unc (MDC) Carr Trac

Units

Analyzed

Qualifiers

Radium-226

0.0514 ± 0.104 (0.242) C:82% T:NA

pCi/L

03/22/21 08:37

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.



### **QUALIFIERS**

Project: YATES RADS
Pace Project No.: 92525245

### **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

Date: 04/01/2021 05:13 PM

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.



### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: YATES RADS
Pace Project No.: 92525245

Date: 04/01/2021 05:13 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525245001	YGWC-26S	EPA 9315	437602		
92525237007	EB-01	EPA 9315	437937		
92525245002	YGWC-28I	EPA 9315	437601		
92525245003	YGWC-29I	EPA 9315	437601		
92525245004	EB-01	EPA 9315	437601		
92525245005	DUP-02	EPA 9315	437601		
92525245006	YGWC-26I	EPA 9315	437601		
92525245007	YGWC-27S	EPA 9315	437601		
92525245008	YGWC-27I	EPA 9315	437601		
92525245009	YGWC-28S	EPA 9315	437601		
92525245001	YGWC-26S	EPA 9320	437643		
92525237007	EB-01	EPA 9320	437953		
92525245002	YGWC-28I	EPA 9320	437642		
92525245003	YGWC-29I	EPA 9320	437642		
92525245004	EB-01	EPA 9320	437642		
92525245005	DUP-02	EPA 9320	437642		
92525245006	YGWC-26I	EPA 9320	437642		
92525245007	YGWC-27S	EPA 9320	437642		
92525245008	YGWC-27I	EPA 9320	437642		
92525245009	YGWC-28S	EPA 9320	437642		
92525245001	YGWC-26S	Total Radium Calculation	440668		
92525237007	EB-01	Total Radium Calculation	440752		
92525245002	YGWC-28I	Total Radium Calculation	440666		
92525245003	YGWC-29I	Total Radium Calculation	440666		
92525245004	EB-01	Total Radium Calculation	440666		
92525245005	DUP-02	Total Radium Calculation	440666		
92525245006	YGWC-26I	Total Radium Calculation	440666		
92525245007	YGWC-27S	Total Radium Calculation	440666		
92525245008	YGWC-27I	Total Radium Calculation	440666		
92525245009	YGWC-28S	Total Radium Calculation	440666		

Pace Analytical*	Sample Condition Upo Document		Page 1 of 2
	F-CAR-CS-033	-Rev.07	Pace Carolinas Quality Office
Laboratory receiving samples: Asheville Eden Greenwood	Huntersville	Raleigh M	Mechanicsville Atlanta Kernersville
Sample Condition Client Name: Upon Receipt  Georgia	porcr	Project #:	WO#: 92525245
Courier: Fed Ex U	PS USPS Other:	Client	92525245
Custody Seal Present? Yes No s	Seals Intact? . Yes	⊠No	Date/Initials Person Examining Contents: 14 T 3/3/2 (
Thermometer:  IR Gun ID: 230  Correction F	Type of ice:	<i></i>	Biological Tasue Frozen?  Yes No N/A  None
Cooler Temp: Add/Subtra  Cooler Temp Corrected (°C):   USDA Regulated Soil ( \sum N/A, water sample)	. D		mp should be above freezing to 6°C  Samples out of temp criteria. Samples on ice, cooling process has begun
Did samples originate in a quarantine zone within the Yes No	United States: CA, NY, or SC	(check maps)? Did	samples originate from a foreign source (internationally, luding Hawaii and Puerto Rico)? Yes
Chain of Custody Present?	Yes No	□N/A 1.	Comments/Discrepancy:
Samples Arrived within Hold Time?	ØYes □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?  Correct Containers Used?	PYes □No	□N/A 5.	
-Pace Containers Used?	Yes No	□N/A 6. □N/A	
Containers Intact?	√ Yes □No	□N/A 7.	
Dissolved analysis: Samples Field Filtered?	□Yes □No	□N/A 8.	
Sample Labels Match COC?	□res □no	□N/A 9.	
-Includes Date/Time/ID/Analysis Matrix:	w T		
Headspace in VOA Vials (>5-6mm)?  Trip Blank Present?	Yes No	□N/A 10.	19
Trip Blank Custody Seals Present?	Yes	□N/A 11.	
COMMENTS/SAMPLE DISCREPANCY			Field Data Required? Yes No
CLIENT NOTIFICATION/RESOLUTION		Lot ID	of split containers:
Person contacted:		Date/Time:	
Project Manager SCURF Review:		The state of the s	Date:
Project Manager SRF Review:			Date:

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Ra-226	₹	3/10/2021	59153
Test	Analyst	Date:	<b>Norklist</b> :

Pace Analytical"

Š Matrix

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MB Sample ID	2112394
MB concentration:	0.043
M/B Counting Uncertainty:	0.110
MB MDC:	0.264
MB Numerical Performance Indicator:	0.76
MB Status vs Numerical Indicator:	A/A
MB Status vs. MDC:	Pass

	Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
	Sample Collection Date:		
	Sample I.D.		
	Sample MS I.D.		
	Sample MSD 1.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. (pCt/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:		

LCSD59153

Matrix Spike/Matrix Spike Duplicate Sample Assessment			Duplicate Sample Assessment
MS/MSD Lower % Recovery L		75%	Lower % Recovery Limits:
MS/MSD Upper % Recovery L		125%	Upper % Recovery Limits:
MSD Status vs Reco		Pass	Status vs Recovery:
MS Status vs Reco		ΑN	Status vs Numerical Indicator:
MSD Status vs Numerical Indic		106.78%	Percent Recovery:
MS Status vs Numerical Indic		1.21	Numerical Performance Indicator:
MSD Percent Reco		0.518	LCS/LCSD Counting Uncertainty (pCi/L, g, F):
MS Percent Reco		5.078	Result (pCi/L, g, F):
MSD Numerical Performance Indic		0.057	Uncertainty (Calculated):
MS Numerical Performance Indic		4.756	Target Conc. (pCi/L, g, F):
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L,		0.505	Aliquot Volume (L, g, F):
Sample Matrix Spike Duplicate Re		0.10	Volume Used (mL):
Matrix Spike Result Counting Uncertainty (pCi/L,		24.039	Decay Corrected Spike Concentration (pCi/mL):
Sample Matrix Spike Re	-	19-033	Spike 1.D.:
Sample Resutt Counting Uncertainty (pCi/L,		3/22/2021	Count Date:

Laboratory Control Sample Assessment

Enter Duplicate

sample IDs if

92525363011DUP 92525363011

Sample I.D.:

Duplicate Sample I.D.

other than LCS/LCSD in the space below.

0.103 0.137 0.053 0.101

Sample Result (DCIVL, g, F):
Sample Result Counting Uncertainty (pCiVL, g, F):
Sample Duplicate Result (pCIVL, g, F):
Sample Duplicate Result Counting Uncertainty (pCIVL, g, F):
Are sample and/or duplicate results below RL?

See Below## 0.675 64.02%

Duplicate Numerical Performance Indicator.

Duplicate RPD:

N/A Fail\*\*\*

Duplicate Status vs Numerical Indicator: Duplicate Status vs RPD: % RPD Limit.

Sample LD. Sample MS LD. Sample MS LD. Sample Matrix Spike Result Matrix Spike Result Counting Uncertainty (DCIL. 9. F). Sample Matrix Spike Duplicate Result Matrix Spike Duplicate Result Outling Uncertainty (DCIL. 9. F).
Sample LD. Sample MS LD. Sample MSD LD. Sample Marix Spike Result: atrix Spike Result Counting Uncertainty (pCift_g F): Sample Matrix Spike Duplicate Result: s Duplicate Result Counting Uncertainty (pCift_g F):
Sample LD. Sample MS LD. Sample MSD LD. Sample Matrix Spike Result: atrix Spike Result Counting Uncertainty (pCil/L. g. F): Sample Matrix Spike Duplicate Result:
Sample I.D. Sample MS I.D. Sample MSD I.D. Sample MSD I.D.
Sample LD. Sample MS LD. Sample MSD LD.
Sample I.D. Sample MS I.D.
Sample I.D.

12/22/2men spector

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

Comments:

Watch must be ce prepped due to unacceptable precision: N/A VAN 3/22/2

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1 of 1

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	<b>←</b>	
Ra-226	LAL 3/10/202	59153
Test	Analyst Date:	Worklist

Face Analytical"

MS/MSD 2

MS/MSD 1

Sample I.D. Sample MS I.D.

Sample Collection Date:

Sample Matrix Spike Control Assessment

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

MSD Aliquot (L, g, F):

MS Aliquot (L, g, F); MS Target Conc.(pCl/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): Matrix Spike Result Counting Uncertainty (pCi/L, g, F):

Sample Matrix Spike Result

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Ra-226	LAL 3/10/2021	59153 DW
Test	Analyst: Date:	Worklist: Matrix:

Method Blank Assessment		
	MB Sample ID	2112394
	MB concentration:	0.043
	M/B Counting Uncertainty:	0.110
	MB MDC:	0.264
	MB Numerical Performance Indicator:	0.76
	MB Status vs Numerical Indicator:	K/N
	MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	λ .
	LCS59153	LCSD59153
Count Date:	3/22/2021	3/22/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24,039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	905.0
Target Conc. (pCi/L, g, F):	4.756	4.749
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.078	4.939
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.518	0.508
Numerical Performance Indicator:	1.21	0.73
Percent Recovery:	106.78%	104.01%
Status vs Numerical Indicator:	Α/N	ΝΆ
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (pCif., 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

						_	_	<u>_</u>				!
Enter Duplicate	sample IDs if	other than	LCS/LCSD in	the space below.			92525363011	92525363011DUP				
LCS59153	LCSD59153	5.078	0.518	4.939	0,508	9	0.375	2.62%	N/A	Pass	25%	
Sample I.D.:	Duplicate Sample I.D.	Sample Result (pCi/L, g, F):	Sample Result Counting Uncertainty (pCl/L, g, F):	Sample Duplicate Result (pCi/L, g, F):	Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator:	lased on the LCS/LCSD Percent Recoveries) Duplicate RPD:	Duplicate Status vs Numerical Indicator.	Duplicate Status vs RPD:	% RPD Limit:	

**Duplicate Sample Assessmen** 

Matrix Spike/Matrix Spike Duplicate Sample Assessment	Sample ID. Sample MS I.D. Sample MS I.D. Sample MSD I.D. Sample MSD I.D. Sample Matrix Spike Result. Matrix Spike Duplicate Result Counting Uncertainty (pC/I/. g. F): Sample Matrix Spike Duplicate Result. Matrix Spike Duplicate Result Counting Uncertainty (pC/I/. g. F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MSI MSD Duplicate RPD: MS/ MSD Duplicate Status vs Numerical Indicator: MS/ MSD Duplicate Status vs Shutus vs RPD: MS/ MSD Duplicate Status vs RPD: MS/ MSD Duplicate Status vs RPD: Status vs Status vs RPD: MS/ MSD Duplicate Status vs RPD:

MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits:

MSD Status vs Recovery

MS Status vs Recovery

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

Comments:

1 of 1

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Ra-226

3/10/2021

Test: Analyst: Date:

Pace Analytical

59154 DW

Worklist: Matrix:

0.104 0.242 0.97 N/A Pass

MB MDC:

MB Numerical Performance Indicator. MB Status vs Numerical Indicator. MB Status vs. MDC:

0.051

MB Sample ID

Method Blank Assessmen

MB concentration: M/B Counting Uncertainty:

MS/MSD 2 MS/MSD 1 Sample I.D. Sample MS I.D. Sample MSD I.D. MS/MSD Lower % Recovery Limits: MS/MSD Lower % Recovery Limits: MS Aliquot (L. g, F): MSD Aliquot (L, g, F). ix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F);

MS Numerical Performance Indicator; MS Target Conc.(pCi/L, g, F): MSD Target Conc. (pCi/L, g, F): Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (pCift, g, F): MS Status vs Numerical Indicator. MS Status vs Recovery. MSD Status vs Recovery. Spike I.D. MS/MSD Decay Corrected Spike Concentration (pCl/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Spike Uncertainty (calculated) MSD Spike Uncertainty (calculated) Sample Result Sample Matrix Spike Duplicate Result MSD Numerical Performance Indicator MSD Status vs Numerical Indicator Sample Collection Date MS Percent Recovery MSD Percent Recovery Sample Matrix Spike Control Assessment

aboratory Control Sample Assessment	LCSD (Y or N)?	, ,	
	LCS59154	LCSD59154	
Count Date:	3/22/2021	3/22/2021	
Spike I.D.:	19-033	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039	
Volume Used (mL):	0.10	0.10	
Aliquot Volume (L, g, F):	0.505	0.505	Matri
Target Conc. (pCi/L, g, F):	4.759	4.756	
Uncertainty (Calculated):	0.057	250.0	
Result (pCi/L, g, F):	5.732	4.926	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.549	0.502	
Numerical Performance Indicator:	3,45	99:0	
Percent Recovery:	120.45%	103.59%	
Status vs Numerical Indicator.	Ϋ́Z	N/A	
Status vs Recovery:	Pass	Pass	
Upper % Recovery Limits:	125%	125%	
Lower % Recovery Limits:	75%	75%	

						-						
				,,,				• •				
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:
	Enter Duplicate	sample IDs if	other than	LCS/LCSD in	the space below.							

LCSD59154

Sample I.D.: Duplicate Sample I.D.

Duplicate Sample Assessmen

Sample Result (pCi/L, g, F):

0.549 4.926 0.502 NO 2.122 15.06%

Sample Result Counting Uncertainty (DCII., g. F):
Sample Duplicate Result (DCII., g. F):
Sample Duplicate Result Counting Uncertainty (DCII., g. F):
Are sample and/or duplicate results below RL?

Duplicate Numerical Performance Indicator.

(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:

Duplicate Status vs Numerical Indicator:

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

N/A Pass 25%

Duplicate Status vs RPD: % RPD Limit:

Comments:



1 of 1

Analyst Must Manually Enter All Fields Highlighted in Yellow.

	Analyst M	Sample Matr	··· • •		MS						
granty control campie i circuma	Ra-226	LAL 3/10/2021	59154 DW	Į.	2112395	0.051	0.104	0.242	76.0	N/A	Pass
Auality Co	Test:	Analyst: Date:	Worklist: Matrix:		MB Sample ID	MB concentration:	M/B Counting Uncertainty:	MB MDC:	MB Numerical Performance Indicator:	MB Status vs Numerical Indicator:	MB Status vs. MDC:
	Face Analytical			Method Blank Assessment							

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD Z
Samp	Sample Collection Date:		
	Sample I.D.		
	Sample MS I.D.		
	Sample MSD I.D.		
	Spike I.D.:	•	
MS/MSD Decay Corrected Spike Concentration (pCl/mL):	entration (pCi/mL):		
Spike Volume	Spike Volume Used in MS (mL):		
Spike Volume l	Spike Volume Used in MSD (mL):		
2	MS Aliquot (L, g, F):		
MS Target	MS Target Conc.(pCi/L, g, F):		
SW	3D Aliquot (L. g, F):		
MSD Target	MSD Target Conc. (pCi/L, g, F):		
MS Spike Unce	MS Spike Uncertainty (calculated):		
MSD Spike Unce	MSD Spike Uncertainty (calculated):		
	Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):	tainty (pCi/L, g, F):	•	
Sample N	Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	tainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:	e Duplicate Result:	·	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	tainty (pCi/L, g, F):		
MS Numerical Per	MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator.	formance Indicator.		
WS	MS Percent Recovery:		
OSW	MSD Percent Recovery:		
MS Status vs h	MS Status vs Numerical Indicator.		
MSD Status vs h	MSD Status vs Numerical Indicator.		
SSW	MS Status vs Recovery.		
SOSM	MSD Status vs Recovery:		
MS/MSD Upper	MS/MSD Upper % Recovery Limits:		
MS/MSD Lower	MS/MSD Lower % Recovery Limits:		

Laboratory Control Sample Assessment	LCSD (Y or N)?	Z	
	LCS59154	LCSD59154	
Count Date:	3/22/2021		
Spike I.D.:	19-033		
Decay Corrected Spike Concentration (pCi/mL):	24.039		
Volume Used (mL):	0.10		
Aliquot Volume (L. g. F):	0.505		Matrio
Target Conc. (pCi/L, g, F):	4.759		
Uncertainty (Calculated):	0.057		
Result (pCi/L, g, F):	5.732		
LCS/LCSD Counting Uncertainty (pCl/L, g, F):	0.549		
Numerical Performance Indicator:	3,45		
Percent Recovery:	120,45%		
Status vs Numerical Indicator:	N/A		
Status vs Recovery:	Pass		
Upper % Recovery Limits:	125%		
Lower % Recovery Limits:	75%		

**Duplicate Sample Assessment** 

uplicate Sample Assessment			Matrix Spike/Matrix Spike Duplicate Sample Assessment
-			-
Sample LD.:	Sample I.D.: 92525214001 Enter Duplicate	Enter Duplicate	Sample I.D.
Duplicate Sample I.D. 92525214001DUP sample IDs if	92525214001DUP	sample IDs if	Sample MS I.D.
Sample Result (pCi/L, g, F):	0.114	other than	Sample MSD I.D.
Sample Result Counting Uncertainty (pCi/l., g, F):	0.189	LCS/LCSD in	Sample Matrix Spike Result:
Sample Duplicate Result (pCi/L, g, F):	0.134	the space below.	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Duplicate Result Counting Uncertainty (pCi/l., g. F):	0.113		Sample Matrix Spike Duplicate Result:
Are sample and/or duplicate results below Rt.?	See Below ##		Matrix Spike Duplicate Resutt Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator.	-0.180	92525214001	Duplicate Numerical Performance Indicator.
Duplicate RPD:	16.34%	92525214001DUP	(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:
Duplicate Status vs Numerical Indicator:	A/A		MS/ MSD Duplicate Status vs Numerical Indicator:
Duplicate Status vs RPD:	Pass		MS/ MSD Duplicate Status vs RPD:
% RPD Limit	25%		% RPD Limit

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

Comments:

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### Face Analytical"

# **Quality Control Sample Performance Assessment**

28		021	89	
Ra-228	VAL	3/15/2	5916	₹
Test	Analyst:	Date:	Worklist	Matrix:

2112539 0.219 0.271 0.570 1.59 Pass Pass

MB Numerical Performance Indicator: MB Status vs Numerical Indicator: MB Status vs. MDC:

MB Sample ID
MB concentration;
M/B 2 Sigma CSU:
MB MB C:

Method Blank Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

_ _	LCSD59158	3/19/2021	21-003	38.405	0.10	0.813	4.724	0.231	3.041	0.755	4.18	64.39%	ΥN	Pass	135%	%09
LCSD (Y or N)?	LCS59158	3/19/2021	21-003	38.405	0.10	0.804	4.777	0.234	3,857	0.900	-1.94	80.76%	A/X	Pass	135%	%09
aboratory Control Sample Assessment		Count Date:	Spike I.D.:	Decay Corrected Spike Concentration (pCi/mL):	Volume Used (mL):	Aliquot Volume (L, g, F):	Target Conc. (pCi/L, g, F):	Uncertainty (Calculated):	Result (pCi/L, g, F);	LCS/LCSD 2 Sigma CSU (pCi/L, g, F);	Numerical Performance indicator:	Percent Recovery:	Status vs Numerical Indicator:	Status vs Recovery:	Upper % Recovery Limits:	Lower % Recovery Limits:

Matrix Spike/Matrix Spike Duplicate Sample Assessment	ite Sample I.D.	if Sample MS I.D.	Sample MSD I.D.	in Sample Matrix Spike Result:	ow.	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:
	Enter Duplicate	sample IDs if	other than	LCS/LCSD in	the space below.							
	LCS59158	LCSD59158	3.857	0.900	3.041	0.755	ON.	1.362	22.55%	Pass	Pass	36%
Duplicate Sample Assessment	Sample I.D.:	Duplicate Sample I.D.	Sample Result (pCi/L, g, F):	Sample Result 2 Sigma CSU (pCi/L, g, F):	Sample Duplicate Result (pCi/L, g, F):	Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator:	(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	Duplicate Status vs Numerical Indicator:	Duplicate Status vs RPD:	% RPD Limit

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Comments:

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1 of 1

Page 34 of 35

### Pace Analytical"

# Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MS/MSD 2

$\vdash$																														
MS/MSD 1																														
Sample Matrix Spike Control Assessment	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 (pCVL, 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/M/SD Upper % Recovery Limits:	MS/MSD Lower % Recovery Limits:
													_	Å	LCSD59159	3/18/2021	21-003	38.419	0.10	0.801	4.794	0.235	4.001	0.884	-1.70	83.47%	WA	Pass	135%	%09
VAL	3/15/2021	59159	M			2112540	0.387	0.316	0.633	2.40	Warning	Pass		LCSD (Y or N)?	LCS59159	3/18/2021	21-003	38.419	0.10	0.810	4.741	0.232	4.345	0.951	-0.79	91.66%	NA	Pass	135%	%09
Analyst	Date:	Worklist:	Matrix:			MB Sample ID	MB concentration:	M/B 2 Sigma CSU:	MB MDC:	erformance Indicator:	s Numerical Indicator:	MB Status vs. MDC:				Count Date:	Spike I.D.:	ncentration (pCi/mL):	Volume Used (mL):	quot Volume (L, g, F):	et Conc. (pCi/L, g, F):	certainty (Calculated):	Result (pCi/L, g, F):	ma CSU (pCi/L, g, F):	erformance Indicator:	Percent Recovery:	s Numerical Indicator:	Status vs Recovery:	er % Recovery Limits:	er % Recovery Limits:

MB Status vs Numerical Indicator: MB Status vs. MDC:

MB Numerical Performance Indicator:

Laboratory Control Sample Assessment	LCSD (Y or N)?	¥	
	LCS59159	LCSD59159	
Count Date:	3/18/2021	3/18/2021	
Spike I.D.:	21-003	21-003	
Decay Corrected Spike Concentration (pCi/mL):	38.419	38.419	
Volume Used (mL):	0.10	0.10	
Aliquot Volume (L, g, F):	0.810	0.801	
Target Conc. (pCVL, g, F):	4.741	4.794	
Uncertainty (Calculated):	0.232	0.235	
Result (pCi/L, g, F):	4.345	4.001	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.951	0.884	
Numerical Performance Indicator:	-0.79	-1.70	
Percent Recovery:	91.66%	83.47%	
Status vs Numerical Indicator:	NA	WA WA	
Status vs Recovery:	Pass	Pass	
Upper % Recovery Limits:	135%	135%	
Lower % Recovery Limits:	%09	%09	
Duplicate Sample Assessment			Matrix

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:
	Enter Duplicate	sample IDs if	other than	LCS/LCSD in	the space below.							

LCS59159 4.345 4.345 0.951 4.001 0.884 NO 0.519 9.34% Pass Pass

Sample Result (DCI/L, g, F):
Sample Result 2 Sigma CSU (DCI/L, g, F):
Sample Duplicate Result (DCI/L, g, F):
Sample Duplicate Result 2 Sigma CSU (DCI/L, g, F):
Are sample and/or duplicate results below RL?

Duplicate Numerical Performance Indicator: (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:

Sample I.D.: Duplicate Sample I.D.

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Duplicate Status vs RPD: % RPD Limit:

Duplicate Status vs Numerical Indicator

Comments:



Ra-228 NELAC DW2 Printed: 3/19/2021 11:00 AM

1 of 1

### **APPENDIX C**

**Statistical Analysis** 

### Appendix III Statistically Significant Increase Summary (March 2021)

Appendix III Parameter	Monitoring Wells
Boron	YGWC-26I, YGWC-26S, YGWC-27I, YGWC-27S, YGWC-28I, YGWC-28S, YGWC-29I
Chloride	YGWC-26I, YGWC-26S, YGWC-27I, YGWC-28I, YGWC-28S
Sulfate	YGWC-27S

### GROUNDWATER STATS CONSULTING

SWFPR= 1 - (1 - alpha)PEPL = X +k × L  $As Hg = (x \cdot (n) - x)$   $(n-2)/(x \cdot (n))$ Zn Vn Cq.

August 24, 2021

Southern Company Services Attn: Ms. Lauren Coker 241 Ralph McGill Blvd NE, Bin 10160 Atlanta, Georgia 30308-3374

Re: Plant Yates Ash Pond 2 (AP-2) March 2021 Statistical Analysis

Dear Ms. Coker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2021 semi-annual Groundwater Detection and Assessment Monitoring statistical analysis for Georgia Power Company's Plant Yates AP-2. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

### Upgradient wells:

- **AP-1:** YGWA-47
- **AP-2:** YGWA-1D, YGWA-1I, YGWA-2I, YGWA-3D, YGWA-3I, YGWA-14S, and YGWA-30I
- Gypsum Landfill: GWA-2
- AMA-R6: YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-21I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, and YGWA-5I
- Downgradient wells: YGWC-26I, YGWC-26S, YGWC-27I, YGWC-27S, YGWC-28I, YGWC-28S, and YGWC-29I

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed Kristina Rayner, Groundwater Statistician and Founder of Groundwater Stats Consulting.

The CCR program consists of the constituents listed below. The terms "parameters" and "constituents" are used interchangeably.

- Appendix III (Detection Monitoring) boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- Appendix IV (Assessment Monitoring) antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient well/constituent pairs with 100% non-detects follows this letter. Additionally, when Appendix IV constituents are not detected during a scheduled Scan event, no statistical analyses are required during the semi-annual sample event, and sampling of those constituents is not required during the subsequent events. During the annual Scan event conducted in February 2021, mercury and thallium were not detected; therefore, they were not required to be sampled during the subsequent events. In some cases, upgradient wells at a given unit were not sampled for all constituents if no detections were present at downgradient wells for that particular unit. The following constituents were not detected during their respective Scan events at other Plant Yates units; therefore, upgradient wells at the units listed below were not sampled for these constituents:

• Yates Gypsum Landfill: molybdenum

• Yates AP-1: cadmium, mercury, selenium, and thallium

Yates AMA-R6: thallium

Combined upgradient well data from all units at Plant Yates are utilized to construct statistical limits for Appendix III and IV parameters. The absence of samples from upgradient wells will affect the sample size of the combined background data set that is used for interwell limits among all units at Plant Yates; however, the calculated limits should not be affected greatly.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data and this generally gives the most conservative limit in each case. In time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. For interwell prediction and tolerance limits, a single reporting limit substitution is used across upgradient wells for a given parameter. Regarding the case of cobalt, due to varying detection limits in individual wells, the most recent reporting limit of 0.005 mg/L was substituted across all wells for all calculations and reports.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

### **Summary of Statistical Methods – Appendix III and IV Parameters:**

Based on the April 2019 evaluation and state and federal regulatory requirements described below, the following methods were selected for Appendix III and IV constituents:

- Appendix III: Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- Appendix IV: Confidence intervals on downgradient well data compared against Groundwater Protections Standards (GWPS) for Appendix IV constituents

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the

parametric prediction limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric prediction limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.</li>
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

### Summary of Background Update – Appendix III and IV Constituents - Conducted in March 2020

### **Outlier and Trend Testing**

The original background screening was conducted in 2017 by MacStat Consulting. Values identified as outliers were flagged in the database and excluded prior to construction of statistical limits. Interwell prediction limits, combined with a 1-of-2 resample plan, were recommended. During the March 2020 1<sup>st</sup> semi-annual analysis, data were screened for the purpose of updating the statistical limits as described below.

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 upgradient wells for Appendix III and all wells for Appendix IV parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, a couple outliers were identified. While this is not the case in the present data set, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Only one of the outliers identified by Tukey's method (combined radium 226 + 228 in downgradient well YGWC-26I) was flagged in the database as all other values were either similar to remaining measurements within the same well and neighboring wells, or the values were reported non-detects. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages will display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. When the reporting limit was higher than the CCR-rule specified levels discussed below, non-detects were substituted with one half the reporting limit. A summary of outlier results follows this letter (Figure C).

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 test was used to evaluate all data at upgradient wells for Appendix III parameters and all wells for Appendix IV parameters to identify statistically significant increasing or decreasing. 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 for the Appendix III and IV parameters showed statistically significant decreasing trends for a handful of constituents and statistically significant increasing trends for calcium, cobalt, combined radium 226 + 228, and sulfate. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period is short with only three 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.

### Statistical Analysis of Appendix III Parameters – March 2021

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. A single high pH value in upgradient well YGWA-47 from AP-1 was flagged as an outlier during earlier screenings since it was higher than the other measurements within this well. The March 2021 value of 6.51 s.u. for pH in downgradient well YGWC-28I was provided by Arcadis as a correction to the original lab report value of 66.51 s.u. A drastic increase in concentrations was also identified for sulfate during the March 2021 sampling event with a reported observation of 451 mg/L in downgradient well YGWC-27S; however, this value was not flagged as outlier and will be reviewed. If this value is determined to be anomalous, it will be flagged as an outlier for future analyses. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No new outliers were flagged for Appendix III parameters, and a summary of flagged outliers follows this report (Figure C).

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical pooled upgradient well data through March 2021 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs). Note that reporting limit changes during this analysis occurred for boron (from <0.1 mg/L to <0.04 mg/L), but there were no changes in statistical limits.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase is identified and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Prediction limit exceedances were noted for the following Appendix III well/constituent pairs:

Boron: YGWC-26I, YGWC-26S, YGWC-27I, YGWC-27S, YGWC-28I,

YGWC-28S, and YGWC-29I

Chloride: YGWC-26I, YGWC-26S, YGWC-27I, YGWC-28I, and YGWC-28S

Sulfate: YGWC-27S

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:

• Chloride: YGWA-17S and YGWA-20S (all upgradient)

• Sulfate: YGWA-1D, YGWA-3D, YGWA-5I, and GWA-2 (all upgradient)

### Decreasing:

Boron: YGWA-21I (upgradient)

Chloride: YGWA-3D (upgradient), YGWA-3I (upgradient),

YGWA-5D (upgradient), YGWA-47 (upgradient),

YGWC-26S, and YGWC-28I

• Sulfate: YGWA-5D, YGWA-39, YGWA-40, YGWA-47 (all upgradient)

A complete list of trend test results and all statistically significant increasing and decreasing trends may be found following this letter in the Trend Test Summary Table

### Statistical Analysis of Appendix IV Parameters – March 2021

For analysis of Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that have 100% non-detects or trace values below the reporting limits do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis.

A high value of 0.21 mg/L from March 2021 for cobalt at upgradient well GWA-2, along with high values 0.20 mg/L and 0.16 mg/L from August and September 2020, were two orders of magnitude higher than the other values for that well. The August and September 2020 values were flagged during the previous analysis, and the March 2021 value was flagged as an outlier during this analysis in order to maintain limits that were conservative from a regulatory perspective. However, since three observations were reported at this level, further study may indicate that the values should not be flagged for future analyses. A summary of flagged outliers follows this report (Figure C).

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. When the alpha level (or false positive rate) for a nonparametric limit is shown as NaN in the results table, it indicates that the background sample size is large enough such that the resulting alpha level is too small to display in the results table. The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

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

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified levels have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the State GWPS is:

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

Following the above Federal CCR and Georgia EPD Rule requirements, Federal and State GWPS were established for Appendix IV constituents for the March 2021 sample event (Figure G). To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well using all historical data through March 2021 according to both Federal and State rules (Figures H and I, respectively). As mentioned above, confidence intervals were not required for mercury and thallium or downgradient well/constituent pairs with 100% non-detects.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the CCR Rules for the federal requirements and the Georgia EPD Rules 391-3-4-.10(6)(a) for the State requirements. Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Note that reporting limits decreased for the following constituents during this analysis:

- Beryllium from <0.003 mg/L to <0.0005 mg/L</li>
- Cadmium from <0.0025 mg/L to <0.0005 mg/L</li>
- Chromium from <0.01 mg/L to <0.005 mg/L</li>
- Lead from <0.005 mg/L to <0.001 mg/L</li>
- Mercury from <0.0005 mg/L to <0.0002 mg/L
- Selenium from <0.01 mg/L to <0.005 mg/L

As a result, background limits were lower for these constituents as compared to the previous analysis. However, in all cases for Federal and State confidence intervals, except for lead, which uses the background limit as the GWPS for State confidence intervals, the established MCL and/or CCR Rule Specified levels were higher than the background limits. Therefore, the GWPS were not affected. Summaries of confidence intervals and complete graphical results follow this letter. For both federal and state confidence intervals, no exceedances were noted.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Yates AP-2. 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

Kristina Rayner

Sanitas™ v.9.6.28 Groundwater Stats Consulting. I

# 100% Non-Detects: Appendix IV Downgradient Wells

Analysis Run 5/7/2021 12:12 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Antimony (mg/L) YGWC-28I, YGWC-28S

Arsenic (mg/L)
YGWC-26I, YGWC-26S, YGWC-27S, YGWC-28I, YGWC-29I

Beryllium (mg/L) YGWC-26I, YGWC-28I, YGWC-28S, YGWC-29I

Cadmium (mg/L) YGWC-26I, YGWC-26S, YGWC-27I, YGWC-27S

Chromium (mg/L) YGWC-27I

Cobalt (mg/L) YGWC-26I

Lead (mg/L) YGWC-27I, YGWC-28I

Lithium (mg/L) YGWC-26S

Molybdenum (mg/L) YGWC-26I, YGWC-26S, YGWC-27S

Selenium (mg/L) YGWC-27I, YGWC-27S, YGWC-29I

Thallium (mg/L) YGWC-26I, YGWC-27I, YGWC-28I, YGWC-28S, YGWC-29I

# Appendix III Interwell Prediction Limits - Significant Results

		Plant Yate	s Client: S	Southern Co	mpany Da	ata: Yates As	sh Pond 2	Printed 5/10/2	2021, 3:51 PM			
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig. Bg N	Bg Mean	Std. Dev.	%NDs ND Adj.	Transforr	n <u>Alpha</u>	Method
Boron (mg/L)	YGWC-26I	0.16	n/a	3/3/2021	0.69	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-26S	0.16	n/a	3/2/2021	0.57	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-27I	0.16	n/a	3/3/2021	2	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-27S	0.16	n/a	3/3/2021	1.2	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-28I	0.16	n/a	3/3/2021	1.8	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-28S	0.16	n/a	3/3/2021	2.3	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-29I	0.16	n/a	3/3/2021	0.62	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-26I	7.9	n/a	3/3/2021	16.6	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-26S	7.9	n/a	3/2/2021	13.2	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-27I	7.9	n/a	3/3/2021	13	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-28I	7.9	n/a	3/3/2021	14.6	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-28S	7.9	n/a	3/3/2021	18	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-27S	160	n/a	3/3/2021	451	Yes 293	n/a	n/a	6.143 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2

### Appendix III Interwell Prediction Limits - All Results

Data: Yates Ash Pond 2 Printed 5/10/2021, 3:51 PM Client: Southern Company Constituent <u>Well</u> Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. Lower Lim. Date Observ. Method YGWC-26I Yes 293 Boron (mg/L) 0.16 3/3/2021 0.69 n/a 45.73 n/a 0.00004918 NP Inter (normality) 1 of 2 n/a n/a n/a Boron (mg/L) YGWC-26S 0.16 n/a 3/2/2021 0.57 Yes 293 n/a n/a 45.73 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Boron (mg/L) YGWC-27I 0.16 n/a 3/3/2021 2 Yes 293 n/a 45.73 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Boron (mg/L) YGWC-27S 0.16 n/a 3/3/2021 1.2 Yes 293 n/a n/a 45.73 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Boron (mg/L) YGWC-28I 0.16 n/a 3/3/2021 293 n/a 45.73 n/a 0.00004918 NP Inter (normality) 1 of 2 YGWC-28S 3/3/2021 2.3 Yes 293 n/a 0.00004918 NP Inter (normality) 1 of 2 Boron (mg/L) 0.16 n/a n/a 45.73 n/a n/a YGWC-29I 3/3/2021 0.00004918 Boron (mg/L) 0.16 0.62 293 45.73 n/a n/a NP Inter (normality) 1 of 2 Calcium (mg/L) YGWC-26I 3/3/2021 NP Inter (normality) 1 of 2 37 16.1 293 1.024 n/a n/a 0.00004918 n/a No n/a n/a 1.024 n/a Calcium (mg/L) YGWC-26S 37 3/2/2021 12.9 293 0.00004918 NP Inter (normality) 1 of 2 n/a No n/a n/a Calcium (mg/L) YGWC-27I 37 3/3/2021 25.7 No 293 n/a n/a 1.024 n/a 0.00004918 NP Inter (normality) 1 of 2 n/a Calcium (mg/L) YGWC-27S 37 n/a 3/3/2021 30.2 Nο 293 n/a n/a 1 024 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Calcium (mg/L) YGWC-28I 37 n/a 3/3/2021 30.9 No 293 n/a n/a 1.024 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 NP Inter (normality) 1 of 2 Calcium (mg/L) YGWC-28S 37 n/a 3/3/2021 28.4 Nο 293 n/a n/a 1.024 n/a n/a 0.00004918 Calcium (mg/L) YGWC-29I 37 3/3/2021 9.5 293 1.024 0.00004918 NP Inter (normality) 1 of 2 NP Inter (normality) 1 of 2 YGWC-26I 3/3/2021 0.00004918 Chloride (mg/L) 7.9 n/a 16.6 Yes 293 n/a n/a 0 n/a n/a Chloride (mg/L) YGWC-26S 3/2/2021 13.2 0 0.00004918 NP Inter (normality) 1 of 2 7.9 n/a Yes 293 n/a n/a n/a n/a Chloride (mg/L) YGWC-27I 3/3/2021 13 0 n/a 0.00004918 NP Inter (normality) 1 of 2 7.9 n/a Yes 293 n/a n/a n/a Chloride (mg/L) YGWC-27S 3/3/2021 4 0 0.00004918 NP Inter (normality) 1 of 2 7.9 293 n/a n/a Chloride (mg/L) YGWC-28I 7.9 3/3/2021 14.6 0 n/a 0.00004918 NP Inter (normality) 1 of 2 n/a Yes 293 n/a n/a n/a Chloride (mg/L) YGWC-28S 7.9 n/a 3/3/2021 18 Yes 293 n/a 0 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Chloride (mg/L) YGWC-29I 7.9 n/a 3/3/2021 6.7 No 293 n/a n/a 0 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Fluoride (mg/L) YGWC-26I 0.68 n/a 3/3/2021 0.05JNo 362 n/a n/a 68.51 n/a n/a 0.00004918 NP Inter (NDs) 1 of 2 Fluoride (mg/L) YGWC-26S 0.68 n/a 3/2/2021 0.1ND No 362 68.51 0.00004918 NP Inter (NDs) 1 of 2 Fluoride (mg/L) YGWC-27I 0.68 n/a 3/3/2021 0.058J No 362 n/a n/a 68.51 n/a n/a 0.00004918 NP Inter (NDs) 1 of 2 Fluoride (mg/L) YGWC-27S 0.68 n/a 3/3/2021 0.1ND No 362 n/a 68.51 n/a n/a 0.00004918 NP Inter (NDs) 1 of 2 Fluoride (mg/L) YGWC-28I 3/3/2021 0.072J 0.00004918 NP Inter (NDs) 1 of 2 0.68 362 n/a 68.51 n/a n/a n/a No n/a 362 Fluoride (mg/L) YGWC-28S 0.68 3/3/2021 0.13 68.51 0.00004918 NP Inter (NDs) 1 of 2 No n/a Fluoride (mg/L) YGWC-29I 0.68 3/3/2021 0.056J No 362 n/a 68.51 n/a n/a 0.00004918 NP Inter (NDs) 1 of 2 n/a n/a pH (S.U.) YGWC-26I 8.39 4.86 3/3/2021 5.93 No 373 n/a n/a 0 n/a n/a 0.00009836 NP Inter (normality) 1 of 2 pH (S.U.) YGWC-26S 8.39 4.86 3/2/2021 5.38 No 373 n/a 0 n/a n/a 0.00009836 NP Inter (normality) 1 of 2 n/a pH (S.U.) YGWC-27I 8.39 4.86 3/3/2021 6.43 No 373 n/a n/a 0 n/a n/a 0.00009836 NP Inter (normality) 1 of 2 pH (S.U.) YGWC-27S 3/3/2021 6.35 No n/a 0 n/a 0.00009836 NP Inter (normality) 1 of 2 YGWC-28I 3/3/2021 0 0.00009836 NP Inter (normality) 1 of 2 pH (S.U.) 8.39 4.86 6.51 Nο 373 n/a n/a n/a n/a pH (S.U.) YGWC-28S 4.86 3/3/2021 6.61 0 n/a n/a 0.00009836 NP Inter (normality) 1 of 2 8.39 No 373 n/a n/a YGWC-29I 3/3/2021 6.27 0 pH (S.U.) 8.39 4.86 No 373 n/a n/a n/a n/a 0.00009836 NP Inter (normality) 1 of 2 0.00004918 Sulfate (mg/L) YGWC-26I 160 3/3/2021 89.3 No 293 6.143 n/a n/a NP Inter (normality) 1 of 2 Sulfate (mg/L) YGWC-26S 160 3/2/2021 92.7 293 6.143 0.00004918 NP Inter (normality) 1 of 2 n/a No n/a n/a n/a 293 Sulfate (mg/L) YGWC-27I 160 n/a 3/3/2021 2.6 No n/a n/a 6.143 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Sulfate (mg/L) YGWC-27S 160 3/3/2021 451 Yes 6.143 0.00004918 NP Inter (normality) 1 of 2 n/a n/a n/a n/a n/a NP Inter (normality) 1 of 2 Sulfate (mg/L) YGWC-28I 160 n/a 3/3/2021 8.6 No 293 n/a n/a 6.143 n/a n/a 0.00004918 Sulfate (mg/L) YGWC-28S 160 3/3/2021 n/a 6.143 n/a 0.00004918 NP Inter (normality) 1 of 2 n/a No NP Inter (normality) 1 of 2 YGWC-29I 0.00004918 Sulfate (mg/L) 160 n/a 3/3/2021 26.6 No 293 n/a n/a 6.143 n/a n/a YGWC-26I 3/3/2021 205 2.574 0.6826 None 0.001075 Param Inter 1 of 2 Total Dissolved Solids (mg/L) 218.8 n/a No 293 10.01 sqrt(x) Total Dissolved Solids (mg/L) YGWC-26S 218.8 3/2/2021 154 293 10.01 2.574 0.6826 None sqrt(x) 0.001075 Param Inter 1 of 2 n/a No Total Dissolved Solids (mg/L) 3/3/2021 10.01 0.6826 None 0.001075 Param Inter 1 of 2 YGWC-27I 218.8 173 No 293 2.574 sqrt(x) Total Dissolved Solids (mg/L) 2.574 YGWC-27S 218.8 3/3/2021 178 293 10.01 0.6826 None 0.001075 Param Inter 1 of 2 n/a No sqrt(x) Total Dissolved Solids (mg/L) YGWC-28I 218.8 n/a 3/3/2021 184 No 293 10.01 2.574 0.6826 None sqrt(x) 0.001075 Param Inter 1 of 2 Total Dissolved Solids (mg/L) YGWC-28S 218.8 n/a 3/3/2021 217 No 10.01 2.574 0.6826 None sqrt(x) 0.001075 Param Inter 1 of 2 Total Dissolved Solids (mg/L) 3/3/2021 10.01 2 574 Param Inter 1 of 2 YGWC-29I 218.8 n/a 110 Nο 293 0.6826 None sqrt(x) 0.001075

# Appendix III Trend Tests - Prediction Limits Exceedances - Significant Results Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 2:57 PM

	Plant Yates	Client: Southern Company	Data: Yates	Ash Pond	12 Printe	ed 5/7/	2021, 2	:57 PM				
Constituent	Well		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	YGWA-21I (bg)		-0.006801	-60	-58	Yes	16	56.25	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)		-0.06529	-59	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)		-0.05699	-66	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-26S		-0.8658	-70	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-28I		-0.3155	-68	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)		-0.5003	-45	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	)	0.3002	76	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	)	0.189	71	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)		-0.9116	-83	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)		1.091	76	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)		0.4938	60	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)		-25.19	-71	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)		-3.687	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)		-12.05	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)		-3.891	-96	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)		0.09335	70	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)		25.64	66	48	Yes	14	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Appendix III 1	Plant Yates Client: Southern Compan	y Data: Yate					-57 PM	.03 -	/ \II I \	Cou	ito
Constituent	Well	Slope	Calc.	<u>Critical</u>	Sig.			Normality	Xform	<u>Alpha</u>	Method
Boron (mg/L)	YGWA-14S (bg)	-0.00131	-37	-58	No.	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0	-2	-58	No	16	25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-23	-58	No	16		n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-18	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-28	-58	No	16	81.25		n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-8	-58	No	16	56.25		n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-23	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-26I	-0.03933	-44	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-26S	0.004704	16	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-27I	0.03779	17	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-27S	0	-4	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-28I	0.006966	2	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-28S	0.04804	17	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-29I	-0.02029	-52	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-47 (bg)	-0.02029	-39	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-17S (bg)	-0.0002497	-11	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0.0002497	-34	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003285	-14	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-15	-58	No	16	87.5	n/a	n/a	0.01	NP
, • ,		-0.006801	-60	-58	Yes	16	56.25			0.01	NP
Boron (mg/L) Boron (mg/L)	YGWA-21I (bg) YGWA-39 (bg)	0.002402	14	<b>-36</b> 43	No	13	7.692		n/a n/a	0.01	NP NP
Boron (mg/L)	YGWA-40 (bg)	-0.02279	-41	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-41 (bg)	0.02279	-41			16	62.5			0.01	NP
Boron (mg/L)	YGWA-41 (bg)	0.0001974	12	-58 E9	No No	16	12.5	n/a n/a	n/a n/a	0.01	NP
	YGWA-5I (bg)			58		16	56.25				
Boron (mg/L)		-0.0019	-46 E	-58	No				n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg) YGWA-14S (bg)	0.1626	5	48	No	14	57.14 0	n/a	n/a	0.01	NP NP
Chloride (mg/L)	YGWA-1D (bg)	-0.02735	30	58	No	16	0	n/a	n/a	0.01 0.01	NP
Chloride (mg/L)			-40	-58	No	16		n/a	n/a		
Chloride (mg/L)	YGWA-1I (bg)	-0.02869	-33	-58	No No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.05296	-45	-58	No No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	0	-21	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.06529	-59	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05699	-66	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-26I	-0.2376	-33	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-26S	-0.8658	-70	-58	Yes		0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-27I	0	-5	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-28S	-0.3155	-68 1F	- <b>58</b>	Yes	16	0	n/a	n/a	0.01	<b>NP</b> NP
Chloride (mg/L)		-0.1389	-15	-58	No	16		n/a	n/a	0.01	
Chloride (mg/L)	YGWA-47 (bg)	-0.5003	-45	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	<b>0.3002</b> 0.05099	76	58	Yes	<b>16</b> 16	0	n/a	n/a	0.01	<b>NP</b> NP
Chloride (mg/L) Chloride (mg/L)	YGWA-18I (bg)	0.2082	35 50	58	No	16	0	n/a	n/a	0.01 0.01	NP
, ,	YGWA-18S (bg)	0.2082	50	58	No	16	0 <b>0</b>	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)		71	58	Yes			n/a	n/a		
Chloride (mg/L) Chloride (mg/L)	YGWA-21I (bg)	-0.1117	-28	-58	No	16	0	n/a	n/a	0.01	NP
, ,	YGWA-39 (bg)	0.2329	13	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.1751	26	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.1099	36	58	No	16	0	n/a	n/a	0.01	NP ND
Chloride (mg/L)	YGWA-5D (bg)	<b>-0.9116</b>	-83 -1	-58 50	Yes	16 16	0	n/a	n/a	0.01	NP ND
Chloride (mg/L)	YGWA-5I (bg)	0 1272	-1 20	-58 49	No	16	0	n/a	n/a	0.01	NP ND
Chloride (mg/L)	GWA-2 (bg)	0.1272	29	48	No	14	0	n/a	n/a	0.01	NP ND
Sulfate (mg/L)	YGWA-14S (bg)	0.09469	17	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.091	76	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1I (bg)	-0.2947	-23	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.1728	11	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.08892	-28	-58	No	16	12.5	n/a	n/a	0.01	NP

# Appendix III Trend Tests - Prediction Limits Exceedances - All Results 2 Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 2:57 PM

	Plant Yates Client: Southern Company	Data: Yates	Ash Pond	12 Printe	d 5/7/2	2021, 2:	57 PM				
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Sulfate (mg/L)	YGWA-3D (bg)	0.4938	60	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3I (bg)	0.6094	45	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-27S	-1.986	-54	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-25.19	-71	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.1322	51	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2007	-54	-58	No	16	25	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.1939	-48	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	24	58	No	16	62.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.2852	-25	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.687	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-12.05	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-4I (bg)	0.1751	39	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-3.891	-96	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.09335	70	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	25.64	66	48	Yes	14	0	n/a	n/a	0.01	NP

# Upper Tolerance Limits Summary Table

Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 12:01 PM Constituent Upper Lim. Lower Lim. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. <u>Transform</u> <u>Alpha</u> Method 0.0047 n/a 315 86.03 Antimony (mg/L) n/a n/a n/a n/a n/a NaN NP Inter(NDs) NP Inter(NDs) Arsenic (mg/L) 0.005 n/a 363 n/a 77.96 n/a n/a NaN Barium (mg/L) 0.071 n/a 363 n/a 3.03 n/a NaN NP Inter(normality) n/a n/a n/a Beryllium (mg/L) 0.0005 n/a 347 81.27 NaN NP Inter(NDs) Cadmium (mg/L) NP Inter(NDs) 0.0005 n/a n/a 347 n/a n/a 95.68 n/a NaN n/a Chromium (mg/L) 0.0093 n/a 315 n/a 77.46 n/a n/a NaN NP Inter(NDs) Cobalt (mg/L) NP Inter(NDs) 0.035 n/a 69.72 n/a NaN n/a n/a 360 n/a n/a Combined Radium 226 + 228 (pCi/L) 6.92 342 0 NP Inter(normality) NP Inter(NDs) Fluoride (mg/L) 0.68 68.51 n/a n/a 362 n/a n/a n/a n/a NaN Lead (mg/L) 0.0013 n/a 317 82.65 NP Inter(NDs) NP Inter(normality) Lithium (mg/L) 0.03 n/a 342 n/a 27.49 n/a NaN n/a n/a n/a Mercury (mg/L) 0.0002 n/a 278 93.17 NaN NP Inter(NDs) Molybdenum (mg/L) 0.014 NP Inter(NDs) n/a n/a 306 n/a n/a 59.8 n/a n/a NaN Selenium (mg/L) 0.005 n/a 345 91.59 n/a NaN NP Inter(NDs) Thallium (mg/L) 0.001 96.64 n/a NP Inter(NDs) n/a n/a 298 n/a n/a n/a NaN

YATES ASH POND 2 GWPS												
		CCR-Rule	Background	Federal	State							
Constituent Name	MCL	Specified	Limit	GWPS	<b>GWPS</b>							
Antimony, Total (mg/L)	0.006		0.0047	0.006	0.006							
Arsenic, Total (mg/L)	0.01		0.005	0.01	0.01							
Barium, Total (mg/L)	2		0.071	2	2							
Beryllium, Total (mg/L)	0.004		0.0005	0.004	0.004							
Cadmium, Total (mg/L)	0.005		0.0005	0.005	0.005							
Chromium, Total (mg/L)	0.1		0.0093	0.1	0.1							
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035							
Combined Radium, Total (pCi/L)	5		6.92	6.92	6.92							
Fluoride, Total (mg/L)	4		0.68	4	4							
Lead, Total (mg/L)		0.015	0.0013	0.015	0.0013							
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03							
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002							
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014							
Selenium, Total (mg/L)	0.05		0.005	0.05	0.05							
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002							

<sup>\*</sup>Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level

<sup>\*</sup>MCL = Maximum Contaminant Level

<sup>\*</sup>CCR = Coal Combustion Residual

<sup>\*</sup>GWPS = Groundwater Protection Standard

# Federal Confidence Intervals - All Results (No Significant) Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 12:14 PM

		Plant Yates	s Client: So	outhern Comp	any	Data:	Yates Ash Po	nd 2 Print	ed 5/7/202	1, 12:14 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Antimony (mg/L)	YGWC-26I	0.003	0.00059	0.006	No	15	0.002674	0.0008604	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-26S	0.003	0.0017	0.006	No	15	0.00282	0.0004754	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-27I	0.003	0.00033	0.006	No	15	0.002822	0.0006894	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-27S	0.003	0.0003	0.006	No	15	0.00282	0.0006971	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-29I	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-27I	0.005	0.0006	0.01	No	19	0.003181	0.002196	57.89	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-28S	0.005	0.00069	0.01	No	19	0.003185	0.002188	57.89	None	No	0.01	NP (NDs)
Barium (mg/L)	YGWC-26I	0.06639	0.06267	2	No	19	0.06453	0.003182	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-26S	0.02896	0.02661	2	No	19	0.02778	0.002008	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-27I	0.0728	0.063	2	No	19	0.06902	0.007204	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-27S	0.1047	0.09313	2	No	19	0.09891	0.009866	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-28I	0.09012	0.08399	2	No	19	0.08706	0.005237	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-28S	0.221	0.196	2	No	19	0.2026	0.03864	0	None	x^4	0.01	Param.
Barium (mg/L)	YGWC-29I	0.0781	0.057	2	No	19	0.07414	0.03394	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-26S	0.0002	0.00011	0.004	No	17	0.0001932	0.0001222		None	No	0.01	NP (normality)
													, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Beryllium (mg/L)	YGWC-27I	0.00023	0.00014	0.004	No No	17	0.0002371	0.0001321		None	No No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-27S	0.0005	0.000066	0.004	No	17	0.0004745	0.0001053		None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-28I	0.0005	0.0001	0.005	No	17	0.0002418	0.0001791		None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-28S	0.0005	0.00048	0.005	No	17	0.0004988	0.0000048		None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-29I	0.0002194	0.0001256	0.005	No	17	0.0002553	0.0001322		Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	YGWC-26I	0.005	0.00065	0.1	No	17	0.003202	0.002205	52.94	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-26S	0.002486	0.001092	0.1	No	17	0.002517	0.00169	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	YGWC-27S	0.015	0.0027	0.1	No	17	0.004668	0.00319	70.59	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-28I	0.005	0.0005	0.1	No	17	0.004201	0.00178	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-28S	0.005	0.0006	0.1	No	17	0.004211	0.001757	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-29I	0.005	0.0005	0.1	No	17	0.004735	0.001091	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-26S	0.002781	0.001865	0.035	No	19	0.002363	0.0008532	5.263	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	YGWC-27I	0.01683	0.003275	0.035	No	19	0.01862	0.02682	0	None	In(x)	0.01	Param.
Cobalt (mg/L)	YGWC-27S	0.0026	0.0022	0.035	No	19	0.002474	0.0006497	5.263	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-28I	0.005	0.00042	0.035	No	19	0.004759	0.001051	94.74	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-28S	0.0012	0.00092	0.035	No	19	0.001424	0.001268	10.53	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-29I	0.005	0.0007	0.035	No	19	0.003845	0.001988	73.68	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YGWC-26I	1.062	0.4927	6.92	No	18	0.8202	0.5153	5.556	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-26S	0.8845	0.5432	6.92	No	19	0.7138	0.2914	5.263	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-27I	4.054	2.769	6.92	No	19	3.412	1.098	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-27S	1.078	0.6625	6.92	No	19	0.8703	0.3549	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-28I	0.948	0.261	6.92	No	19	0.6337	0.3534	5.263	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	YGWC-28S	0.9055	0.4908	6.92	No	19	0.6981	0.3541	5.263	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-29I	1.148	0.7362	6.92	No	19	0.9422	0.3517	5.263	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-26I	0.1	0.06	4	No	20	0.0825	0.02103	40	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-26S	0.16	0.044	4	No	20	0.1332	0.09928	70	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-27I	0.14	0.07	4	No	20	0.0921	0.02603	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-27S	0.2052	0.1014	4	No	20	0.1634	0.1047	20	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-28I	0.14	0.078	4	No	20	0.1269	0.08215	25	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-28S	0.2651	0.1498	4	No	20	0.2075	0.1015	10	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-29I	0.09525	0.05897	4	No	20	0.0882	0.03115	35	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	YGWC-26I	0.001	0.000059	0.015	No	15	0.000874	0.0003325	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-26S	0.001	0.000064	0.015	No	15	0.00069	0.0004539		None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-27S	0.001	0.0002	0.015	No	15	0.0007625	0.0003766		None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-28S	0.001	0.000063	0.015	No	15	0.0006876	0.0004573		None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-29I	0.001	0.00016	0.015	No	15	0.0008214	0.0004373		None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-26I	0.007	0.006541	0.013	No	19	0.006821	0.0003702		None	No	0.01	Param.
Lithium (mg/L) Lithium (mg/L)	YGWC-27I	0.007101	0.008039	0.04	No	19	0.000821	0.0004779	0	None	No	0.01	Param.
Lithium (mg/L) Lithium (mg/L)	YGWC-27S	0.01037	0.000039	0.04	No	19	0.009205	0.001991	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-28I	0.007044	0.00663	0.04	No	19	0.02646	0.000097		None	No	0.01	Param.
Lithium (mg/L) Lithium (mg/L)	YGWC-28I	0.007044	0.0053	0.04		19	0.006837	0.005667	94.74			0.01	NP (NDs)
	YGWC-285 YGWC-29I	0.0074	0.0053		No	19	0.0287	0.005581	5.263	None	No No	0.01	, ,
Lithium (mg/L)	1 G v v G - 2 3 1	0.0074	0.0002	0.04	No	19	0.001220	0.000081	J.203	None	No	0.01	NP (normality)

# Federal Confidence Intervals - All Results (No Significant)

Page 2

Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 12:14 PM <u>Well</u> ND Adj. Transform Alpha Constituent  $\underline{\text{Upper Lim.}} \quad \underline{\text{Lower Lim.}} \quad \underline{\text{Compliance}} \quad \underline{\text{Sig.}} \quad \underline{\text{N}}$ <u>Mean</u> Std. Dev. %NDs Method Molybdenum (mg/L) YGWC-27I 0.01 0.0014 0.1 No 19 0.005942 0.004398 52.63 None No NP (NDs) YGWC-28I 0.01 0.0012 0.005411 0.004474 47.37 0.01 NP (normality) Molybdenum (mg/L) 0.1 No 19 No None 0.00083 Molybdenum (mg/L) YGWC-28S 0.01 0.1 No 19 0.008046 0.003887 78.95 None No 0.01 NP (NDs) Molybdenum (mg/L) YGWC-29I 0.01 0.00083 0.1 No 19 0.009517 0.002104 94.74 0.01 NP (NDs) None No 0.0018 0.01 Selenium (mg/L) YGWC-26I 0.0031 0.05 No 17 0.002476 0.001067 11.76 None No NP (normality) Selenium (mg/L) YGWC-26S 0.005 0.0014 0.05 No 0.004076 0.001731 76.47 No 0.01 NP (NDs) Selenium (mg/L) YGWC-28I 0.005 0.0012 0.05 No 17 0.004776 0.0009216 94.12 0.01 NP (NDs) None No YGWC-28S 0.005 0.001 0.05 0.004765 0.0009701 94.12 NP (NDs) Selenium (mg/L) No 17 0.01 No None

# State Confidence Intervals - All Results (No Significant)

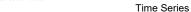
		Plant Yate	s Client: So	outhern Comp	any	Data:	Yates Ash Po	ond 2 Prin	ted 5/7/202	1, 12:16 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Antimony (mg/L)	YGWC-26I	0.003	0.00059	0.006	No	15	0.002674	0.0008604	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-26S	0.003	0.0017	0.006	No	15	0.00282	0.0004754	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-27I	0.003	0.00033	0.006	No	15	0.002822	0.0006894	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-27S	0.003	0.0003	0.006	No	15	0.00282	0.0006971	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-29I	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-27I	0.005	0.0006	0.01	No	19	0.003181	0.002196	57.89	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-28S	0.005	0.00069	0.01	No	19	0.003185	0.002188	57.89	None	No	0.01	NP (NDs)
Barium (mg/L)	YGWC-26I	0.06639	0.06267	2	No	19	0.06453	0.003182	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-26S	0.02896	0.02661	2	No	19	0.02778	0.002008	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-27I	0.0728	0.063	2	No	19	0.06902	0.007204	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-27S	0.1047	0.09313	2	No	19	0.09891	0.009866	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-28I	0.09012	0.08399	2	No	19	0.08706	0.005237	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-28S	0.221	0.196	2	No	19	0.2026	0.03864	0	None	x^4	0.01	Param.
Barium (mg/L)	YGWC-29I	0.0781	0.057	2	No	19	0.07414	0.03394	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-26S	0.0002	0.00011	0.004	No	17	0.0001932	0.0001222		None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-27I	0.00023	0.00014	0.004	No	17	0.0002371	0.0001321		None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-27S	0.0005	0.000066	0.004	No	17	0.0004745	0.0001053		None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-28I	0.0005	0.0001	0.005	No	17	0.0002418	0.0001791		None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-28S	0.0005	0.00048	0.005	No	17	0.0004988	0.0000048		None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-29I	0.0002194	0.0001256	0.005	No	17	0.0002553	0.0001322		Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	YGWC-26I	0.005	0.00065	0.1	No	17	0.003202	0.002205	52.94	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-26S	0.002486	0.001092	0.1	No	17	0.002517	0.00169	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	YGWC-27S	0.015	0.0027	0.1	No	17	0.004668	0.00319	70.59	Kaplan-Meier		0.01	NP (NDs)
Chromium (mg/L)	YGWC-28I	0.005	0.0005	0.1	No	17	0.004201	0.00178	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-28S	0.005	0.0006	0.1	No	17	0.004211	0.001757	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-29I	0.005	0.0005	0.1	No	17	0.004735	0.001091	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-26S	0.002781	0.001865	0.035	No	19	0.002363	0.0008532		None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	YGWC-27I	0.01683	0.003275	0.035	No	19	0.01862	0.02682	0	None	ln(x)	0.01	Param.
Cobalt (mg/L) Cobalt (mg/L)	YGWC-27S YGWC-28I	0.0026 0.005	0.0022 0.00042	0.035	No No	19 19	0.002474 0.004759	0.0006497 0.001051	94.74	None None	No No	0.01	NP (normality)
				0.035	No	19		0.001051	10.53	None	No	0.01	NP (NDs)
Cobalt (mg/L) Cobalt (mg/L)	YGWC-28S YGWC-29I	0.0012 0.005	0.00092 0.0007	0.035	No	19	0.001424 0.003845	0.001266	73.68	None	No	0.01	NP (normality) NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YGWC-26I	1.062	0.4927	6.92	No	18	0.8202	0.5153	5.556	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-26S	0.8845	0.5432	6.92	No	19	0.7138	0.2914	5.263	None	No No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-27I	4.054	2.769	6.92	No	19	3.412	1.098	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)		1.078	0.6625	6.92	No	19	0.8703	0.3549	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)		0.948	0.261	6.92	No	19	0.6337	0.3534	5.263	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	YGWC-28S	0.9055	0.4908	6.92	No	19	0.6981	0.3541	5.263	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-29I	1.148	0.7362	6.92	No	19	0.9422	0.3517	5.263	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-26I	0.1	0.06	4	No	20	0.0825	0.02103	40	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-26S	0.16	0.044	4	No	20	0.1332	0.09928	70	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-27I	0.14	0.07	4	No	20	0.0921	0.02603	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-27S	0.2052	0.1014	4	No	20	0.1634	0.1047	20	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-28I	0.14	0.078	4	No	20	0.1269	0.08215	25	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-28S	0.2651	0.1498	4	No	20	0.2075	0.1015	10	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-29I	0.09525	0.05897	4	No	20	0.0882	0.03115	35	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	YGWC-26I	0.001	0.000059	0.0013	No	15	0.000874	0.0003325	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-26S	0.001	0.000064	0.0013	No	15	0.00069	0.0004539	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-27S	0.001	0.0002	0.0013	No	15	0.0007625	0.0003766	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-28S	0.001	0.000063	0.0013	No	15	0.0006876	0.0004573	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-29I	0.001	0.00016	0.0013	No	15	0.0008214	0.0003702	80	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-26I	0.007101	0.006541	0.03	No	19	0.006821	0.0004779	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-27I	0.01037	0.008039	0.03	No	19	0.009205	0.001991	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-27S	0.03	0.00081	0.03	No	19	0.02846	0.006697	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-28I	0.007044	0.00663	0.03	No	19	0.006837	0.0003531	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-28S	0.03	0.0053	0.03	No	19	0.0287	0.005667	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-29I	0.0074	0.0052	0.03	No	19	0.007226	0.005581	5.263	None	No	0.01	NP (normality)

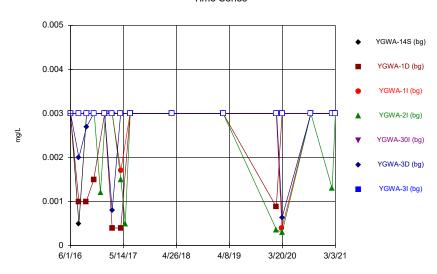
### Page 2

# State Confidence Intervals - All Results (No Significant)

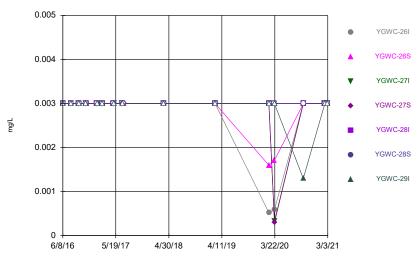
		Plant Yates	s Client: So	outhern Comp	any	Data:	Yates Ash Po	nd 2 Printe	ed 5/7/202	1, 12:16 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Molybdenum (mg/L)	YGWC-27I	0.01	0.0014	0.014	No	19	0.005942	0.004398	52.63	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-28I	0.01	0.0012	0.014	No	19	0.005411	0.004474	47.37	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-28S	0.01	0.00083	0.014	No	19	0.008046	0.003887	78.95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-29I	0.01	0.00083	0.014	No	19	0.009517	0.002104	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	YGWC-26I	0.0031	0.0018	0.05	No	17	0.002476	0.001067	11.76	None	No	0.01	NP (normality)
Selenium (mg/L)	YGWC-26S	0.005	0.0014	0.05	No	17	0.004076	0.001731	76.47	None	No	0.01	NP (NDs)
Selenium (mg/L)	YGWC-28I	0.005	0.0012	0.05	No	17	0.004776	0.0009216	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	YGWC-28S	0.005	0.001	0.05	No	17	0.004765	0.0009701	94.12	None	No	0.01	NP (NDs)

# FIGURE A.



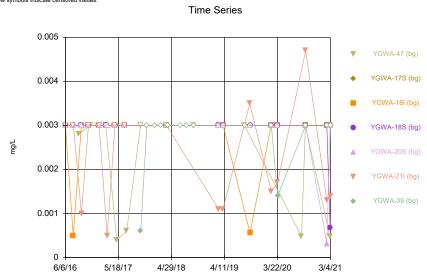


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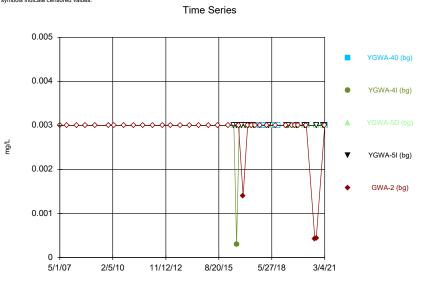


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### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values

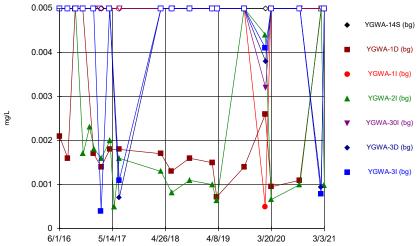


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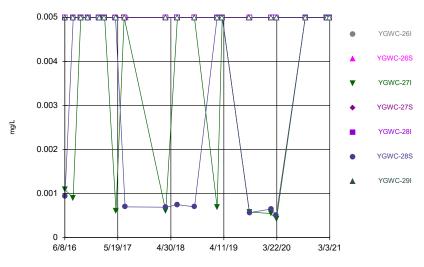


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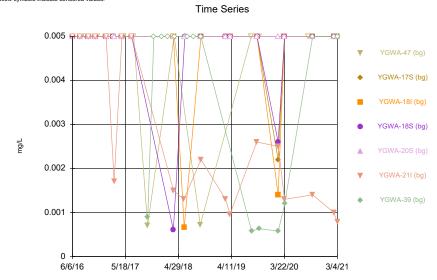


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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

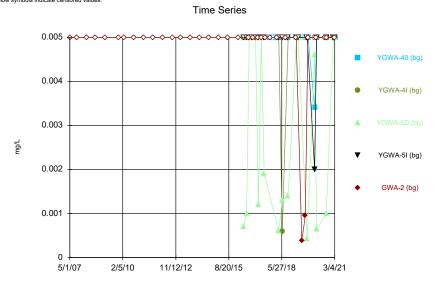


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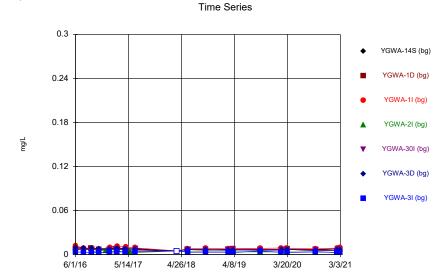
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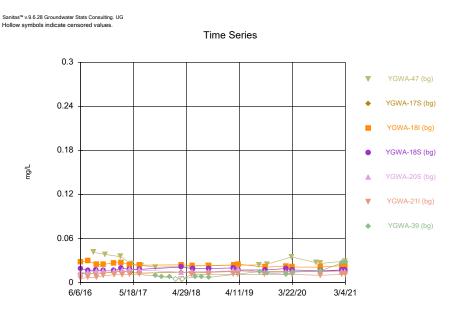
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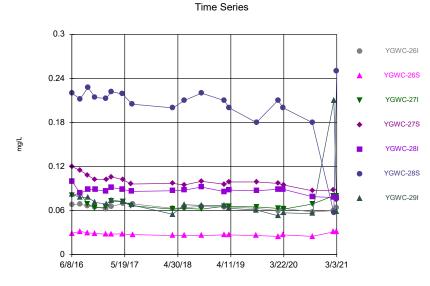
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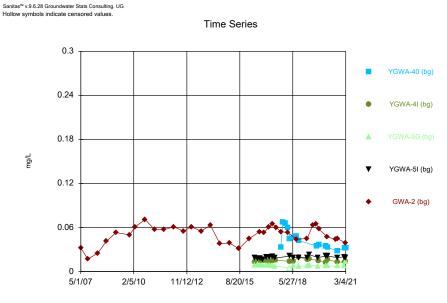
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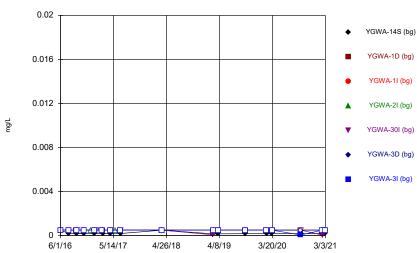


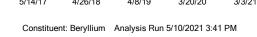
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



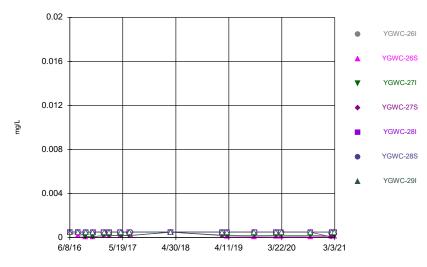
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2





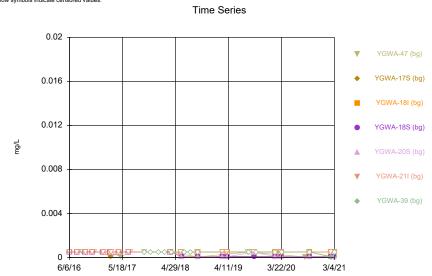


### Time Series



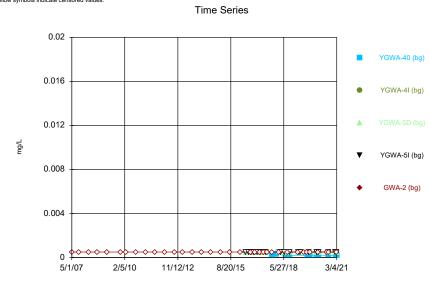
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### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values



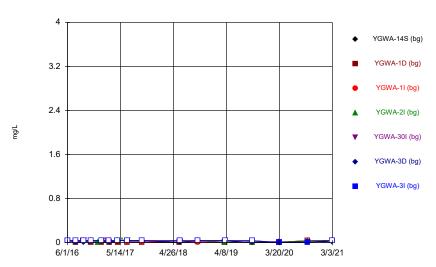
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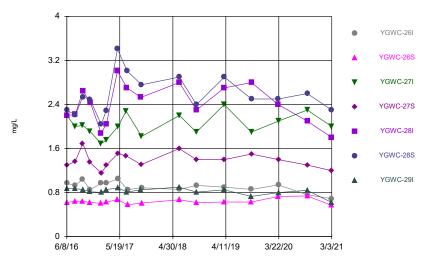


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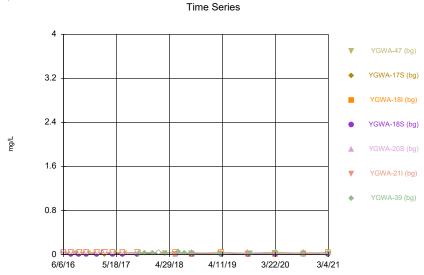


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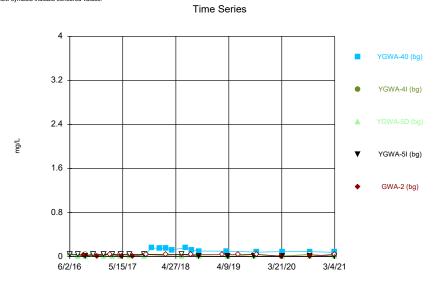


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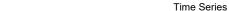
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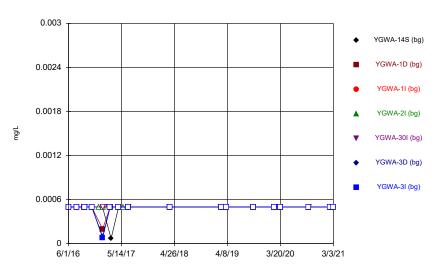


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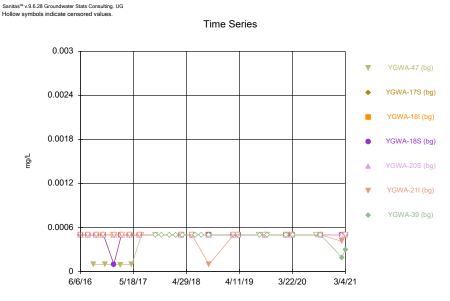


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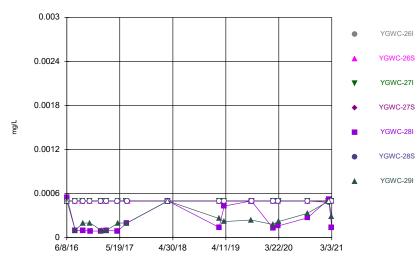


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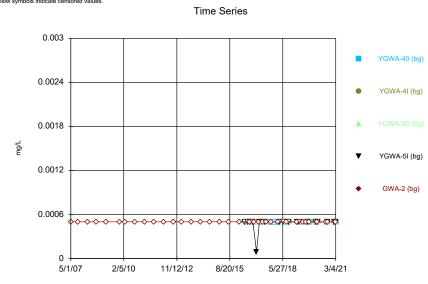


Constituent: Cadmium Analysis Run 5/10/2021 3:41 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Time Series

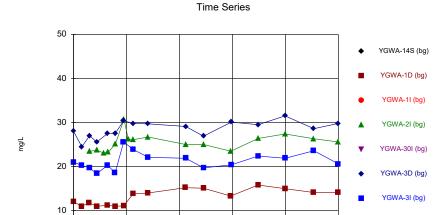


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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



Constituent: Cadmium Analysis Run 5/10/2021 3:41 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

6/1/16



Constituent: Calcium Analysis Run 5/10/2021 3:41 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

4/26/18

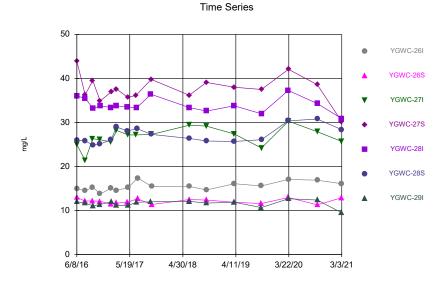
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3/20/20

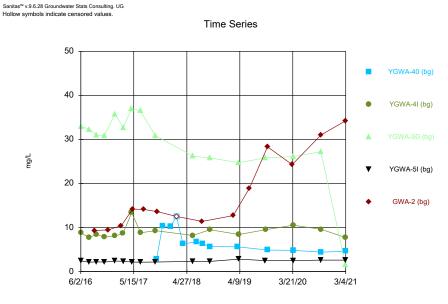
3/3/21

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Time Series 50 YGWA-47 (bg) YGWA-17S (bg) 40 YGWA-18I (bg) YGWA-18S (bg) 20 YGWA-21I (bg) YGWA-39 (bg) 10 3/4/21 6/6/16 5/18/17 4/29/18 4/11/19 3/22/20

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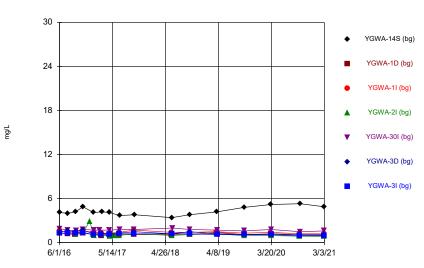


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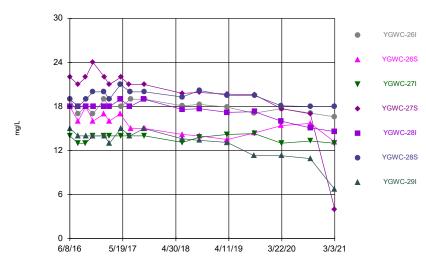


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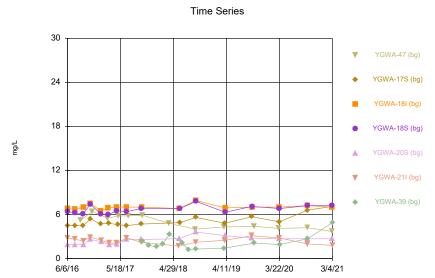


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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



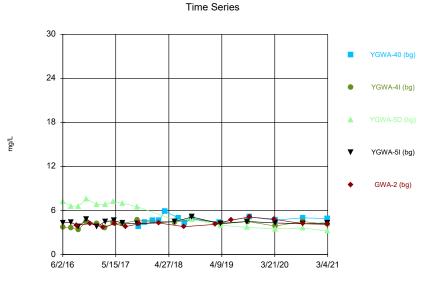
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG



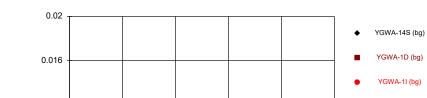
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

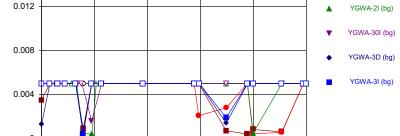


Constituent: Chloride Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

mg/L



Time Series



4/8/19

3/20/20

3/3/21

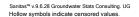
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

4/26/18

### 0.02 YGWC-26I YGWC-26S 0.016 YGWC-27I 0.012 YGWC-27S mg/L YGWC-28I 0.008 YGWC-28S YGWC-29I 0.004 6/8/16 4/30/18 3/3/21 5/19/17 4/11/19 3/22/20

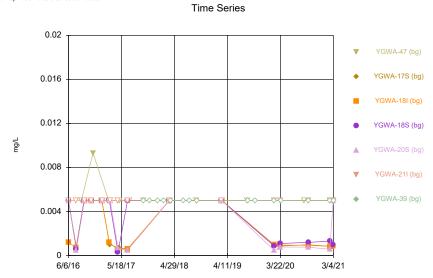
Time Series

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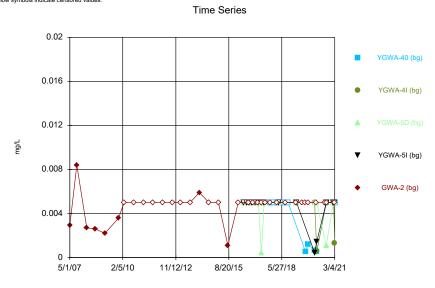


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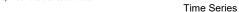
5/14/17

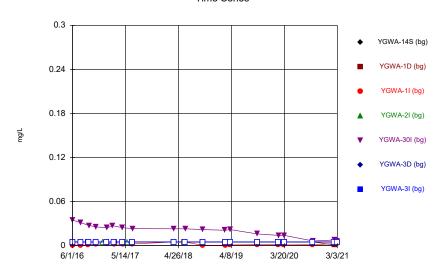


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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



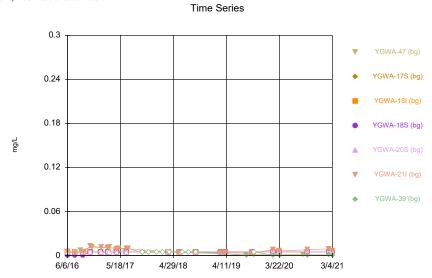
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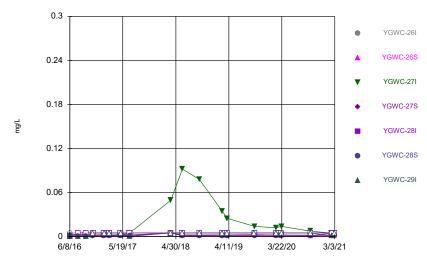
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### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values



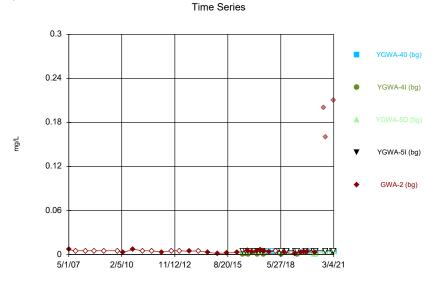
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### Time Series

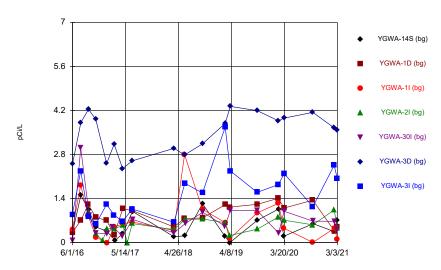


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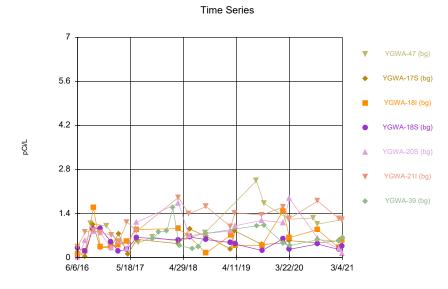


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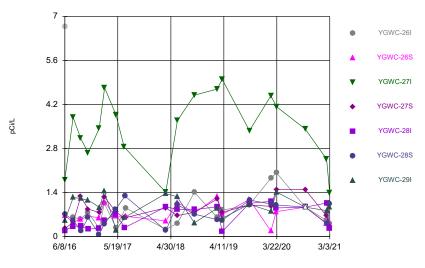
Constituent: Combined Radium 226 + 228 Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



Constituent: Combined Radium 226 + 228 Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

6/2/16

5/15/17

# 7 5.6 YGWA-40 (bg) YGWA-41 (bg) YGWA-5D (bg) YGWA-5I (bg) 1.4

Constituent: Combined Radium 226 + 228 Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

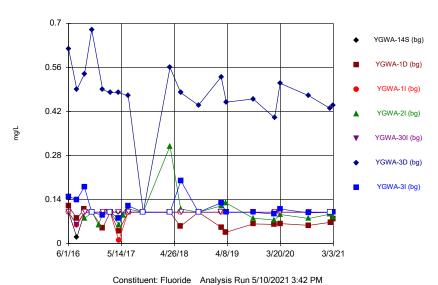
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3/21/20

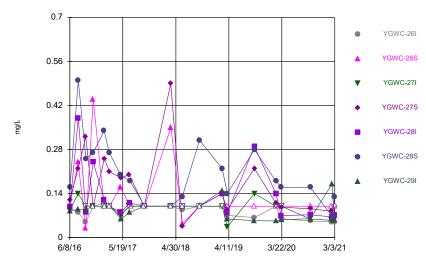
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4/27/18



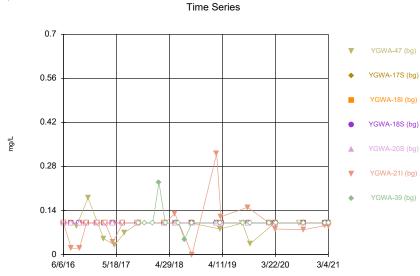


### Time Series

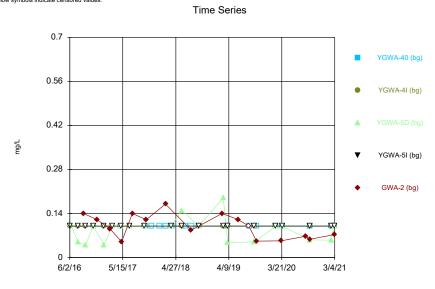


Constituent: Fluoride Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

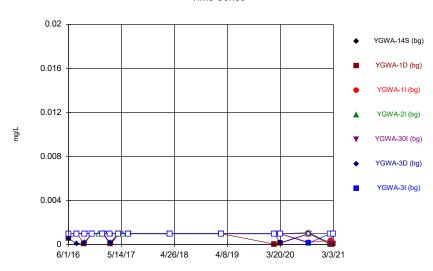


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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



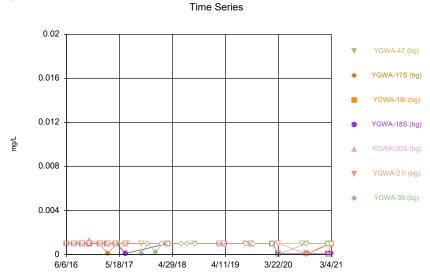
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2





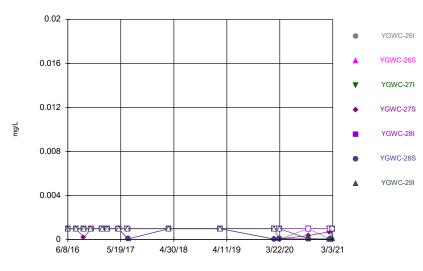
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### $\label{eq:Sanitas} Sanitas^{\text{\tiny{IM}}} \ v.9.6.28 \ Groundwater \ Stats \ Consulting. \ UG \\ Hollow \ symbols \ indicate \ censored \ values.$

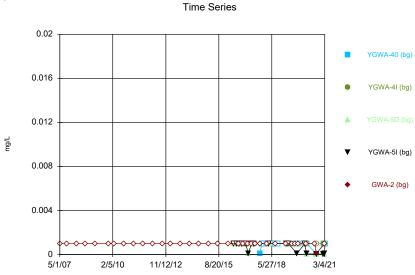


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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series

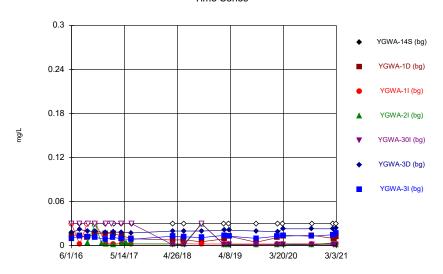


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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

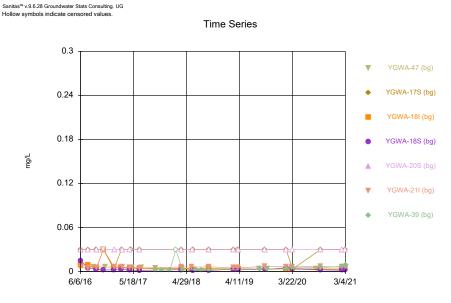


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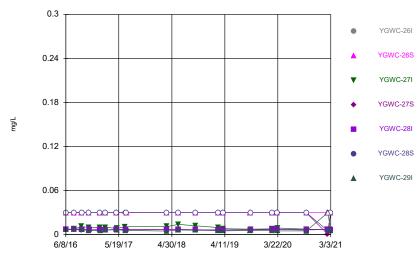




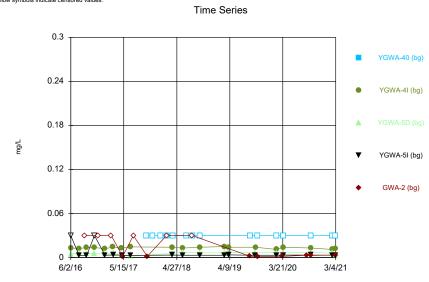
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



Constituent: Lithium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

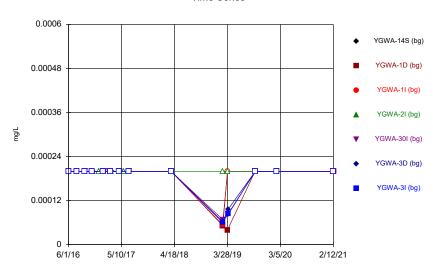


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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



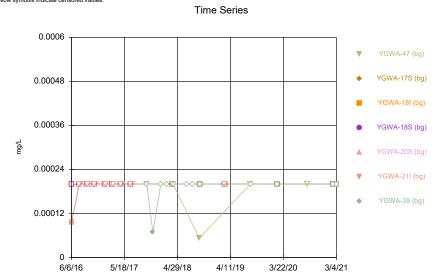
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2





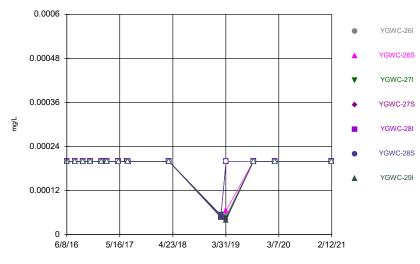
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### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

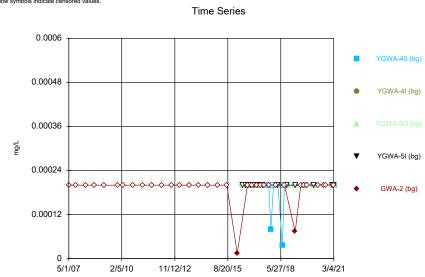


Constituent: Mercury Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Time Series

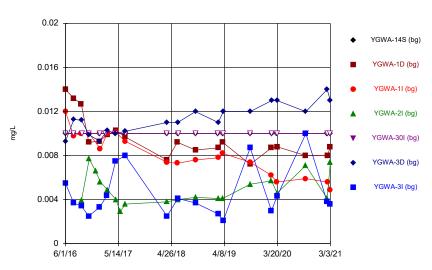


Constituent: Mercury Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



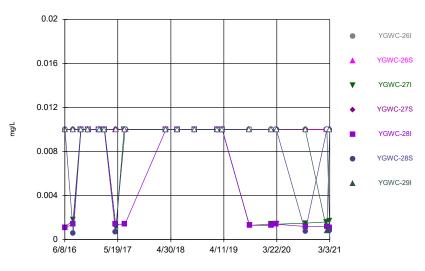
Constituent: Mercury Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2





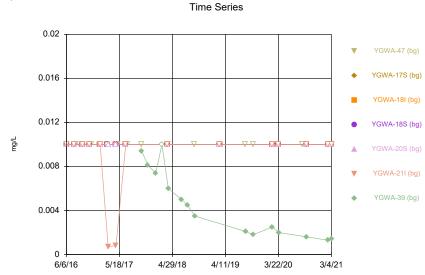
# Constituent: Molybdenum Analysis Run 5/10/2021 3:42 PM Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Time Series



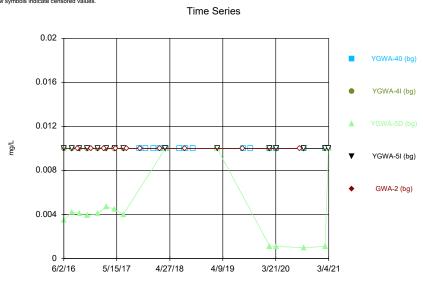
Constituent: Molybdenum Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

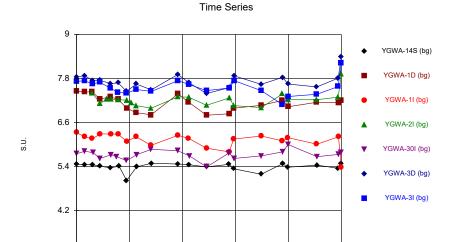


Constituent: Molybdenum Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Molybdenum Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



Constituent: pH Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

4/8/19

4/26/18

3/20/20

3/3/21

### YGWC-26I YGWC-26S 7.8 YGWC-27I YGWC-27S S.U. YGWC-28I YGWC-28S YGWC-29I 4.2 6/8/16 5/19/17 4/30/18 4/11/19 3/22/20 3/3/21

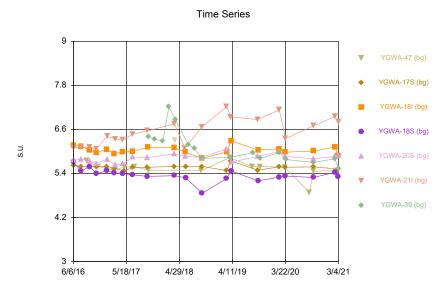
Time Series

Constituent: pH Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

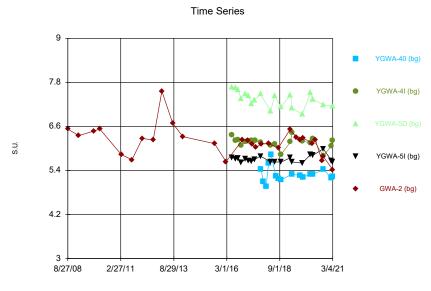
6/1/16

5/14/17



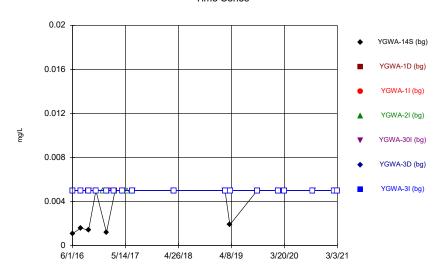
Constituent: pH Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



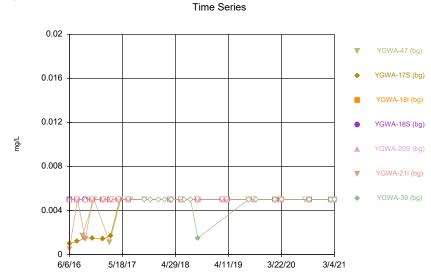
Constituent: pH Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2





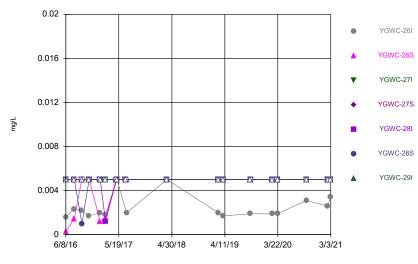
Constituent: Selenium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

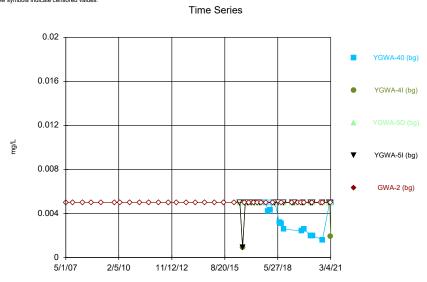


Constituent: Selenium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Time Series

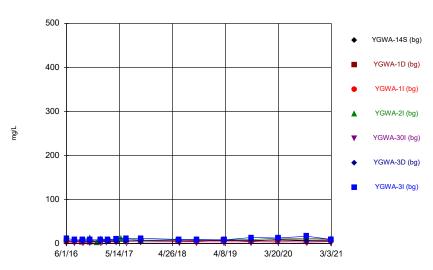


Constituent: Selenium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

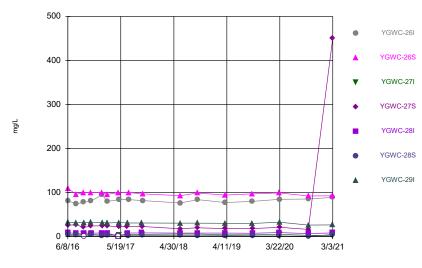


Constituent: Selenium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



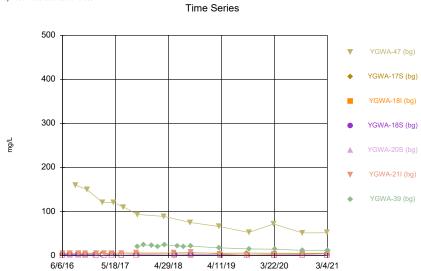


Constituent: Sulfate Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



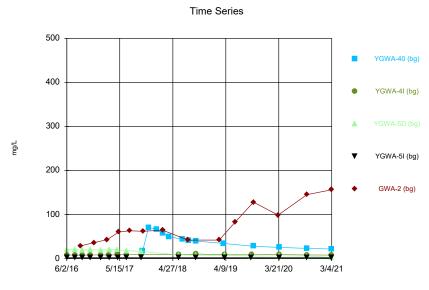
Constituent: Sulfate Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



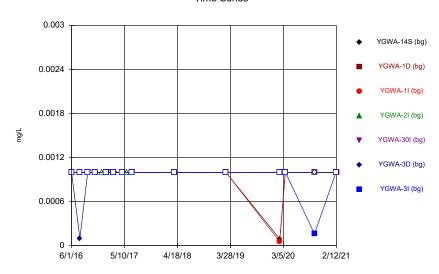
Constituent: Sulfate Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



Constituent: Sulfate Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2





Constituent: Thallium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

6/6/16

5/14/17

# Time Series 0.003 0.0024 VGWA-47 (bg) VGWA-178 (bg) VGWA-188 (bg) VGWA-208 (bg) VGWA-208 (bg) VGWA-39 (bg)

Constituent: Thallium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

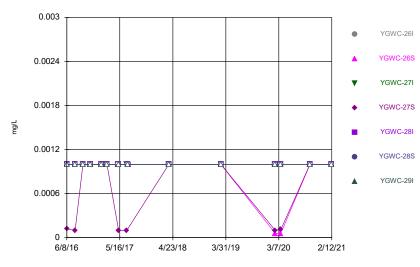
3/29/19

3/5/20

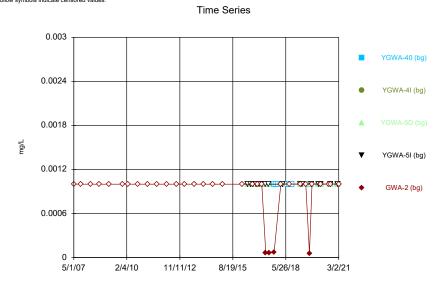
2/10/21

4/21/18

### Time Series

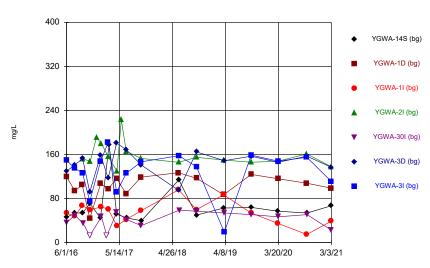


Constituent: Thallium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

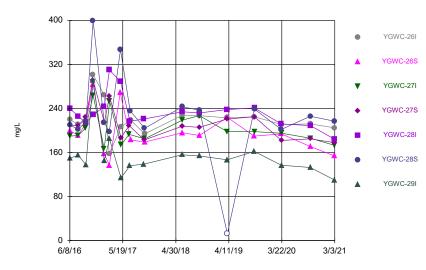


Constituent: Thallium Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



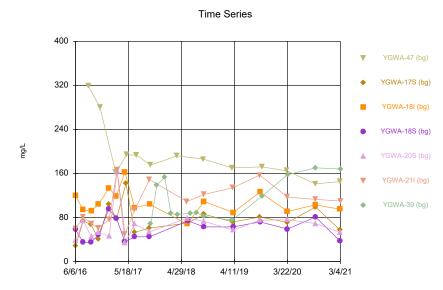


Constituent: Total Dissolved Solids Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



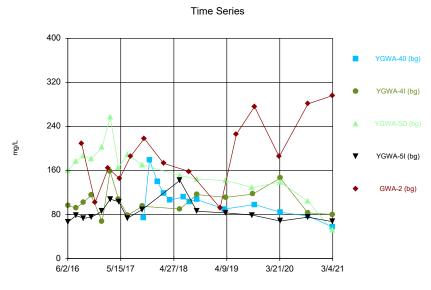
Constituent: Total Dissolved Solids Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



Constituent: Total Dissolved Solids Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



Constituent: Total Dissolved Solids Analysis Run 5/10/2021 3:42 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Constituent: Antimony (mg/L) Analysis Run 5/10/2021 3:43 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		<0.003	<0.003				<0.003
6/2/2016	<0.003				<0.003	<0.003	
7/25/2016			<0.003		<0.003		<0.003
7/26/2016	0.0005 (J)	0.001 (J)				0.002 (J)	
9/13/2016		0.001 (J)	<0.003				
9/14/2016				<0.003			<0.003
9/15/2016	<0.003					0.0027 (J)	
9/19/2016					<0.003		
11/1/2016		0.0015 (J)			<0.003	<0.003	<0.003
11/2/2016	<0.003	. ,					
11/4/2016			<0.003	<0.003			
12/15/2016				0.0012 (J)			
1/10/2017	<0.003			. ,			
1/11/2017		<0.003				<0.003	<0.003
1/16/2017			<0.003	<0.003	<0.003		
2/21/2017			0.000	0.000	<0.003		
3/1/2017					10.000		<0.003
3/2/2017		0.0004 (J)	<0.003			0.0008 (J)	0.000
3/3/2017		0.0004 (0)	-0.000	<0.003		0.0000 (0)	
3/8/2017	<0.003			10.000			
4/26/2017	<0.003				<0.003	<0.003	<0.003
4/27/2017	10.003	0.0004 (J)	0.0017 (J)		10.003	10.003	10.000
4/28/2017		0.0004 (3)	0.0017 (3)	0.0015 (J)			
5/26/2017				0.0015 (J)			
6/27/2017		<0.003	<0.003	0.0003 (3)			
6/28/2017		<b>~0.003</b>	<b>~0.003</b>	<0.003		<0.003	<0.003
6/30/2017	<0.003			<b>~0.003</b>	<0.003	<b>~0.003</b>	0.003
			<0.003		<0.003		
3/27/2018	<0.003		<0.003	<0.003	<0.003	<b>~0.00</b> 2	<b>40</b> 002
3/28/2018		-0.000		<0.003		<0.003	<0.003
3/29/2018	<0.002	<0.003			<0.002		
2/26/2019	<0.003	-0.000	-0.000	10.000	<0.003	-0.000	-0.002
2/27/2019		<0.003	<0.003	<0.003		<0.003	<0.003
2/10/2020		0.00088 (J)	<0.003	0.00000 (1)			0.000
2/11/2020				0.00036 (J)			<0.003
2/12/2020	<0.003		0.000471		<0.003	<0.003	
3/18/2020	<0.003		0.0004 (J)				
3/19/2020		<0.003		0.0003 (J)	<0.003	0.00064 (J)	<0.003
9/23/2020		<0.003	<0.003	<0.003		<0.003	<0.003
9/24/2020					<0.003		
9/25/2020	<0.003						
2/10/2021	<0.003			0.0013 (J)		<0.003	<0.003
2/11/2021					<0.003		
2/12/2021		<0.003	<0.003				
3/1/2021					<0.003		
3/2/2021	<0.003						
3/3/2021		<0.003	<0.003	<0.003		<0.003	<0.003

Constituent: Antimony (mg/L) Analysis Run 5/10/2021 3:43 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.003	<0.003	<0.003	<0.003			
6/9/2016					<0.003	<0.003	<0.003
8/1/2016	<0.003	<0.003	<0.003	<0.003			
8/2/2016					<0.003	<0.003	<0.003
9/20/2016	<0.003	<0.003	<0.003	<0.003			
9/21/2016					<0.003	<0.003	<0.003
11/7/2016	<0.003	<0.003	<0.003	<0.003		<0.003	<0.003
11/8/2016					<0.003		
1/18/2017	<0.003	<0.003	<0.003		<0.003	<0.003	
1/19/2017				<0.003			<0.003
2/21/2017	<0.003	<0.003				<0.003	
2/22/2017				<0.003	<0.003		<0.003
2/23/2017			<0.003				
5/3/2017		<0.003					
5/5/2017					<0.003	<0.003	
5/8/2017	<0.003		<0.003	<0.003			<0.003
6/30/2017			<0.003	<0.003			
7/5/2017					<0.003		<0.003
7/7/2017						<0.003	
7/10/2017	<0.003	<0.003					
3/29/2018			<0.003	<0.003			<0.003
3/30/2018	<0.003	<0.003			<0.003	<0.003	
2/27/2019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
2/13/2020	0.00052 (J)	0.0016 (J)	<0.003	<0.003	<0.003	<0.003	<0.003
3/19/2020		0.0017 (J)			<0.003	<0.003	
3/20/2020	0.00059 (J)		0.00033 (J)	0.0003 (J)			<0.003
9/24/2020	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0013 (J)
2/10/2021	<0.003	<0.003	<0.003	<0.003			
2/11/2021					<0.003		
2/12/2021						<0.003	<0.003
3/2/2021		<0.003					
3/3/2021	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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	
8/30/2016	0.0028 (J)						
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	
11/14/2016	<0.003						
1/11/2017		<0.003	<0.003	<0.003			
1/13/2017					<0.003	<0.003	
2/24/2017	<0.003						
3/1/2017	0.000		<0.003	<0.003			
3/2/2017		<0.003	0.000	0.000			
3/6/2017		-0.000			<0.003	0.0005 (J)	
4/26/2017			<0.003	<0.003	<0.003	<0.003	
5/2/2017		<0.003	-0.003	-0.003	10.003	10.003	
5/8/2017	0.0004 (J)	<b>~0.003</b>					
6/28/2017	0.0004 (3)		<0.003	<0.003			
		<0.002	<0.003	<0.003	-0.002	<0.002	
6/29/2017	0.0000 (1)	<0.003			<0.003	<0.003	
7/11/2017	0.0006 (J)						
10/10/2017	<0.003						0.0000 (1)
10/11/2017							0.0006 (J)
11/20/2017							<0.003
1/11/2018							<0.003
2/20/2018							<0.003
3/28/2018		<0.003	<0.003	<0.003			
3/29/2018					<0.003	<0.003	
4/2/2018	<0.003						
4/3/2018							<0.003
6/28/2018							<0.003
8/7/2018							<0.003
9/19/2018	<0.003						
9/24/2018							<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		
8/20/2019	<0.003						
8/21/2019							<0.003
9/24/2019						0.0035	
9/25/2019		<0.003			<0.003		
9/26/2019			0.00056 (J)	<0.003			
2/11/2020		<0.003	<0.003	<0.003			
2/12/2020					<0.003	0.0015 (J)	<0.003
3/24/2020		<0.003	<0.003	<0.003	<0.003	0.0017 (J)	
3/25/2020							0.0014 (J)
8/27/2020	0.00048 (J)						
9/22/2020	<0.003						
9/23/2020		<0.003	<0.003	<0.003			
9/24/2020					<0.003	0.0047	<0.003

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
2/9/2021			<0.003	<0.003	0.00032 (J)	0.0013 (J)	
2/10/2021							<0.003
3/1/2021	0.00048 (J)						
3/3/2021		<0.003	<0.003	0.00067 (J)	<0.003		
3/4/2021						0.0014 (J)	<0.003

			Flantia	ites Client. Southe	sin Company Data: Tales Ash Fond 2
	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (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
6/2/2016		<0.003	<0.003	<0.003	
7/26/2016		0.0003 (J)	<0.003	<0.003	
8/31/2016					<0.003
9/14/2016		<0.003	<0.003	<0.003	
11/2/2016		<0.003	<0.003		
11/4/2016				<0.003	
11/28/2016					0.0014 (J)
1/12/2017			<0.003	<0.003	
1/13/2017		<0.003			
2/22/2017					<0.003
3/6/2017		<0.003			
3/7/2017			<0.003	<0.003	
5/1/2017		<0.003	<0.003		
5/2/2017				<0.003	
5/8/2017					<0.003
6/27/2017			<0.003	<0.003	
6/29/2017		<0.003			
7/17/2017					<0.003
10/12/2017	<0.003				
10/16/2017					<0.003
11/20/2017	<0.003				
1/10/2018	<0.003				
2/19/2018	<0.003				<0.003
3/29/2018		<0.003	<0.003	<0.003	
4/3/2018	<0.003				
6/28/2018	<0.003				
8/6/2018	-				<0.003
8/7/2018	<0.003				
9/24/2018	<0.003				
2/25/2019	3.000				<0.003
3/4/2019		<0.003	<0.003	<0.003	
4/3/2019		<0.003	<0.003	<0.003	
6/12/2019		-0.003	-0.003	-0.003	<0.003
0/12/2013					10.000

8/19/2019 <0.003 8/21/2019 <0.003 9/24/2019 <0.003 <0.003 9/25/2019 <0.003	ξ.
	•
9/25/2019 <0.003	
10/8/2019 <0.00	3
2/12/2020 <0.003 <0.003 <0.003 <0.003	
3/17/2020 <0.00:	3
3/24/2020 <0.003 <0.003 <0.003	
3/25/2020 <0.003	
8/26/2020 0.000	ł2 (J)
9/22/2020 <0.003 <0.003 <0.003 0.0004	l4 (J)
9/24/2020 <0.003	
2/8/2021 <0.003 <0.003	
2/9/2021 <0.003	
2/10/2021 <0.003	
3/2/2021 <0.003 <0.003 <0.003	3
3/3/2021 <0.003	
3/4/2021 <0.003	

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		0.0021	<0.005				<0.005
6/2/2016	<0.005				<0.005	<0.005	
7/25/2016			<0.005		<0.005		<0.005
7/26/2016	<0.005	0.0016 (J)				<0.005	
9/13/2016		<0.005	<0.005				
9/14/2016				<0.005			<0.005
9/15/2016	<0.005					<0.005	
9/19/2016					<0.005		
11/1/2016		<0.005			<0.005	<0.005	<0.005
11/2/2016	<0.005						
11/4/2016			<0.005	0.0017 (J)			
12/15/2016				0.0023 (J)			
1/10/2017	<0.005						
1/11/2017		0.0017 (J)				<0.005	<0.005
1/16/2017			<0.005	0.0018 (J)	<0.005		
2/21/2017					<0.005		
3/1/2017							0.0004 (J)
3/2/2017		0.0014 (J)	<0.005			<0.005	
3/3/2017				0.0016 (J)			
3/8/2017	<0.005						
4/26/2017	<0.005				<0.005	<0.005	<0.005
4/27/2017		0.0018 (J)	<0.005				
4/28/2017				0.002 (J)			
5/26/2017				0.0005 (J)			
6/27/2017		0.0018 (J)	<0.005				
6/28/2017				0.0016 (J)		0.0007 (J)	0.0011 (J)
6/30/2017	<0.005				<0.005		
3/27/2018	<0.005		<0.005		<0.005		
3/28/2018				0.0013 (J)		<0.005	<0.005
3/29/2018		0.0017 (J)					
6/5/2018		0.0013 (J)					
6/6/2018			<0.005				
6/7/2018				0.00082 (J)		<0.005	
6/8/2018	<0.005						<0.005
6/11/2018					<0.005		
10/1/2018	<0.005	0.0016 (J)	<0.005	0.0011 (J)		<0.005	<0.005
10/2/2018					<0.005		
2/26/2019	<0.005				<0.005		
2/27/2019		0.0015 (J)	<0.005	0.001 (J)		<0.005	<0.005
3/28/2019		0.00072 (J)	<0.005				
3/29/2019	<0.005			0.00063 (J)			
4/1/2019					<0.005	<0.005	<0.005
9/24/2019		0.0014 (J)	<0.005	<0.005			
9/25/2019	<0.005				<0.005	<0.005	<0.005
2/10/2020		0.0026 (J)	0.0005 (J)				
2/11/2020				0.0044 (J)			0.0041 (J)
2/12/2020	<0.005				0.0032 (J)	0.0038 (J)	
3/18/2020	<0.005		<0.005				
3/19/2020		0.00095 (J)		0.00066 (J)	<0.005	<0.005	<0.005
9/23/2020		0.0011 (J)	<0.005	0.001 (J)		<0.005	<0.005
9/24/2020					<0.005		
9/25/2020	<0.005						

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
2/10/2021	<0.005			<0.005		0.00094 (J)	0.00078 (J)
2/11/2021					<0.005		
2/12/2021		<0.005	<0.005				
3/1/2021					<0.005		
3/2/2021	<0.005						
3/3/2021		<0.005	<0.005	0.00098 (J)		<0.005	<0.005

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.005	<0.005	0.0011 (J)	<0.005			
6/9/2016					<0.005	0.00094 (J)	<0.005
8/1/2016	<0.005	<0.005	0.0009 (J)	<0.005			
8/2/2016					<0.005	<0.005	<0.005
9/20/2016	<0.005	<0.005	<0.005	<0.005			
9/21/2016					<0.005	<0.005	<0.005
11/7/2016	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005
11/8/2016					<0.005		
1/18/2017	<0.005	<0.005	<0.005		<0.005	<0.005	
1/19/2017				<0.005			<0.005
2/21/2017	<0.005	<0.005				<0.005	
2/22/2017				<0.005	<0.005		<0.005
2/23/2017			<0.005				
5/3/2017		<0.005					
5/5/2017					<0.005	<0.005	
5/8/2017	<0.005		0.0006 (J)	<0.005			<0.005
6/30/2017			<0.005 (*)	<0.005 (*)			
7/5/2017					<0.005		<0.005
7/7/2017						0.0007 (J)	
7/10/2017	<0.005	<0.005					
3/29/2018			0.0006 (J)	<0.005			<0.005
3/30/2018	<0.005	<0.005			<0.005	0.00069 (J)	
6/11/2018							<0.005
6/12/2018				<0.005	<0.005	0.00075 (J)	
6/13/2018	<0.005	<0.005	<0.005				
10/2/2018	<0.005	<0.005	<0.005	<0.005			<0.005
10/3/2018					<0.005	0.0007 (J)	
2/27/2019	<0.005	<0.005	0.00069 (J)	<0.005	<0.005	<0.005	<0.005
4/1/2019			<0.005	<0.005	<0.005		<0.005
4/2/2019	<0.005	<0.005				<0.005	
9/25/2019	<0.005	<0.005					<0.005
9/26/2019			0.00058 (J)	<0.005	<0.005	0.00057 (J)	
2/13/2020	<0.005	<0.005	0.00055 (J)	<0.005	<0.005	0.00065 (J)	<0.005
3/19/2020		<0.005			<0.005	0.00051 (J)	
3/20/2020	<0.005		0.00042 (J)	<0.005			<0.005
9/24/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/10/2021	<0.005	<0.005	<0.005	<0.005			
2/11/2021					<0.005		
2/12/2021						<0.005	<0.005
3/2/2021		<0.005					
3/3/2021	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005

		YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
6/6/2	2016			<0.005	<0.005			
6/7/2	2016		<0.005			<0.005	<0.005	
7/27	7/2016		<0.005	<0.005	<0.005	<0.005		
7/28	3/2016						<0.005	
8/30	)/2016	<0.005						
9/16	6/2016		<0.005		<0.005			
9/19	9/2016			<0.005		<0.005	<0.005	
	2/2016					<0.005		
	3/2016		<0.005	<0.005	<0.005		<0.005	
	4/2016	<0.005						
	/2017		<0.005	<0.005	<0.005			
	3/2017					<0.005	<0.005	
	1/2017	<0.005				0.000	0.000	
	2017	-0.000		<0.005	<0.005			
	2017		<0.005	40.003	10.003			
			<b>~</b> 0.003			<0.00E	0.0017 (1)	
	2017			<0.005	<0.005	<0.005	0.0017 (J) <0.005	
	3/2017		<0.00E	~0.003	~0.000	<0.005	~U.UU3	
	2017	-0.005	<0.005					
	2017	<0.005		-0.005	-0.005			
	3/2017			<0.005	<0.005			
	9/2017		<0.005			<0.005	<0.005	
	/2017	<0.005						
	0/2017	0.0007 (J)						
	1/2017							0.0009 (J)
	20/2017							<0.005
	/2018							<0.005
	)/2018							<0.005
	3/2018		<0.005	<0.005	0.00061 (J)			
3/29	9/2018					<0.005	0.0015 (J)	
4/2/2	2018	<0.005						
4/3/2	2018							<0.005
6/5/2	2018						0.0013 (J)	
6/6/2	2018					<0.005		
6/7/2	2018			0.00066 (J)				
6/11	/2018		<0.005		<0.005			
6/28	3/2018							<0.005
8/7/2	2018							<0.005
9/19	9/2018	0.00072 (J)						
9/24	1/2018							<0.005
9/25	5/2018		<0.005	<0.005	<0.005	<0.005	0.0022 (J)	
3/5/2	2019		<0.005		<0.005	<0.005	0.0013 (J)	
3/6/2	2019			<0.005				
4/2/2	2019		<0.005				0.00096 (J)	
4/3/2	2019			<0.005	<0.005	<0.005		
8/20	)/2019	<0.005						
8/21	/2019							0.00058 (J)
9/24	1/2019						0.0026 (J)	
9/25	5/2019		<0.005			<0.005		
	5/2019			<0.005	<0.005			
10/8	3/2019	<0.005						
	9/2019							0.00063 (J)
	/2020		0.0022 (J)	0.0014 (J)	0.0026 (J)			

2/12/2020	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg) <0.005	YGWA-21I (bg) 0.0025 (J)	YGWA-39 (bg) 0.00058 (J)
3/17/2020	<0.005						
3/24/2020		<0.005	<0.005	<0.005	<0.005	0.0013 (J)	
3/25/2020							0.0012 (J)
8/27/2020	<0.005						
9/22/2020	<0.005						
9/23/2020		<0.005	<0.005	<0.005			
9/24/2020					<0.005	0.0014 (J)	<0.005
2/9/2021			<0.005	<0.005	<0.005	0.001 (J)	
2/10/2021							<0.005
3/1/2021	<0.005						
3/3/2021		<0.005	<0.005	<0.005	<0.005		
3/4/2021						0.00078 (J)	<0.005

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (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		<0.00E	0.00071 (1)	<0.00E	<0.005
6/2/2016		<0.005	0.00071 (J)	<0.005	
7/26/2016		<0.005	0.001 (J)	<0.005	40.00F
8/31/2016		.0.005	.0.005	.0.005	<0.005
9/14/2016		<0.005	<0.005	<0.005	
11/2/2016		<0.005	<0.005	.0.005	
11/4/2016				<0.005	0.005
11/28/2016			.0.005	.0.005	<0.005
1/12/2017			<0.005	<0.005	
1/13/2017		<0.005			
2/22/2017					<0.005
3/6/2017		<0.005			
3/7/2017			0.0012 (J)	<0.005	
5/1/2017		<0.005	<0.005		
5/2/2017				<0.005	
5/8/2017					<0.005
6/27/2017			0.0019 (J)	<0.005	
6/29/2017		<0.005			
7/17/2017					<0.005
10/12/2017	<0.005				
10/16/2017					<0.005
11/20/2017	<0.005				
1/10/2018	<0.005				
2/19/2018	<0.005				<0.005
3/29/2018		<0.005	0.0006 (J)	<0.005	
4/3/2018	<0.005				
6/6/2018			0.0013 (J)		
6/7/2018		0.00059 (J)		<0.005	
6/28/2018	<0.005				
8/6/2018					<0.005
8/7/2018	<0.005				
9/24/2018	<0.005				
9/26/2018		<0.005	0.0014 (J)	<0.005	
2/25/2019					<0.005

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
3/4/2019		<0.005	<0.005	<0.005	
4/3/2019		<0.005	<0.005	<0.005	
6/12/2019					0.00038 (J)
8/19/2019					0.00095 (J)
8/21/2019	<0.005				
9/24/2019			0.00043 (J)	<0.005	
9/25/2019		<0.005			
10/8/2019					<0.005
10/9/2019	<0.005				
2/12/2020	0.0034 (J)	<0.005	0.0046 (J)	0.002 (J)	
3/17/2020					<0.005
3/24/2020	<0.005		0.00065 (J)	<0.005	
3/25/2020		<0.005			
8/26/2020					<0.005
9/22/2020		<0.005	0.001 (J)	<0.005	<0.005
9/24/2020	<0.005				
2/8/2021			<0.005	<0.005	
2/9/2021		<0.005			
2/10/2021	<0.005				
3/2/2021			<0.005	<0.005	<0.005
3/3/2021		<0.005			
3/4/2021	<0.005				

0/1/0010	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016	0.0004	0.008	0.012		0.0004	0.01	0.0038
6/2/2016	0.0081		0.0001 (1)		0.0064	0.01	0.0004 (1)
7/25/2016	0.0000 ( 1)	0.000 (1)	0.0091 (J)		0.0071 (J)	0.0000 (1)	0.0031 (J)
7/26/2016	0.0082 (J)	0.006 (J)				0.0088 (J)	
9/13/2016		0.0084 (J)	0.008 (J)	0.0007.(1)			0.0007 (1)
9/14/2016	0.0007 ( 1)			0.0037 (J)		0.000 (1)	0.0027 (J)
9/15/2016	0.0087 (J)					0.009 (J)	
9/19/2016					0.0069 (J)		
11/1/2016		0.0062 (J)			0.007 (J)	0.0079 (J)	0.0027 (J)
11/2/2016	0.0082 (J)						
11/4/2016			0.0067 (J)	0.0059 (J)			
12/15/2016				0.0056 (J)			
1/10/2017	0.0086 (J)						
1/11/2017		0.0069 (J)				0.0075 (J)	0.0036 (J)
1/16/2017			0.0096 (J)	0.0049 (J)	0.0071 (J)		
2/21/2017					0.0077 (J)		0.0000 (1)
3/1/2017		0.0074 (1)	0.0110			0.000 (1)	0.0036 (J)
3/2/2017		0.0071 (J)	0.0112			0.009 (J)	
3/3/2017	0.0000 ( 1)			0.0046 (J)			
3/8/2017	0.0088 (J)						
4/26/2017	0.0085 (J)				0.0074 (J)	0.0078 (J)	0.0038 (J)
4/27/2017		0.0064 (J)	0.0106				
4/28/2017				0.0039 (J)			
5/26/2017				0.0034 (J)			
6/27/2017		0.0054 (J)	0.0092 (J)				
6/28/2017	0.0004 ( 1)			0.003 (J)	0.0070 (1)	0.0071 (J)	0.004 (J)
6/30/2017	0.0081 (J)		0.04		0.0076 (J)		
3/27/2018	<0.01		<0.01	.0.04	<0.01	.0.04	2.24
3/28/2018		.0.04		<0.01		<0.01	<0.01
3/29/2018		<0.01					
6/5/2018		0.0069 (J)	0.0000 (1)				
6/6/2018			0.0082 (J)	0.0007 (1)		0.0000 / 1)	
6/7/2018	0.007 (1)			0.0037 (J)		0.0068 (J)	0.0004 (1)
6/8/2018 6/11/2018	0.007 (J)				0.007 (1)		0.0034 (J)
	0.007 (1)	0.0000 (1)	0.0004 (1)	0.0000 ( 1)	0.007 (J)	0.0005 (1)	0.0004 (1)
10/1/2018	0.007 (J)	0.0062 (J)	0.0084 (J)	0.0038 (J)	0.0000 (1)	0.0065 (J)	0.0034 (J)
10/2/2018 2/26/2019	0.0067 (1)				0.0069 (J)		
2/27/2019	0.0067 (J)	0.0074 (1)	0.008 (1)	0.0035 ( 1)	0.007 (J)	0.0050 (1)	0.0034 (J)
3/28/2019		0.0074 (J)	0.008 (J)	0.0035 (J)		0.0059 (J)	0.0034 (3)
	0.0066 ( 1)	0.0082 (J)	0.0082 (J)	0.0020 ( 1)			
3/29/2019 4/1/2019	0.0066 (J)			0.0039 (J)	0.0072 (J)	0.0064 (J)	0.002 ( 1)
9/24/2019		0.0072 (1)	0.0086 (1)	0.0038 ( 1)	0.0072 (3)	0.0004 (3)	0.003 (J)
9/25/2019	0.0071 (J)	0.0072 (J)	0.0086 (J)	0.0038 (J)	0.0066 ( 1)	0.0050 (1)	0.005 (1)
2/10/2020	0.0071 (3)	0.0066 ( 1)	0.0091 (J)		0.0066 (J)	0.0059 (J)	0.005 (J)
2/11/2020		0.0066 (J)	0.0091 (3)	0.0036 (1)			0.0031 (J)
	0.007 (1)			0.0036 (J)	0.0072 ( 1)	0.0062 (1)	0.0031 (3)
2/12/2020 3/18/2020	0.007 (J)		0.008471		0.0073 (J)	0.0062 (J)	
3/18/2020	0.0076 (J)	0.0076 (J)	0.0084 (J)	0.0036 (J)	0.0074 (J)	0.0072 (J)	0.0029 (J)
9/23/2020		0.0076 (J) 0.0068 (J)	0.0079 (J)	0.0036 (J) 0.0039 (J)	0.0074 (3)	0.0072 (J) 0.0051 (J)	0.0029 (J)
9/23/2020		0.0000 (0)	0.0073 (3)	0.0039 (3)	0.0062 (J)	0.0051 (3)	0.0000 (0)
9/25/2020	0.0073 (J)				0.0002 (0)		
5,25,2520	3.3370 (0)						

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
2/10/2021	0.0078 (J)			0.0032 (J)		0.0059 (J)	0.0029 (J)
2/11/2021					0.0077 (J)		
2/12/2021		0.0057 (J)	0.009 (J)				
3/1/2021					0.007		
3/2/2021	0.0076						
3/3/2021		0.0068	0.0094	0.0041 (J)		0.0064	0.0031 (J)

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.068	0.029	0.081	0.12			
6/9/2016					0.1	0.22	0.082
8/1/2016	0.0688	0.0316	0.0838	0.115			
8/2/2016					0.0836	0.212	0.0781
9/20/2016	0.0663	0.0298	0.0687	0.108			
9/21/2016					0.0889	0.228	0.0782
11/7/2016	0.065	0.0289	0.0639	0.102		0.214	0.0712
11/8/2016					0.0886		
1/18/2017	0.0625	0.0278	0.0645		0.0862	0.213	
1/19/2017				0.102			0.0689
2/21/2017	0.0655	0.0282				0.222	
2/22/2017				0.106	0.0915		0.0741
2/23/2017			0.0728				
5/3/2017		0.0282					
5/5/2017					0.0891	0.219	
5/8/2017	0.0699		0.0721	0.102			0.0725
6/30/2017			0.0666	0.0963			
7/5/2017					0.0862		0.0677
7/7/2017						0.205	
7/10/2017	0.0691	0.0274					
3/29/2018			0.062	0.097			0.055
3/30/2018	0.063	0.026			0.087	0.2	
6/11/2018							0.068
6/12/2018				0.095	0.088	0.21	
6/13/2018	0.064	0.026	0.063				
10/2/2018	0.066	0.026	0.062	0.1			0.067
10/3/2018					0.092	0.22	
2/27/2019	0.065	0.027	0.066	0.096	0.086	0.21	0.067
4/1/2019			0.066	0.099	0.088		0.063
4/2/2019	0.065	0.027				0.2	
9/25/2019	0.063	0.026					0.061
9/26/2019			0.065	0.099	0.087	0.18	
2/13/2020	0.06	0.025	0.063	0.097	0.089	0.21	0.053
3/19/2020		0.027			0.089	0.2	
3/20/2020	0.063		0.062	0.095			0.057
9/24/2020	0.058	0.025	0.069	0.087	0.079	0.18	0.056
2/10/2021	0.06	0.031	0.08	0.088			
2/11/2021					0.078		
2/12/2021						0.057	0.21
3/2/2021		0.031					
3/3/2021	0.064		0.08	0.075	0.077	0.25	0.059

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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)	
8/30/2016	0.0413						
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)	
11/14/2016	0.0383						
1/11/2017		0.0142	0.0266	0.0162			
1/13/2017					0.0158	0.0105	
2/24/2017	0.0351						
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					
5/8/2017	0.0251						
6/28/2017			0.0237	0.018			
6/29/2017		0.0128			0.017	0.0109	
7/11/2017	0.0233						
10/10/2017	0.0207						
10/11/2017							0.0092 (J)
11/20/2017							0.0081 (J)
1/11/2018							0.0077 (J)
2/20/2018							<0.01
3/28/2018		0.014	0.024	0.021			
3/29/2018		0.011	0.02	0.021	0.014	<0.01	
4/2/2018	0.022				0.014	10.01	
4/3/2018	0.022						<0.01
6/5/2018						0.011	-0.01
6/6/2018					0.015	0.011	
6/7/2018			0.023		0.013		
6/11/2018		0.013	0.023	0.019			
		0.013		0.019			0.0079 (1)
6/28/2018							0.0078 (J)
8/7/2018	0.022						0.0078 (J)
9/19/2018	0.023						0.0074 (1)
9/24/2018		0.014	0.022	0.010	0.015	0.011	0.0071 (J)
9/25/2018		0.014	0.023	0.019	0.015	0.011	
3/5/2019		0.015	0.004	0.02	0.016	0.011	
3/6/2019		0.040	0.024			0.044	
4/2/2019		0.016				0.011	
4/3/2019			0.025	0.017	0.018		
8/20/2019	0.024						
8/21/2019							0.015
9/24/2019						0.011	
9/25/2019		0.015			0.014		
9/26/2019			0.021	0.017			
10/8/2019	0.025						
10/9/2019							0.013
2/11/2020		0.015	0.022	0.019			

2/12/2020	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg) 0.014	YGWA-21I (bg) 0.011	YGWA-39 (bg) 0.011
3/17/2020	0.035						
3/24/2020		0.015	0.021	0.017	0.015	0.011	
3/25/2020							0.014
8/27/2020	0.027						
9/22/2020	0.026						
9/23/2020		0.015	0.021	0.016			
9/24/2020					0.015	0.01	0.016
2/9/2021			0.023	0.017	0.015	0.011	
2/10/2021							0.027
3/1/2021	0.029						
3/3/2021		0.017	0.023	0.017	0.015		
3/4/2021						0.011	0.028

				Plant Ya	tes Client: Southe	ern Company	Data: Yates Ash Pond 2
		YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (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	
1	1/18/2009					0.05	
3/	/3/2010					0.061	
9/	/8/2010					0.071	
3/	/10/2011					0.057	
	/8/2011					0.057	
	/5/2012					0.061	
	10/2012					0.055	
	6/2013					0.061	
	12/2013					0.055	
	/5/2014					0.063	
	/5/2014					0.038	
	4/2015					0.039	
	/3/2015					0.031	
	16/2016					0.045	
	/2/2016		0.013	0.0084	0.019	0.043	
	26/2016		0.0158	0.01	0.0179		
	/31/2016		0.0130	0.01	0.0173	0.0542	
	/14/2016		0.0143	0.0085 (J)	0.0181	0.0342	
	1/2/2016		0.0143	0.0083 (J) 0.0091 (J)	0.0101		
	1/4/2016		0.0140	0.0031 (3)	0.0165		
	1/28/2016				0.0103	0.0529	
	/12/2017			0.0089 (J)	0.0199	0.0329	
	13/2017		0.0146	0.0089 (3)	0.0199		
	/13/2017 /22/2017		0.0140			0.0607	
			0.0141			0.0007	
	/6/2017 /7/2017		0.0141	0.000 (1)	0.0106		
	/7/2017 /1/2017		0.0149	0.009 (J)	0.0196		
			0.0149	0.0083 (J)	0.0202		
	/2/2017				0.0202	0.005	
	/8/2017			0.0074 (1)	0.0101	0.065	
	27/2017			0.0074 (J)	0.0184		
	/29/2017		0.0154				
	/17/2017	0.0000				0.06	
	0/12/2017	0.0328				0.0540	
	0/16/2017					0.0542	
	1/20/2017	0.0671					
	/10/2018	0.0656					
	/19/2018	0.0598				0.0533	
	/29/2018		0.014	<0.01	0.021		
	/3/2018	0.045					
	/6/2018			0.008 (J)			
	7/2018		0.014		0.019		
	/28/2018	0.047					
	/6/2018					0.044	
	7/2018	0.048					
	/24/2018	0.042					
	/26/2018		0.02	0.0075 (J)	0.019		
2	/25/2019					0.045	

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
3/4/2019		0.016	0.0077 (J)	0.019	
4/3/2019		0.017	0.0087 (J)	0.023	
6/12/2019	)				0.063
8/19/2019	)				0.065
8/21/2019	0.035				
9/24/2019	)		0.0075 (J)	0.019	
9/25/2019	)	0.015			
10/8/2019	)				0.058
10/9/2019	0.036				
2/12/2020	0.035	0.012	0.0079 (J)	0.021	
3/17/2020	)				0.047
3/24/2020	0.033		0.0076 (J)	0.021	
3/25/2020	)	0.016			
8/26/2020	)				0.044
9/22/2020	)	0.013	0.0076 (J)	0.019	0.045
9/24/2020	0.028				
2/8/2021			0.0079 (J)	0.02	
2/9/2021		0.013			
2/10/2021	0.032				
3/2/2021			0.014	0.019	0.039
3/3/2021		0.014			
3/4/2021	0.032				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		<0.0005	<0.0005				<0.0005
6/2/2016	<0.0005				<0.0005	<0.0005	
7/25/2016			<0.0005		<0.0005		<0.0005
7/26/2016	0.0002 (J)	<0.0005				<0.0005	
9/13/2016		<0.0005	<0.0005				
9/14/2016				<0.0005			<0.0005
9/15/2016	0.0002 (J)					<0.0005	
9/19/2016					<0.0005		
11/1/2016		<0.0005			<0.0005	<0.0005	<0.0005
11/2/2016	0.0002 (J)						
11/4/2016			<0.0005	<0.0005			
12/15/2016				<0.0005			
1/10/2017	0.0002 (J)						
1/11/2017		<0.0005				<0.0005	<0.0005
1/16/2017			<0.0005	<0.0005	<0.0005		
2/21/2017					<0.0005		
3/1/2017							<0.0005
3/2/2017		<0.0005	<0.0005			<0.0005	
3/3/2017				<0.0005			
3/8/2017	0.0002 (J)						
4/26/2017	0.0002 (J)				<0.0005	<0.0005	<0.0005
4/27/2017		<0.0005	<0.0005				
4/28/2017				<0.0005			
5/26/2017				<0.0005			
6/27/2017		<0.0005	<0.0005				
6/28/2017				<0.0005		<0.0005	<0.0005
6/30/2017	0.0002 (J)				<0.0005		
3/27/2018	<0.0005		<0.0005		<0.0005		
3/28/2018				<0.0005		<0.0005	<0.0005
3/29/2018		<0.0005					
2/26/2019	0.00016 (J)				7.2E-05 (J)		
2/27/2019	(1)	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
3/28/2019		<0.0005	<0.0005				
3/29/2019	0.00017 (J)			<0.0005			
4/1/2019					<0.0005	<0.0005	<0.0005
9/24/2019		<0.0005	<0.0005	<0.0005			
9/25/2019	0.00018 (J)				<0.0005	<0.0005	<0.0005
2/10/2020		<0.0005	<0.0005				
2/11/2020				<0.0005			<0.0005
2/12/2020	0.00019 (J)				<0.0005	<0.0005	
3/18/2020	0.00021 (J)		<0.0005				
3/19/2020	0.00021(0)	<0.0005	-0.0000	<0.0005	<0.0005	<0.0005	<0.0005
9/23/2020		<0.0005	<0.0005	<0.0005	0.0000	<0.0005	5.9E-05 (J)
9/24/2020		0.0000	0.000	0.000	<0.0005	0.0000	(0)
9/25/2020	0.00018 (J)				0.0000		
2/10/2021	0.00018 (J)			<0.0005		<0.0005	<0.0005
2/11/2021	3.000 10 (0)			0.0000	4.7E-05 (J)	0.0000	5.5555
2/11/2021		<0.0005	<0.0005		4.7 E 00 (0)		
3/1/2021		-0.0000	-0.0000		<0.0005		
3/2/2021	0.00018 (J)				0.0000		
3/3/2021	3.000 10 (0)	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
							<del>-</del>

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.0005	<0.0005	<0.0005	<0.0005			
6/9/2016					<0.0005	<0.0005	<0.0005
8/1/2016	<0.0005	0.0002 (J)	<0.0005	<0.0005			
8/2/2016					<0.0005	<0.0005	<0.0005
9/20/2016	<0.0005	0.0001 (J)	9E-05 (J)	<0.0005			
9/21/2016					<0.0005	<0.0005	<0.0005
11/7/2016	<0.0005	0.0001 (J)	0.0001 (J)	<0.0005		<0.0005	<0.0005
11/8/2016					<0.0005		
1/18/2017	<0.0005	0.0002 (J)	0.0002 (J)		<0.0005	<0.0005	
1/19/2017				<0.0005			<0.0005
2/21/2017	<0.0005	0.0002 (J)				<0.0005	
2/22/2017				<0.0005	<0.0005		<0.0005
2/23/2017			0.0002 (J)				
5/3/2017		0.0002 (J)					
5/5/2017					<0.0005	<0.0005	
5/8/2017	<0.0005		0.0002 (J)	<0.0005			<0.0005
6/30/2017			0.0002 (J)	<0.0005			
7/5/2017					<0.0005		<0.0005
7/7/2017						<0.0005	
7/10/2017	<0.0005	0.0002 (J)					
3/29/2018			<0.0005	<0.0005			<0.0005
3/30/2018	<0.0005	<0.0005			<0.0005	<0.0005	
2/27/2019	<0.0005	0.00018 (J)	0.00022 (J)	<0.0005	<0.0005	<0.0005	<0.0005
4/1/2019			0.00022 (J)	<0.0005	<0.0005		<0.0005
4/2/2019	<0.0005	0.00015 (J)				<0.0005	
9/25/2019	<0.0005	0.00011 (J)					<0.0005
9/26/2019			0.0002 (J)	<0.0005	<0.0005	<0.0005	
2/13/2020	<0.0005	0.00015 (J)	0.00021 (J)	<0.0005	<0.0005	<0.0005	<0.0005
3/19/2020		0.00012 (J)			<0.0005	<0.0005	
3/20/2020	<0.0005		0.00023 (J)	<0.0005			<0.0005
9/24/2020	<0.0005	8.5E-05 (J)	0.00019 (J)	<0.0005	<0.0005	<0.0005	<0.0005
2/10/2021	<0.0005	0.00013 (J)	0.00014 (J)	6.6E-05 (J)			
2/11/2021					<0.0005		
2/12/2021						<0.0005	<0.0005
3/2/2021		0.00016 (J)					
3/3/2021	<0.0005		0.00013 (J)	<0.0005	<0.0005	<0.0005	<0.0005

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
6/6/2016			<0.0005	<0.0005			
6/7/2016		<0.0005			<0.0005	<0.0005	
7/27/2016		<0.0005	<0.0005	<0.0005	<0.0005		
7/28/2016						<0.0005	
8/30/2016	<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	
11/14/2016	<0.0005						
1/11/2017		<0.0005	<0.0005	<0.0005			
1/13/2017					<0.0005	<0.0005	
2/24/2017	<0.0005						
3/1/2017			<0.0005	<0.0005			
3/2/2017		8E-05 (J)					
3/6/2017		02 00 (0)			<0.0005	<0.0005	
4/26/2017			<0.0005	<0.0005	<0.0005	<0.0005	
5/2/2017		<0.0005	-0.0003	10.0003	10.0000	10.0000	
	7E 0E ( I)	<0.0005					
5/8/2017	7E-05 (J)		<0.000E	<0.000E			
6/28/2017		.0.0005	<0.0005	<0.0005	0.0005	0.0005	
6/29/2017		<0.0005			<0.0005	<0.0005	
7/11/2017	<0.0005						
10/10/2017	<0.0005						
10/11/2017							<0.0005
11/20/2017							<0.0005
1/11/2018							<0.0005
2/20/2018							<0.0005
3/28/2018		<0.0005	<0.0005	<0.0005			
3/29/2018					<0.0005	<0.0005	
4/2/2018	<0.0005						
4/3/2018							<0.0005
6/5/2018						<0.0005	
6/6/2018					8E-05 (J)		
6/7/2018			<0.0005				
6/11/2018		9E-05 (J)		5.7E-05 (J)			
6/28/2018							<0.0005
8/7/2018							<0.0005
9/19/2018	5.7E-05 (J)						
9/24/2018							<0.0005
9/25/2018		8.9E-05 (J)	<0.0005	8.2E-05 (J)	6.1E-05 (J)	<0.0005	
3/5/2019		9.1E-05 (J)		7.9E-05 (J)	0.00011 (J)	<0.0005	
3/6/2019			<0.0005				
4/2/2019		9E-05 (J)				<0.0005	
4/3/2019			<0.0005	7.5E-05 (J)	6.4E-05 (J)		
8/20/2019	<0.0005			. ,	. ,		
8/21/2019							<0.0005
9/24/2019						<0.0005	
9/25/2019		8.1E-05 (J)			<0.0005		
9/26/2019			<0.0005	8.4E-05 (J)	0.000		
10/9/2019			5.0000	5.4L 00 (0)			<0.0005
2/11/2020		7.8E-05 (J)	<0.0005	7.6E-05 (J)			5.5555
2/11/2020		7.0L-00 (0)	-0.0003	,.uL-03 (d)	7.8E-05 (J)	<0.0005	<0.0005
£11£1£U£U					7.00-00 (0)	·0.0000	-0.0000

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
3/24/2020		8E-05 (J)	<0.0005	8.9E-05 (J)	7.6E-05 (J)	<0.0005	
3/25/2020							<0.0005
8/27/2020	4.7E-05 (J)						
9/22/2020	<0.0005						
9/23/2020		8.1E-05 (J)	<0.0005	8.8E-05 (J)			
9/24/2020					8.3E-05 (J)	<0.0005	<0.0005
2/9/2021			<0.0005	9.8E-05 (J)	6.8E-05 (J)	<0.0005	
2/10/2021							5.1E-05 (J)
3/1/2021	5.5E-05 (J)						
3/3/2021		9.9E-05 (J)	<0.0005	0.00011 (J)	6.8E-05 (J)		
3/4/2021						<0.0005	<0.0005

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
5/1/2007					<0.0005
9/11/2007					<0.0005
3/20/2008					<0.0005
8/27/2008					<0.0005
3/3/2009					<0.0005
11/18/2009					<0.0005
3/3/2010					<0.0005
9/8/2010					<0.0005
3/10/2011					<0.0005
9/8/2011					<0.0005
3/5/2012					<0.0005
9/10/2012					<0.0005
2/6/2013					<0.0005
8/12/2013					<0.0005
2/5/2014					<0.0005
8/5/2014					<0.0005
2/4/2015					<0.0005
8/3/2015					<0.0005
2/16/2016					<0.0005
6/2/2016		<0.0005	<0.0005	<0.0005	VI.0000
7/26/2016		<0.0005	<0.0005	<0.0005	
8/31/2016		<0.0003	<0.0003	<b>~0.0003</b>	<0.0005
		<0.000E	<0.000E	<0.000E	V0.0005
9/14/2016		<0.0005 <0.0005	<0.0005 <0.0005	<0.0005	
11/2/2016		<0.0005	<0.0005	<0.000E	
11/4/2016				<0.0005	40 000E
11/28/2016			<0.0005	<0.0005	<0.0005
1/12/2017		<0.000E	<0.0005	<0.0005	
1/13/2017		<0.0005			10,0005
2/22/2017		<0.000E			<0.0005
3/6/2017		<0.0005	<0.000E	<0.000E	
3/7/2017		<0.000E	<0.0005	<0.0005	
5/1/2017		<0.0005	<0.0005	<0.000E	
5/2/2017				<0.0005	10,0005
5/8/2017			<0.000E	<0.000E	<0.0005
6/27/2017		-0.0005	<0.0005	<0.0005	
6/29/2017		<0.0005			0.0005
7/17/2017	0.0000 (1)				<0.0005
10/12/2017	0.0002 (J)				40 000E
10/16/2017	0.0002 (1)				<0.0005
11/20/2017	0.0003 (J)				
1/10/2018	0.0003 (J)				-0.000F
2/19/2018	<0.0005	.0.005	0.000-	.0.00-	<0.0005
3/29/2018	.0.000=	<0.0005	<0.0005	<0.0005	
4/3/2018	<0.0005		0.000-		
6/6/2018		.0.005	<0.0005	.0.00-	
6/7/2018	0.00055.411	<0.0005		<0.0005	
6/28/2018	0.00029 (J)				
8/6/2018					<0.0005
8/7/2018	0.00024 (J)				
9/24/2018	0.00019 (J)				
9/26/2018		<0.0005	<0.0005	<0.0005	
2/25/2019					<0.0005

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
3/4/2019		<0.0005	<0.0005	<0.0005	
4/3/2019		<0.0005	<0.0005	<0.0005	
6/12/2019					<0.0005
8/19/2019					<0.0005
8/21/2019	0.0002 (J)				
9/24/2019			<0.0005	<0.0005	
9/25/2019		<0.0005			
10/8/2019					<0.0005
10/9/2019	0.0002 (J)				
2/12/2020	0.00018 (J)	<0.0005	<0.0005	<0.0005	
3/17/2020					<0.0005
3/24/2020	0.00022 (J)		<0.0005	<0.0005	
3/25/2020		<0.0005			
8/26/2020					<0.0005
9/22/2020		<0.0005	<0.0005	<0.0005	<0.0005
9/24/2020	0.0002 (J)				
2/8/2021			<0.0005	<0.0005	
2/9/2021		<0.0005			
2/10/2021	0.00021 (J)				
3/2/2021			<0.0005	<0.0005	<0.0005
3/3/2021		<0.0005			
3/4/2021	0.00021 (J)				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		<0.04	<0.04				<0.04
6/2/2016	<0.04				<0.04	<0.04	
7/25/2016	6		<0.04		<0.04		<0.04
7/26/2016	6 0.0177 (J)	0.0055 (J)				0.0097 (J)	
9/13/2016	6	<0.04	<0.04				
9/14/2016	6			<0.04			<0.04
9/15/2016	6 0.0214 (J)					0.0102 (J)	
9/19/2016	6				<0.04		
11/1/2016	6	0.0086 (J)			<0.04	<0.04	<0.04
11/2/2016	6 <0.04						
11/4/2016	6		<0.04	<0.04			
12/15/20	16			0.0107 (J)			
1/10/2017	7 0.0198 (J)						
1/11/2017	7	0.0074 (J)				<0.04	<0.04
1/16/2017	7		<0.04	<0.04	<0.04		
2/21/2017	7				<0.04		
3/1/2017							<0.04
3/2/2017		0.008 (J)	<0.04			0.0084 (J)	
3/3/2017				<0.04			
3/8/2017	0.0189 (J)						
4/26/2017	7 0.0161 (J)				<0.04	<0.04	<0.04
4/27/2017	7	0.0066 (J)	<0.04				
4/28/2017	7			<0.04			
5/26/2017	7			<0.04			
6/27/2017	7	0.0087 (J)	0.006 (J)				
6/28/2017	7			<0.04		<0.04	<0.04
6/30/2017	7 0.0173 (J)				<0.04		
10/3/2017	7	0.0072 (J)	0.0071 (J)	<0.04			
10/4/2017	7				<0.04	<0.04	<0.04
10/5/2017	7 0.0173 (J)						
6/5/2018		0.0052 (J)					
6/6/2018			<0.04				
6/7/2018				<0.04		0.004 (J)	
6/8/2018	0.013 (J)						<0.04
6/11/2018	8				0.014 (J)		
10/1/2018	8 0.015 (J)	0.021 (J)	0.0049 (J)	<0.04		<0.04	<0.04
10/2/2018	8				<0.04		
3/28/2019	9	0.005 (J)	<0.04				
3/29/2019	9 0.014 (J)			0.0065 (J)			
4/1/2019					<0.04	<0.04	<0.04
9/24/2019		0.0064 (J)	0.0055 (J)	0.0076 (J)			
9/25/2019		• •	• •	.,	<0.04	0.0054 (J)	<0.04
3/18/2020			0.0087 (J)				
3/19/2020		0.0085 (J)	• •	0.0073 (J)	0.0052 (J)	0.0073 (J)	0.0053 (J)
9/23/2020		<0.04	<0.04	<0.04	.,	0.012 (J)	0.0073 (J)
9/24/2020					0.0075 (J)	. ,	
9/25/2020					,		
3/1/2021					<0.04		
3/2/2021							
3/3/2021		<0.04	<0.04	<0.04		<0.04	<0.04
		•		*			

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.97	0.62	2.2	1.3			
6/9/2016					2.2	2.3	0.88
8/1/2016	0.932	0.643	2	1.36			
8/2/2016					2.22	2.21	0.872
9/20/2016	1.04	0.644	2.02	1.69			
9/21/2016					2.65	2.54	0.853
11/7/2016	0.852	0.621	1.91	1.35		2.49	0.815
11/8/2016					2.44		
1/18/2017	0.972	0.607	1.69		1.88	2.04	
1/19/2017				1.15			0.803
2/21/2017	0.972	0.624				2.29	
2/22/2017				1.3	2.05		0.855
2/23/2017			1.76				
5/3/2017		0.676					
5/5/2017					3.01	3.41	
5/8/2017	1.05		2	1.51			0.884
6/30/2017			2.28	1.47			
7/5/2017					2.7		0.811
7/7/2017						3.01	
7/10/2017	0.855	0.58					
10/5/2017					2.53		0.851
10/6/2017				1.31			
10/9/2017			1.82			2.76	
10/10/2017	0.887	0.612					
6/11/2018							0.9
6/12/2018				1.6	2.8	2.9	
6/13/2018	0.86	0.67	2.2				
10/2/2018	0.93	0.62	1.9	1.4			0.81
10/3/2018					2.3	2.4	
4/1/2019	0.0	0.00	2.4	1.4	2.7	0.0	0.85
4/2/2019	0.9	0.63				2.9	0.70
9/25/2019	0.86	0.63	1.0	4.5	0.0	0.5	0.73
9/26/2019		0.70	1.9	1.5	2.8	2.5	
3/19/2020	0.04	0.73	2.1	1.4	2.4	2.5	0.0
3/20/2020 9/24/2020	0.94 0.76	0.74	2.1	1.4 1.3	2.1	2.6	0.8 0.84
3/2/2021	0.70	0.74	2.3	1.0	2.1	2.0	0.04
3/3/2021	0.69	0.57	2	1.2	1.8	2.3	0.62
0/3/2021	0.00		_	1.2	1.0	2.0	v.v <u>L</u>

					,		
	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
6/6/2016			<0.04	<0.04			
6/7/2016		<0.04			<0.04	<0.04	
7/27/2016		0.008 (J)	<0.04	0.0059 (J)	<0.04		
7/28/2016						<0.04	
8/30/2016	0.0166 (J)						
9/16/2016		0.0086 (J)		0.0079 (J)			
9/19/2016			<0.04		<0.04	<0.04	
11/2/2016					<0.04		
11/3/2016		0.0077 (J)	<0.04	0.0082 (J)		<0.04	
11/14/2016	0.0166 (J)						
1/11/2017		0.0092 (J)	<0.04	0.0096 (J)			
1/13/2017					<0.04	<0.04	
2/24/2017	0.0145 (J)						
3/1/2017			<0.04	<0.04			
3/2/2017		0.0095 (J)					
3/6/2017					<0.04	<0.04	
4/26/2017			<0.04	0.0091 (J)	<0.04	<0.04	
5/2/2017		<0.04					
5/8/2017	0.0141 (J)						
6/28/2017	` '		<0.04	0.0079 (J)			
6/29/2017		0.0074 (J)			<0.04	<0.04	
7/11/2017	0.0131 (J)	.,					
10/3/2017	ν-/					<0.04	
10/4/2017		0.0077 (J)		0.009 (J)	<0.04		
10/5/2017		(-)	<0.04				
10/10/2017	0.0124 (J)						
10/11/2017							0.0135 (J)
11/20/2017							0.0251 (J)
1/11/2018							0.0251 (J)
2/20/2018							<0.04
4/2/2018	0.013 (J)						-0.0-7
4/3/2018	0.010 (0)						0.033 (J)
6/5/2018						0.0092 (J)	3.000 (0)
6/6/2018					0.0049 (J)	3.0032 (3)	
6/7/2018			<0.04		0.00 <del>1</del> 3 (0)		
6/11/2018		0.01 (J)	~U.U <del>4</del>	0.0093 (J)			
		0.01 (3)		0.0093 (3)			0.053
6/28/2018							
8/7/2018	0.012 (1)						0.024 (J)
9/19/2018	0.012 (J)						0.000 ( "
9/24/2018		0.0000 ( 1)	0.00407.0	0.007 ( "	-0.04	0.005470	0.028 (J)
9/25/2018	0.040 ( "	0.0096 (J)	0.0046 (J)	0.007 (J)	<0.04	0.0054 (J)	0.047./
3/27/2019	0.013 (J)	0.0000 ( );				0.044.45	0.017 (J)
4/2/2019		0.0066 (J)				0.011 (J)	
4/3/2019			<0.04	0.0053 (J)	<0.04		
9/24/2019						0.018 (J)	
9/25/2019		0.0081 (J)			<0.04		
9/26/2019			0.0062 (J)	0.0072 (J)			
10/8/2019	0.012 (J)						
10/9/2019							0.017 (J)
3/17/2020	0.023 (J)						
3/24/2020		0.0092 (J)	0.0054 (J)	0.01 (J)	<0.04	0.016 (J)	
3/25/2020							0.043 (J)

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
9/22/2020	0.0076 (J)						
9/23/2020		0.0066 (J)	0.021 (J)	0.006 (J)			
9/24/2020					0.0094 (J)	0.013 (J)	0.037 (J)
3/1/2021	0.013 (J)						
3/3/2021		0.01 (J)	<0.04	0.0094 (J)	<0.04		
3/4/2021						0.0079 (J)	0.033 (J)

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
6/2/2016		<0.04	<0.04	<0.04	
7/26/2016		0.0047 (J)	0.0052 (J)	<0.04	
8/31/2016					0.0315 (J)
9/14/2016		<0.04	0.0071 (J)	0.01 (J)	
11/2/2016		<0.04	<0.04		
11/4/2016				<0.04	
11/28/2016					0.0095 (J)
1/12/2017			0.0076 (J)	<0.04	
1/13/2017		<0.04			
2/22/2017					<0.04
3/6/2017		<0.04			
3/7/2017			0.0089 (J)	<0.04	
5/1/2017		<0.04	0.0061 (J)		
5/2/2017				<0.04	
5/8/2017					0.0084 (J)
6/27/2017			0.0079 (J)	<0.04	
6/29/2017		<0.04	• •		
7/17/2017					0.0092 (J)
10/3/2017			0.0094 (J)	<0.04	
10/5/2017		<0.04			
10/12/2017	0.0401				
10/16/2017					<0.04
11/20/2017					
1/10/2018	0.15				
2/19/2018	0.146				<0.04
4/3/2018	0.12				
6/6/2018			0.0098 (J)		
6/7/2018		0.0045 (J)	. ,	<0.04	
6/28/2018	0.16	. ,			
8/6/2018					<0.04
8/7/2018	0.12				
9/24/2018	0.099				
9/26/2018		0.005 (J)	0.01 (J)	0.0057 (J)	
2/25/2019		. ,	. ,	. ,	<0.04
3/26/2019	0.096				
4/3/2019		0.0055 (J)	0.0076 (J)	0.0044 (J)	
6/12/2019		• •	• •	• •	<0.04
9/24/2019			0.01 (J)	0.0049 (J)	
9/25/2019		<0.04		• •	
10/8/2019					<0.04
10/9/2019	0.079				
3/17/2020					0.0051 (J)
3/24/2020	0.088 (J)		0.011 (J)	0.0068 (J)	
3/25/2020	.,	0.011 (J)	.,	. ,	
9/22/2020		<0.04	0.0079 (J)	0.0053 (J)	0.0079 (J)
9/24/2020	0.087 (J)		.,	` '	
3/2/2021	(-)		0.0068 (J)	0.011 (J)	<0.04
3/3/2021		0.0056 (J)	(-)	- (-)	
3/4/2021	0.078	. (-/			

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		<0.0005	<0.0005				<0.0005
6/2/2016	<0.0005				<0.0005	<0.0005	
7/25/2016			<0.0005		<0.0005		<0.0005
7/26/2016	<0.0005	<0.0005				<0.0005	
9/13/2016		<0.0005	<0.0005				
9/14/2016				<0.0005			<0.0005
9/15/2016	<0.0005					<0.0005	
9/19/2016					<0.0005		
11/1/2016		<0.0005			<0.0005	<0.0005	<0.0005
11/2/2016	<0.0005						
11/4/2016			<0.0005	<0.0005			
12/15/2016				<0.0005			
1/10/2017	<0.0005						
1/11/2017		0.0002 (J)				0.0001 (J)	8E-05 (J)
1/16/2017			<0.0005	<0.0005	<0.0005		
2/21/2017					<0.0005		
3/1/2017							<0.0005
3/2/2017		<0.0005	<0.0005			<0.0005	
3/3/2017				<0.0005			
3/8/2017	7E-05 (J)						
4/26/2017	<0.0005				<0.0005	<0.0005	<0.0005
4/27/2017		<0.0005	<0.0005				
4/28/2017				<0.0005			
5/26/2017				<0.0005			
6/27/2017		<0.0005	<0.0005				
6/28/2017				<0.0005		<0.0005	<0.0005
6/30/2017	<0.0005				<0.0005		
3/27/2018	<0.0005		<0.0005		<0.0005		
3/28/2018				<0.0005		<0.0005	<0.0005
3/29/2018		<0.0005					
2/26/2019	<0.0005	0.0000			<0.0005		
2/27/2019	0.000	<0.0005	<0.0005	<0.0005	0.0000	<0.0005	<0.0005
3/28/2019		<0.0005	<0.0005	0.000		0.0000	0.0000
3/29/2019	<0.0005	0.0000	0.0000	<0.0005			
4/1/2019	0.000			0.000	<0.0005	<0.0005	<0.0005
9/24/2019		<0.0005	<0.0005	<0.0005	0.0000	0.0000	0.0000
9/25/2019	<0.0005				<0.0005	<0.0005	<0.0005
2/10/2020	3.0000	<0.0005	<0.0005		0.000	0.000	
2/11/2020				<0.0005			<0.0005
2/12/2020	<0.0005				<0.0005	<0.0005	
3/18/2020	<0.0005		<0.0005				
3/19/2020	3.0000	<0.0005	5.0000	<0.0005	<0.0005	<0.0005	<0.0005
9/23/2020		<0.0005	<0.0005	<0.0005	0.000	<0.0005	<0.0005
9/24/2020					<0.0005		<del>-</del>
9/25/2020	<0.0005				0.000		
2/10/2021	<0.0005			<0.0005		<0.0005	<0.0005
2/11/2021	3.0000			2.000	<0.0005	0.000	
2/11/2021		<0.0005	<0.0005		0.0000		
3/1/2021		3.000	3.000		<0.0005		
3/2/2021	<0.0005				0.0000		
3/3/2021	0.0000	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
		2.000	5.0000	2.000		0.000	

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.0005	<0.0005	<0.0005	<0.0005			
6/9/2016					0.00055 (J)	<0.0005	<0.0005
8/1/2016	<0.0005	<0.0005	<0.0005	<0.0005			
8/2/2016					0.0001 (J)	<0.0005	0.0001 (J)
9/20/2016	<0.0005	<0.0005	<0.0005	<0.0005			
9/21/2016					0.0001 (J)	<0.0005	0.0002 (J)
11/7/2016	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	0.0002 (J)
11/8/2016					9E-05 (J)		
1/18/2017	<0.0005	<0.0005	<0.0005		9E-05 (J)	<0.0005	
1/19/2017				<0.0005			0.0001 (J)
2/21/2017	<0.0005	<0.0005				<0.0005	
2/22/2017				<0.0005	0.0001 (J)		0.0001 (J)
2/23/2017			<0.0005				
5/3/2017		<0.0005					
5/5/2017					9E-05 (J)	<0.0005	
5/8/2017	<0.0005		<0.0005	<0.0005			0.0002 (J)
6/30/2017			<0.0005	<0.0005			
7/5/2017					0.0002 (J)		0.0002 (J)
7/7/2017						<0.0005	
7/10/2017	<0.0005	<0.0005					
3/29/2018			<0.0005	<0.0005			<0.0005
3/30/2018	<0.0005	<0.0005			<0.0005	<0.0005	
2/27/2019	<0.0005	<0.0005	<0.0005	<0.0005	0.00014 (J)	<0.0005	0.00026 (J)
4/1/2019			<0.0005	<0.0005	0.00043 (J)		0.00022 (J)
4/2/2019	<0.0005	<0.0005				<0.0005	
9/25/2019	<0.0005	<0.0005					0.00024 (J)
9/26/2019			<0.0005	<0.0005	<0.0005	<0.0005	
2/13/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.00013 (J)	<0.0005	0.00018 (J)
3/19/2020		<0.0005			0.00016 (J)	<0.0005	
3/20/2020	<0.0005		<0.0005	<0.0005			0.00022 (J)
9/24/2020	<0.0005	<0.0005	<0.0005	<0.0005	0.00027 (J)	<0.0005	0.00033 (J)
2/10/2021	<0.0005	<0.0005	<0.0005	<0.0005			
2/11/2021					0.00052 (J)		
2/12/2021						0.00048 (J)	<0.0005
3/2/2021		<0.0005					
3/3/2021	<0.0005		<0.0005	<0.0005	0.00014 (J)	<0.0005	0.00029 (J)

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
6/6/2016			<0.0005	<0.0005			
6/7/2016		<0.0005			<0.0005	<0.0005	
7/27/2016		<0.0005	<0.0005	<0.0005	<0.0005		
7/28/2016						<0.0005	
8/30/2016	0.0001 (J)						
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	
11/14/2016	0.0001 (J)	0.0000	0.000	0.000		0.0000	
1/11/2017	0.000. (0)	0.0001 (J)	<0.0005	0.0001 (J)			
1/13/2017		0.0001 (0)	10.0000	0.0001 (0)	<0.0005	<0.0005	
2/24/2017	9E-05 (J)				10.0000	10.0000	
3/1/2017	9L-03 (3)		<0.0005	<0.0005			
		<0.000E	<0.0005	<0.0005			
3/2/2017		<0.0005			<0.000E	<0.000E	
3/6/2017			<0.000E	<0.000E	<0.0005	<0.0005	
4/26/2017		<0.000F	<0.0005	<0.0005	<0.0005	<0.0005	
5/2/2017		<0.0005					
5/8/2017	0.0001 (J)		-0.0005	-0.0005			
6/28/2017			<0.0005	<0.0005			
6/29/2017		<0.0005			<0.0005	<0.0005	
7/11/2017	<0.0005						
10/10/2017	<0.0005						
10/11/2017							<0.0005
11/20/2017							<0.0005
1/11/2018							<0.0005
2/20/2018							<0.0005
3/28/2018		<0.0005	<0.0005	<0.0005			
3/29/2018					<0.0005	<0.0005	
4/2/2018	<0.0005						
4/3/2018							<0.0005
6/5/2018						<0.0005	
6/6/2018					<0.0005		
6/7/2018			<0.0005				
6/11/2018		<0.0005		<0.0005			
6/28/2018							<0.0005
8/7/2018							<0.0005
9/19/2018	<0.0005						
9/24/2018							<0.0005
9/25/2018		<0.0005	<0.0005	<0.0005	<0.0005	9.6E-05 (J)	
3/5/2019		<0.0005		<0.0005	<0.0005	<0.0005	
3/6/2019			<0.0005				
4/2/2019		<0.0005				<0.0005	
4/3/2019			<0.0005	<0.0005	<0.0005		
8/20/2019	<0.0005						
8/21/2019							<0.0005
9/24/2019						<0.0005	
9/25/2019		<0.0005			<0.0005	0.000	
9/26/2019		5.5550	<0.0005	<0.0005	5.5500		
10/8/2019	<0.0005		0.0000	0.0000			
10/9/2019	-0.0000						<0.0005
2/11/2020		<0.0005	<0.0005	<0.0005			-0.0000
L. 1 1/2UZU		-0.0003	-0.0000	-0.0003			

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
2/12/2020					<0.0005	<0.0005	<0.0005
3/17/2020	<0.0005						
3/24/2020		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
3/25/2020							<0.0005
8/27/2020	<0.0005						
9/23/2020		<0.0005	<0.0005	<0.0005			
9/24/2020					<0.0005	<0.0005	<0.0005
2/9/2021			<0.0005	<0.0005	<0.0005	0.00041 (J)	
2/10/2021							0.00019 (J)
3/3/2021		<0.0005	<0.0005	<0.0005	<0.0005		
3/4/2021						<0.0005	0.0003 (J)

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
5/1/2007					<0.0005
9/11/2007					<0.0005
3/20/2008					<0.0005
8/27/2008					<0.0005
3/3/2009					<0.0005
11/18/2009					<0.0005
3/3/2010					<0.0005
9/8/2010					<0.0005
3/10/2011					<0.0005
9/8/2011					<0.0005
3/5/2012					<0.0005
9/10/2012					<0.0005
2/6/2013					<0.0005
8/12/2013					<0.0005
2/5/2014					<0.0005
8/5/2014					<0.0005
2/4/2015					<0.0005
8/3/2015					<0.0005
2/16/2016		.0.005	0.0005	.0.005	<0.0005
6/2/2016		<0.0005	<0.0005	<0.0005	
7/26/2016		<0.0005	<0.0005	<0.0005	
8/31/2016					<0.0005
9/14/2016		<0.0005	<0.0005	<0.0005	
11/2/2016		<0.0005	<0.0005		
11/4/2016				<0.0005	
11/28/2016					<0.0005
1/12/2017			<0.0005	9E-05 (J)	
1/13/2017		<0.0005			
2/22/2017					<0.0005
3/6/2017		<0.0005			
3/7/2017			<0.0005	<0.0005	
5/1/2017		<0.0005	<0.0005		
5/2/2017				<0.0005	
5/8/2017					<0.0005
6/27/2017			<0.0005	<0.0005	
6/29/2017		<0.0005			
7/17/2017					<0.0005
10/12/2017	<0.0005				
10/16/2017					<0.0005
11/20/2017	<0.0005				
1/10/2018	<0.0005				
2/19/2018	<0.0005				<0.0005
3/29/2018		<0.0005	<0.0005	<0.0005	•••••
4/3/2018	<0.0005	0.0000	0.0000	0.0000	
6/6/2018	<0.0003		<0.0005		
		<0.000E	<b>~0.0003</b>	<0.0005	
6/7/2018	<0.0005	<0.0005		~U.UUU3	
6/28/2018	<0.0005				40 000E
8/6/2018	<0.000F				<0.0005
8/7/2018	<0.0005				
9/24/2018	<0.0005				
9/26/2018		<0.0005	<0.0005	<0.0005	0.000
2/25/2019					<0.0005

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
3/4/2019		<0.0005	<0.0005	<0.0005	
4/3/2019		<0.0005	<0.0005	<0.0005	
6/12/2019					<0.0005
8/19/2019					<0.0005
8/21/2019	<0.0005				
9/24/2019			<0.0005	<0.0005	
9/25/2019		<0.0005			
10/8/2019					<0.0005
10/9/2019	<0.0005				
2/12/2020	<0.0005	<0.0005	<0.0005	<0.0005	
3/17/2020					<0.0005
3/24/2020	<0.0005		<0.0005	<0.0005	
3/25/2020		<0.0005			
8/26/2020					<0.0005
9/22/2020		<0.0005	<0.0005	<0.0005	<0.0005
9/24/2020	<0.0005				
2/8/2021			<0.0005	<0.0005	
2/9/2021		<0.0005			
2/10/2021	<0.0005				
3/2/2021			<0.0005	<0.0005	<0.0005
3/3/2021		<0.0005			
3/4/2021	<0.0005				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		12	2.5				21
6/2/2016	1.3				1.3	28	
7/25/2016			2.16		1.17		20.3
7/26/2016	1.24	11				24.5	
9/13/2016		11.8	2.21				
9/14/2016				23.5			19.7
9/15/2016	1.17					27	
9/19/2016					1.05		
11/1/2016		11			1.14	25.6	18.4
11/2/2016	1.23						
11/4/2016			2.67	23.7			
12/15/2016				23.1			
1/10/2017	1.24						
1/11/2017		11.2				27.5	20.3
1/16/2017			2.45	23.3	1.23		
2/21/2017					1.25		
3/1/2017							18.6
3/2/2017		11	2.57			27.5	
3/3/2017				25.1			
3/8/2017	1.21						
4/26/2017	1.14				1.03	30.4	25.6
4/27/2017		11.1	2.38				
4/28/2017				30.7			
5/26/2017				26.2			
6/27/2017		13.8	2.36				
6/28/2017				26.1		29.8	23.9
6/30/2017	1.24				1.13		
10/3/2017		14	2.21	26.7			
10/4/2017					1.09	29.7	22.1
10/5/2017	1.11						
6/5/2018		15.2 (J)					
6/6/2018			2.3				
6/7/2018				25		29.1	
6/8/2018	1.1						21.9 (J)
6/11/2018					1.1		(-/
10/1/2018	0.99	15.1	1.8	25		26.9	19.7
10/2/2018					1.1		
3/28/2019		13.3 (J)	2.2				
3/29/2019	1.1	- (-)		23.5 (J)			
4/1/2019				- (-)	1.3	30.1	20.4 (J)
9/24/2019		15.8	2.3	26.4			(-)
9/25/2019	1.1	.0.0	2.0	20	1.1	29.5	22.4
3/18/2020	1.1		2.1				
3/19/2020		15	<del></del>	27.4	1.2	31.5	21.9
9/23/2020		14.1	1.8	26.3	·- <del>-</del>	28.6	23.6
9/24/2020		e ee e	***		1.1		
9/25/2020	1.3				***		
3/1/2021					1.2		
3/2/2021	1.2				1.4		
3/3/2021		14.1	1.8	25.6		29.8	20.6
				20.0		20.0	

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	15	13	25	44			
6/9/2016					36	26	12
8/1/2016	14.5	12.2	21.4	36.3			
8/2/2016					35.5	25.8	11.7
9/20/2016	15.3	12.2	26.3	39.5			
9/21/2016					33.2	24.9	11.1
11/7/2016	13.8	12.1	26.1	34.9		25.1	11.4
11/8/2016					33.8		
1/18/2017	15.1	11.5	25.6		33.4	26.1	
1/19/2017				37			12
2/21/2017	14.6	11.7				29	
2/22/2017				37.6	33.8		11.2
2/23/2017			28.2				
5/3/2017		11.9					
5/5/2017					33.5	28.1	
5/8/2017	15.2		27.2	35.7			11.2
6/30/2017			27.2	36.2			
7/5/2017					33.4		11.9
7/7/2017						28.6	
7/10/2017	17.4	12.7					
10/5/2017					36.4		12
10/6/2017				39.8			
10/9/2017			27.3			27.3	
10/10/2017	15.5	11.4					
6/11/2018							12.1
6/12/2018				36.2	33.4	26.4	
6/13/2018	15.5	12.5	29.4				
10/2/2018	14.7	12.4 (J)	29.2	39.1			11.7 (J)
10/3/2018					32.6	25.8	
4/1/2019			27.4	38	33.8		11.9 (J)
4/2/2019	16.1 (J)	11.9 (J)				25.7	
9/25/2019	15.6	11.6					10.7
9/26/2019			24.2	37.5	32	26.1	
3/19/2020		13			37.3	30.4	
3/20/2020	17.1		30.3	42.1			12.7
9/24/2020	16.9	11.3	27.9	38.6	34.3	30.8	12.4
3/2/2021		12.9					
3/3/2021	16.1		25.7	30.2	30.9	28.4	9.5

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
6/6/2016	( 0)	( 0/	6.2	1.4	( 0)	( 0)	<b>, ,</b>
6/7/2016		2.2			2.3	3.7	
7/27/2016		2	4.73	1.19	2.08		
7/28/2016						3.15	
8/30/2016	20.9						
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	
11/14/2016	18.6						
1/11/2017		2.28	4.74	1.25			
1/13/2017					2.45	4.98	
2/24/2017	16.1						
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					
5/8/2017	14.6						
6/28/2017			4.95	1.06			
6/29/2017		2.02			2.54	6.04	
7/11/2017	14.3						
10/3/2017						8.28	
10/4/2017		2.03		1.1	2.25		
10/5/2017			5.28				
10/10/2017	12.1						
10/11/2017							2.74
11/20/2017							1.81
1/11/2018							1.54
2/20/2018							1.71
4/2/2018	<25						
4/3/2018							1.4
6/5/2018						9.1	
6/6/2018					2.3		
6/7/2018			4.8				
6/11/2018		2.1		1.4			
6/28/2018							1.4
8/7/2018							1.2
9/19/2018	11.1 (J)						
9/24/2018							1.1
9/25/2018		2.1	4.6	1	2.3	10.4 (J)	
3/27/2019	10.8 (J)						1.5
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			4.9	1.1			
10/8/2019	9.7						
10/9/2019							2.4
3/17/2020	14.8						
3/24/2020		2.7	5.3	1	2.6	6	
3/25/2020							2.7

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
9/22/2020	10.1						
9/23/2020		2.6	5.2	0.91 (J)			
9/24/2020					2.6	7.8	3.7
3/1/2021	10.3						
3/3/2021		2.5	5.2	0.96 (J)	2.4		
3/4/2021						8.7	8.2

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
6/2/2016		8.8	33	2.4	
7/26/2016		7.69	32.3	2.12	
8/31/2016					9.31
9/14/2016		8.49	31	2.18	
11/2/2016		7.83	30.9		
11/4/2016				2.17 (J)	
11/28/2016					9.47 (B)
1/12/2017			35.7	2.37	
1/13/2017		8.08			
2/22/2017					10.4
3/6/2017		8.64			
3/7/2017			32.7	2.34	
5/1/2017		13.4	37		
5/2/2017				2.17	
5/8/2017					14.2
6/27/2017			36.5	2.13	
6/29/2017		8.81			
7/17/2017					14.1
10/3/2017			30.9	2.15	
10/5/2017		9.29			
10/12/2017	2.9				
10/16/2017					13.6
11/20/2017	10.4				
1/10/2018	10.2				
2/19/2018	<25				<25
4/3/2018	6.3				
6/6/2018			26.2		
6/7/2018		8.2		2.3	
6/28/2018	6.7				
8/6/2018					11.4 (J)
8/7/2018	6.3				
9/24/2018	5.7				
9/26/2018		9.5 (J)	25.8	2.3	
2/25/2019					12.7 (J)
3/26/2019	5.6				
4/3/2019		8.4	24.7 (J)	2.8	
6/12/2019					18.9
9/24/2019			25.8	2.5	
9/25/2019		9.5			
10/8/2019					28.3
10/9/2019	4.9				
3/17/2020					24.3
3/24/2020	4.8		26.1	2.5	
3/25/2020		10.5			
9/22/2020		9.6	27.2	2.6	31
9/24/2020	4.4				
3/2/2021			1.6	2.6	34.2
3/3/2021		7.7			
3/4/2021	4.6				

		YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6	6/1/2016		1.3	1.6				1.3
6	6/2/2016	4.1				1.9	1.4	
7	//25/2016			1.4		1.7		1.3
7	//26/2016	4	1.2				1.6	
9	9/13/2016		1.1	1.3				
9	9/14/2016				1.1			1.3
9	)/15/2016	4.2					1.5	
9	9/19/2016					1.6		
1	1/1/2016		1.3			1.8	1.7	1.4
1	1/2/2016	4.9						
1	1/4/2016			1.6	1.4			
1	2/15/2016				2.9			
1	/10/2017	4.1						
1	/11/2017		1.1				1.2	1.1
1.	/16/2017			1.4	0.98	1.7		
2	2/21/2017					1.7		
3	3/1/2017							1.1
3	3/2/2017		1	1.3			1.2	
3	3/3/2017				1.1			
3	3/8/2017	4.2						
4	/26/2017	4.1				1.7	1.2	1.1
4	/27/2017		1	1.3				
4	/28/2017				0.91			
5	5/26/2017				0.93			
6	5/27/2017		1.1	1.4				
6	5/28/2017				1		1.3	1.2
6	6/30/2017	3.7				1.8		
1	0/3/2017		1.1	1.7	1.2			
1	0/4/2017					1.8	1.5	1.2
1	0/5/2017	3.8						
6	6/5/2018		1.1					
6	6/6/2018			1.4				
6	6/7/2018				1		1.2	
6	6/8/2018	3.4						1.2
6	6/11/2018					2		
1	0/1/2018	3.8	1.1	1.4	1.1		1.5	1.2
1	0/2/2018					1.8		
3	3/28/2019		1.4	1.5				
3	3/29/2019	4.2			1.2			
4	/1/2019					1.7	1.2	1.1
9	9/24/2019		1.1	1.3	0.95 (J)			
9	9/25/2019	4.8				1.6	1.1	1.1
3	3/18/2020	5.2		1.4				
3	3/19/2020		1.1		0.97 (J)	1.8	1.2	1.1
9	9/23/2020		0.99 (J)	1.2	0.88 (J)		1.1	1
9	9/24/2020					1.5		
9	9/25/2020	5.3						
3	3/1/2021					1.6		
3	3/2/2021	4.9						
3	3/3/2021		0.96 (J)	1.2	0.86 (J)		1.1	0.99 (J)

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	19	18	14	22			
6/9/2016					18	19	15
8/1/2016	17	16	13	21			
8/2/2016					18	18	14
9/20/2016	18	18	13	22			
9/21/2016					18	19	14
11/7/2016	17	16	14	24		20	14
11/8/2016					18		
1/18/2017	19	17	14		18	20	
1/19/2017				22			14
2/21/2017	18	16				19	
2/22/2017				21	18		13
2/23/2017			14				
5/3/2017		17					
5/5/2017					19	21	
5/8/2017	18		14	22			15
6/30/2017			14	21			
7/5/2017					18		14
7/7/2017						20	
7/10/2017	19	15					
10/5/2017					19		15
10/6/2017				21			
10/9/2017			14			20	
10/10/2017	19	15					
6/11/2018							13.6
6/12/2018				19.8	17.6	19.3	
6/13/2018	18.1	14.2	13.1				
10/2/2018	18.3	14	13.8	19.9			13.4
10/3/2018					17.7	20.2	
4/1/2019			14.2	19.7	17.2		13.1
4/2/2019	17.9	13.5				19.5	
9/25/2019	17.1	14.4					11.3
9/26/2019			14.3	19.6	17.3	19.5	
3/19/2020		15.4			16	18.1	
3/20/2020	17.7		13	17.7			11.3
9/24/2020	17.1	15.7	13.3	17	15.1	18	10.9
3/2/2021		13.2					
3/3/2021	16.6		13	4	14.6	18	6.7

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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	
8/30/2016	5.2						
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	
11/14/2016	6.4						
1/11/2017		4.7	6.5	6.1			
1/13/2017					2.3	2.5	
2/24/2017	5.5						
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					
5/8/2017	5.8						
6/28/2017			7	6.4			
6/29/2017		4.5			2.6	2.8	
7/11/2017	5.8						
10/3/2017						2.2	
10/4/2017		4.7		6.8	2.6		
10/5/2017			7				
10/10/2017	5.9						
10/11/2017							2.4
11/20/2017							1.8
1/11/2018							1.6
2/20/2018							2
4/2/2018	4.8						
4/3/2018							3.3
6/5/2018						1.7	
6/6/2018					2.7		
6/7/2018			6.8				
6/11/2018		4.9		6.8			
6/28/2018							2.1
8/7/2018							1.2
9/19/2018	4						
9/24/2018							1.3
9/25/2018		5.6	7.9	7.8	3.6	2.2	
3/27/2019	4.3						1.4
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			7	7.1			
10/8/2019	4.4						
10/9/2019							2.1
3/17/2020	4.1						
3/24/2020		5	7	6.8	2.7	2.8	
3/25/2020							1.9

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
9/22/2020	4.2						
9/23/2020		6.6	7.2	7.2			
9/24/2020					2.7	2	2.7
3/1/2021	3.7						
3/3/2021		7.1	7	7.2	2.7		
3/4/2021						1.8	4.9

620316         YoMA-0 (bg)         YOMA-0 (bg) <t< th=""><th></th><th></th><th></th><th>i idilit i</th><th>ates Chem. Coun</th><th>ioni company Data. Tales Asi i Oid 2</th></t<>				i idilit i	ates Chem. Coun	ioni company Data. Tales Asi i Oid 2
2012    100   10		YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
8   12010	6/2/2016		3.7	7.2	4.3	
9142016	7/26/2016		3.6	6.6	4.4	
11/202016	8/31/2016					4
11/202016	9/14/2016		3.4	6.6	3.8	
11/202016						
11/22017					4.8	
11/22017						4.2
1122017				6.8	3.8	
2022017			4.2			
38/2017         3.6           37/2017         6.8         4.5           51/2017         4.3         7.2           52/2017         -         4.6           58/2017         -         4.2           62/2017         -         4.2           62/2017         -         4.2           7/17/2017         -         5.8           10/32/2017         4.7         -           10/32/2017         4.7         -           10/12/2017         3.8         -           10/12/2017         3.8         -           10/12/2017         3.8         -           11/20/2017         4.7         -           11/20/2017         4.4         -         4.2           11/20/2017         4.6         -         -         4.2           11/20/2017         4.6         -         -         4.2           11/20/2018         4.6         -         -         4.5           6/22/2018         5         -         -         -           8/2/2018         4.9         -         -         -           9/24/2018         4.9         -         -         -      <						3.7
S7/2017			3.6			
SALUZIOT				6.8	4.5	
SEZ2017			4.3			
58/2017					4.6	
6/27/2017       4.2         6/28/2017       4.2         7/17/2017       6.5       4.2         10/32017       4.7       4.7         10/16/2017       3.8       4.7         10/16/2017       4.4       4.2         11/10/2018       4.6       4.2         2/19/2018       4.6       4.7         4/2018       5.9       4.7         6/6/2018       4.4       4.7         8/1/2018       5.9       4.4         8/1/2018       4.8       4.8         8/1/2018       4.9         9/2/2018       4.8       4.8         8/1/2018       4.9         9/2/2018       4.8       4.8         8/1/2018       4.9         9/2/2019       4.1         4/2/2019       4.8         9/2/2019       4.3         9/2/2019       4.5         9/2/2019       4.5         10/9/2019       5.1         10/9/2019       5.1         9/2/2020       4.5         9/2/2020       4.5         9/2/2020       4.5         9/2/2020       4.5         9/2/2020       4.5 <td></td> <td></td> <td></td> <td></td> <td></td> <td>4.2</td>						4.2
6/29/2017				7	4.3	
7/17/2017			4.2			
10/3/2017						3.8
10/5/2017				6.5	4.2	
10/12/2017   3.8			4.7			
10/16/2017		3.8				
11/20/2017						4.2
1/10/2018		4.4				
2/19/2018       4.6       4.3         4/3/2018       5.9         6/6/2018       4.4       4.5         6/7/2018       5       4.4         8/6/2018       5       3.8         8/7/2018       4.3       4.3         9/24/2018       4.9       4.8       5.1         9/24/2019       4.8       4.8       5.1         2/25/2019       4.4       4.2       4.7         3/26/2019       4.4       4.2       4.7         6/12/2019       4.3       4       4.2         9/24/2019       4.5       5.1       5.1         10/9/2019       5.1       4.5       4.3         3/17/2020       4.7       3.5       4.3       4.2         9/24/2020       4.5       3.6       4.2       4.2         9/24/2020       5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1						
4/3/2018 5.9 6/6/2018 4.4 4.7 6/7/2018 5.8 8/6/2018 5.8 8/6/2018 4.3 9/24/2018 4.9 9/24/2018 4.8 4.8 5.1 2/25/2019 4.8 4.3 3/26/2019 4.4 4/3/2019 4.4 4/3/2019 4.3 4.3 9/24/2019 5.1 3/26/2019 5.1 3/26/2019 4.5 3/26/2019 4.5 3/27/2020 5.1 3/26/2020 5.3 3/26/2020 5.3 3/2/2021 4.5 3/2/2021 4.5 3/2/2021 4.5 3/2/2021 4.5 3/2/2021 4.5 3/2/2021 5.3 3/2/2021 4.5 3/2/2021 4.5 3/2/2021 5.3 3/2/2021 4.5 3/2/2021 4.5 3/2/2021 5.3						4.3
6/6/2018						
6/7/2018				4.7		
6/28/2018       5         8/6/2018       4.3         9/24/2018       4.9         9/26/2018       4.8       4.8       5.1         2/25/2019       4.4       4.3       4       4.2         4/3/2019       4.4       4.2       4.7         9/24/2019       4.5       5.1       5.1         10/8/2019       4.5       5.1       5.1         10/8/2019       5.1       4.5       5.1         3/24/2020       4.7       3.5       4.3       4.8         3/24/2020       4.7       3.5       4.3       4.8         3/24/2020       5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1         3/3/2021       4.1       4.1       4.2       4.2			4.4		4.5	
8/6/2018       4.3         9/24/2018       4.9         9/26/2018       4.8       4.8       5.1         2/25/2019       4.4       4.1         3/26/2019       4.4       4.2         4/3/2019       4.3       4       4.2         6/1/2/2019       4.5       3.7       4.5         9/24/2019       4.5       5.1         10/8/2019       5.1       4.5       5.1         3/17/2020       4.7       3.5       4.3       4.8         3/24/2020       4.7       3.5       4.3       4.8         3/25/2020       4.5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1		5				
87/2018       4.3         9/24/2018       4.9         9/26/2018       4.8       4.8       5.1         2/25/2019       4.4       4.1         4/3/2019       4.3       4       4.2         6/12/2019       4.5       4.5         9/24/2019       4.5       5.1         10/8/2019       5.1       4.5         3/4/72020       4.7       3.5       4.3         3/25/2020       4.5       3.6       4.2       4.2         9/22/2020       5       3.6       4.2       4.2         3/2/2021       3.2       4.3       4.1		-				3.8
9/24/2018       4.9         9/26/2018       4.8       4.8       5.1         2/25/2019       4.4       4.1         4/3/2019       4.3       4       4.2         6/12/2019       3.7       4.5         9/24/2019       4.5       5.1         10/8/2019       5.1       5.1         3/17/2020       4.7       3.5       4.3         3/24/2020       4.7       3.5       4.3         3/25/2020       3.9       4.5       4.2         9/22/2020       5       4.5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1		4.3				
9/26/2018       4.8       4.8       5.1         2/25/2019       4.4       4.2       4.7         4/3/2019       4.3       4       4.2         6/12/2019       5.1       4.5       4.5         9/25/2019       4.5       5.1         10/8/2019       5.1       5.1         3/17/2020       4.7       3.5       4.3         3/24/2020       4.7       3.6       4.2       4.2         9/22/2020       5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1						
2/25/2019       4.4         3/26/2019       4.3       4       4.2         6/12/2019       4.5       4.5         9/25/2019       4.5       5.1         10/8/2019       5.1       4.8         3/17/2020       4.7       3.5       4.3         3/24/2020       4.7       3.5       4.3         9/22/2020       4.5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1         3/3/2021       4.1       4.3       4.3       4.1			4.8	4.8	5.1	
3/26/2019       4.4         4/3/2019       4.3       4       4.2         6/12/2019       5.7       4.5       4.5         9/25/2019       4.5       5.1         10/8/2019       5.1       5.1         3/17/2020       5.1       4.8         3/24/2020       4.7       3.5       4.3         3/25/2020       3.9       4.5       4.2         9/24/2020       5       4.2       4.2         3/2/2021       3.2       4.3       4.1						41
4/3/2019       4.3       4       4.2         6/12/2019       3.7       4.5         9/25/2019       4.5       5.1         10/8/2019       5.1       5.1         3/17/2020       5.1       4.8         3/24/2020       4.7       3.5       4.3         3/25/2020       3.9       4.5       4.2         9/24/2020       5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1         3/3/2021       4.1       4.1       4.3       4.1		4.4				
6/12/2019 9/24/2019 3.7 4.5 9/25/2019 4.5 10/8/2019 5.1 10/9/2019 5.1 3/17/2020 4.7 3.5 3/24/2020 4.7 3.9 9/22/2020 9/22/2020 5 3/2/2021 4.1			4.3	4	4.2	
9/24/2019       3.7       4.5         9/25/2019       4.5       5.1         10/8/2019       5.1       4.8         3/17/2020       4.7       3.5       4.3         3/24/2020       4.7       3.9       4.2         9/22/2020       4.5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1         3/3/2021       4.1       4.1       4.3       4.1						4.7
9/25/2019       4.5         10/8/2019       5.1         10/9/2019       5.1         3/17/2020       4.7         3/24/2020       4.7         3/25/2020       3.9         9/22/2020       4.5         9/24/2020       5         3/2/2021       3.2         4.3       4.1				3.7	4.5	
10/8/2019       5.1         10/9/2019       5.1         3/17/2020       4.8         3/24/2020       4.7       3.5       4.3         3/25/2020       3.9         9/22/2020       4.5       3.6       4.2       4.2         9/24/2020       5         3/2/2021       3.2       4.3       4.1         3/3/2021       4.1			4.5			
10/9/2019       5.1         3/17/2020       4.8         3/24/2020       4.7         3/25/2020       3.9         9/22/2020       4.5         9/24/2020       5         3/2/2021       3.2         4.3       4.1						5.1
3/17/2020       4.8         3/24/2020       4.7       3.5       4.3         3/25/2020       3.9       9/22/2020       4.5       3.6       4.2       4.2         9/24/2020       5       3.2       4.3       4.1         3/3/2021       4.1       4.1		5.1				
3/24/2020 4.7 3.5 4.3 3/25/2020 3.9 9/22/2020 4.5 3.6 4.2 4.2 9/24/2020 5 3/2/2021 3.2 4.3 4.1 3/3/2021 4.1						4.8
3/25/2020 3.9 9/22/2020 4.5 3.6 4.2 4.2 9/24/2020 5 3/2/2021 3.2 4.3 4.1 3/3/2021 4.1		4.7		3.5	4.3	
9/22/2020     4.5     3.6     4.2     4.2       9/24/2020     5       3/2/2021     3.2     4.3     4.1       3/3/2021     4.1			3.9		-	
9/24/2020 5 3/2/2021 3.2 4.3 4.1 3/3/2021 4.1				3.6	4.2	4.2
3/2/2021 3.2 4.3 4.1 3/3/2021 4.1		5	-			
3/3/2021 4.1		-		3.2	4.3	4.1
			4.1	-	-	
		4.9				
	-					

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016	(-3)	0.0035	<0.005	(-3)		(-3)	<0.005
6/2/2016	<0.005				<0.005	0.0013 (J)	
7/25/2016			<0.005		<0.005		<0.005
7/26/2016	<0.005	<0.005				<0.005	
9/13/2016		<0.005	<0.005				
9/14/2016				<0.005			<0.005
9/15/2016	<0.005					<0.005	
9/19/2016					<0.005		
11/1/2016		<0.005			<0.005	<0.005	<0.005
11/2/2016	<0.005						
11/4/2016			<0.005	<0.005			
12/15/2016				<0.005			
1/10/2017	<0.005						
1/11/2017		<0.005				<0.005	<0.005
1/16/2017			<0.005	<0.005	<0.005		
2/21/2017					<0.005		
3/1/2017							0.0004 (J)
3/2/2017		0.0009 (J)	0.0004 (J)			0.0006 (J)	(-)
3/3/2017				0.0005 (J)		(-)	
3/8/2017	<0.005						
4/26/2017	<0.005				0.0016 (J)	<0.005	<0.005
4/27/2017		<0.005	<0.005		(-)		
4/28/2017		0.000	0.000	0.0004 (J)			
5/26/2017				<0.005			
6/27/2017		<0.005	<0.005	0.000			
6/28/2017		0.000	0.000	<0.005		<0.005	<0.005
6/30/2017	<0.005			10.000	<0.005	-0.000	0.000
3/27/2018	<0.005		<0.005		<0.005		
3/28/2018	-0.000		10.000	<0.005	10.000	<0.005	<0.005
3/29/2018		<0.005		10.003		10.000	-0.005
2/26/2019	<0.005	10.003			<0.005		
2/27/2019	10.003	<0.005	<0.005	<0.005	10.003	<0.005	<0.005
3/28/2019		<0.005	0.003 0.0021 (J)	10.003		10.000	-0.005
3/29/2019	<0.005	10.003	0.0021 (3)	<0.005			
4/1/2019	-0.000			-0.000	<0.005	<0.005	<0.005
9/24/2019		0.00072 (J)	0.0028 (J)	<0.005	0.000	0.000	5.555
9/25/2019	<0.005	0.00072 (0)	0.0020 (0)	-0.000	<0.005	0.0014 (J)	0.0019 (J)
2/10/2020	-0.000	0.00042 (J)	<0.005		-0.000	3.50 i <del> +</del> (0)	3.55.5 (0)
2/11/2020		000 .= (0)	5.555	<0.005			<0.005
2/11/2020	<0.005			0.000	<0.005	<0.005	5.555
3/18/2020	<0.005		0.00044 (J)		0.000	0.000	
3/19/2020	-0.000	0.00084 (J)	0.00044 (0)	0.00048 (J)	<0.005	<0.005	<0.005
9/23/2020		0.00064 (J)	0.00058 (J)	<0.005	0.000	<0.005	<0.005
9/24/2020		0.00002 (0)	0.00000 (0)	-0.000	<0.005	-0.003	-0.000
9/25/2020	<0.005				~U.UUJ		
2/10/2021	<0.005			<0.005		<0.005	<0.005
2/11/2021	-0.00J			-0.003	<0.005	-0.003	-0.000
2/11/2021		<0.005	<0.005		-0.003		
3/1/2021		~0.003	~0.003		<0.005		
3/2/2021	<0.005				-0.003		
3/3/2021	-0.00J	<0.005	<0.005	<0.005		<0.005	<0.005
JIJIZUZ I		·0.003	~0.00J	50.000		÷0.000	-0.000

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.005	<0.005	<0.005	<0.005			
6/9/2016					<0.005	<0.005	<0.005
8/1/2016	0.0008 (J)	0.0026 (J)	<0.005	<0.005			
8/2/2016					0.0005 (J)	0.0005 (J)	0.0005 (J)
9/20/2016	<0.005	0.001 (J)	<0.005	<0.005			
9/21/2016					<0.005	<0.005	<0.005
11/7/2016	<0.005	0.0013 (J)	<0.005	<0.005		<0.005	<0.005
11/8/2016					<0.005		
1/18/2017	<0.005	0.002 (J)	<0.005		<0.005	<0.005	
1/19/2017				<0.005			<0.005
2/21/2017	<0.005	0.0019 (J)				<0.005	
2/22/2017				<0.005	<0.005		<0.005
2/23/2017			<0.005				
5/3/2017		0.0037 (J)					
5/5/2017					<0.005	<0.005	
5/8/2017	0.0006 (J)		<0.005	<0.005			<0.005
6/30/2017			<0.005	<0.005			
7/5/2017					<0.005		<0.005
7/7/2017						<0.005	
7/10/2017	<0.005 (*)	<0.005 (*)					
3/29/2018			<0.005	<0.005			<0.005
3/30/2018	<0.005	<0.005			<0.005	<0.005	
2/27/2019	0.0049 (J)	0.0055 (J)	<0.005	0.015	<0.005	<0.005	<0.005
4/1/2019			<0.005	<0.005	<0.005		<0.005
4/2/2019	<0.005	0.003 (J)				<0.005	
9/25/2019	0.00048 (J)	0.0012 (J)					<0.005
9/26/2019			<0.005	<0.005	0.00044 (J)	<0.005	
2/13/2020	0.00044 (J)	0.0012 (J)	<0.005	<0.005	0.00047 (J)	<0.005	<0.005
3/19/2020		0.0018 (J)			<0.005	0.00049 (J)	
3/20/2020	0.0009 (J)		<0.005	0.0005 (J)			<0.005
9/24/2020	0.00067 (J)	0.00068 (J)	<0.005	0.00057 (J)	<0.005	0.0006 (J)	<0.005
2/10/2021	0.00065 (J)	0.00091 (J)	<0.005	0.0027 (J)			
2/11/2021					<0.005		
2/12/2021						<0.005	<0.005
3/2/2021		0.001 (J)					
3/3/2021	<0.005		<0.005	0.00058 (J)	<0.005	<0.005	<0.005

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
6/6/2016			0.0012 (J)	<0.005			
6/7/2016		<0.005			<0.005	<0.005	
7/27/2016		0.0008 (J)	0.0007 (J)	0.0006 (J)	0.0005 (J)		
7/28/2016						<0.005	
8/30/2016	<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	
11/14/2016	0.0093 (J)						
1/11/2017		<0.005	<0.005	<0.005			
1/13/2017					<0.005	<0.005	
2/24/2017	<0.005						
3/1/2017			0.0012 (J)	<0.005			
3/2/2017		0.001 (J)					
3/6/2017					<0.005	<0.005	
4/26/2017			0.0005 (J)	0.0003 (J)	0.0007 (J)	<0.005	
5/2/2017		0.0007 (J)					
5/8/2017	<0.005						
6/28/2017			0.0006 (J)	<0.005			
6/29/2017		0.0006 (J)			0.0005 (J)	<0.005	
7/11/2017	<0.005						
10/10/2017	<0.005						
10/11/2017							<0.005
11/20/2017							<0.005
1/11/2018							<0.005
2/20/2018							<0.005
3/28/2018		<0.005	<0.005	<0.005			
3/29/2018					<0.005	<0.005	
4/2/2018	<0.005						
4/3/2018							<0.005
6/28/2018							<0.005
8/7/2018							<0.005
9/19/2018	<0.005						
9/24/2018							<0.005
3/5/2019		<0.005		<0.005	<0.005	<0.005	
3/6/2019			<0.005				
8/20/2019	<0.005						
8/21/2019							<0.005
10/9/2019							<0.005
2/11/2020		0.00087 (J)	0.001 (J)	0.00088 (J)			
2/12/2020		(-)	(-)		0.00045 (J)	<0.005	<0.005
3/24/2020		0.00087 (J)	0.00095 (J)	0.0011 (J)	0.00077 (J)	<0.005	
3/25/2020		(-)	(-)		(-)		<0.005
8/27/2020	<0.005						
9/22/2020	<0.005						
9/23/2020	<del>-</del>	0.00098 (J)	0.00092 (J)	0.0012 (J)			
9/24/2020		(0)	,(v)	······(0)	0.00076 (J)	<0.005	<0.005
2/9/2021			0.00083 (J)	0.0013 (J)	0.00076 (J)	<0.005	
2/10/2021			, (0)	(0)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<0.005
3/1/2021	<0.005						
3/3/2021	5.556	0.00082 (J)	0.00087 (J)	0.001 (J)	<0.005		
5/5/2521		3.33002 (0)	0.00007 (0)	0.001(0)	3.550		

Page 2

# **Time Series**

Constituent: Chromium (mg/L) Analysis Run 5/10/2021 3:43 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

YGWA-47 (bg) YGWA-17S (bg) YGWA-18I (bg) YGWA-18S (bg) YGWA-20S (bg) YGWA-21I (bg) YGWA-39 (bg)

3/4/2021 <0.005 <0.005

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)	
5/1/2007					0.0029	
9/11/2007					0.0084	
3/20/2008					0.0027	
8/27/2008					0.0026	
3/3/2009					0.0022	
11/18/2009					0.0036	
3/3/2010					<0.005	
9/8/2010					<0.005	
3/10/2011					<0.005	
9/8/2011					<0.005	
3/5/2012					<0.005	
9/10/2012					<0.005	
2/6/2013					<0.005	
8/12/2013					<0.005	
2/5/2014					0.0059	
8/5/2014					<0.005	
2/4/2015					<0.005	
8/3/2015					0.0011 (J)	
2/16/2016					<0.005	
6/2/2016		<0.005	<0.005	<0.005		
7/26/2016		<0.005	<0.005	<0.005		
8/31/2016					<0.005	
9/14/2016		<0.005	<0.005	<0.005		
11/2/2016		<0.005	<0.005			
11/4/2016				<0.005		
11/28/2016					<0.005	
1/12/2017			<0.005	<0.005		
1/13/2017		<0.005				
2/22/2017					<0.005	
3/6/2017		<0.005				
3/7/2017			<0.005	<0.005		
5/1/2017		<0.005	0.0004 (J)			
5/2/2017		2.300		<0.005		
5/8/2017				-0.000	<0.005	
6/27/2017			<0.005	<0.005	-0.000	
		<0.00E	~0.000	~U.UU3		
6/29/2017		<0.005			<0.005	
7/17/2017	<0.00E				<0.005	
10/12/2017	<0.005				0.005	
10/16/2017	.0.65=				<0.005	
11/20/2017	<0.005					
1/10/2018	<0.005					
2/19/2018	<0.005				<0.005	
3/29/2018		<0.005	<0.005	<0.005		
4/3/2018	<0.005					
6/28/2018	<0.005					
8/6/2018					<0.005	
8/7/2018	<0.005					
9/24/2018	<0.005					
2/25/2019					<0.005	
3/4/2019		<0.005	<0.005	<0.005		
6/12/2019					<0.005	
8/19/2019					<0.005	

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
8/21/2019	0.00053 (J)				
10/8/2019					<0.005
10/9/2019	0.0012 (J)				
2/12/2020	0.00065 (J)	<0.005	<0.005	0.00043 (J)	
3/17/2020					<0.005
3/24/2020	0.00055 (J)		<0.005	0.0014 (J)	
3/25/2020		0.00058 (J)			
8/26/2020					<0.005
9/22/2020		<0.005	0.0011 (J)	<0.005	<0.005
9/24/2020	<0.005				
2/8/2021			<0.005	<0.005	
2/9/2021		<0.005			
2/10/2021	<0.005				
3/2/2021			<0.005	<0.005	<0.005
3/3/2021		0.0013 (J)			
3/4/2021	<0.005				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		<0.005	0.00082 (J)				<0.005
6/2/2016	<0.005				0.035	<0.005	
7/25/2016			0.0008 (J)		0.0312		<0.005
7/26/2016	<0.005	<0.005				<0.005	
9/13/2016		<0.005	0.0009 (J)				
9/14/2016				<0.005			<0.005
9/15/2016	<0.005					<0.005	
9/19/2016					0.0275		
11/1/2016		<0.005			0.0255	<0.005	<0.005
11/2/2016	<0.005						
11/4/2016			0.0025 (J)	<0.005			
12/15/2016				<0.005			
1/10/2017	<0.005						
1/11/2017		<0.005				<0.005	<0.005
1/16/2017			0.0027 (J)	<0.005	0.0245		
2/21/2017					0.0272		
3/1/2017							<0.005
3/2/2017		<0.005	0.0022 (J)			<0.005	
3/3/2017				<0.005			
3/8/2017	<0.005				0.0044	0.005	0.005
4/26/2017	<0.005	.0.005	0.0040 (1)		0.0244	<0.005	<0.005
4/27/2017		<0.005	0.0018 (J)	-0.005			
4/28/2017				<0.005			
5/26/2017		10.005	0.0002 (1)	<0.005			
6/27/2017		<0.005	0.0023 (J)	<0.00E		<0.00E	-0.00F
6/28/2017 6/30/2017	<0.005			<0.005	0.0233	<0.005	<0.005
3/27/2018	<0.005		<0.005		0.0233		
3/28/2018	<b>~</b> 0.003		<b>~0.003</b>	<0.005	0.023	<0.005	<0.005
3/29/2018		<0.005		10.003		10.003	-0.000
6/5/2018		<0.005					
6/6/2018		0.000	<0.005				
6/7/2018			0.000	<0.005		<0.005	
6/8/2018	<0.005						<0.005
6/11/2018					0.023		
10/1/2018	<0.005	<0.005	0.00059 (J)	<0.005		<0.005	<0.005
10/2/2018			. ,		0.022		
2/26/2019	<0.005				0.021		
2/27/2019		<0.005	0.00064 (J)	<0.005		<0.005	<0.005
3/28/2019		<0.005	0.00091 (J)				
3/29/2019	<0.005			<0.005			
4/1/2019					0.022	<0.005	<0.005
9/24/2019		<0.005	0.0013 (J)	<0.005			
9/25/2019	<0.005				0.016	<0.005	<0.005
2/10/2020		<0.005	0.0016 (J)				
2/11/2020				<0.005			<0.005
2/12/2020	<0.005				0.014	<0.005	
3/18/2020	<0.005		0.00087 (J)				
3/19/2020		<0.005		<0.005	0.014	<0.005	<0.005
9/23/2020		<0.005	0.0013 (J)	<0.005		<0.005	<0.005
9/24/2020					0.0064		
9/25/2020	<0.005						

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
2/10/2021	<0.005			<0.005		<0.005	<0.005
2/11/2021					0.0078		
2/12/2021		0.00086 (J)	0.0028 (J)				
3/1/2021					0.0061		
3/2/2021	<0.005						
3/3/2021		<0.005	0.003 (J)	<0.005		<0.005	<0.005

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.005	0.0032	0.0016 (J)	0.0024 (J)			
6/9/2016					0.00042 (J)	0.00085 (J)	0.00052 (J)
8/1/2016	<0.005	0.003 (J)	0.0014 (J)	0.0026 (J)			
8/2/2016					<0.005	0.0008 (J)	0.0006 (J)
9/20/2016	<0.005	0.003 (J)	0.002 (J)	0.0026 (J)			
9/21/2016					<0.005	0.0008 (J)	0.0007 (J)
11/7/2016	<0.005	0.0025 (J)	0.0016 (J)	0.0025 (J)		0.001 (J)	<0.005
11/8/2016					<0.005		
1/18/2017	<0.005	0.0022 (J)	0.0017 (J)		<0.005	0.001 (J)	
1/19/2017				0.0024 (J)			<0.005
2/21/2017	<0.005	0.0022 (J)				0.0011 (J)	
2/22/2017				0.0023 (J)	<0.005		<0.005
2/23/2017			0.002 (J)				
5/3/2017		0.002 (J)					
5/5/2017					<0.005	0.0012 (J)	
5/8/2017	<0.005		0.0029 (J)	0.0023 (J)			<0.005
6/30/2017			0.0044 (J)	0.0022 (J)			
7/5/2017					<0.005		0.0003 (J)
7/7/2017						0.0012 (J)	
7/10/2017	<0.005	0.002 (J)					
3/29/2018			0.0495 (D)	<0.005			<0.005
3/30/2018	<0.005	<0.005			<0.005	<0.005	
6/11/2018							<0.005
6/12/2018				0.0025 (J)	<0.005	0.0011 (J)	
6/13/2018	<0.005	0.0017 (J)	0.092				
10/2/2018	<0.005	0.002 (J)	0.078	0.0023 (J)			<0.005
10/3/2018					<0.005	0.0013 (J)	
2/27/2019	<0.005	0.0017 (J)	0.035	0.0024 (J)	<0.005	0.00093 (J)	<0.005
4/1/2019			0.025	0.0023 (J)	<0.005		<0.005
4/2/2019	<0.005	0.0022 (J)				0.0011 (J)	
9/25/2019	<0.005	0.0033 (J)					<0.005
9/26/2019			0.014	0.0021 (J)	<0.005	0.00098 (J)	
2/13/2020	<0.005	0.0019 (J)	0.012	0.0026 (J)	<0.005	0.00092 (J)	<0.005
3/19/2020		0.0021 (J)			<0.005	0.00093 (J)	
3/20/2020	<0.005		0.014	0.0022 (J)			<0.005
9/24/2020	<0.005	0.0011 (J)	0.0076	0.0021 (J)	<0.005	0.00085 (J)	<0.005
2/10/2021	<0.005	0.0017 (J)	0.0048 (J)	0.0025 (J)			
2/11/2021					<0.005		
2/12/2021						<0.005	0.00094 (J)
3/2/2021		0.0021 (J)					
3/3/2021	<0.005		0.0042 (J)	0.0017 (J)	<0.005	0.001 (J)	<0.005

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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)	
8/30/2016	0.0073 (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	
11/14/2016	0.0115						
1/11/2017		<0.005	<0.005	<0.005			
1/13/2017					<0.005	0.011	
2/24/2017	0.0106				0.000	0.0	
3/1/2017	0.0100		<0.005	<0.005			
3/2/2017		<0.005	-0.000	10.000			
3/6/2017		-0.000			<0.005	0.011	
4/26/2017			<0.005	<0.005	<0.005	0.009 (J)	
5/2/2017		<0.005	10.000	10.003	10.003	0.003 (0)	
5/8/2017	0.0099 (J)	<b>~0.003</b>					
6/28/2017	0.0099 (3)		<0.005	<0.005			
6/29/2017		<0.00E	<0.005	<0.005	<0.00E	0.0002 (1)	
	0.0006 ( 1)	<0.005			<0.005	0.0093 (J)	
7/11/2017	0.0096 (J)						
10/10/2017	0.0036 (J)						10.005
10/11/2017							<0.005
11/20/2017							<0.005
1/11/2018							<0.005
2/20/2018							<0.005
3/28/2018		<0.005	<0.005	<0.005			
3/29/2018					<0.005	<0.005	
4/2/2018	<0.005						
4/3/2018							<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			
6/28/2018							<0.005
8/7/2018							<0.005
9/19/2018	0.0036 (J)						
9/24/2018							<0.005
9/25/2018		<0.005	<0.005	<0.005	<0.005	0.0044 (J)	
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		
8/20/2019	0.00092 (J)						
8/21/2019							0.00034 (J)
9/24/2019						0.0032 (J)	
9/25/2019		<0.005			<0.005		
9/26/2019			<0.005	<0.005			
10/8/2019	0.0014 (J)						
10/9/2019							<0.005
2/11/2020		<0.005	<0.005	<0.005			

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
2/12/2020					<0.005	0.0081	0.00034 (J)
3/17/2020	0.0017 (J)						
3/24/2020		<0.005	<0.005	<0.005	<0.005	0.0061	
3/25/2020							0.00034 (J)
8/27/2020	0.0011 (J)						
9/22/2020	0.00097 (J)						
9/23/2020		<0.005	<0.005	<0.005			
9/24/2020					<0.005	0.0079	0.00053 (J)
2/9/2021			<0.005	<0.005	<0.005	0.009	
2/10/2021							0.00098 (J)
3/1/2021	0.001 (J)						
3/3/2021		<0.005	<0.005	<0.005	<0.005		
3/4/2021						0.0065	0.00071 (J)

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (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
6/2/2016		0.00082 (J)	<0.005	<0.005	0.0027
7/26/2016		0.0002 (J)	<0.005	<0.005	
8/31/2016		0.0012 (0)	10.000	10.000	0.0053 (J)
9/14/2016		0.0006 (1)	<0.005	<0.005	0.0033 (0)
11/2/2016		0.0006 (J) <0.005	<0.005	<0.005	
		<0.005	<0.005	<0.00E	
11/4/2016				<0.005	0.0036 (1)
11/28/2016			<0.00E	<0.005	0.0036 (J)
1/12/2017		0.0000 (1)	<0.005	<0.005	
1/13/2017		0.0029 (J)			0.0010 (1)
2/22/2017					0.0049 (J)
3/6/2017		0.0006 (J)			
3/7/2017			<0.005	<0.005	
5/1/2017		<0.005	<0.005		
5/2/2017				<0.005	
5/8/2017					0.0059 (J)
6/27/2017			<0.005	<0.005	
6/29/2017		0.0005 (J)			
7/17/2017					0.0046 (J)
10/12/2017	<0.005				
10/16/2017					0.0034 (J)
11/20/2017	<0.005				
1/10/2018	<0.005				
2/19/2018	<0.005				<0.005
3/29/2018		<0.005	<0.005	<0.005	
4/3/2018	<0.005				
6/6/2018			<0.005		
6/7/2018		0.00058 (J)		<0.005	
6/28/2018	<0.005				
8/6/2018					0.003 (J)
8/7/2018	<0.005				
9/24/2018	<0.005				
9/26/2018		<0.005	<0.005	<0.005	
2/25/2019					0.001 (J)

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
3/4/2019		<0.005	<0.005	<0.005	
4/3/2019		0.00083 (J)	<0.005	<0.005	
6/12/2019					0.003 (J)
8/19/2019					0.0035 (J)
8/21/2019	<0.005				
9/24/2019			<0.005	<0.005	
9/25/2019		<0.005			
10/8/2019					0.0039 (J)
10/9/2019	<0.005				
2/12/2020	<0.005	<0.005	0.00037 (J)	<0.005	
3/17/2020					0.003 (J)
3/24/2020	<0.005		0.00035 (J)	<0.005	
3/25/2020		0.00056 (J)			
8/26/2020					0.2 (O)
9/22/2020		<0.005	<0.005	<0.005	0.16 (O)
9/24/2020	<0.005				
2/8/2021			<0.005	<0.005	
2/9/2021		<0.005			
2/10/2021	<0.005				
3/2/2021			<0.005	<0.005	0.21 (O)
3/3/2021		<0.005			
3/4/2021	<0.005				

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/10/2021 3:43 PM

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		0.321 (U)	0.42				0.896
6/2/2016	0.329 (U)				0.0652 (U)	2.51	
7/25/2016			1.83		3.01		2.28
7/26/2016	1.51	0.707 (U)				3.82	
9/13/2016		1.22	0.841				
9/14/2016				0.98 (U)			0.821 (U)
9/15/2016	1.04 (U)					4.24	
9/19/2016					0.871 (U)		
11/1/2016		0.805 (U)			0.307 (U)	3.92	0.585 (U)
11/2/2016	0.496 (U)						
11/4/2016			0.166 (U)	0.277 (U)			
12/15/2016				0.071 (U)			
1/10/2017	0.376 (U)						
1/11/2017		0.705 (U)				2.52	1.22
1/16/2017			0	0.44 (U)	0.284 (U)		
2/21/2017					0.503 (U)		
3/1/2017							0.877 (U)
3/2/2017		0.251 (U)	0.504 (U)			3.13	
3/3/2017				0.448 (U)			
3/8/2017	0.0745 (U)						
4/26/2017	0.282 (U)				0.204 (U)	2.35	0.672 (U)
4/27/2017		1.08	0.593 (U)				
4/28/2017				0.548 (U)			
5/26/2017				0 (U)			
6/27/2017		1.02 (U)	0.657 (U)				
6/28/2017				0.608 (U)		2.6	1.07 (U)
6/30/2017	0.994				0.738 (U)		
3/27/2018	0.189 (U)		0.39 (U)		0.31 (U)		
3/28/2018				0.412 (U)		3	0.65 (U)
3/29/2018		0.503 (U)					
6/5/2018		0.771 (U)					
6/6/2018			2.8				
6/7/2018				0.73 (U)		2.79	
6/8/2018	0.218 (U)						1.89
6/11/2018					0.608 (U)		
10/1/2018	1.24	0.783 (U)	1.06 (U)	0.756 (U)		3.14	1.58
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)		3.79	3.67
3/28/2019		1.13 (U)	0.125 (U)				
3/29/2019	0 (U)			0.224 (U)			
4/1/2019					1.02 (U)	4.33	2.28
9/24/2019		1.22 (U)	0.949 (U)	0.429 (U)			
9/25/2019	0.707 (U)				1.02 (U)	4.2	1.6
2/10/2020		1.41	1.25 (U)				
2/11/2020				0.817 (U)		3.87	1.85
2/12/2020	1.07 (U)				0.301 (U)		
3/18/2020	0.207 (U)		0.458 (U)				
3/19/2020		1.1		0.715 (U)	1	3.96	2.2
9/23/2020		1.35 (U)	0.00884 (U)	0.565 (U)		4.14	1.14 (U)
9/24/2020					0.684 (U)		
9/25/2020	0.603 (U)						

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/10/2021 3:43 PM

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
2/10/2021	0.353 (U)			1.04 (U)		3.65	2.46
2/11/2021					0.678 (U)		
2/12/2021		0.366 (U)	0.458 (U)				
3/1/2021					0.412 (U)		
3/2/2021	0.71 (U)						
3/3/2021		0.492 (U)	0.105 (U)	0.459 (U)		3.58	2.03

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/10/2021 3:43 PM

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	6.68 (o)	0.677	1.81	0.257 (U)			
6/9/2016					0.194 (U)	0.715	0.523
8/1/2016	0.606 (U)	0.457 (U)	3.79	0.453 (U)			
8/2/2016					0.331 (U)	0.526 (U)	1.25
9/20/2016	0.565 (U)	0.555 (U)	3.12	1.27			
9/21/2016					0.335 (U)	0.176 (U)	1.21 (U)
11/7/2016	0.773 (U)	0.647 (U)	2.66	0.877 (U)		0.609 (U)	1.16
11/8/2016					0.245 (U)		
1/18/2017	0.263 (U)	0.6 (U)	3.44		0.261 (U)	0.0752 (U)	
1/19/2017				0.764 (U)			0.933 (U)
2/21/2017	1.06 (U)	1.11 (U)				0.404 (U)	
2/22/2017				1.26 (U)	0.516 (U)		1.45 (U)
2/23/2017			4.73				
5/3/2017		0.654 (U)					
5/5/2017					0.713 (U)	0.868 (U)	
5/8/2017	0.291 (U)		3.87	0.789 (U)			0.21 (U)
6/30/2017			2.85	0.592 (U)			
7/5/2017					0.292 (U)		0.62 (U)
7/7/2017						1.29	
7/10/2017	0.912	0.649 (U)					
3/29/2018			1.41	0.916 (U)			1.37
3/30/2018	0.23 (U)	0.501 (U)			0.948 (U)	0.195 (U)	
6/11/2018							1.27 (U)
6/12/2018				0.666 (U)	0.869 (U)	1.02 (U)	
6/13/2018	0.427 (U)	1.09 (U)	3.69				
10/2/2018	1.41 (U)	0.747 (U)	4.5	0.774 (U)			0.442 (U)
10/3/2018					0.864 (U)	0.713 (U)	
2/27/2019	0.614 (U)	1.27	4.69	1.19	0.947 (U)	0.543 (U)	0.902 (U)
4/1/2019			5	0.777 (U)	0.162 (U)		0.584 (U)
4/2/2019	0.84 (U)	0.708 (U)				0.521 (U)	
9/25/2019	1.01 (U)	1.18 (U)					1.03 (U)
9/26/2019			3.37	1.01 (U)	1.06 (U)	1.16	
2/13/2020	1.86	0.178 (U)	4.48	0.961 (U)	1.12 (U)	1.04	0.806 (U)
3/19/2020		0.796 (U)			0.913 (U)	1.01 (U)	
3/20/2020	2.03		4.13	1.5			1.42
9/24/2020	<1.88	<1.88	3.42	1.49	<1.88	<1.88	<1.88
2/10/2021	0.513 (U)	0.41 (U)	2.47	0.663 (U)			
2/11/2021					1.07		
2/12/2021						0.419 (U)	0.826
3/2/2021		0.394 (U)					
3/3/2021	0.419 (U)		1.39	0.327 (U)	0.261 (U)	1.04	0.955

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/10/2021 3:43 PM

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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)	
8/30/2016	1.09						
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)	
12/15/2016	1 (U)	,	,	,		. ,	
1/11/2017	,	0.34 (U)	0.365 (U)	0.502 (U)			
1/13/2017		(-)	(-)	(-)	0.296 (U)	0.72 (U)	
2/24/2017	0.504 (U)				(-)		
3/1/2017	(2)		0.395 (U)	0.202 (U)			
3/2/2017		0.746 (U)	0.000 (0)	0.202 (0)			
3/6/2017		0.7.10 (0)			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)	0.007 (0)	0.204 (0)	0.202 (0)	1.10 (0)	
5/8/2017	0.455 (U)	0.111 (0)					
6/28/2017	0.455 (0)		0.892	0.636 (U)			
6/29/2017		0.576 (U)	0.032	0.030 (0)	1.12	0.841 (U)	
	0.471 (11)	0.576 (0)			1.12	0.841 (0)	
7/11/2017	0.471 (U)						
10/10/2017	0.649 (U)						0.596 (11)
10/11/2017							0.586 (U)
11/20/2017							0.816 (U)
1/11/2018							0.841 (U)
2/20/2018		0.400.410	0.00 (1.1)	0.50 (1.1)			1.58
3/28/2018		0.438 (U)	0.92 (U)	0.56 (U)	. ==		
3/29/2018					1.73	1.91	
4/2/2018	0.512 (U)						0.005 (11)
4/3/2018							0.385 (U)
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)			
6/28/2018							0.283 (U)
8/7/2018							0.332 (U)
9/19/2018	0.789 (U)						
9/24/2018							0.767 (U)
9/25/2018		0.68 (U)	0.141 (U)	0.574 (U)	0.772 (U)	1.62	
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		
8/20/2019	2.44						
8/21/2019							1.01 (U)
9/24/2019						1.35	
9/25/2019		0.412 (U)			1.18 (U)		
9/26/2019			0.386 (U)	0.222 (U)			
10/8/2019	1.72						1.02 (U)
2/11/2020		0.461 (U)	1.48	0.597 (U)			
2/12/2020					1.11 (U)	1.61	0.45 (U)

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/10/2021 3:43 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
3/17/2020	1.22 (U)						
3/24/2020		0.534 (U)	0.632 (U)	0.262 (U)	1.88	1.24 (U)	
3/25/2020							0.377 (U)
8/27/2020	1.26 (U)						
9/22/2020	1.06 (U)						
9/23/2020		0.466 (U)	0.887 (U)	0.43 (U)			
9/24/2020					0.611 (U)	1.8	0.568 (U)
2/9/2021		0.529 (U)	0.314 (U)	0.259 (U)	0.284 (U)	1.24	
2/10/2021							0.518 (U)
3/1/2021	1.2						
3/3/2021		0.59 (U)	0.565 (U)	0.352 (U)	0.133 (U)	1.2	
3/4/2021							0.636 (U)

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/10/2021 3:43 PM

1.19						
5222016		YGWA-40 (ba)	YGWA-41 (ba)	YGWA-5D (ba)	YGWA-5I (ba)	GWA-2 (ha)
1.26	6/2/2016					(-3)
12   12   12   12   12   12   12   12						
1442016   0.901 (U)   3.96   1.27   1.27   1.19   1.142016   1.09 (U)   4.53   1.22   1.142017   1.19   1			1.20	0.32	1.47	1.2
1114/22016			0.001 (11)	2.06	1.07	1.2
11/14/2016					1.27	
11/28/2016			1.09 (U)	4.53		
1.19					0.434 (U)	
1.19	11/28/2016					0.264 (U)
22222017	1/12/2017			4.43	0.202 (U)	
1.58   1.58	1/13/2017		1.19			
367/2017	2/22/2017					1.06 (U)
Salz2017	3/6/2017		0.669 (U)			
52/2017	3/7/2017			4.8	0.0674 (U)	
58/2017	5/1/2017		0.803 (U)	4.16		
227/2017   1.35   1.42   1.4	5/2/2017				0.444 (U)	
1.35	5/8/2017					0.187 (U)
1.35	6/27/2017			2.8	0.77 (U)	
7/17/2017	6/29/2017		1.35		•	
10/12/2017 1.49 10/16/2017 0.918 (U) 11/10/2018 1.05 11/10/2018 2.05	7/17/2017					1.42
1.17 11/20/2017		1.49				
11/20/2017						1.17
1.05		0.018 (11)				1.17
2/19/2018   2.05						
3/29/2018   0.703 (U)   3.42   0.648 (U)   4/3/2018   0.688 (U)   3.99   0.745 (U)   5/6/2018   0.628 (U)   0.745 (U)   5/6/2018   0.628 (U)   0.745						1 E0 (D)
3.99		∠.∪5	0.702 (11)	2.42	0.649.715	(ט) אכ.ו
3.99 3.67/2018 3.99 3.77/2018 1.28 3.67/2018 1.16 3.77/2018 1.16 3.77/2018 1.16 3.77/2018 1.16 3.77/2018 1.16 3.77/2018 1.21 (U) 3.77/2018 3.77/2019 3.77/20		0.00.415	U.7U3 (U)	3.42	υ.υ48 (U)	
0.628 (U) 0.745 (U) 0.745 (U) 0.796 (U) 0.796 (U) 0.196		U.68 (U)		0.00		
1.28				3.99		
1.16			0.628 (U)		0.745 (U)	
1.16 9/24/2018 0.965 (U) 9/26/2018 0.965 (U) 9/26/2018 0.756 (U) 0.757 (U) 0	6/28/2018	1.28				
9/24/2018	8/6/2018					0.196 (U)
9/26/2018	8/7/2018	1.16				
1.21 (U) 4.43 1 (U) 4.79 0.43 (U) 3/19/2019 1.07 (U) 4.79 0.43 (U) 3/19/2019 1.24 (U) 3/21/2019 1.24 (U) 3/22/2019 1.86 10/8/2019 0.866 (U) 1.32 (U) 2/12/2020 1.83 1.25 4.02 0.913 (U) 2/12/2020 1.27 (U) 3.52 3/25/2020 0.766 (U) 3/24/2020 0.766 (U) 3/22/2020 0.634 (U) 2/8/2021 0.634 (U) 2/8/2021 0.783 (U) 3/3/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1.67 0.579 (U) 0.948 (U) 3/3/3/2021 1.67 0.579 (U) 0.948 (U) 3/3/3/2021 1.67 0.579 (U) 0.948 (U)	9/24/2018	0.965 (U)				
4.79 0.43 (U) 3.79/2019 1.24 (U) 3.721/2019 1.24 (U) 3.721/2019 1.86 1.86 10/8/2019 0.866 (U) 2.712/2020 1.83 1.25 4.02 0.913 (U) 2.712/2020 1.27 (U) 3.52 3.725/2020 0.766 (U) 3.726/2020 1.75 3.725/2020 0.795 (U) 2.98 0.428 (U) 0.688 (U) 2.721/2020 0.634 (U) 2.721/2020 0.783 (U) 3.721/2020 0.783 (U) 3.721/2020 0.783 (U) 3.721/2020 0.783 (U) 3.721/2021 0.783 (U) 3.721/2021 0.783 (U) 3.721/2021 0.783 (U) 3.731/2021 1.67 0.579 (U) 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U) 3.731/2021 0.948 (U)	9/26/2018		0.756 (U)	2.73	0.377 (U)	
4/3/2019 1.07 (U) 4.79 0.43 (U) 1.39 3/21/2019 1.24 (U) 1.39 3/21/2019 1.24 (U) 1.36 3/21/2019 1.86 1.86 10/8/2019 0.866 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.32 (U) 1.27 (U) 1.27 (U) 1.27 (U) 1.27 (U) 1.27 (U) 1.27 (U) 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.75	3/4/2019		1.21 (U)	4.43	1 (U)	
3/19/2019   1.24 (U)   3/24/2019   1.24 (U)   4.06   0.699 (U)   9/25/2019   1.86   1.32 (U)   1.33 (U)   1.	4/3/2019					
3/21/2019   1.24 (U)   3/24/2019   1.86   1.32 (U)   2/12/2020   1.83   1.25   4.02   0.913 (U)   3/24/2020   1.27 (U)   3.52   3/25/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2020   1.75   3/22/2021   1.75   3/22/2021   1.75   3/22/2021   1.67   3/22/2021   0.783 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   3/2/2021   1.67   0.579 (U)   0.948 (U)   0.579 (U)   0.948 (U)   0.579 (U)   0.948 (U)   0.579 (U)   0.948 (U)   0.579 (U)   0.948 (U)   0.579 (U)   0.948 (U)   0.579 (U)   0.948 (U)   0.579 (U)   0.948 (U)   0.579 (U)   0.948 (U)	8/19/2019					1.39
3/24/2019   1.86   1.86   1.32 (U)   2/12/2020   1.83   1.25   4.02   0.913 (U)   1.75   1.	8/21/2019	1.24 (U)				
1.86	9/24/2019			4.06	0.699 (U)	
10/8/2019	9/25/2019		1.86		. ,	
2/12/2020 1.83 1.25 4.02 0.913 (U) 3/17/2020 1.27 (U) 3.52 3/25/2020 0.766 (U) 3/26/2020 1.75 9/22/2020 0.795 (U) 2.98 0.428 (U) 0.688 (U) 9/24/2020 0.634 (U) 2/8/2021 2.89 0.613 (U) 2/9/2021 0.783 (U) 3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1.67	10/8/2019	0.866 (U)				1.32 (U)
3/17/2020 1.27 (U) 3.52 1.07 (U) 3.52 3.52 3.75/2020 0.766 (U) 3.75/2020 1.75 3.75/2020 1.75 3.75/2020 1.75 3.75/2020 0.634 (U) 2.98 0.428 (U) 0.688 (U) 3.75/2020 0.634 (U) 2.89 0.613 (U) 2.89/2021 2.89 0.613 (U) 2.98/2021 0.783 (U) 3.75/2021 1.67 0.579 (U) 0.948 (U) 3.75/2021 1.75 0.579 (U) 0.948 (U) 3.75/2021 1.75 0.579 (U) 0.948 (U) 3.75/2021 1.75 0.579 (U) 0.948 (U) 3.75/2021 1.75 0.579 (U) 0.948 (U) 3.75/2021 1.75 0.579 (U) 0.948 (U) 3.75/2021 1.75 0.579 (U) 0.948 (U) 3.75/2021 1.75 0.75 (U) 0.948 (U) 0.94			1.25	4.02	0.913 (U)	(3)
3/24/2020 1.27 (U) 3.52 3/25/2020 0.766 (U) 1.75 3/26/2020 0.795 (U) 2.98 0.428 (U) 0.688 (U) 0.624 (U) 0.688 (U) 0.626 (U) 0.626 (U) 0.783 (U) 0.783 (U) 0.783 (U) 0.783 (U) 0.679 (U) 0.948 (U)			5		5.5.5 (6)	1 (11)
3/25/2020 0.766 (U) 3/26/2020 1.75 9/22/2020 0.795 (U) 2.98 0.428 (U) 0.688 (U) 9/24/2020 0.634 (U) 2/8/2021 2.89 0.613 (U) 2/9/2021 0.783 (U) 2/10/2021 0.783 (U) 3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1		1 27 (11)		3 52		1 (0)
3/26/2020 1.75 3/22/2020 0.795 (U) 2.98 0.428 (U) 0.688 (U) 3/24/2020 0.634 (U) 2/8/2021 2.89 0.613 (U) 2/9/2021 0.626 (U) 2/10/2021 0.783 (U) 3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1		1.27 (0)	0.766 (11)	J.J2		
9/22/2020 0.795 (U) 2.98 0.428 (U) 0.688 (U) 9/24/2020 0.634 (U) 2/8/2021 2.89 0.613 (U) 2/9/2021 0.626 (U) 2/10/2021 0.783 (U) 3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1			U. 700 (U)			1.75
9/24/2020 0.634 (U) 2/8/2021 2.89 0.613 (U) 2/9/2021 0.626 (U) 2/10/2021 0.783 (U) 3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1			0.705 (1.1)	0.00	0.400.00	
2/8/2021 2.89 0.613 (U) 2/9/2021 0.626 (U) 2/10/2021 0.783 (U) 3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1			0.795 (U)	2.98	0.428 (U)	0.688 (U)
2/9/2021 0.626 (U) 2/10/2021 0.783 (U) 3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1		0.634 (U)				
2/10/2021 0.783 (U) 3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1	2/8/2021			2.89	0.613 (U)	
3/2/2021 1.67 0.579 (U) 0.948 (U) 3/3/2021 1	2/9/2021		0.626 (U)			
3/3/2021 1	2/10/2021	0.783 (U)				
	3/2/2021			1.67	0.579 (U)	0.948 (U)
3/4/2021 0.818 (U)	3/3/2021		1			
	3/4/2021	0.818 (U)				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		0.12 (J)	<0.1				0.15 (J)
6/2/2016	<0.1				<0.1	0.62	
7/25/2016			0.06 (J)		0.06 (J)		0.14 (J)
7/26/2016	0.02 (J)	0.08 (J)				0.49	
9/13/2016		0.11 (J)	<0.1				
9/14/2016				0.08 (J)			0.18 (J)
9/15/2016	<0.1					0.54	
9/19/2016					<0.1		
11/1/2016		<0.1			<0.1	0.68	<0.1
11/2/2016	<0.1						
11/4/2016			<0.1	<0.1			
12/15/2016				0.06 (J)			
1/10/2017	<0.1			. ,			
1/11/2017		0.05 (J)				0.49	0.09 (J)
1/16/2017		. ,	<0.1	0.1 (J)	<0.1		· ,
2/21/2017				( )	<0.1		
3/1/2017							<0.1
3/2/2017		<0.1	<0.1			0.48	
3/3/2017				<0.1			
3/8/2017	<0.1						
4/26/2017	<0.1				<0.1	0.48	0.08 (J)
4/27/2017		0.04 (J)	0.01 (J)				
4/28/2017				0.06 (J)			
5/26/2017				0.09 (J)			
6/27/2017		<0.1	<0.1	(0)			
6/28/2017			211	0.11 (J)		0.47	0.12 (J)
6/30/2017	<0.1			0.11(0)	<0.1	· · ·	5.12 (d)
10/3/2017		<0.1	<0.1	<0.1			
10/4/2017					<0.1	<0.1	<0.1
10/5/2017	<0.1						
3/27/2018	<0.1		<0.1		<0.1		
3/28/2018				0.31		0.56	<0.1
3/29/2018		<0.1					
6/5/2018		0.055 (J)					
6/6/2018		(-)	<0.1				
6/7/2018				0.11 (J)		0.48	
6/8/2018	<0.1						0.2 (J)
6/11/2018					<0.1		
10/1/2018	<0.1	<0.1	<0.1	<0.1		0.44	<0.1
10/2/2018					<0.1		
2/26/2019	<0.1				<0.1		
2/27/2019		0.052 (J)	<0.1	0.12 (J)		0.53	0.13 (J)
3/28/2019		0.036 (J)	<0.1	` '			• •
3/29/2019	<0.1	` '		0.13 (J)			
4/1/2019				` '	<0.1	0.45	0.1 (J)
9/24/2019		0.063 (J)	<0.1	0.081 (J)			
9/25/2019	<0.1	` '		` '	<0.1	0.46	0.1 (J)
2/10/2020		0.061 (J)	<0.1				••
2/11/2020		` '		0.075 (J)			0.094 (J)
2/12/2020	<0.1			• •	<0.1	0.4	
3/18/2020	<0.1		<0.1				
3/19/2020		0.064 (J)		0.093 (J)	<0.1	0.51	0.11 (J)
		. ,					

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
9/23/2020		0.058 (J)	<0.1	0.08 (J)		0.47	0.098 (J)
9/24/2020					<0.1		
9/25/2020	<0.1						
2/10/2021	<0.1			0.094 (J)		0.43	<0.1
2/11/2021					<0.1		
2/12/2021		0.068 (J)	<0.1				
3/1/2021					<0.1		
3/2/2021	<0.1						
3/3/2021		0.078 (J)	<0.1	0.085 (J)		0.44	0.1

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.094 (J)	<0.1	0.086 (J)	0.12 (J)			
6/9/2016					0.098 (J)	0.16 (J)	0.085 (J)
8/1/2016	0.08 (J)	0.24 (J)	0.14 (J)	0.22 (J)			
8/2/2016					0.38	0.5	0.09 (J)
9/20/2016	0.05 (J)	0.03 (J)	<0.1	0.32			
9/21/2016	.,				0.08 (J)	0.25 (J)	0.09 (J)
11/7/2016	<0.1 (*)	0.44	<0.1 (*)	<0.1 (*)		0.27 (J)	<0.1 (*)
11/8/2016					0.24 (J)		
1/18/2017	0.11 (J)	<0.1 (*)	<0.1 (*)		0.12 (J)	0.34	
1/19/2017	.,	.,	, ,	0.25 (J)	, ,		<0.1 (*)
2/21/2017	<0.1 (*)	<0.1 (*)				0.27 (J)	
2/22/2017	.,	.,		0.21 (J)	<0.1 (*)	• •	<0.1 (*)
2/23/2017			<0.1 (*)	. ,	,,		,,
5/3/2017		0.16 (J)					
5/5/2017		. ,			0.08 (J)	0.2 (J)	
5/8/2017	0.08 (J)		0.07 (J)	0.19 (J)	` '	.,	0.06 (J)
6/30/2017	` '		<0.1 (*)	0.2 (J)			` '
7/5/2017			.,	` '	0.11 (J)		0.08 (J)
7/7/2017					` '	0.18 (J)	` '
7/10/2017	<0.1 (*)	<0.1 (*)				. ,	
10/5/2017		• •			<0.1 (*)		<0.1 (*)
10/6/2017				<0.1 (*)	( )		.,
10/9/2017			<0.1 (*)	.,		<0.1 (*)	
10/10/2017	<0.1	<0.1	.,			• • • • • • • • • • • • • • • • • • • •	
3/29/2018			<0.1	0.49			<0.1
3/30/2018	<0.1	0.35			<0.1	<0.1	
6/11/2018							<0.1
6/12/2018				0.037 (J)	<0.1	0.13 (J)	
6/13/2018	0.088 (J)	0.044 (J)	<0.1	. ,		• •	
10/2/2018	<0.1	<0.1	<0.1	<0.1			<0.1
10/3/2018					<0.1	0.31	
2/27/2019	<0.1	<0.1	<0.1	0.14 (J)	0.14 (J)	0.22 (J)	0.15 (J)
4/1/2019			0.034 (J)	0.088 (J)	0.078 (J)	• •	0.059 (J)
4/2/2019	0.071 (J)	<0.1	.,	,	` '	0.14 (J)	` '
9/25/2019	0.064 (J)	<0.1				• •	0.054 (J)
9/26/2019	.,		0.14 (J)	0.22 (J)	0.29 (J)	0.28 (J)	` '
2/13/2020	<0.1	<0.1	<0.1	0.11 (J)	0.14 (J)	0.18 (J)	0.053 (J)
3/19/2020		<0.1		` '	0.07 (J)	0.16 (J)	` '
3/20/2020	0.06 (J)		<0.1	0.097 (J)	. ,	• •	0.057 (J)
9/24/2020	0.053 (J)	<0.1	0.059 (J)	0.092 (J)	0.073 (J)	0.16	0.06 (J)
2/10/2021	0.05 (J)	<0.1	0.055 (J)	0.084 (J)	\-/		• • •
2/11/2021	` '		.,,	ν-/	0.066 (J)		
2/12/2021					\-/	0.069 (J)	0.17
3/2/2021		<0.1				` '	
3/3/2021	0.05 (J)		0.058 (J)	<0.1	0.072 (J)	0.13	0.056 (J)
	. ,		. ,		. ,		. ,

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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)	
8/30/2016	0.09 (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	
11/14/2016	0.18 (J)						
1/11/2017		<0.1	<0.1	<0.1			
1/13/2017					<0.1	<0.1	
2/24/2017	0.05 (J)						
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					
5/8/2017	0.03 (J)						
6/28/2017			<0.1	<0.1			
6/29/2017		<0.1			<0.1	<0.1	
7/11/2017	0.07 (J)						
10/3/2017						<0.1	
10/4/2017		<0.1		<0.1	<0.1		
10/5/2017			<0.1				
10/10/2017	<0.1						
10/11/2017							<0.1
11/20/2017							<0.1
1/11/2018							<0.1
2/20/2018							0.23
3/28/2018		<0.1	<0.1	<0.1			
3/29/2018					<0.1	<0.1	
4/2/2018	<0.1						
4/3/2018							<0.1
6/5/2018						0.13 (J)	
6/6/2018					<0.1		
6/7/2018			<0.1				
6/11/2018		<0.1		<0.1			
6/28/2018							<0.1
8/7/2018							0.048 (J)
9/19/2018	<0.1						
9/24/2018							<0.1
9/25/2018		<0.1	<0.1	<0.1	<0.1	0 (J)	
3/5/2019		<0.1		<0.1	<0.1	0.32	
3/6/2019			<0.1				
3/27/2019	0.081 (J)						<0.1
4/2/2019		<0.1				0.12 (J)	
4/3/2019			<0.1	<0.1	<0.1		
8/20/2019	<0.1						
8/21/2019							<0.1
9/24/2019						0.15 (J)	
9/25/2019		<0.1			<0.1		

9/26/2019	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg) <0.1	YGWA-18S (bg) <0.1	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
10/8/2019	0.034 (J)						
10/9/2019							<0.1
2/11/2020		<0.1	<0.1	<0.1			
2/12/2020					<0.1	0.1 (J)	<0.1
3/17/2020	<0.1						
3/24/2020		<0.1	<0.1	<0.1	<0.1	0.081 (J)	
3/25/2020							<0.1
8/27/2020	<0.1						
9/22/2020	<0.1						
9/23/2020		<0.1	<0.1	<0.1			
9/24/2020					<0.1	0.079 (J)	<0.1
2/9/2021			<0.1	<0.1	<0.1	0.092 (J)	
2/10/2021							<0.1
3/1/2021	<0.1						
3/3/2021		<0.1	<0.1	<0.1	<0.1		
3/4/2021						0.091 (J)	<0.1

		YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
6/2/2	2016		<0.1	0.11 (J)	<0.1	
7/26	/2016		<0.1	0.05 (J)	<0.1	
8/31	/2016					0.14 (J)
9/14	/2016		<0.1	0.04 (J)	<0.1	
11/2	/2016		<0.1	<0.1		
11/4	/2016				<0.1	
11/2	8/2016					0.12 (J)
1/12	/2017			0.04 (J)	<0.1	
1/13	/2017		<0.1			
2/22	/2017					0.09 (J)
3/6/2	2017		<0.1			
3/7/2	2017			<0.1	<0.1	
5/1/2	2017		<0.1	<0.1		
5/2/2	2017				<0.1	
5/8/2	2017					0.05 (J)
6/27	/2017			<0.1	<0.1	
	/2017		<0.1			
	/2017					0.14 (J)
	/2017			<0.1	<0.1	
	/2017		<0.1			
	2/2017	<0.1				
	6/2017					0.12 (J)
	0/2017	<0.1				
	/2018	<0.1				
	/2018	<0.1				0.17
	/2018	-0.1	<0.1	<0.1	<0.1	0.17
4/3/2		<0.1	-0.1	-0.1	-0.1	
6/6/2		-0.1		0.15 (J)		
6/7/2			<0.1	0.13 (0)	<0.1	
	/2018	<0.1	<b>~0.1</b>		<b>~</b> 0.1	
8/6/2		<b>~</b> 0.1				0.087 (J)
8/7/2		<0.1				0.007 (3)
	/2018	<0.1				
		<b>~</b> 0.1	<0.1	-0.1	-0 1	
	/2018 /2019		<0.1	<0.1	<0.1	0.14 (J)
3/4/2			-0.1	0.10 ( 1)	-0.1	0.14 (0)
	/2019	-0.1	<0.1	0.19 (J)	<0.1	
		<0.1	-0.1	0.047 (1)	-0.1	
4/3/2	/2019		<0.1	0.047 (J)	<0.1	0.4270
						0.12 (J)
	/2019					<0.1
	/2019	<0.1		0.05 (1)	-0.1	
	/2019		.0.4	0.05 (J)	<0.1	
	/2019		<0.1			
	/2019					0.052 (J)
	/2019	<0.1	.0.4	.0.4	.0.4	
	/2020	<0.1	<0.1	<0.1	<0.1	
	/2020					0.053 (J)
	/2020	<0.1		<0.1	<0.1	
	/2020		<0.1			
	/2020					0.068 (J)
	/2020		<0.1	0.056 (J)	<0.1	0.058 (J)
9/24	/2020	<0.1				

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
2/8/2021			0.055 (J)	<0.1	
2/9/2021		<0.1			
2/10/2021	<0.1				
3/2/2021			<0.1	<0.1	0.073 (J)
3/3/2021		<0.1			
3/4/2021	<0.1				

6/1/2016	YGWA-14S (bg)	YGWA-1D (bg) 0.00056 (J)	YGWA-1I (bg) <0.001	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg) <0.001
6/2/2016	<0.001	0.00056 (3)	<0.001		<0.001	0.00056 (J)	<0.001
7/25/2016	<b>\0.001</b>		<0.001		<0.001	0.00030 (3)	<0.001
	<0.001	<0.001	<0.001		<0.001	0.0001 (1)	<b>\0.001</b>
7/26/2016	<0.001	<0.001	-0.004			0.0001 (J)	
9/13/2016		0.0001 (J)	<0.001	-0.001			-0.004
9/14/2016	-0.001			<0.001		0.0000 (1)	<0.001
9/15/2016	<0.001				.0.004	0.0002 (J)	
9/19/2016					<0.001		
11/1/2016	0.004	<0.001			<0.001	<0.001	<0.001
11/2/2016	<0.001		0.004	0.004			
11/4/2016			<0.001	<0.001			
12/15/2016	.0.004			<0.001			
1/10/2017	<0.001						
1/11/2017		<0.001				<0.001	<0.001
1/16/2017			<0.001	<0.001	<0.001		
2/21/2017					<0.001		
3/1/2017							<0.001
3/2/2017		0.0001 (J)	<0.001			0.0002 (J)	
3/3/2017				<0.001			
3/8/2017	0.0001 (J)						
4/26/2017	<0.001				<0.001	<0.001	<0.001
4/27/2017		<0.001	<0.001				
4/28/2017				<0.001			
5/26/2017				<0.001			
6/27/2017		<0.001	<0.001				
6/28/2017				<0.001		<0.001	<0.001
6/30/2017	<0.001				<0.001		
3/27/2018	<0.001		<0.001		<0.001		
3/28/2018				<0.001		<0.001	<0.001
3/29/2018		<0.001					
2/26/2019	<0.001				<0.001		
2/27/2019		<0.001	<0.001	<0.001		<0.001	<0.001
2/10/2020		4.9E-05 (J)	<0.001				
2/11/2020				<0.001			<0.001
2/12/2020	<0.001				<0.001	<0.001	
3/18/2020	<0.001		<0.001				
3/19/2020		0.00012 (J)		<0.001	<0.001	0.00017 (J)	<0.001
9/23/2020		<0.001	0.00021 (J)	0.0011 (J)		<0.001	0.00015 (J)
9/24/2020					<0.001		
9/25/2020	<0.001						
2/10/2021	4.8E-05 (J)			0.00015 (J)		<0.001	<0.001
2/11/2021					4.6E-05 (J)		
2/12/2021		4.4E-05 (J)	0.00038 (J)				
3/1/2021					<0.001		
3/2/2021	<0.001						
3/3/2021		5.6E-05 (J)	<0.001	<0.001		<0.001	<0.001

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.001	<0.001	<0.001	<0.001 (*)			
6/9/2016					<0.001	<0.001	<0.001
8/1/2016	<0.001	<0.001	<0.001	<0.001			
8/2/2016					<0.001	<0.001	<0.001
9/20/2016	<0.001	<0.001	<0.001	0.0002 (J)			
9/21/2016					<0.001	<0.001	<0.001
11/7/2016	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
11/8/2016					<0.001		
1/18/2017	<0.001	<0.001	<0.001		<0.001	<0.001	
1/19/2017				<0.001			<0.001
2/21/2017	<0.001	<0.001				<0.001	
2/22/2017				<0.001	<0.001		<0.001
2/23/2017			<0.001				
5/3/2017		<0.001 (*)					
5/5/2017					<0.001	<0.001 (*)	
5/8/2017	<0.001		<0.001	<0.001			<0.001
6/30/2017			<0.001	<0.001			
7/5/2017					<0.001		<0.001
7/7/2017						7E-05 (J)	
7/10/2017	<0.001	8E-05 (J)					
3/29/2018			<0.001	<0.001			<0.001
3/30/2018	<0.001	<0.001			<0.001	<0.001	
2/27/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2020	<0.001	<0.001	<0.001	6.2E-05 (J)	<0.001	5.4E-05 (J)	<0.001
3/19/2020		0.0001 (J)			<0.001	7.5E-05 (J)	
3/20/2020	5.9E-05 (J)		<0.001	8.5E-05 (J)			<0.001
9/24/2020	<0.001	6.4E-05 (J)	<0.001	0.00037 (J)	<0.001	6.3E-05 (J)	9.5E-05 (J)
2/10/2021	5.1E-05 (J)	5E-05 (J)	<0.001	0.00072 (J)			
2/11/2021					<0.001		
2/12/2021						5.2E-05 (J)	6.6E-05 (J)
3/2/2021		5.6E-05 (J)					
3/3/2021	<0.001		<0.001	<0.001	<0.001	<0.001	0.00016 (J)

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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	
8/30/2016	<0.001						
9/16/2016		<0.001		<0.001			
9/19/2016			<0.001		<0.001	<0.001	
11/2/2016					0.0013 (J)		
11/3/2016		<0.001	<0.001	<0.001		<0.001	
11/14/2016	<0.001						
1/11/2017		<0.001	<0.001	<0.001			
1/13/2017					<0.001	<0.001	
2/24/2017	<0.001						
3/1/2017			<0.001	<0.001			
3/2/2017		8E-05 (J)					
3/6/2017					<0.001	<0.001	
4/26/2017			<0.001	<0.001	<0.001	<0.001	
5/2/2017		<0.001					
5/8/2017	<0.001						
6/28/2017	0.001		<0.001	0.0001 (J)			
6/29/2017		8E-05 (J)	-0.001	0.0001 (0)	<0.001	<0.001	
7/11/2017	<0.001	0L-03 (0)			10.001	10.001	
10/10/2017	<0.001						
10/10/2017	<0.001						0.0001 (1)
							0.0001 (J)
11/20/2017							<0.001
1/11/2018							0.0002 (J)
2/20/2018		-0.001	-0.001	-0.001			<0.001
3/28/2018		<0.001	<0.001	<0.001		.0.004	
3/29/2018					<0.001	<0.001	
4/2/2018	<0.001						
4/3/2018							<0.001
6/28/2018							<0.001
8/7/2018							<0.001
9/19/2018	<0.001						
9/24/2018							<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		
8/20/2019	<0.001						
8/21/2019							<0.001
9/24/2019						<0.001	
9/25/2019		<0.001			<0.001		
9/26/2019			<0.001	<0.001			
10/9/2019							<0.001
2/11/2020		<0.001	<0.001	<0.001			
2/12/2020					<0.001	<0.001	<0.001
3/24/2020		6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)	0.00011 (J)	<0.001	
3/25/2020							5.1E-05 (J)
8/27/2020	<0.001						
9/22/2020	<0.001						
9/23/2020		4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)			

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
9/24/2020					9.2E-05 (J)	4.6E-05 (J)	<0.001
2/9/2021			5E-05 (J)	9.4E-05 (J)	6.3E-05 (J)	<0.001	
2/10/2021							<0.001
3/1/2021	<0.001						
3/3/2021		<0.001	<0.001	7.6E-05 (J)	4.5E-05 (J)		
3/4/2021						<0.001	<0.001

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
5/1/2007	1 GVVA-40 (Dg)	1 GVVA-41 (Dg)	r GvvA-oD (bg)	r GvvA-31 (bg)	GWA-2 (bg) <0.001
9/11/2007					<0.001
3/20/2008					<0.001
8/27/2008					<0.001
3/3/2009					<0.001
11/18/2009					<0.001
3/3/2010					<0.001
9/8/2010					<0.001
3/10/2011					<0.001
9/8/2011					<0.001
3/5/2012					<0.001
9/10/2012					<0.001
2/6/2013					<0.001
8/12/2013					<0.001
2/5/2014					<0.001
8/5/2014					<0.001
2/4/2015					<0.001
8/3/2015					<0.001
2/16/2016					<0.001
6/2/2016		<0.001	<0.001	<0.001	
7/26/2016		<0.001	<0.001	<0.001	
8/31/2016					<0.001
9/14/2016		<0.001	<0.001	<0.001	
11/2/2016		<0.001	<0.001		
11/4/2016				<0.001	
11/28/2016					<0.001
1/12/2017			<0.001	<0.001	
1/13/2017		<0.001			
2/22/2017		0.001			<0.001
3/6/2017		<0.001			0.001
3/7/2017		50.00 I	0.0001 (J)	7E-05 (J)	
		<0.001		/L-03 (J)	
5/1/2017		<0.001	<0.001	<0.001	
5/2/2017				<0.001	-0.004
5/8/2017			-0.004	-0.004	<0.001
6/27/2017			<0.001	<0.001	
6/29/2017		<0.001			
7/17/2017					<0.001
10/12/2017	9E-05 (J)				
10/16/2017					<0.001
11/20/2017	<0.001				
1/10/2018	<0.001				
2/19/2018	<0.001				<0.001
3/29/2018		<0.001	<0.001	<0.001	
4/3/2018	<0.001				
6/28/2018	<0.001				
8/6/2018					<0.001
8/7/2018	<0.001				
9/24/2018	<0.001				
0/05/0010					<0.001
2/25/2019					
3/4/2019		<0.001	<0.001	< 0.001	
		<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
8/19/2019					<0.001
8/21/2019	<0.001				
9/24/2019			<0.001	9E-05 (J)	
9/25/2019		<0.001			
10/8/2019					<0.001
10/9/2019	<0.001				
2/12/2020	<0.001	<0.001	<0.001	<0.001	
3/17/2020					<0.001
3/24/2020	<0.001		5.4E-05 (J)	6.8E-05 (J)	
3/25/2020		<0.001			
8/26/2020					<0.001
9/22/2020		<0.001	4.5E-05 (J)	4.2E-05 (J)	0.0001 (J)
9/24/2020	3.8E-05 (J)				
2/8/2021			0.00013 (J)	3.7E-05 (J)	
2/9/2021		<0.001			
2/10/2021	<0.001				
3/2/2021			5.1E-05 (J)	9.2E-05 (J)	<0.001
3/3/2021		<0.001			
3/4/2021	<0.001				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		0.015	<0.03				0.01
6/2/2016	<0.03				<0.03	0.018	
7/25/2016			0.002 (J)		<0.03		0.0132 (J)
7/26/2016	<0.03	0.0135 (J)				0.0221 (J)	
9/13/2016		0.0112 (J)	<0.03				
9/14/2016				0.004 (J)			0.012 (J)
9/15/2016	<0.03					0.0197 (J)	
9/19/2016					<0.03		
11/1/2016		0.0163 (J)			<0.03	0.0194 (J)	0.0115 (J)
11/2/2016	<0.03						
11/4/2016			<0.03	<0.03			
12/15/2016				0.0026 (J)			
1/10/2017	<0.03						
1/11/2017		0.0166 (J)				0.0177 (J)	0.0085 (J)
1/16/2017			0.0023 (J)	0.0023 (J)	<0.03		
2/21/2017					<0.03		
3/1/2017							0.0114 (J)
3/2/2017		0.0159 (J)	0.0025 (J)			0.0185 (J)	
3/3/2017				0.0013 (J)			
3/8/2017	<0.03						
4/26/2017	<0.03				<0.03	0.0183 (J)	0.0092 (J)
4/27/2017		0.0137 (J)	0.0027 (J)				
4/28/2017				0.0031 (J)			
5/26/2017				0.0038 (J)			
6/27/2017		0.0094 (J)	0.0024 (J)				
6/28/2017				0.0026 (J)		0.0173 (J)	0.0085 (J)
6/30/2017	<0.03				<0.03		
3/27/2018	<0.03		0.0023 (J)		0.0011 (J)		
3/28/2018				0.0025 (J)		0.02 (J)	0.013 (J)
3/29/2018		0.0078 (J)					
6/5/2018		0.0079 (J)					
6/6/2018			0.0024 (J)				
6/7/2018				0.0017 (J)		0.02 (J)	
6/8/2018	<0.03						0.012 (J)
6/11/2018					0.0012 (J)		
10/1/2018	<0.03	0.0053 (J)	0.0023 (J)	<0.03		0.02 (J)	0.011 (J)
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)		0.021 (J)	0.014 (J)
3/28/2019		0.013 (J)	0.0022 (J)				
3/29/2019	<0.03			0.0016 (J)			
4/1/2019					0.001 (J)	0.021 (J)	0.013 (J)
9/24/2019		0.0046 (J)	0.0023 (J)	0.0011 (J)			
9/25/2019	<0.03				0.0011 (J)	0.02 (J)	0.01 (J)
2/10/2020		0.011 (J)	0.0023 (J)				2012(1)
2/11/2020				0.0012 (J)			0.013 (J)
2/12/2020	<0.03				0.0013 (J)	0.019 (J)	
3/18/2020	<0.03		0.0024 (J)				22440
3/19/2020		0.013 (J)		0.0022 (J)	0.0012 (J)	0.023 (J)	0.014 (J)
9/23/2020		0.014 (J)	0.0024 (J)	0.0016 (J)		0.023 (J)	0.013 (J)
9/24/2020	.0.00				0.0011 (J)		
9/25/2020	<0.03						

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
2/10/2021	<0.03			0.0039 (J)		0.023 (J)	0.015 (J)
2/11/2021					0.0012 (J)		
2/12/2021		0.01 (J)	0.0025 (J)				
3/1/2021					0.0011 (J)		
3/2/2021	<0.03						
3/3/2021		0.012 (J)	0.0025 (J)	0.0016 (J)		0.024 (J)	0.017 (J)

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.007	<0.03	0.0067	<0.03			
6/9/2016					0.0073	<0.03	0.0075
8/1/2016	0.0068 (J)	<0.03	0.008 (J)	<0.03			
8/2/2016					0.0073 (J)	<0.03	0.0078 (J)
9/20/2016	0.0062 (J)	<0.03	0.0111 (J)	<0.03			
9/21/2016					0.0067 (J)	<0.03	0.0074 (J)
11/7/2016	0.0057 (J)	<0.03	0.0097 (J)	<0.03		<0.03	0.0057 (J)
11/8/2016					0.0072 (J)		
1/18/2017	0.0066 (J)	<0.03	0.01 (J)		0.0067 (J)	<0.03	
1/19/2017				<0.03			0.0055 (J)
2/21/2017	0.0067 (J)	<0.03				<0.03	
2/22/2017				<0.03	0.0064 (J)		0.0063 (J)
2/23/2017			0.0099 (J)				
5/3/2017		<0.03					
5/5/2017					0.007 (J)	<0.03	
5/8/2017	0.007 (J)		0.0086 (J)	<0.03			0.0066 (J)
6/30/2017			0.0108 (J)	<0.03			
7/5/2017					0.0072 (J)		0.0058 (J)
7/7/2017						<0.03	
7/10/2017	0.0064 (J)	<0.03					
3/29/2018			0.011 (J)	<0.03			0.0049 (J)
3/30/2018	0.0068 (J)	<0.03			0.007 (J)	<0.03	
6/11/2018							0.0064 (J)
6/12/2018				<0.03	0.0073 (J)	<0.03	
6/13/2018	0.0071 (J)	<0.03	0.014 (J)				
10/2/2018	0.0064 (J)	<0.03	0.012 (J)	<0.03			0.006 (J)
10/3/2018					0.0069 (J)	<0.03	
2/27/2019	0.0069 (J)	<0.03	0.0096 (J)	<0.03	0.0063 (J)	<0.03	0.0053 (J)
4/1/2019			0.0082 (J)	<0.03	0.0065 (J)		0.0052 (J)
4/2/2019	0.0064 (J)	<0.03				<0.03	
9/25/2019	0.0073 (J)	<0.03					0.0057 (J)
9/26/2019			0.0075 (J)	<0.03	0.0064 (J)	<0.03	
2/13/2020	0.0073 (J)	<0.03	0.0079 (J)	<0.03	0.0069 (J)	<0.03	0.0057 (J)
3/19/2020		<0.03			0.007 (J)	<0.03	
3/20/2020	0.0072 (J)		0.0091 (J)	<0.03			0.0051 (J)
9/24/2020	0.0074 (J)	<0.03	0.0075 (J)	<0.03	0.0065 (J)	<0.03	0.005 (J)
2/10/2021	0.0067 (J)	<0.03	0.0067 (J)	0.00081 (J)			
2/11/2021					0.007 (J)		
2/12/2021						0.0053 (J)	<0.03
3/2/2021		<0.03					
3/3/2021	0.0077 (J)		0.0066 (J)	<0.03	0.0063 (J)	<0.03	0.0054 (J)

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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)	
8/30/2016	0.0061 (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	
11/14/2016	0.0064 (J)						
1/11/2017		0.0035 (J)	0.0052 (J)	0.0025 (J)			
1/13/2017					<0.03	0.0062 (J)	
2/24/2017	0.0049 (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					
5/8/2017	0.0053 (J)						
6/28/2017			0.0039 (J)	0.0016 (J)			
6/29/2017		<0.03			<0.03	0.0047 (J)	
7/11/2017	0.0051 (J)						
10/10/2017	0.0043 (J)						
10/11/2017	(-)						0.0018 (J)
11/20/2017							0.0018 (J)
1/11/2018							0.0019 (J)
2/20/2018							<0.03
3/28/2018		<0.03	0.0041 (J)	0.0024 (J)			0.00
3/29/2018		-0.00	0.0041 (0)	0.002+(0)	<0.03	0.0062 (J)	
4/2/2018	0.0045 (J)				-0.00	0.0002 (0)	
4/3/2018	0.0043 (0)						0.0022 (J)
6/5/2018						0.0061 (J)	0.0022 (0)
6/6/2018					<0.03	0.0001 (3)	
6/7/2018			0.0032 (J)		<b>~0.03</b>		
6/11/2018		<0.03	0.0032 (3)	0.0014 (J)			
		<0.03		0.0014 (3)			0.0036 (1)
6/28/2018							0.0026 (J)
8/7/2018	0.0042 ( !)						0.0024 (J)
9/19/2018	0.0043 (J)						0.0022 (1)
9/24/2018		-0.00	0.0000 ( "	0.0010 / "	10.00	0.0000 / 15	0.0022 (J)
9/25/2018		<0.03	0.0036 (J)	0.0016 (J)	<0.03	0.0062 (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		
8/20/2019	0.0036 (J)						
8/21/2019							0.0035 (J)
9/24/2019						0.0068 (J)	
9/25/2019		<0.03			<0.03		
9/26/2019			0.0032 (J)	0.0029 (J)			
10/8/2019	0.0036 (J)						
10/9/2019							0.0036 (J)
2/11/2020		<0.03	0.0033 (J)	0.005 (J)			

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
2/12/2020					<0.03	0.0065 (J)	0.0041 (J)
3/17/2020	0.0046 (J)						
3/24/2020		0.0034 (J)	0.0033 (J)	0.0035 (J)	<0.03	0.0064 (J)	
3/25/2020							0.0049 (J)
8/27/2020	0.0039 (J)						
9/22/2020	0.0036 (J)						
9/23/2020		<0.03	0.003 (J)	0.0022 (J)			
9/24/2020					<0.03	0.0069 (J)	0.0054 (J)
2/9/2021			0.0031 (J)	0.0019 (J)	<0.03	0.006 (J)	
2/10/2021							0.0071 (J)
3/1/2021	0.0037 (J)						
3/3/2021		<0.03	0.0034 (J)	0.0021 (J)	<0.03		
3/4/2021						0.0062 (J)	0.0084 (J)

0.00.00.15	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
6/2/2016		0.013	0.0049 (J)	<0.03	
7/26/2016		0.0123 (J)	0.0063 (J)	0.0027 (J)	
8/31/2016					<0.03
9/14/2016		0.0137 (J)	0.0058 (J)	0.0029 (J)	
11/2/2016		0.0136 (J)	0.0053 (J)		
11/4/2016				<0.03	
11/28/2016					<0.03
1/12/2017			0.0054 (J)	0.0032 (J)	
1/13/2017		0.0121 (J)			
2/22/2017					<0.03
3/6/2017		0.0143 (J)			
3/7/2017			0.0056 (J)	0.0035 (J)	
5/1/2017		0.0132 (J)	0.0031 (J)	. ,	
5/2/2017		` '	` '	0.0031 (J)	
5/8/2017				- \-/	0.0014 (J)
6/27/2017			0.0018 (J)	0.0029 (J)	(-)
6/29/2017		0.0145 (J)	3.33.3 (0)	0.0020 (0)	
7/17/2017		3.0170 (0)			<0.03
10/12/2017	<0.03				-0.03
10/12/2017	~0.03				0.0016 (J)
	<0.03				0.0010 (J)
11/20/2017	<0.03				
1/10/2018	<0.03				-0.00
2/19/2018	<0.03	0.04475	0.0050 ( "	0.0004 ( ))	<0.03
3/29/2018		0.014 (J)	0.0058 (J)	0.0034 (J)	
4/3/2018	<0.03				
6/6/2018			0.0068 (J)		
6/7/2018		0.013 (J)		0.0032 (J)	
6/28/2018	<0.03				
8/6/2018					<0.03
8/7/2018	<0.03				
9/24/2018	<0.03				
9/26/2018		0.014 (J)	0.0065 (J)	0.0032 (J)	
3/4/2019		0.015 (J)	0.0065 (J)	0.0032 (J)	
4/3/2019		0.014 (J)	0.007 (J)	0.0035 (J)	
8/19/2019					0.0019 (J)
8/21/2019	<0.03				
9/24/2019			0.0065 (J)	0.0031 (J)	
9/25/2019		0.014 (J)	` '	` '	
10/8/2019		\-'\			0.0015 (J)
10/9/2019	<0.03				(0)
2/12/2020	<0.03	0.011 (J)	0.0066 (J)	0.0032 (J)	
3/17/2020	-0.03	0.011 (3)	0.0000 (3)	0.0032 (3)	0.0017 (J)
	<0.03		0.0064 ( 1)	0.0033 (1)	0.0017 (3)
3/24/2020	<0.03	0.014 (1)	0.0064 (J)	0.0033 (J)	
3/25/2020		0.014 (J)			0.0000 ( ))
8/26/2020					0.0032 (J)
9/22/2020		0.013 (J)	0.0066 (J)	0.0034 (J)	0.0029 (J)
9/24/2020	<0.03				
2/8/2021			0.0063 (J)	0.0032 (J)	
2/9/2021		0.011 (J)			
2/10/2021	<0.03				
3/2/2021			0.0018 (J)	0.0031 (J)	0.0033 (J)

Constituent: Lithium (mg/L) Analysis Run 5/10/2021 3:43 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

YGWA-40 (bg) YGWA-4I (bg) YGWA-5D (bg) YGWA-5I (bg) GWA-2 (bg)

3/4/2021 <0.03

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		<0.0002	<0.0002				<0.0002
6/2/2016	<0.0002				<0.0002	<0.0002	
7/25/2016			<0.0002		<0.0002		<0.0002
7/26/2016	<0.0002	<0.0002				<0.0002	
9/13/2016		<0.0002	<0.0002				
9/14/2016				<0.0002			<0.0002
9/15/2016	<0.0002					<0.0002	
9/19/2016					<0.0002		
11/1/2016		<0.0002			<0.0002	<0.0002	<0.0002
11/2/2016	<0.0002						
11/4/2016			<0.0002	<0.0002			
12/15/2016				<0.0002			
1/10/2017	<0.0002						
1/11/2017		<0.0002				<0.0002	<0.0002
1/16/2017			<0.0002	<0.0002	<0.0002		
2/21/2017					<0.0002		
3/1/2017							<0.0002
3/2/2017		<0.0002	<0.0002			<0.0002	
3/3/2017				<0.0002			
3/8/2017	<0.0002						
4/26/2017	<0.0002				<0.0002	<0.0002	<0.0002
4/27/2017		<0.0002	<0.0002				
4/28/2017				<0.0002			
5/26/2017				<0.0002			
6/27/2017		<0.0002	<0.0002				
6/28/2017				<0.0002		<0.0002	<0.0002
6/30/2017	<0.0002				<0.0002		
3/27/2018	<0.0002		<0.0002		<0.0002		
3/28/2018				<0.0002		<0.0002	<0.0002
3/29/2018		<0.0002					
2/26/2019	6.1E-05 (J)				6.8E-05 (J)		
2/27/2019		5.1E-05 (J)	5.4E-05 (J)	<0.0002		6.2E-05 (J)	6.1E-05 (J)
3/28/2019		4E-05 (J)	<0.0002				
3/29/2019	<0.0002			<0.0002			
4/1/2019					8.2E-05 (J)	9.6E-05 (J)	8.4E-05 (J)
9/24/2019		<0.0002	<0.0002	<0.0002			
9/25/2019	<0.0002				<0.0002	<0.0002	<0.0002
2/10/2020		<0.0002	<0.0002				
2/11/2020				<0.0002			<0.0002
2/12/2020	<0.0002				<0.0002	<0.0002	
2/10/2021	<0.0002			<0.0002		<0.0002	<0.0002
2/11/2021					<0.0002		
2/12/2021		<0.0002	<0.0002				

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.0002	<0.0002	<0.0002	<0.0002			
6/9/2016					<0.0002 (*)	<0.0002 (*)	<0.0002 (*)
8/1/2016	<0.0002	<0.0002	<0.0002	<0.0002			
8/2/2016					<0.0002	<0.0002	<0.0002
9/20/2016	<0.0002	<0.0002	<0.0002	<0.0002			
9/21/2016					<0.0002	<0.0002	<0.0002
11/7/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
11/8/2016					<0.0002		
1/18/2017	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
1/19/2017				<0.0002			<0.0002
2/21/2017	<0.0002	<0.0002				<0.0002	
2/22/2017				<0.0002	<0.0002		<0.0002
2/23/2017			<0.0002				
5/3/2017		<0.0002					
5/5/2017					<0.0002	<0.0002	
5/8/2017	<0.0002		<0.0002	<0.0002			<0.0002
6/30/2017			<0.0002 (*)	<0.0002 (*)			
7/5/2017					<0.0002		<0.0002
7/7/2017						<0.0002	
7/10/2017	<0.0002	<0.0002					
3/29/2018			<0.0002	<0.0002			<0.0002
3/30/2018	<0.0002	<0.0002			<0.0002	<0.0002	
2/27/2019	5.1E-05 (J)	4.9E-05 (J)	5.4E-05 (J)	4.9E-05 (J)	4.8E-05 (J)	5.2E-05 (J)	4.7E-05 (J)
4/1/2019			4.5E-05 (J)	4.1E-05 (J)	<0.0002		3.9E-05 (J)
4/2/2019	5.1E-05 (J)	6.6E-05 (J)				<0.0002	
9/25/2019	<0.0002	<0.0002					<0.0002
9/26/2019			<0.0002	<0.0002	<0.0002	<0.0002	
2/13/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/10/2021	<0.0002	<0.0002	<0.0002	<0.0002			
2/11/2021					<0.0002		
2/12/2021						<0.0002	<0.0002

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
6/6/2016			<0.0002	<0.0002			
6/7/2016		9.5E-05 (J)			9.6E-05 (J)	9.6E-05 (J)	
7/27/2016		<0.0002	<0.0002	<0.0002	<0.0002		
7/28/2016						<0.0002	
8/30/2016	<0.0002						
9/16/2016		<0.0002		<0.0002			
9/19/2016			<0.0002		<0.0002	<0.0002	
11/2/2016					<0.0002		
11/3/2016		<0.0002	<0.0002	<0.0002		<0.0002	
11/14/2016	<0.0002						
1/11/2017		<0.0002	<0.0002	<0.0002			
1/13/2017					<0.0002	<0.0002	
2/24/2017	<0.0002						
3/1/2017			<0.0002	<0.0002			
3/2/2017		<0.0002					
3/6/2017					<0.0002	<0.0002	
4/26/2017			<0.0002	<0.0002	<0.0002	<0.0002	
5/2/2017		<0.0002					
5/8/2017	<0.0002						
6/28/2017			<0.0002	<0.0002			
6/29/2017		<0.0002			<0.0002	<0.0002	
7/11/2017	<0.0002						
10/10/2017	<0.0002						
10/11/2017							<0.0002
11/20/2017							7E-05 (J)
1/11/2018							<0.0002
2/20/2018							<0.0002
3/28/2018		<0.0002	<0.0002	<0.0002			
3/29/2018					<0.0002	<0.0002	
4/2/2018	<0.0002						
4/3/2018							<0.0002
6/28/2018							<0.0002
8/7/2018							<0.0002
9/19/2018	5.3E-05 (J)						
9/24/2018							<0.0002
9/25/2018		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
3/5/2019		<0.0002		<0.0002	<0.0002	<0.0002	
3/6/2019			<0.0002				
8/20/2019	<0.0002						
8/21/2019							<0.0002
2/11/2020		<0.0002	<0.0002	<0.0002			
2/12/2020					<0.0002	<0.0002	<0.0002
8/27/2020	<0.0002						
2/9/2021			<0.0002	<0.0002	<0.0002	<0.0002	
2/10/2021							<0.0002
3/3/2021		<0.0002	<0.0002	<0.0002	<0.0002		
3/4/2021						<0.0002	<0.0002

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
5/1/2007					<0.0002
9/11/2007					<0.0002
3/20/2008					<0.0002
8/27/2008					<0.0002
3/3/2009					<0.0002
11/18/2009					<0.0002
3/3/2010					<0.0002
9/8/2010					<0.0002
3/10/2011					<0.0002
9/8/2011					<0.0002
3/5/2012					<0.0002
9/10/2012					<0.0002
2/6/2013					<0.0002
8/12/2013					<0.0002
2/5/2014					<0.0002
8/5/2014					<0.0002
2/4/2015					<0.0002
8/3/2015					<0.0002
2/16/2016					1.36E-05 (J)
6/2/2016		<0.0002	<0.0002	<0.0002	1.30E-03 (J)
7/26/2016		<0.0002	<0.0002	<0.0002	
8/31/2016		<0.000Z	<b>~0.0002</b>	<b>\0.0002</b>	<0.0002
9/14/2016		<0.0002	<0.0002	<0.0002	V0.0002
11/2/2016		<0.0002	<0.0002	<0.0002	
		<0.0002	<0.0002	<b>~</b> 0.0000	
11/4/2016				<0.0002	40,0003
11/28/2016			<0.0002	<0.0002	<0.0002
1/12/2017		<0.0002	<0.0002	<0.0002	
1/13/2017		<0.0002			40,0002
2/22/2017		<0.0002			<0.0002
3/6/2017 3/7/2017		<0.0002	<0.0002	<0.0002	
		<0.0002		<0.0002	
5/1/2017		<0.0002	<0.0002	<0.0000	
5/2/2017				<0.0002	40,0000
5/8/2017			-0.0000	-0.0000	<0.0002
6/27/2017		-0.0000	<0.0002	<0.0002	
6/29/2017		<0.0002			40,0000
7/17/2017	-0.0002				<0.0002
10/12/2017	<0.0002				40,0000
10/16/2017	05.05.41)				<0.0002
11/20/2017	8E-05 (J)				
1/10/2018	<0.0002				<b>40.0002</b>
2/19/2018	<0.0002	-0.0000	10,0000	-0.0000	<0.0002
3/29/2018	-0.0000	<0.0002	<0.0002	<0.0002	
4/3/2018	<0.0002				
6/28/2018	3.6E-05 (J)				0.0000
8/6/2018					<0.0002
8/7/2018	<0.0002				
9/24/2018	<0.0002				
9/26/2018		<0.0002	<0.0002	<0.0002	
2/25/2019					7.4E-05 (J)
3/4/2019		<0.0002	<0.0002	<0.0002	
6/12/2019					<0.0002

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
8/19/2019					<0.0002
8/21/2019	<0.0002				
10/8/2019					<0.0002
2/12/2020	<0.0002	<0.0002	<0.0002	<0.0002	
5/6/2020					<0.0002
8/26/2020					<0.0002
9/22/2020					<0.0002
2/8/2021			<0.0002	<0.0002	
2/9/2021		<0.0002			
2/10/2021	<0.0002				
3/2/2021			<0.0002	<0.0002	<0.0002
3/3/2021		<0.0002			
3/4/2021	<0.0002				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		0.014 (J)	0.012 (J)				0.0055 (J)
6/2/2016	<0.01				<0.01	0.0093 (J)	
7/25/2016			0.0098 (J)		<0.01		0.0037 (J)
7/26/2016	<0.01	0.0132				0.0113	
9/13/2016		0.0127	0.01 (J)				
9/14/2016				0.0039 (J)			0.0034 (J)
9/15/2016	<0.01					0.0112	
9/19/2016					<0.01		
11/1/2016		0.0092 (J)			<0.01	0.0099 (J)	0.0025 (J)
11/2/2016	<0.01						
11/4/2016			0.01	0.0077 (J)			
12/15/2016				0.0066 (J)			
1/10/2017	<0.01						
1/11/2017		0.0093 (J)				0.0093 (J)	0.0033 (J)
1/16/2017			0.0086 (J)	0.0056 (J)	<0.01		
2/21/2017					<0.01		
3/1/2017							0.0044 (J)
3/2/2017		0.0099 (J)	0.01			0.0103	
3/3/2017				0.0049 (J)			
3/8/2017	<0.01						
4/26/2017	<0.01				<0.01	0.01	0.0075 (J)
4/27/2017		0.0103	0.0101				
4/28/2017				0.004 (J)			
5/26/2017				0.0029 (J)			
6/27/2017		0.0097 (J)	0.0093 (J)				
6/28/2017				0.0036 (J)		0.0102	0.008 (J)
6/30/2017	<0.01				<0.01		
3/27/2018	<0.01		0.0074 (J)		<0.01		
3/28/2018				0.0038 (J)		0.011	0.0025 (J)
3/29/2018		0.0076 (J)					
6/5/2018		0.0092 (J)					
6/6/2018			0.0073 (J)				
6/7/2018				0.004 (J)		0.011	
6/8/2018	<0.01						0.0041 (J)
6/11/2018					<0.01		
10/1/2018	<0.01	0.0085 (J)	0.0076 (J)	0.0042 (J)		0.012	0.0037 (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)		0.011	0.0027 (J)
3/28/2019		0.0092 (J)	0.0082 (J)				
3/29/2019	<0.01			0.0041 (J)			
4/1/2019					<0.01	0.012	0.0021 (J)
9/24/2019		0.0072 (J)	0.0074 (J)	0.0054 (J)			
9/25/2019	<0.01				<0.01	0.012	0.0087 (J)
2/10/2020		0.0087 (J)	0.0062 (J)				
2/11/2020				0.0057 (J)			0.003 (J)
2/12/2020	<0.01				<0.01	0.013	
3/18/2020	<0.01		0.0056 (J)				
3/19/2020		0.0088 (J)		0.0046 (J)	<0.01	0.013	0.0043 (J)
9/23/2020		0.008 (J)	0.0059 (J)	0.0071 (J)		0.012	0.01
9/24/2020					<0.01		
9/25/2020	<0.01						

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
2/10/2021	<0.01			0.0041 (J)		0.014	0.0038 (J)
2/11/2021					<0.01		
2/12/2021		0.008 (J)	0.0056 (J)				
3/1/2021					<0.01		
3/2/2021	<0.01						
3/3/2021		0.0088 (J)	0.0049 (J)	0.0074 (J)		0.013	0.0036 (J)

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.01	<0.01	0.0011 (J)	<0.01			
6/9/2016					0.0011 (J)	<0.01	<0.01
8/1/2016	<0.01	<0.01	0.0018 (J)	<0.01			
8/2/2016					0.0014 (J)	0.0006 (J)	<0.01
9/20/2016	<0.01	<0.01	<0.01	<0.01			
9/21/2016					<0.01	<0.01	<0.01
11/7/2016	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01
11/8/2016					<0.01		
1/18/2017	<0.01	<0.01	<0.01		<0.01	<0.01	
1/19/2017				<0.01			<0.01
2/21/2017	<0.01	<0.01				<0.01	
2/22/2017				<0.01	<0.01		<0.01
2/23/2017			<0.01				
5/3/2017		<0.01					
5/5/2017					0.0014 (J)	0.0007 (J)	
5/8/2017	<0.01		0.0011 (J)	<0.01			<0.01
6/30/2017			<0.01	<0.01			
7/5/2017					0.0014 (J)		<0.01
7/7/2017						<0.01	
7/10/2017	<0.01	<0.01					
3/29/2018			<0.01	<0.01			<0.01
3/30/2018	<0.01	<0.01			<0.01	<0.01	
6/11/2018							<0.01
6/12/2018				<0.01	<0.01	<0.01	
6/13/2018	<0.01	<0.01	<0.01				
10/2/2018	<0.01	<0.01	<0.01	<0.01			<0.01
10/3/2018					<0.01	<0.01	
2/27/2019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4/1/2019			<0.01	<0.01	<0.01		<0.01
4/2/2019	<0.01	<0.01				<0.01	
9/25/2019	<0.01	<0.01					<0.01
9/26/2019			0.0013 (J)	<0.01	0.0013 (J)	<0.01	
2/13/2020	<0.01	<0.01	0.0014 (J)	<0.01	0.0013 (J)	<0.01	<0.01
3/19/2020		<0.01			0.0014 (J)	<0.01	
3/20/2020	<0.01		0.0014 (J)	<0.01			<0.01
9/24/2020	<0.01	<0.01	0.0015 (J)	<0.01	0.0012 (J)	0.00075 (J)	<0.01
2/10/2021	<0.01	<0.01	0.0016 (J)	<0.01			
2/11/2021					0.0012 (J)		
2/12/2021						<0.01	0.00083 (J)
3/2/2021		<0.01					
3/3/2021	<0.01		0.0017 (J)	<0.01	0.0011 (J)	0.00083 (J)	<0.01

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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	
8/30/2016	<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	
11/14/2016	<0.01						
1/11/2017		<0.01	<0.01	<0.01			
1/13/2017					<0.01	<0.01	
2/24/2017	<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					
5/8/2017	<0.01						
6/28/2017			<0.01	<0.01			
6/29/2017		<0.01			<0.01	<0.01	
7/11/2017	<0.01						
10/10/2017	<0.01						
10/11/2017							0.0094 (J)
11/20/2017							0.0081 (J)
1/11/2018							0.0074 (J)
2/20/2018							<0.01
3/28/2018		<0.01	<0.01	<0.01			
3/29/2018					<0.01	<0.01	
4/2/2018	<0.01						
4/3/2018							0.006 (J)
6/28/2018							0.005 (J)
8/7/2018							0.0045 (J)
9/19/2018	<0.01						
9/24/2018							0.0035 (J)
3/5/2019		<0.01		<0.01	<0.01	<0.01	
3/6/2019			<0.01				
8/20/2019	<0.01						
8/21/2019							0.0021 (J)
10/8/2019	<0.01						
10/9/2019							0.0018 (J)
2/11/2020		<0.01	<0.01	<0.01			
2/12/2020					<0.01	<0.01	0.0025 (J)
3/17/2020	<0.01						
3/24/2020		<0.01	<0.01	<0.01	<0.01	<0.01	
3/25/2020							0.002 (J)
8/27/2020	<0.01						
9/22/2020	<0.01						
9/23/2020		<0.01	<0.01	<0.01			
9/24/2020					<0.01	<0.01	0.0016 (J)
2/9/2021			<0.01	<0.01	<0.01	<0.01	
2/10/2021							0.0013 (J)

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
3/1/2021	<0.01						
3/3/2021		<0.01	<0.01	<0.01	<0.01		
3/4/2021						<0.01	0.0014 (J)

			Plant fa	tes Client: Southe	rn Company	Data: Yales Ash Pond 2			
	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)				
6/2/2016		<0.01	0.0035 (J)	<0.01					
7/26/2016		<0.01	0.0042 (J)	<0.01					
8/31/2016					<0.01				
9/14/2016		<0.01	0.0041 (J)	<0.01					
11/2/2016		<0.01	0.0039 (J)						
11/4/2016				<0.01					
11/28/2016					<0.01				
1/12/2017			0.0041 (J)	<0.01					
1/13/2017		<0.01							
2/22/2017					<0.01				
3/6/2017		<0.01							
3/7/2017			0.0047 (J)	<0.01					
5/1/2017		<0.01	0.0045 (J)						
5/2/2017				<0.01					
5/8/2017					<0.01				
6/27/2017			0.004 (J)	<0.01					
6/29/2017		<0.01							
7/17/2017					<0.01				
10/12/2017	<0.01								
10/16/2017					<0.01				
11/20/2017	<0.01								
1/10/2018	<0.01								
2/19/2018	<0.01				<0.01				
3/29/2018		<0.01	<0.01	<0.01					
4/3/2018	<0.01								
6/28/2018	<0.01								
8/6/2018					<0.01				
8/7/2018	<0.01								
9/24/2018	<0.01								
3/4/2019		<0.01	<0.01	<0.01					
8/19/2019					<0.01				
8/21/2019	<0.01								
10/9/2019	<0.01								
2/12/2020	<0.01	<0.01	0.0011 (J)	<0.01					
3/24/2020	<0.01		0.0011 (J)	<0.01					
3/25/2020		<0.01							
8/26/2020					<0.01				
9/22/2020		<0.01	0.00099 (J)	<0.01					
9/24/2020	<0.01								
2/8/2021			0.0011 (J)	<0.01					
2/9/2021		<0.01							
2/10/2021	<0.01								
3/2/2021			<0.01	<0.01					
3/3/2021		<0.01							
3/4/2021	<0.01								

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		7.46	6.33				7.72
6/2/2016	5.46				5.75	7.84	
7/25/2016			6.21		5.82		7.74
7/26/2016	5.45	7.43				7.88	
9/13/2016		7.44	6.16	7.41			
9/14/2016							7.65
9/15/2016	5.45					7.74	
9/19/2016					5.78 (D)		
11/1/2016		7.24			5.62	7.75	7.7
11/2/2016	5.41						
11/4/2016			6.29	7.12			
12/15/2016				7.24			
1/10/2017	5.37						
1/11/2017		7.3				7.66	7.53
1/16/2017			6.29	7.24	5.72		
2/21/2017					5.67		
3/1/2017							7.42
3/2/2017		7.23	6.28			7.68	
3/3/2017				7.22			
3/8/2017	5.41						
4/26/2017	5.02				5.56	7.45	7.4
4/27/2017	0.02	6.99	6.09		0.00	7.40	7.3
4/28/2017		0.55	0.00	7.21			
5/26/2017				7.13			
6/27/2017		6.87	6.21	7.10			
6/28/2017		0.07	0.21	7.06		7.65	7.5
6/30/2017	5.39			7.00	5.72	7.03	7.5
10/3/2017	3.39	6.81	5.98	6.99	3.72		
10/4/2017		0.01	5.50	0.55	5.87	7.49	7.45
10/4/2017	E 40				3.07	7.43	7.43
3/27/2018	5.49 5.47		6.25		5.83		
3/28/2018	5.47		0.23	7.3	5.65	7.91	7.74
3/29/2018		7.38		7.3		7.91	7.74
6/5/2018		7.16					
6/6/2018		7.10	6.17				
6/7/2018			0.17	7.29		7.69	
6/8/2018	5.45			7.29		7.03	7.64
6/11/2018	5.45				5.69		7.04
10/1/2018	5.39	6.8	5.9	7.07	3.09	7.39	7.47
10/1/2018	5.39	0.8	5.9	7.07	5.39	7.39	7.47
2/26/2019	E 46						
	5.46	6.04	F 0	7.07	5.77	7.55	754
2/27/2019		6.84	5.8	7.27		7.55	7.54
3/28/2019	5.24	6.99	6.15	7.00			
3/29/2019	5.34			7.06	F.60	7.07	7.74
4/1/2019		7.07	0.00	7.01	5.62	7.87	7.74
9/24/2019	E 10	7.07	6.23	7.01	E 60	7.64	7.47
9/25/2019	5.19	7.0	6.1		5.69	7.64	7.47
2/10/2020		7.2	6.1	7.20			7.00
2/11/2020	E 40			7.38	F 9	7.02	7.09
2/12/2020	5.48		6.10		5.8	7.83	
3/18/2020	5.38	7.03	6.19	7 22	6	7.65	7.21
3/19/2020		7.03		7.22	6	7.65	7.31

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
9/23/2020		7.15	6.01	7.22		7.57	7.37
9/24/2020					5.67		
9/25/2020	5.44						
2/10/2021	5.35			7.29		7.81	7.58
2/11/2021					5.73		
2/12/2021		7.14	6.21				
3/1/2021					5.78		
3/2/2021	5.49						
3/3/2021		7.2	5.38	7.92		8.39	8.23

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	5.85	5.24	6.32	6.24			
6/9/2016					6.42	6.39	6.19
8/1/2016	5.83	5.17	6.34	6.12			
8/2/2016					6.43	6.35	6.17
9/20/2016	5.89	5.35	6.36	6.3			
9/21/2016					6.45	6.39	6.2
11/7/2016	5.91	5.35	6.3	6.25		6.36	6.1
11/8/2016					6.37		
1/18/2017	5.84	5.2	6.31		6.27	6.23	
1/19/2017				6.2			6.22
2/21/2017	5.79	5.14				6.42	
2/22/2017				6.14	6.35		6.12
2/23/2017			6.18		0.00		0.12
5/3/2017		5.28	0.10				
5/5/2017		5.20			6.36	6.4	
5/8/2017	5.84		6.24	6.11	0.30	0.4	6.11
6/30/2017	5.64		6.21	6.17			6.11
			0.21	0.17	6.4		6.17
7/5/2017					6.4	6.46	6.17
7/7/2017	F 02	F 2F				6.46	
7/10/2017	5.92	5.25			0.40		0.47
10/5/2017				0.10	6.43		6.17
10/6/2017			0.00	6.13		0.07	
10/9/2017	5.04	F 47	6.26			6.37	
10/10/2017	5.84	5.17	0.00	0.05			0.00
3/29/2018		=	6.36	6.25			6.09
3/30/2018	6.19	5.19			6.39	6.35	0.47
6/11/2018							6.17
6/12/2018		=		6.22	6.42	6.47	
6/13/2018	5.82	5.12	6.28				
10/2/2018	5.81	4.95	5.9	5.99			6.17
10/3/2018		_			6.21	6.01	
2/27/2019	5.79	5	6.31	6.26	6.32	6.38	6.19
4/1/2019			6.43	6.4	6.3		6.03
4/2/2019	5.87	5.13				6.7	
9/25/2019	5.79	5.24					6.21
9/26/2019			6.3	6.22	6.43	6.47	
2/13/2020	5.93	5.29	6.4	6.31	6.49	6.53	6.32
3/19/2020		5.46			7.01	6.98	
3/20/2020	5.94		6.32	6.18			6.17
9/24/2020	5.86	5.46	6.36	6.27	6.41	6.53	6.2
2/10/2021	5.96	5.18	6.29	6.21			
2/11/2021					6.57		
2/12/2021						6.6	6.24
3/2/2021		5.38					
3/3/2021	5.93		6.43	6.35	6.51	6.61	6.27

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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	
8/30/2016	5.75						
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	
11/14/2016	5.59						
1/11/2017		5.59	6.05	5.48			
1/13/2017					5.79	6.41	
2/24/2017	5.49						
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					
5/8/2017	5.58						
6/28/2017			6	5.36			
6/29/2017		5.56			5.85	6.47	
7/11/2017	5.58						
10/3/2017	0.00					6.56	
10/4/2017		5.57		5.32	5.83	0.00	
10/5/2017		0.07	6.11	0.02	0.00		
10/10/2017	5.49		0.11				
10/11/2017	0.40						6.4
11/20/2017							6.33
1/11/2018							6.29
2/20/2018							7.22
3/28/2018		5.59	6.1	5.34			1.22
3/29/2018		0.00	0.1	0.04	5.93	6.75	
4/2/2018	6.3 (o)				5.55	0.75	
4/3/2018	0.5 (0)						6.87
6/5/2018						6.09	0.07
6/6/2018					5.86	0.03	
6/7/2018			5.98		3.00		
6/11/2018		5.58	5.96	5.28			
6/28/2018		3.36		5.20			6.18
8/7/2018							6.08
	E 40						0.06
9/19/2018	5.48						E 04
9/24/2018		F F0	F 04	4.00	5.04	0.07	5.81
9/25/2018		5.59	5.81	4.86	5.84	6.67	
3/5/2019		5.48	F 00	5.26	6.07	7.22	
3/6/2019	E 02		5.99				E 94
3/27/2019	5.83	F 74				0.04	5.84
4/2/2019		5.74	0.00	5.47	5.74	6.94	
4/3/2019	5.50		6.29	5.47	5.71		
8/20/2019	5.58						F.00
8/21/2019						0.07	5.96
9/24/2019		5.40			5.00	6.87	
9/25/2019		5.49			5.86		

0/00/0040	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
9/26/2019			6.04	5.2			
10/8/2019	5.59						
10/9/2019							5.81
2/11/2020		5.58	6.07	5.3			
2/12/2020					6	7.13	5.97
3/17/2020	5.57						
3/24/2020		5.57	5.98	5.33	5.86	6.35	
3/25/2020							5.78
8/27/2020	4.88						
9/22/2020	5.46						
9/23/2020		5.58	6.01	5.29			
9/24/2020					5.8	6.7	5.7
2/9/2021			6.12	5.43	5.86	6.95	
2/10/2021							5.8
3/1/2021	5.48						
3/3/2021		5.52	5.89	5.31	5.89		
3/4/2021						6.8	5.54

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (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
6/2/2016		6.36	7.67	5.75	
7/26/2016		6.22	7.66	5.72	
9/14/2016		6.23	7.6	5.74	
11/2/2016		6.08	7.35	J.77	
11/4/2016		0.00	7.55	5.61	
11/28/2016				5.01	6.23
1/12/2017			7.49	5.71	0.20
1/13/2017		6.19	7.43	3.71	
2/22/2017		0.19			6.21
3/6/2017		6.0			0.21
		6.2	7.42	F 66	
3/7/2017		6.21	7.43	5.66	
5/1/2017		6.21	7.22	5.05	
5/2/2017				5.65	0.40
5/8/2017			7.00	5.7	6.12
6/27/2017		0.04	7.32	5.7	
6/29/2017		6.21			•••
7/17/2017			7.40	5 70	6.03
10/3/2017		0.40	7.48	5.79	
10/5/2017	- 10	6.16			
10/12/2017	5.43				
10/16/2017					6.12
11/20/2017	5.1				
1/10/2018	4.97				0.40
2/19/2018	5.6				6.13
3/29/2018		6.09	7.02	5.63	
4/3/2018	5.84				
6/6/2018			7.43		
6/7/2018		6.12		5.63	
6/28/2018	5.24				
8/6/2018					6.01
8/7/2018	5.18				
9/24/2018	5.14				
9/26/2018		5.84	7.13	5.63	
2/25/2019					6.51
3/4/2019		6.18	7.46	5.75	
3/26/2019	5.3				
4/3/2019		6.43	7.11	5.63	
6/12/2019					6.3
8/19/2019					6.23

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
8/21/2019	5.26				
9/24/2019			6.93	5.6	
9/25/2019		6.2			
10/8/2019					6.28
10/9/2019	5.22				
2/12/2020	5.3	6.15	7.52	5.83	
3/17/2020					6.14
3/24/2020	5.29		7.34	5.81	
3/25/2020		6.26			
5/6/2020					6.24
8/26/2020					5.67
9/22/2020		5.8	7.19	5.99	5.78
9/24/2020	5.43				
2/8/2021				5.67	
2/9/2021		6.06			
2/10/2021	5.19				
3/2/2021			7.15	5.63	5.42
3/3/2021		6.21			
3/4/2021	5.23				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		<0.005	<0.005				<0.005
6/2/2016	0.0011 (J)				<0.005	<0.005	
7/25/2016			<0.005		<0.005		<0.005
7/26/2016	0.0016 (J)	<0.005				<0.005	
9/13/2016		<0.005	<0.005				
9/14/2016				<0.005			<0.005
9/15/2016	0.0014 (J)					<0.005	
9/19/2016					<0.005		
11/1/2016		<0.005			<0.005	<0.005	<0.005
11/2/2016	<0.005						
11/4/2016			<0.005	<0.005			
12/15/2016				<0.005			
1/10/2017	0.0012 (J)						
1/11/2017		<0.005				<0.005	<0.005
1/16/2017			<0.005	<0.005	<0.005		
2/21/2017					<0.005		
3/1/2017							<0.005
3/2/2017		<0.005	<0.005			<0.005	
3/3/2017				<0.005			
3/8/2017	<0.005						
4/26/2017	<0.005				<0.005	<0.005	<0.005
4/27/2017		<0.005	<0.005				
4/28/2017				<0.005			
5/26/2017				<0.005			
6/27/2017		<0.005	<0.005				
6/28/2017				<0.005		<0.005	<0.005
6/30/2017	<0.005				<0.005		
3/27/2018	<0.005		<0.005		<0.005		
3/28/2018				<0.005		<0.005	<0.005
3/29/2018		<0.005					
2/26/2019	<0.005				<0.005		
2/27/2019		<0.005	<0.005	<0.005		<0.005	<0.005
3/28/2019		<0.005	<0.005				
3/29/2019	0.0019 (J)			<0.005			
4/1/2019					<0.005	<0.005	<0.005
9/24/2019		<0.005	<0.005	<0.005			
9/25/2019	<0.005				<0.005	<0.005	<0.005
2/10/2020		<0.005	<0.005				
2/11/2020				<0.005			<0.005
2/12/2020	<0.005				<0.005	<0.005	
3/18/2020	<0.005		<0.005				
3/19/2020		<0.005		<0.005	<0.005	<0.005	<0.005
9/23/2020		<0.005	<0.005	<0.005		<0.005	<0.005
9/24/2020					<0.005		
9/25/2020	<0.005						
2/10/2021	<0.005			<0.005		<0.005	<0.005
2/11/2021					<0.005		
2/12/2021		<0.005	<0.005				
3/1/2021					<0.005		
3/2/2021	<0.005						
3/3/2021		<0.005	<0.005	<0.005		<0.005	<0.005

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.0016	0.0003 (J)	<0.005	<0.005			
6/9/2016					<0.005	<0.005	<0.005
8/1/2016	0.0023 (J)	0.0014 (J)	<0.005	<0.005			
8/2/2016					<0.005	<0.005	<0.005
9/20/2016	0.0022 (J)	<0.005	<0.005	<0.005			
9/21/2016					<0.005	0.001 (J)	<0.005
11/7/2016	0.0017 (J)	<0.005	<0.005	<0.005		<0.005	<0.005
11/8/2016					<0.005		
1/18/2017	0.002 (J)	0.0012 (J)	<0.005		<0.005	<0.005	
1/19/2017				<0.005			<0.005
2/21/2017	0.0018 (J)	0.0014 (J)				<0.005	
2/22/2017				<0.005	0.0012 (J)		<0.005
2/23/2017			<0.005				
5/3/2017		<0.005					
5/5/2017					<0.005	<0.005	
5/8/2017	<0.005		<0.005	<0.005			<0.005
6/30/2017			<0.005	<0.005			
7/5/2017					<0.005		<0.005
7/7/2017						<0.005	
7/10/2017	0.002 (J)	<0.005					
3/29/2018			<0.005	<0.005			<0.005
3/30/2018	<0.005	<0.005			<0.005	<0.005	
2/27/2019	0.002 (J)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4/1/2019			<0.005	<0.005	<0.005		<0.005
4/2/2019	0.0017 (J)	<0.005				<0.005	
9/25/2019	0.0019 (J)	<0.005					<0.005
9/26/2019			<0.005	<0.005	<0.005	<0.005	
2/13/2020	0.0019 (J)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/19/2020		<0.005			<0.005	<0.005	
3/20/2020	0.0019 (J)		<0.005	<0.005			<0.005
9/24/2020	0.0031 (J)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/10/2021	0.0026 (J)	<0.005	<0.005	<0.005			
2/11/2021					<0.005		
2/12/2021						<0.005	<0.005
3/2/2021		<0.005					
3/3/2021	0.0034 (J)		<0.005	<0.005	<0.005	<0.005	<0.005

		YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
6/	/6/2016			<0.005	<0.005			
6/	7/2016		0.001 (J)			<0.005	0.00048 (J)	
7/	27/2016		0.0012 (J)	<0.005	<0.005	<0.005		
7/	/28/2016						<0.005	
8/	/30/2016	0.0017 (J)						
9/	16/2016		0.0015 (J)		<0.005			
9/	19/2016			<0.005		<0.005	0.0014 (J)	
11	1/2/2016					<0.005		
11	1/3/2016		0.0015 (J)	<0.005	<0.005		<0.005	
11	1/14/2016	<0.005						
1/	/11/2017		0.0014 (J)	<0.005	<0.005			
1/	/13/2017					<0.005	<0.005	
2/	/24/2017	0.0011 (J)						
3/	/1/2017			<0.005	<0.005			
3/	/2/2017		0.0017 (J)					
3/	/6/2017					<0.005	<0.005	
4/	/26/2017			<0.005	<0.005	<0.005	<0.005	
5/	/2/2017		<0.005					
5/	/8/2017	<0.005						
6/	/28/2017			<0.005	<0.005			
6/	/29/2017		<0.005			<0.005	<0.005	
7/	/11/2017	<0.005						
10	0/10/2017	<0.005						
	0/11/2017							<0.005
	1/20/2017							<0.005
	/11/2018							<0.005
	/20/2018							<0.005
	/28/2018		<0.005	<0.005	<0.005			
	/29/2018					<0.005	<0.005	
	/2/2018	<0.005						
	/3/2018							<0.005
	/5/2018						<0.005	
	/6/2018					<0.005		
	7/2018			<0.005				
	/11/2018		<0.005		<0.005			
	/28/2018							<0.005
	7/2018							<0.005
	19/2018	<0.005						
	/24/2018							0.0015 (J)
	/25/2018		<0.005	<0.005	<0.005	<0.005	<0.005	,
	/5/2019		<0.005		<0.005	<0.005	<0.005	
	6/2019			<0.005				
	/2/2019		<0.005				<0.005	
	/3/2019			<0.005	<0.005	<0.005		
	/20/2019	<0.005						
	21/2019							<0.005
	/24/2019						<0.005	
	25/2019		<0.005			<0.005		
	26/2019		2.000	<0.005	<0.005	3.000		
	0/9/2019							<0.005
	/11/2020		<0.005	<0.005	<0.005			
	12/2020		2.000	3.000	2.000	<0.005	<0.005	<0.005

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
3/24/2020		<0.005	<0.005	<0.005	<0.005	<0.005	
3/25/2020							<0.005
8/27/2020	<0.005						
9/23/2020		<0.005	<0.005	<0.005			
9/24/2020					<0.005	<0.005	<0.005
2/9/2021			<0.005	<0.005	<0.005	<0.005	
2/10/2021							<0.005
3/3/2021		<0.005	<0.005	<0.005	<0.005		
3/4/2021						<0.005	<0.005

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (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		<0.00E	<0.00E	<0.00E	<0.005
6/2/2016		<0.005	<0.005	<0.005	
7/26/2016		0.0009 (J)	<0.005	0.0009 (J)	
8/31/2016					<0.005
9/14/2016		<0.005	<0.005	<0.005	
11/2/2016		<0.005	<0.005		
11/4/2016				<0.005	
11/28/2016					<0.005
1/12/2017			<0.005	<0.005	
1/13/2017		<0.005			
2/22/2017					<0.005
3/6/2017		<0.005			
3/7/2017			<0.005	<0.005	
5/1/2017		<0.005	<0.005		
5/2/2017				<0.005	
5/8/2017					<0.005
6/27/2017			<0.005	<0.005	
6/29/2017		<0.005			
7/17/2017					<0.005
10/12/2017	<0.005				
10/16/2017					<0.005
11/20/2017	0.0042 (J)				
1/10/2018	0.0043 (J)				
2/19/2018	<0.005				<0.005
3/29/2018		<0.005	<0.005	<0.005	
4/3/2018	<0.005				
6/6/2018			<0.005		
6/7/2018		<0.005		<0.005	
6/28/2018	0.0032 (J)				
8/6/2018	0.0002 (0)				<0.005
8/7/2018	0.0031 (J)				-0.000
9/24/2018	0.0031 (J) 0.0026 (J)				
	0.0020 (J)	<0.005	<0.005	<0.005	
9/26/2018		<0.005	<0.005	<0.005	<0.00E
2/25/2019					<0.005

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
3/4/2019		<0.005	<0.005	<0.005	
4/3/2019		<0.005	<0.005	<0.005	
6/12/2019					<0.005
8/19/2019					<0.005
8/21/2019	0.0024 (J)				
9/24/2019			<0.005	<0.005	
9/25/2019		<0.005			
10/8/2019					<0.005
10/9/2019	0.0026 (J)				
2/12/2020	0.002 (J)	<0.005	<0.005	<0.005	
3/17/2020					<0.005
3/24/2020	0.002 (J)		<0.005	<0.005	
3/25/2020		<0.005			
8/26/2020					<0.005
9/22/2020		<0.005	<0.005	<0.005	<0.005
9/24/2020	0.0016 (J)				
2/8/2021			<0.005	<0.005	
2/9/2021		<0.005			
2/10/2021	<0.005				
3/2/2021			<0.005	<0.005	<0.005
3/3/2021		0.0019 (J)			
3/4/2021	<0.005				

		YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2	2016		5	4.2				12
6/2/2	2016	6.6				1.3	5.8	
7/25/	/2016			3.7		1.2		8.4
7/26/	/2016	6.1	5.4				6.7	
9/13/	/2016		2.9	5.2				
9/14/	/2016				9.4			8.6
	/2016	6.1					6	
	/2016					1.2		
	/2016		3.9			1.3	4.9	8.9
	/2016	6.3						
	/2016			5	13			
	5/2016				1.8			
	/2017	5.9						
	/2017	0.0	3.7				4.5	8.6
	/2017		0.7	7.9	11	<1	4.0	0.0
	/2017			7.5	• • • • • • • • • • • • • • • • • • • •	1.4		
3/1/2						1.4		9.3
3/2/2			4.6	7.4			4.4	5.3
			4.0	7.4	0.0		4.4	
3/3/2		7			8.8			
3/8/2		7				4.4	F 4	44
	/2017	7	5.0	- 4		1.4	5.1	11
	/2017		5.2	7.4	40			
	/2017				10			
	/2017				12			
	/2017		5.9	6.4				
	/2017				11		5.4	12
	/2017	6.5				<1		
	/2017		6.6	5.9	7.9			
	/2017					1.4	6.2	12
	/2017	7.9						
6/5/2			6.4					
6/6/2				4.4				
6/7/2					8.8		6.7	
6/8/2		6.4						9.6
6/11/	/2018					1.1		
10/1/	/2018	6.8	5.6	4	9.1		7.1	9.1
	/2018					1		
3/28/	/2019		8	4.3				
	/2019	7.3			9			
4/1/2	2019					0.96 (J)	7.2	8.5
9/24/	/2019		5.3	4.3	9.1			
9/25/	/2019	6.6				0.81 (J)	7	13.8
3/18/	/2020	8.1		5.3				
3/19/	/2020		10		12.4	1.6	9	12.9
9/23/	/2020		8.1	3.4	11.8		6.9	16.8
	/2020					0.69 (J)		
	/2020	6.1						
3/1/2						0.88 (J)		
3/2/2		6						
3/3/2			9	4.4	10.6		7	9.6

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	81	110	3.2	26			
6/9/2016					8.7	5.2	33
8/1/2016	75	96	3.6	27			
8/2/2016					7.5	4.5	32
9/20/2016	78	100	5.6	21			
9/21/2016					8	<1 (*)	32
11/7/2016	81	100	5.4	24		4.3	33
11/8/2016					8.3		
1/18/2017	95	100	3.5		8	2.7	
1/19/2017				25			32
2/21/2017	80	96				3	
2/22/2017				24	8.2		31
2/23/2017			4.9				
5/3/2017		100					
5/5/2017					<1 (*)	<1 (*)	
5/8/2017	84		3.9	23			32
6/30/2017			5	23			
7/5/2017					8.1		31
7/7/2017						2.7	
7/10/2017	84	100					
10/5/2017					8.6		31
10/6/2017				23			
10/9/2017			5.1			2.9	
10/10/2017	82	97					
6/11/2018							30.6
6/12/2018				18.1	8.2	2.9	
6/13/2018	76.5	93.3	6.1				
10/2/2018	83.9	99	6.1	20.2			30.8
10/3/2018					8	2.1	
4/1/2019			4.1	18.3	8.2		30.4
4/2/2019	77.6	94.5				2.4	
9/25/2019	80.1	97					30
9/26/2019			4.2	18.2	7.9	1.6	
3/19/2020		99.4			9.1	1.7	
3/20/2020	84.7		5.2	21.1			33
9/24/2020	85.6	92.3	3	16.6	7.2	0.99 (J)	26.2
3/2/2021		92.7					
3/3/2021	89.3		2.6	451	8.6	4.9	26.6

			Fidill	ates Client. South		da. Tates Asii Fuliu 2	
	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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	
8/30/2016	160						
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	
11/14/2016	150						
1/11/2017		5.2	<1	1.7			
1/13/2017					<1	4.3	
2/24/2017	120						
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					
5/8/2017	120						
6/28/2017			<1	<1			
6/29/2017		5.2			<1	5.5	
7/11/2017	110						
10/3/2017						5.8	
10/4/2017		5.3		1.7	<1		
10/5/2017			1.6				
10/10/2017	93						
10/11/2017							20
11/20/2017							24
1/11/2018							23
2/20/2018							20.6
4/2/2018	88.8						
4/3/2018							24.5
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)			
6/28/2018							22
8/7/2018							20.7
9/19/2018	75						
9/24/2018							21.2
9/25/2018		6.1	1	1.5	0.13 (J)	7	
3/27/2019	65.9						17.7
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			0.64 (J)	1			
10/8/2019	52.3						
10/9/2019							15
3/17/2020	71.6						
3/24/2020		5.4	<1	0.99 (J)	<1	3	
3/25/2020							14.3

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
9/22/2020	51.5						
9/23/2020		5.1	0.53 (J)	1.1			
9/24/2020					<1	3.6	11.7
3/1/2021	51.6						
3/3/2021		5.2	<1	1	<1		
3/4/2021						4.5	12

			Tidill Ta	ites Chem. Coulin	ompany Data. Tates Asir Fond 2
	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
6/2/2016		8	20	1.9	
7/26/2016		7.7	20	1.8	
8/31/2016					29
9/14/2016		7.5	19	1.8	
11/2/2016		8.2	20		
11/4/2016				2	
11/28/2016					36
1/12/2017			19	1.9	
1/13/2017		8.1			
2/22/2017					43
3/6/2017		8			
3/7/2017			20	2.1	
5/1/2017		8.4	20		
5/2/2017				2	
5/8/2017					60
6/27/2017			18	2.1	
6/29/2017		9.2			
7/17/2017					63
10/3/2017			16	2.3	
10/5/2017		9.6			
10/12/2017	17				
10/16/2017					62
11/20/2017	71				
1/10/2018	66				
2/19/2018	57.2				64.6
4/3/2018	49.4				
6/6/2018			8.3		
6/7/2018		8.5		2	
6/28/2018	43.8				
8/6/2018					42.1
8/7/2018	40.5				
9/24/2018	39.7				
9/26/2018		10.2	7.9	2.3	
2/25/2019					42.1
3/26/2019	34.3				
4/3/2019		8.5	7	2.1	
6/12/2019					83.4
9/24/2019			5.5	2.4	
9/25/2019		8.5			
10/8/2019					128
10/9/2019	27.9				
3/17/2020					98.6
3/24/2020	25.2		5.9	2.1	
3/25/2020		8.8			
9/22/2020		8.2	5.5	2.1	145
9/24/2020	22.9				
3/2/2021			2.6	2.3	156
3/3/2021		7.8			
3/4/2021	21.5				

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		<0.001	<0.001				<0.001
6/2/2016	<0.001				<0.001	<0.001	
7/25/2016			<0.001		<0.001		<0.001
7/26/2016	<0.001	<0.001				0.0001 (J)	
9/13/2016		<0.001	<0.001				
9/14/2016				<0.001			<0.001
9/15/2016	<0.001					<0.001	
9/19/2016					<0.001		
11/1/2016		<0.001			<0.001	<0.001	<0.001
11/2/2016	<0.001						
11/4/2016			<0.001	<0.001			
12/15/2016				<0.001			
1/10/2017	<0.001						
1/11/2017		<0.001				<0.001	<0.001
1/16/2017			<0.001	<0.001	<0.001		
2/21/2017					<0.001		
3/1/2017							<0.001
3/2/2017		<0.001	<0.001			<0.001	
3/3/2017				<0.001			
3/8/2017	<0.001						
4/26/2017	<0.001				<0.001	<0.001	<0.001
4/27/2017		<0.001	<0.001				
4/28/2017				<0.001			
5/26/2017				<0.001			
6/27/2017		<0.001	<0.001				
6/28/2017				<0.001		<0.001	<0.001
6/30/2017	<0.001				<0.001		
3/27/2018	<0.001		<0.001		<0.001		
3/28/2018				<0.001		<0.001	<0.001
3/29/2018		<0.001					
2/26/2019	<0.001				<0.001		
2/27/2019		<0.001	<0.001	<0.001		<0.001	<0.001
2/10/2020		<0.001	5.5E-05 (J)				
2/11/2020				<0.001			<0.001
2/12/2020	8.9E-05 (J)				<0.001	<0.001	
3/18/2020	<0.001		<0.001				
3/19/2020		<0.001		<0.001	<0.001	<0.001	<0.001
9/23/2020		<0.001	<0.001	<0.001		<0.001	0.00016 (J)
9/24/2020					<0.001		
9/25/2020	<0.001						
2/10/2021	<0.001			<0.001		<0.001	<0.001
2/11/2021					<0.001		
2/12/2021		<0.001	<0.001				

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.001	<0.001	<0.001	0.00012 (J)			
6/9/2016					<0.001	<0.001	<0.001
8/1/2016	<0.001	<0.001	<0.001	0.0001 (J)			
8/2/2016					<0.001	<0.001	<0.001
9/20/2016	<0.001	<0.001	<0.001	<0.001			
9/21/2016					<0.001	<0.001	<0.001
11/7/2016	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
11/8/2016					<0.001		
1/18/2017	<0.001	<0.001	<0.001		<0.001	<0.001	
1/19/2017				<0.001			<0.001
2/21/2017	<0.001	<0.001				<0.001	
2/22/2017				<0.001	<0.001		<0.001
2/23/2017			<0.001				
5/3/2017		<0.001					
5/5/2017					<0.001	<0.001	
5/8/2017	<0.001		<0.001	0.0001 (J)			<0.001
6/30/2017			<0.001	0.0001 (J)			
7/5/2017					<0.001		<0.001
7/7/2017						<0.001	
7/10/2017	<0.001	<0.001					
3/29/2018			<0.001	<0.001			<0.001
3/30/2018	<0.001	<0.001			<0.001	<0.001	
2/27/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2020	<0.001	5.7E-05 (J)	<0.001	0.0001 (J)	<0.001	<0.001	<0.001
3/19/2020		5.5E-05 (J)			<0.001	<0.001	
3/20/2020	<0.001		<0.001	0.00011 (J)			<0.001
9/24/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/10/2021	<0.001	<0.001	<0.001	<0.001			
2/11/2021					<0.001		
2/12/2021						<0.001	<0.001

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (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	
8/30/2016	<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	
11/14/2016	<0.001						
1/11/2017		<0.001	<0.001	<0.001			
1/13/2017					<0.001	<0.001	
2/24/2017	<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					
5/8/2017	<0.001	0.001					
6/28/2017	<b>10.001</b>		<0.001	<0.001			
6/29/2017		<0.001	-0.001	-0.001	<0.001	<0.001	
7/11/2017	<0.001	10.001			<b>10.001</b>	<b>10.001</b>	
10/10/2017	<0.001						
10/10/2017	<0.001						<0.001
							<0.001
11/20/2017							<0.001
1/11/2018							<0.001
2/20/2018		.0.004		.0.004			<0.001
3/28/2018		<0.001	<0.001	<0.001			
3/29/2018					<0.001	<0.001	
4/2/2018	<0.001						
4/3/2018							<0.001
6/28/2018							<0.001
8/7/2018							<0.001
9/19/2018	<0.001						
9/24/2018							<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		
8/20/2019	5.8E-05 (J)						
8/21/2019							<0.001
9/24/2019						<0.001	
9/25/2019		<0.001			<0.001		
9/26/2019			<0.001	<0.001			
10/8/2019	8.4E-05 (J)						
2/11/2020		<0.001	<0.001	<0.001			
2/12/2020					<0.001	<0.001	<0.001
3/17/2020	<0.001						
3/24/2020		<0.001	<0.001	<0.001	<0.001	<0.001	
3/25/2020							<0.001
8/27/2020	<0.001						

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
9/23/2020		<0.001	<0.001	<0.001			
9/24/2020					<0.001	<0.001	<0.001
2/9/2021			<0.001	<0.001	<0.001	<0.001	
2/10/2021							<0.001

YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
				<0.001
	<0.001	<0.001	<0.001	
				<0.001
			<0.001	
	<0.001	<0.001		
			<0.001	
				<0.001
		<0.001	<0.001	
	<0.001			
				<0.001
	<0.001			
		<0.001	<0.001	
	<0.001	<0.001		
			<0.001	
				6E-05 (J)
		<0.001	<0.001	
	<0.001			
				6E-05 (J)
<0.001				
				7E-05 (J)
<0.001				
<0.001				
<0.001				<0.001
	<0.001	<0.001	<0.001	
<0.001				
<0.001				
				<0.001
<0.001				
<0.001				
				<0.001
	<0.001	<0.001	<0.001	
				<0.001
				5.5E-05 (J)
				(-)
	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	<pre>&lt;0.001</pre>	<pre></pre>

	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
8/21/2019	<0.001				
9/24/2019			<0.001	<0.001	
9/25/2019		<0.001			
10/8/2019					<0.001
2/12/2020	<0.001	<0.001	<0.001	<0.001	
3/17/2020					<0.001
3/24/2020	<0.001		<0.001	<0.001	
3/25/2020		<0.001			
8/26/2020					<0.001
9/22/2020		<0.001	<0.001	<0.001	<0.001
9/24/2020	<0.001				
2/8/2021			<0.001	<0.001	
2/9/2021		<0.001			
2/10/2021	<0.001				
3/2/2021					<0.001

	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016		120	54				150
6/2/2016	46				36	130	
7/25/2016			48		50		135
7/26/2016	54	94				141	
9/13/2016		105	67				
9/14/2016				152			127
9/15/2016	54					153	
9/19/2016					35		
11/1/2016		44			<25	92	75
11/2/2016	71						
11/4/2016			60	148			
12/15/2016				191			
1/10/2017	45						
1/11/2017		107				159	148
1/16/2017			65	180	47		
2/21/2017					<25		
3/1/2017							182
3/2/2017		98	61			117	
3/3/2017				156			
3/8/2017	178						
4/26/2017	52				55	181	92
4/27/2017		116	31				
4/28/2017				130			
5/26/2017				223			
6/27/2017		89	42				
6/28/2017				166		169	126
6/30/2017	45				42		
10/3/2017		119	58	153			
10/4/2017					31	141	147
10/5/2017	40						
6/5/2018		127					
6/6/2018			96				
6/7/2018				146		95	
6/8/2018	114						158
6/11/2018					59		
10/1/2018	50	117	60	155		165	138
10/2/2018					57		
3/28/2019		87	87				
3/29/2019	63			150			
4/1/2019					54	149	19 (J)
9/24/2019		124	54	146			
9/25/2019	64				51	157	159
3/18/2020	57		35				
3/19/2020		116		148	47	146	148
9/23/2020		108	15	161		157	155
9/24/2020					51		
9/25/2020	54						
3/1/2021					23		
3/2/2021	67						
3/3/2021		99	39	138		137	111

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	220	200	190	210			
6/9/2016					240	210	150
8/1/2016	211	191	191	209			
8/2/2016					226	202	155
9/20/2016	217	213	205	224			
9/21/2016					214	216	138
11/7/2016	301	284	264	291		399	291
11/8/2016					229		
1/18/2017	265 (D)	158 (D)	167 (D)		243 (D)	215 (D)	
1/19/2017				215 (D)			145 (D)
2/21/2017	158	137				198	
2/22/2017				262	310		185
2/23/2017			253				
5/3/2017		269					
5/5/2017					289	347	
5/8/2017	207		174	187			114
6/30/2017			193	209			
7/5/2017					217		136
7/7/2017						236	
7/10/2017	219	183					
10/5/2017					221		139
10/6/2017				183			
10/9/2017			185			204	
10/10/2017	194	179					
6/11/2018							156
6/12/2018				208	234	243	
6/13/2018	228	196	219				
10/2/2018	227	191	227	206			154
10/3/2018					232	237	
4/1/2019			198	221	238		147
4/2/2019	223	224				<25	
9/25/2019	225	190					162
9/26/2019			198	225	241	239	
3/19/2020		194			212	202	
3/20/2020	211		195	182			137
9/24/2020	212	171	186	185	209	226	133
3/2/2021		154					
3/3/2021	205		173	178	184	217	110

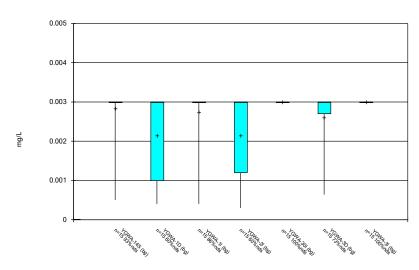
6/6/2016	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg) 120	YGWA-18S (bg) 58	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
		20	120	50	20	60	
6/7/2016		28	0.4	0.5	38	60	
7/27/2016		74	94	35	74		
7/28/2016						81	
8/30/2016	319						
9/16/2016		67		35			
9/19/2016			92		45	68	
11/2/2016					53		
11/3/2016		41	104	48		61	
11/14/2016	280						
1/11/2017		104	133	95			
1/13/2017					46	76	
2/24/2017	162						
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	-				
5/8/2017	194						
6/28/2017	10-1		98	45			
6/29/2017		53	50	10	68	94	
	103	JJ			JU	J <del>*1</del>	
7/11/2017	193					140	
10/3/2017		61		45	E4	149	
10/4/2017		61	104	45	54		
10/5/2017	475		104				
10/10/2017	175						00
10/11/2017							68
11/20/2017							139
1/11/2018							153
2/20/2018							87
4/2/2018	192						
4/3/2018							85
6/5/2018						109	
6/6/2018					79		
6/7/2018			68				
6/11/2018		70		74			
6/28/2018							88
8/7/2018							89
9/19/2018	186						
9/24/2018							82
9/25/2018		86	109	63	73	122	
3/27/2019	170				-		75
4/2/2019	-	72				134	-
4/3/2019		· <del>-</del>	89	63	57		
9/24/2019					··	157	
9/25/2019		81			75	107	
9/26/2019		O I	126	72	, ,		
	170		126	72			
10/8/2019	172						110
10/9/2019	105						119
3/17/2020	165						
3/24/2020		71	91	59	76	117	
3/25/2020							158

	YGWA-47 (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-39 (bg)
9/22/2020	141						
9/23/2020		99	103	81			
9/24/2020					69	113	170
3/1/2021	145						
3/3/2021		57	95	37	53		
3/4/2021						110	168

			T lant Ta	tes Chert. Oddite	ioni company Data. Tales Asi Fond 2
	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	GWA-2 (bg)
6/2/2016		96	160	66	
7/26/2016		92	177	78	
8/31/2016					209
9/14/2016		102	187	73	
11/2/2016		115	181		
11/4/2016				75	
11/28/2016					102
1/12/2017			202	86	
1/13/2017		67			
2/22/2017					164
3/6/2017		159			
3/7/2017			257	108	
5/1/2017		107	165		
5/2/2017				103	
5/8/2017					145
6/27/2017			189	73	
6/29/2017		79			
7/17/2017					185
10/3/2017			170	89	
10/5/2017		95			
10/12/2017	74				
10/16/2017					218
11/20/2017	179				
1/10/2018	140				
2/19/2018	119				173
4/3/2018	106				
6/6/2018			151		
6/7/2018		90		142	
6/28/2018	112				
8/6/2018					158
8/7/2018	103				
9/24/2018	107				
9/26/2018		116	144	86	
2/25/2019					92
3/26/2019	90				
4/3/2019		111	142	83	
6/12/2019					226
9/24/2019			129	79	
9/25/2019		117			
10/8/2019					276
10/9/2019	98				
3/17/2020					185
3/24/2020	84		139	68	
3/25/2020		146			
9/22/2020		83	104	75	281
9/24/2020	77				
3/2/2021			52	67	296
3/3/2021		80			
3/4/2021	57				

# FIGURE B.

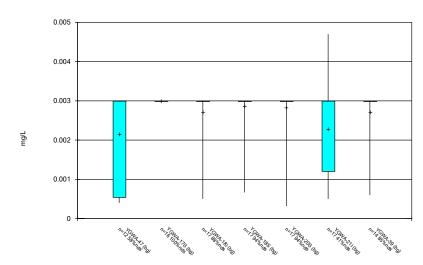
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/10/2021 3:45 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

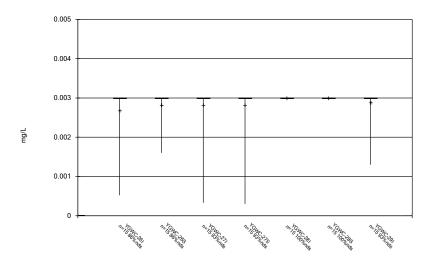
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/10/2021 3:45 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

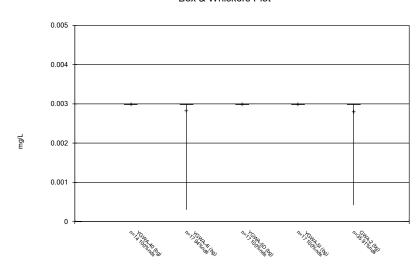
Box & Whiskers Plot



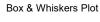
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

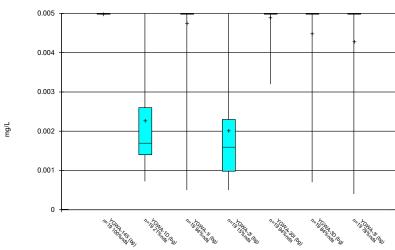
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



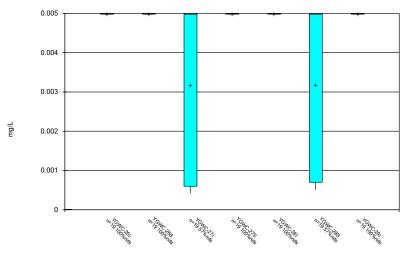
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2





Constituent: Arsenic Analysis Run 5/10/2021 3:45 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

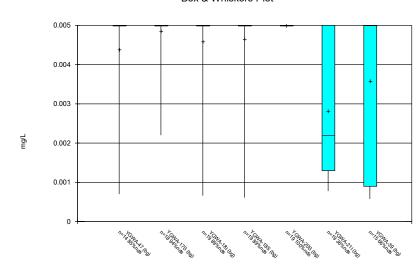
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/10/2021 3:45 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

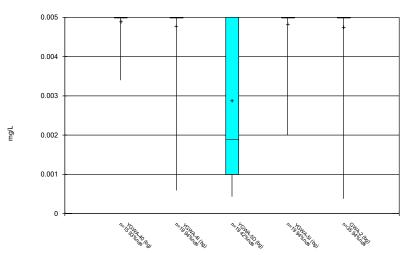
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

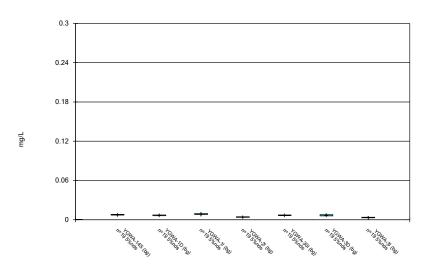
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/10/2021 3:45 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

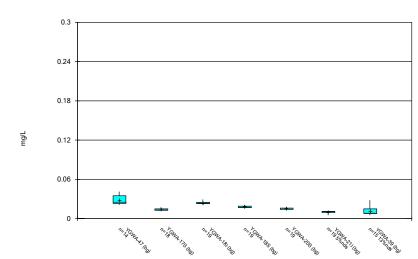
Box & Whiskers Plot



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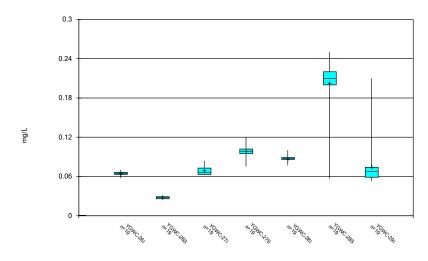
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Barium Analysis Run 5/10/2021 3:45 PM
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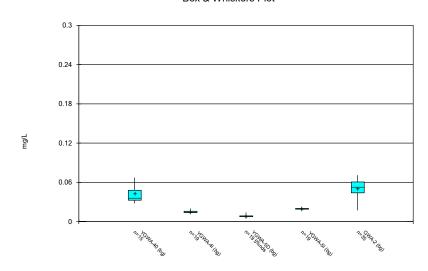
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

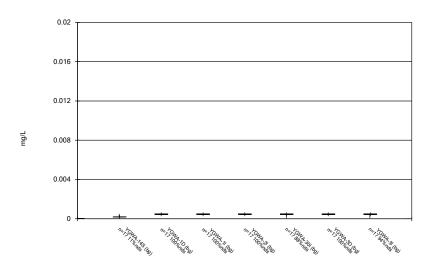
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Barium Analysis Run 5/10/2021 3:45 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

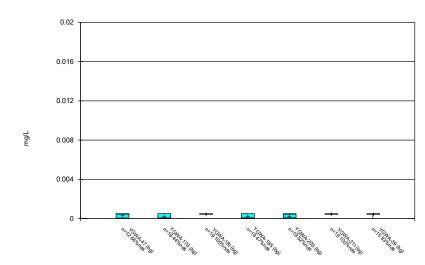
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/10/2021 3:46 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

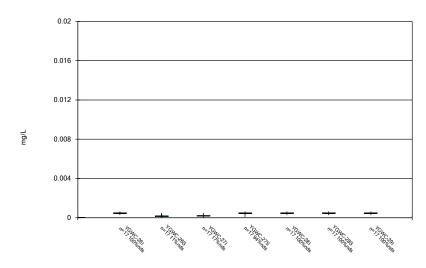
Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/10/2021 3:46 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

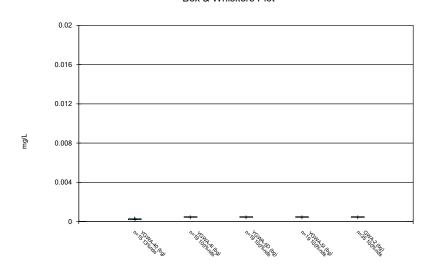
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/10/2021 3:46 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

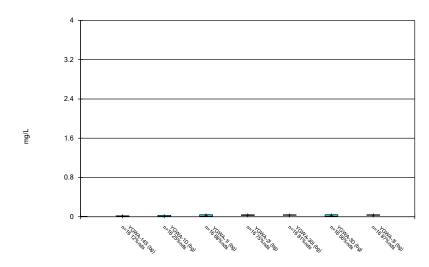
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/10/2021 3:46 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

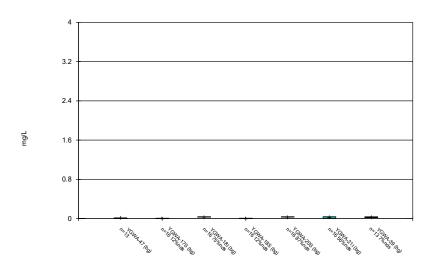
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/10/2021 3:46 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

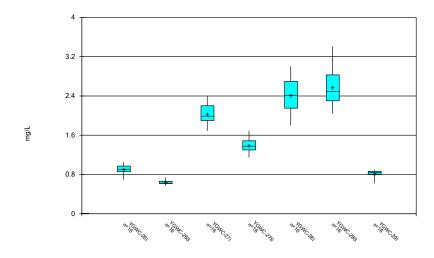
Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Boron Analysis Run 5/10/2021 3:46 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

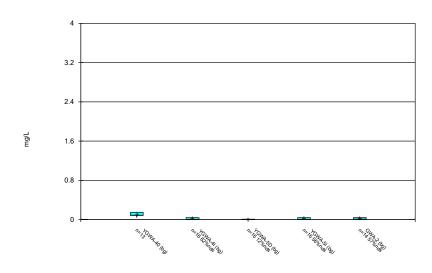
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

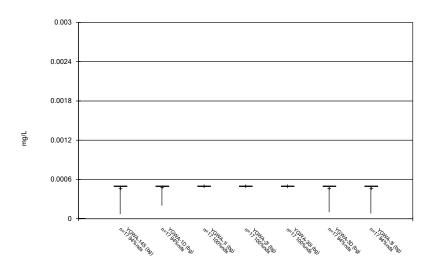
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

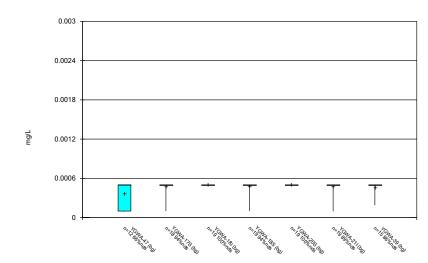
Box & Whiskers Plot



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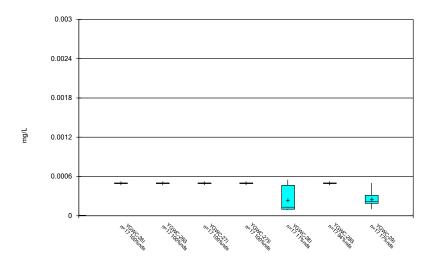
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Box & Whiskers Plot



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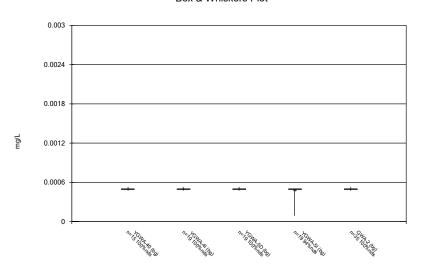
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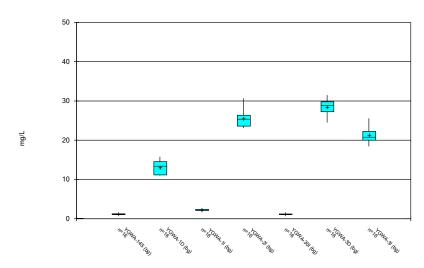
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Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



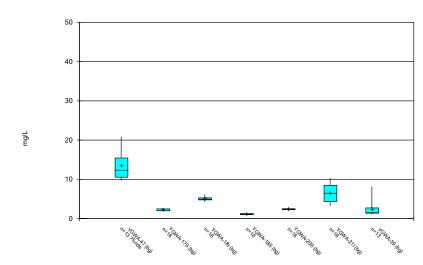
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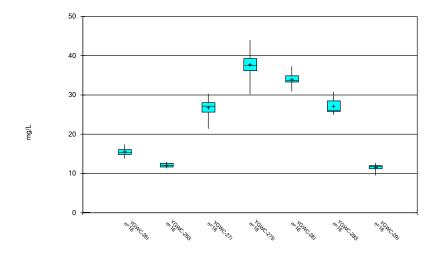
Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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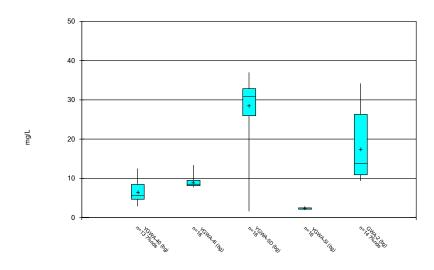
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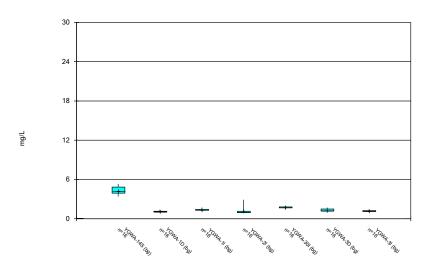
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Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



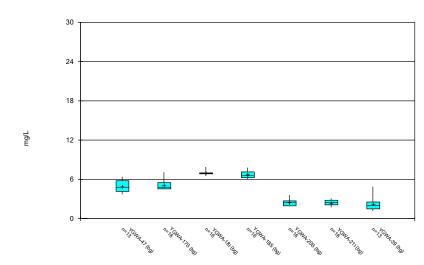
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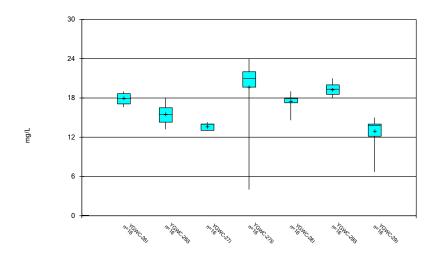
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Box & Whiskers Plot



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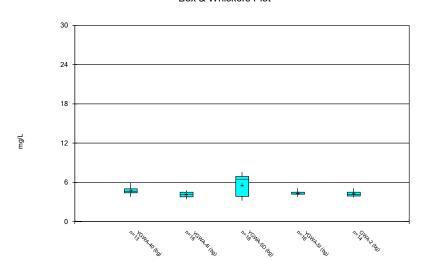
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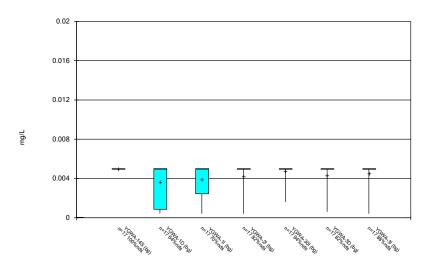
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Box & Whiskers Plot



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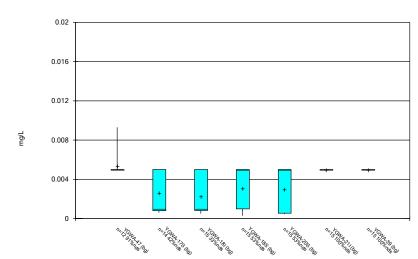
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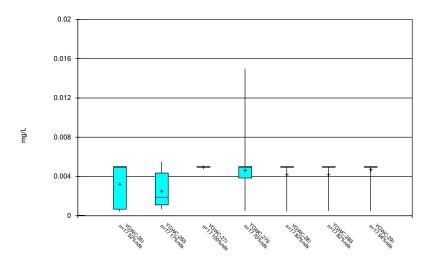
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Box & Whiskers Plot



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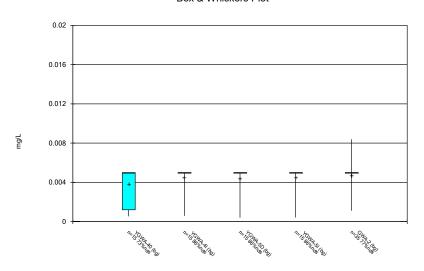
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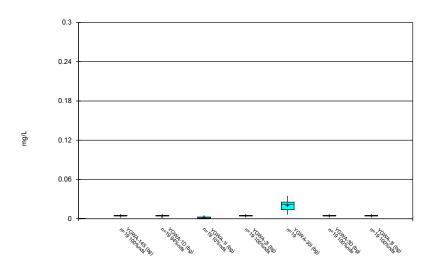
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Box & Whiskers Plot



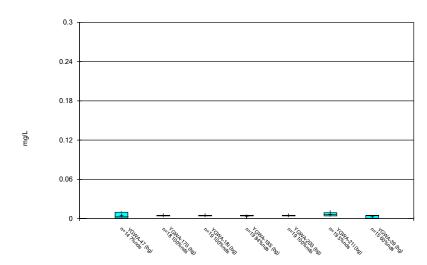
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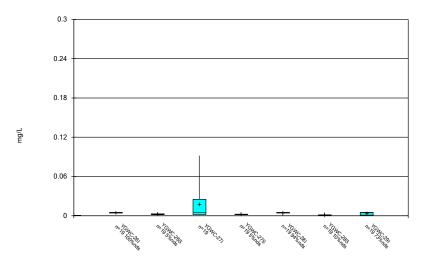
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Box & Whiskers Plot



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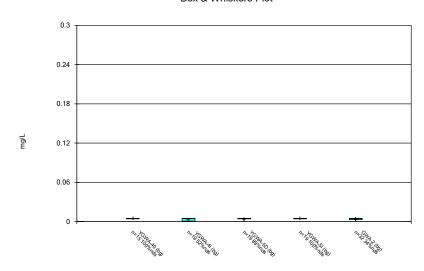
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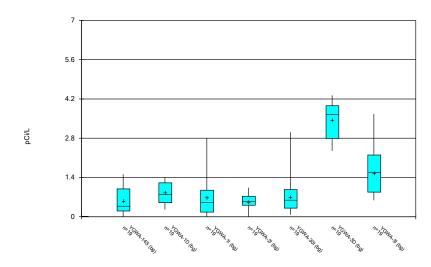
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Box & Whiskers Plot



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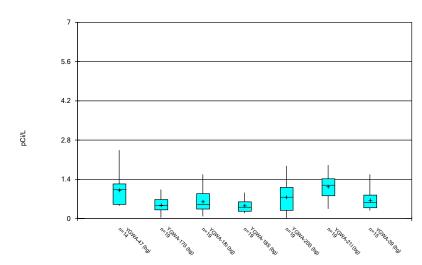
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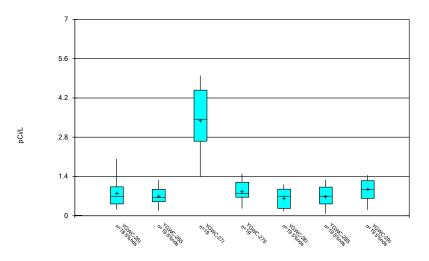
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Box & Whiskers Plot



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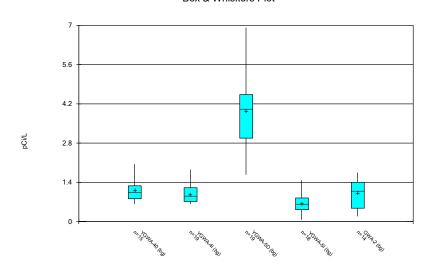
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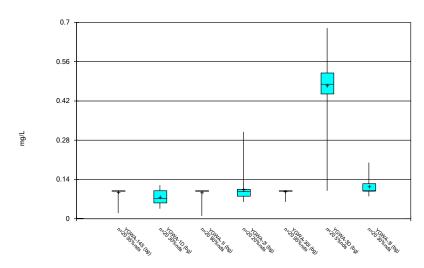
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Box & Whiskers Plot



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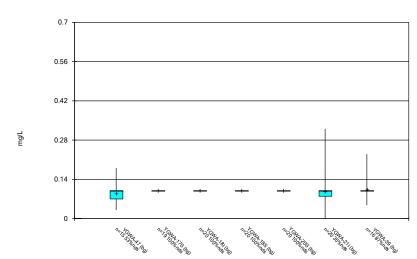
Box & Whiskers Plot



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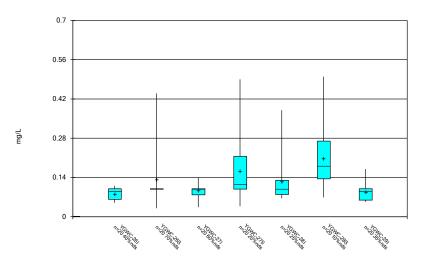
Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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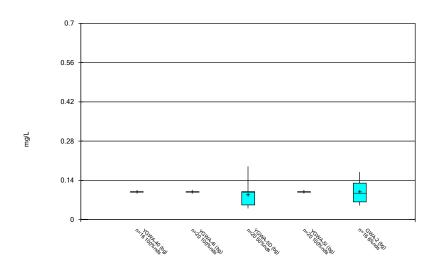
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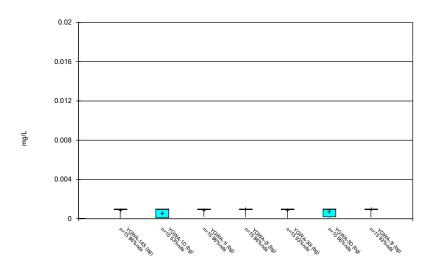
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Box & Whiskers Plot



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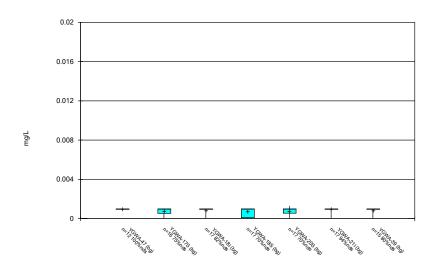
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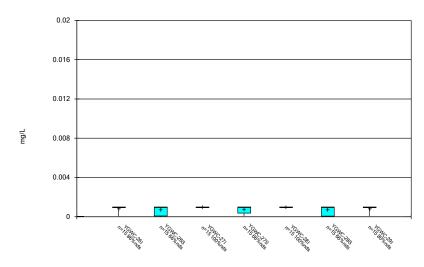
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Box & Whiskers Plot



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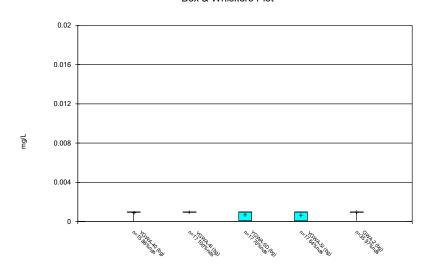
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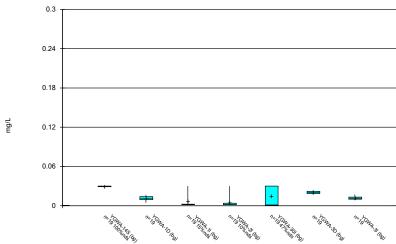
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Box & Whiskers Plot



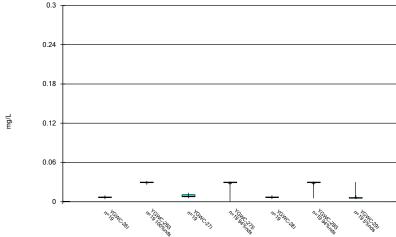
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Box & Whiskers Plot



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0.3 -----

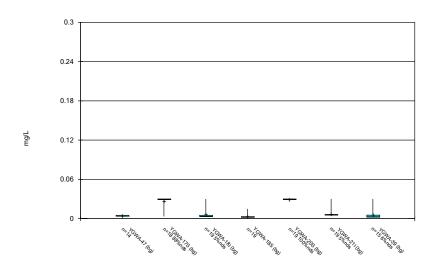


Box & Whiskers Plot

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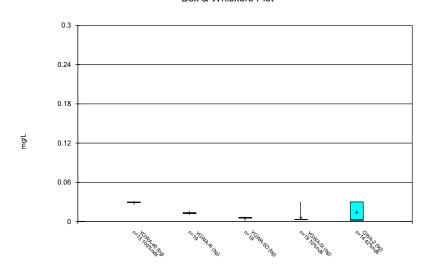
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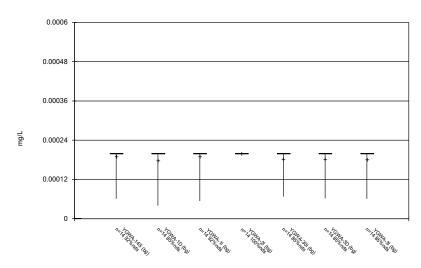
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Box & Whiskers Plot



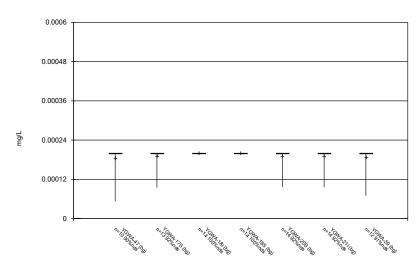
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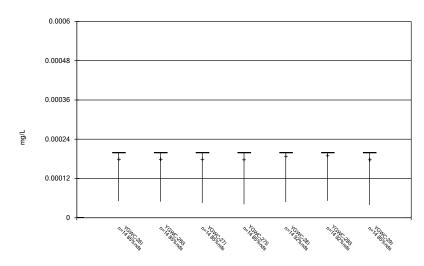
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Box & Whiskers Plot



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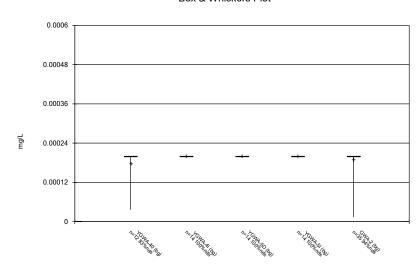
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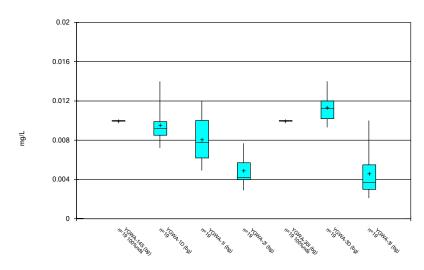
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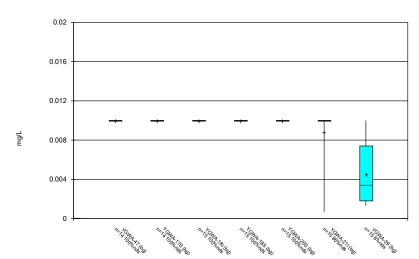
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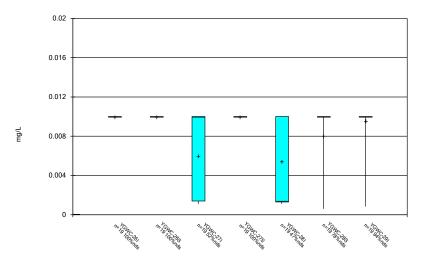
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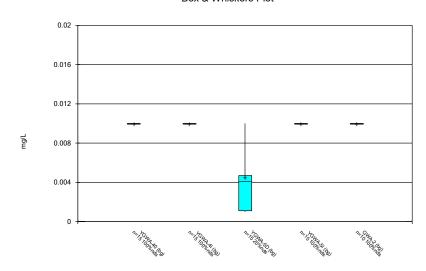
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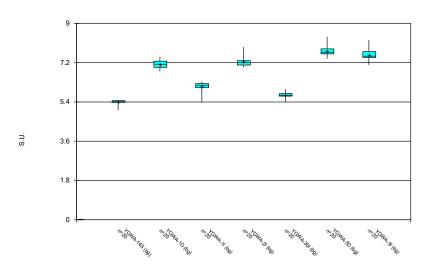
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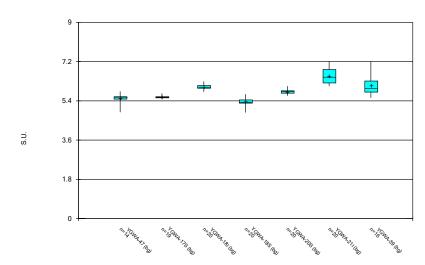
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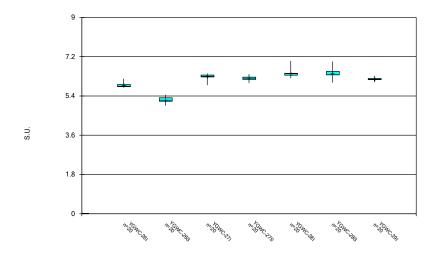
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Box & Whiskers Plot



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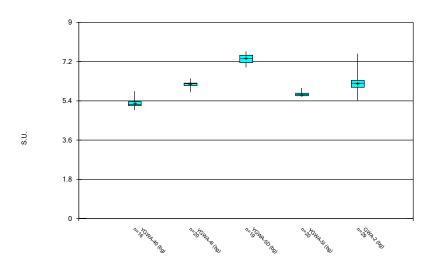
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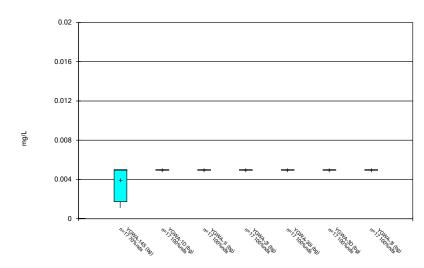
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Box & Whiskers Plot



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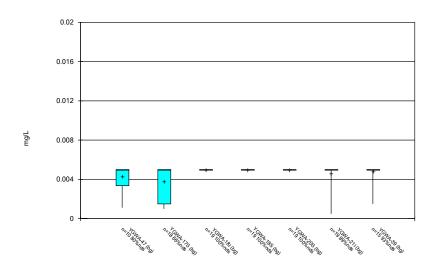
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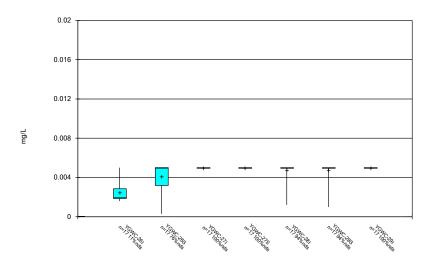
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Box & Whiskers Plot



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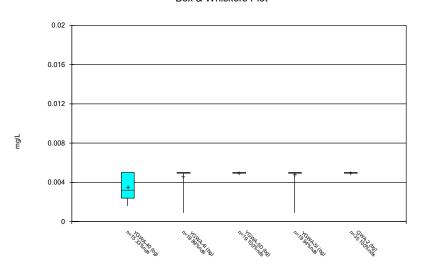
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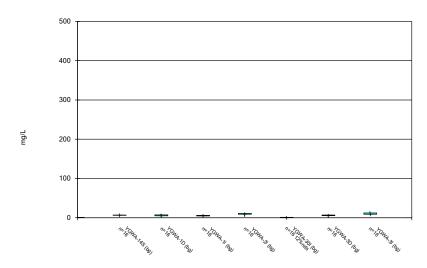
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Box & Whiskers Plot



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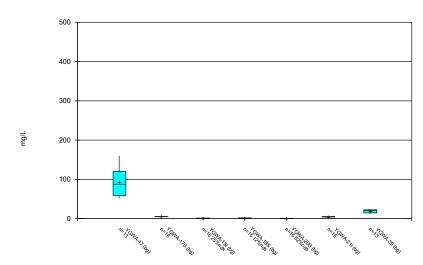
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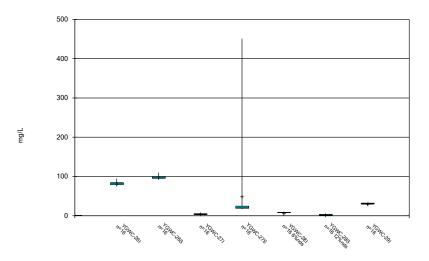
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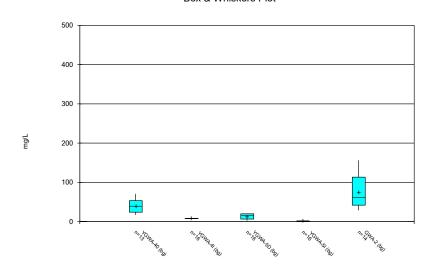
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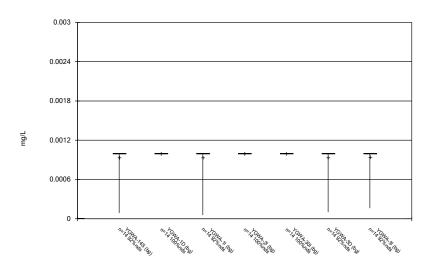
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Box & Whiskers Plot



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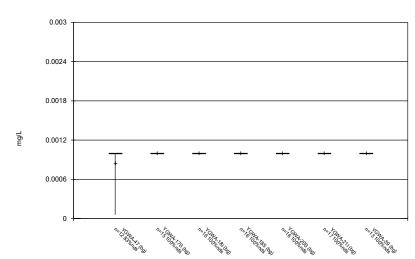
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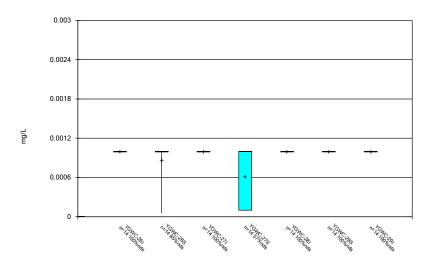
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Box & Whiskers Plot



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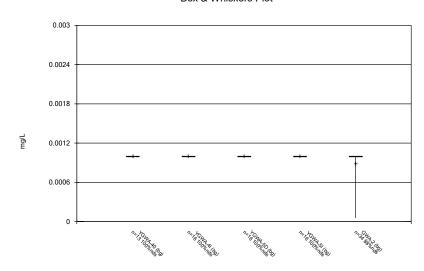
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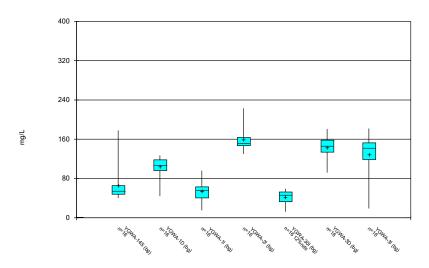
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Box & Whiskers Plot



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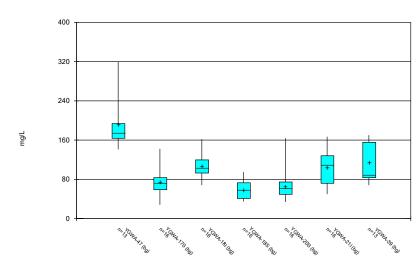
Box & Whiskers Plot



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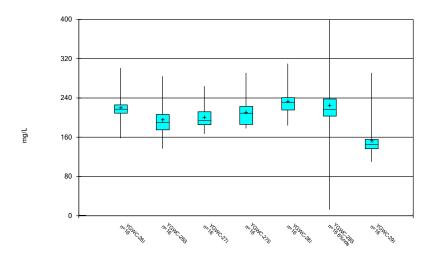
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Box & Whiskers Plot



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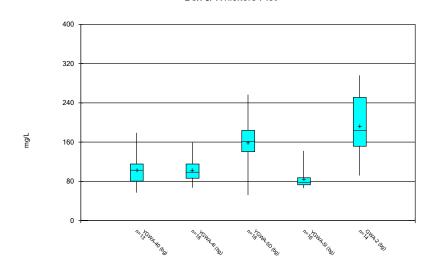
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/10/2021 3:46 PM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

## FIGURE C.

# Outlier Summary Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/10/2021, 3:48 PM GWA-2 Cobalt (mg/L) YGWC-26l Combined Radium 226 + 228 (pCi/L) YGWA-47 pH (S.U.) 6/8/2016 6.68 (o) 4/2/2018 6.3 (o) 8/26/2020 0.2 (O) 9/22/2020 0.16 (O) 3/2/2021 0.21 (O)

### FIGURE D.

#### Appendix III Interwell Prediction Limits - Significant Results

		Plant Yate	s Client: S	Southern Co	mpany Da	ita: Yates As	sh Pond 2	Printed 5/10/2	2021, 3:51 PM			
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig. Bg N	Bg Mean	Std. Dev.	%NDs ND Adj.	Transforr	n <u>Alpha</u>	Method
Boron (mg/L)	YGWC-26I	0.16	n/a	3/3/2021	0.69	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-26S	0.16	n/a	3/2/2021	0.57	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-27I	0.16	n/a	3/3/2021	2	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-27S	0.16	n/a	3/3/2021	1.2	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-28I	0.16	n/a	3/3/2021	1.8	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-28S	0.16	n/a	3/3/2021	2.3	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-29I	0.16	n/a	3/3/2021	0.62	Yes 293	n/a	n/a	45.73 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-26I	7.9	n/a	3/3/2021	16.6	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-26S	7.9	n/a	3/2/2021	13.2	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-27I	7.9	n/a	3/3/2021	13	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-28I	7.9	n/a	3/3/2021	14.6	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-28S	7.9	n/a	3/3/2021	18	Yes 293	n/a	n/a	0 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-27S	160	n/a	3/3/2021	451	Yes 293	n/a	n/a	6.143 n/a	n/a	0.00004918	NP Inter (normality) 1 of 2

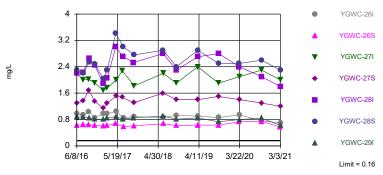
#### Appendix III Interwell Prediction Limits - All Results

Data: Yates Ash Pond 2 Printed 5/10/2021, 3:51 PM Client: Southern Company Constituent <u>Well</u> Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. Lower Lim. Date Observ. Method YGWC-26I Yes 293 Boron (mg/L) 0.16 3/3/2021 0.69 n/a 45.73 n/a 0.00004918 NP Inter (normality) 1 of 2 n/a n/a n/a Boron (mg/L) YGWC-26S 0.16 n/a 3/2/2021 0.57 Yes 293 n/a n/a 45.73 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Boron (mg/L) YGWC-27I 0.16 n/a 3/3/2021 2 Yes 293 n/a 45.73 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Boron (mg/L) YGWC-27S 0.16 n/a 3/3/2021 1.2 Yes 293 n/a n/a 45.73 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Boron (mg/L) YGWC-28I 0.16 n/a 3/3/2021 293 n/a 45.73 n/a 0.00004918 NP Inter (normality) 1 of 2 YGWC-28S 3/3/2021 2.3 Yes 293 n/a 0.00004918 NP Inter (normality) 1 of 2 Boron (mg/L) 0.16 n/a n/a 45.73 n/a n/a YGWC-29I 3/3/2021 0.00004918 Boron (mg/L) 0.16 0.62 293 45.73 n/a n/a NP Inter (normality) 1 of 2 Calcium (mg/L) YGWC-26I 3/3/2021 NP Inter (normality) 1 of 2 37 16.1 293 1.024 n/a n/a 0.00004918 n/a No n/a n/a 1.024 n/a Calcium (mg/L) YGWC-26S 37 3/2/2021 12.9 293 0.00004918 NP Inter (normality) 1 of 2 n/a No n/a n/a Calcium (mg/L) YGWC-27I 37 3/3/2021 25.7 No 293 n/a n/a 1.024 n/a 0.00004918 NP Inter (normality) 1 of 2 n/a Calcium (mg/L) YGWC-27S 37 n/a 3/3/2021 30.2 Nο 293 n/a n/a 1 024 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Calcium (mg/L) YGWC-28I 37 n/a 3/3/2021 30.9 No 293 n/a n/a 1.024 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 NP Inter (normality) 1 of 2 Calcium (mg/L) YGWC-28S 37 n/a 3/3/2021 28.4 Nο 293 n/a n/a 1.024 n/a n/a 0.00004918 Calcium (mg/L) YGWC-29I 37 3/3/2021 9.5 293 1.024 0.00004918 NP Inter (normality) 1 of 2 NP Inter (normality) 1 of 2 YGWC-26I 3/3/2021 0.00004918 Chloride (mg/L) 7.9 n/a 16.6 Yes 293 n/a n/a 0 n/a n/a Chloride (mg/L) YGWC-26S 3/2/2021 13.2 0 0.00004918 NP Inter (normality) 1 of 2 7.9 n/a Yes 293 n/a n/a n/a n/a Chloride (mg/L) YGWC-27I 3/3/2021 13 0 n/a 0.00004918 NP Inter (normality) 1 of 2 7.9 n/a Yes 293 n/a n/a n/a Chloride (mg/L) YGWC-27S 3/3/2021 4 0 0.00004918 NP Inter (normality) 1 of 2 7.9 293 n/a n/a Chloride (mg/L) YGWC-28I 7.9 3/3/2021 14.6 0 n/a 0.00004918 NP Inter (normality) 1 of 2 n/a Yes 293 n/a n/a n/a Chloride (mg/L) YGWC-28S 7.9 n/a 3/3/2021 18 Yes 293 n/a 0 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Chloride (mg/L) YGWC-29I 7.9 n/a 3/3/2021 6.7 No 293 n/a n/a 0 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Fluoride (mg/L) YGWC-26I 0.68 n/a 3/3/2021 0.05JNo 362 n/a n/a 68.51 n/a n/a 0.00004918 NP Inter (NDs) 1 of 2 Fluoride (mg/L) YGWC-26S 0.68 n/a 3/2/2021 0.1ND No 362 68.51 0.00004918 NP Inter (NDs) 1 of 2 Fluoride (mg/L) YGWC-27I 0.68 n/a 3/3/2021 0.058J No 362 n/a n/a 68.51 n/a n/a 0.00004918 NP Inter (NDs) 1 of 2 Fluoride (mg/L) YGWC-27S 0.68 n/a 3/3/2021 0.1ND No 362 n/a 68.51 n/a n/a 0.00004918 NP Inter (NDs) 1 of 2 Fluoride (mg/L) YGWC-28I 3/3/2021 0.072J 0.00004918 NP Inter (NDs) 1 of 2 0.68 362 n/a 68.51 n/a n/a n/a No n/a 362 Fluoride (mg/L) YGWC-28S 0.68 3/3/2021 0.13 68.51 0.00004918 NP Inter (NDs) 1 of 2 No n/a Fluoride (mg/L) YGWC-29I 0.68 3/3/2021 0.056J No 362 n/a 68.51 n/a n/a 0.00004918 NP Inter (NDs) 1 of 2 n/a n/a pH (S.U.) YGWC-26I 8.39 4.86 3/3/2021 5.93 No 373 n/a n/a 0 n/a n/a 0.00009836 NP Inter (normality) 1 of 2 pH (S.U.) YGWC-26S 8.39 4.86 3/2/2021 5.38 No 373 n/a 0 n/a n/a 0.00009836 NP Inter (normality) 1 of 2 n/a pH (S.U.) YGWC-27I 8.39 4.86 3/3/2021 6.43 No 373 n/a n/a 0 n/a n/a 0.00009836 NP Inter (normality) 1 of 2 pH (S.U.) YGWC-27S 3/3/2021 6.35 No n/a 0 n/a 0.00009836 NP Inter (normality) 1 of 2 YGWC-28I 3/3/2021 0 0.00009836 NP Inter (normality) 1 of 2 pH (S.U.) 8.39 4.86 6.51 No 373 n/a n/a n/a n/a pH (S.U.) YGWC-28S 4.86 3/3/2021 6.61 0 n/a n/a 0.00009836 NP Inter (normality) 1 of 2 8.39 No 373 n/a n/a YGWC-29I 3/3/2021 6.27 0 pH (S.U.) 8.39 4.86 No 373 n/a n/a n/a n/a 0.00009836 NP Inter (normality) 1 of 2 0.00004918 Sulfate (mg/L) YGWC-26I 160 3/3/2021 89.3 No 293 6.143 n/a n/a NP Inter (normality) 1 of 2 Sulfate (mg/L) YGWC-26S 160 3/2/2021 92.7 293 6.143 0.00004918 NP Inter (normality) 1 of 2 n/a No n/a n/a n/a 293 Sulfate (mg/L) YGWC-27I 160 n/a 3/3/2021 2.6 No n/a n/a 6.143 n/a n/a 0.00004918 NP Inter (normality) 1 of 2 Sulfate (mg/L) YGWC-27S 160 3/3/2021 451 Yes 6.143 0.00004918 NP Inter (normality) 1 of 2 n/a n/a n/a n/a n/a NP Inter (normality) 1 of 2 Sulfate (mg/L) YGWC-28I 160 n/a 3/3/2021 8.6 No 293 n/a n/a 6.143 n/a n/a 0.00004918 Sulfate (mg/L) YGWC-28S 160 3/3/2021 n/a 6.143 n/a 0.00004918 NP Inter (normality) 1 of 2 n/a No NP Inter (normality) 1 of 2 YGWC-29I 0.00004918 Sulfate (mg/L) 160 n/a 3/3/2021 26.6 Nο 293 n/a n/a 6.143 n/a n/a YGWC-26I 3/3/2021 205 2.574 0.6826 None 0.001075 Param Inter 1 of 2 Total Dissolved Solids (mg/L) 218.8 n/a No 293 10.01 sqrt(x) Total Dissolved Solids (mg/L) YGWC-26S 218.8 3/2/2021 154 293 10.01 2.574 0.6826 None sqrt(x) 0.001075 Param Inter 1 of 2 n/a No Total Dissolved Solids (mg/L) 3/3/2021 10.01 0.6826 None 0.001075 Param Inter 1 of 2 YGWC-27I 218.8 173 No 293 2.574 sqrt(x) Total Dissolved Solids (mg/L) 2.574 YGWC-27S 218.8 3/3/2021 178 293 10.01 0.6826 None 0.001075 Param Inter 1 of 2 n/a No sqrt(x) Total Dissolved Solids (mg/L) YGWC-28I 218.8 n/a 3/3/2021 184 No 293 10.01 2.574 0.6826 None sqrt(x) 0.001075 Param Inter 1 of 2 Total Dissolved Solids (mg/L) YGWC-28S 218.8 n/a 3/3/2021 217 No 10.01 2.574 0.6826 None sqrt(x) 0.001075 Param Inter 1 of 2 Total Dissolved Solids (mg/L) 3/3/2021 10.01 2 574 Param Inter 1 of 2 YGWC-29I 218.8 n/a 110 Nο 293 0.6826 None sqrt(x) 0.001075

Exceeds Limit: YGWC-26I, YGWC-26S, YGWC-27I, YGWC-27S, YGWC-28I, YGWC-28S, YGWC-29I

#### Prediction Limit

Interwell Non-parametric



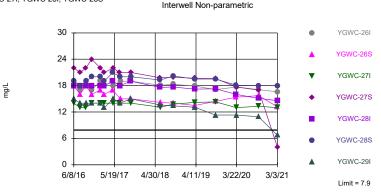
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 293 background values. 45.73% NDs. Annual perconstituent alpha = 0.0006883. Individual comparison alpha = 0.00004918 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 5/10/2021 3:49 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Exceeds Limit: YGWC-26I, YGWC-26S, YGWC-27I, YGWC-28I, YGWC-28S

#### Prediction Limit

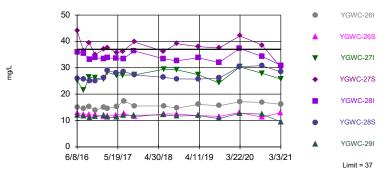


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 293 background values. Annual per-constituent alpha = 0.0006883. Individual comparison alpha = 0.00004918 (1 of 2). Comparing 7 points to limit.

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

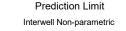
#### Prediction Limit Interwell Non-parametric

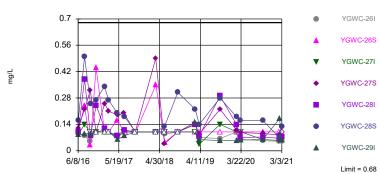


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 293 background values. 1.024% NDs. Annual perconstituent alpha = 0.0006883. Individual comparison alpha = 0.00004918 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium Analysis Run 5/10/2021 3:49 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values. Within Limit

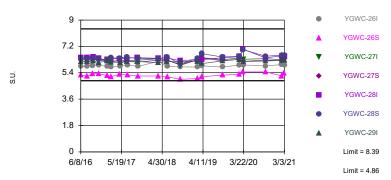




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 362 background values. 68.51% NDs. Annual per-constituent alpha = 0.0006883. Individual comparison alpha = 0.0004918 (1 of 2). Comparing 7 points to limit.

Sanitas™ v.9.6.28 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 373 background values. Annual perconstituent alpha = 0.001377. Individual comparison alpha = 0.00009836 (1 of 2). Comparing 7 points to limit.

Constituent: pH Analysis Run 5/10/2021 3:49 PM View: Appendix III

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values. Within Limit

# Prediction Limit Interwell Parametric 400 YGWC-26I YGWC-26S YGWC-27I YGWC-27S YGWC-27S YGWC-28S YGWC-28S YGWC-28S YGWC-28I

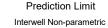
Background Data Summary (based on square root transformation): Mean=10.01, Std. Dev.=2.574, n=293, 0.6826% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.97, critical = 14.07. Kappa = 1.859 (c=7, w=7, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

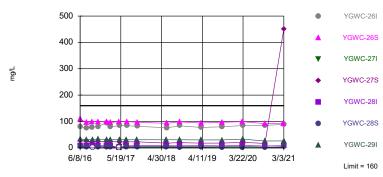
Limit = 218.8

Constituent: Total Dissolved Solids Analysis Run 5/10/2021 3:49 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Exceeds Limit: YGWC-27S





Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 293 background values. 6.143% NDs. Annual perconstituent alpha = 0.0006883. Individual comparison alpha = 0.00004918 (1 of 2). Comparing 7 points to limit.

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
6/1/2016	<0.04	<0.04	<0.04						
6/2/2016				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
6/6/2016									
6/7/2016									
6/8/2016									
6/9/2016									
7/25/2016	<0.04	<0.04						<0.04	
7/26/2016			0.0055 (J)	0.0097 (J)	0.0052 (J)	<0.04	0.0047 (J)		0.0177 (J)
7/27/2016									
7/28/2016									
8/1/2016									
8/2/2016									
8/30/2016									
8/31/2016									
9/13/2016		<0.04	<0.04						
9/14/2016	<0.04				0.0071 (J)	0.01 (J)	<0.04		
9/15/2016	10.04			0.0102 (J)	0.0071 (0)	0.01 (0)	10.04		0.0214 (J)
9/16/2016				0.0102 (3)					0.0214 (3)
								<b>-0.04</b>	
9/19/2016								<0.04	
9/20/2016									
9/21/2016									
11/1/2016	<0.04		0.0086 (J)	<0.04				<0.04	
11/2/2016					<0.04		<0.04		<0.04
11/3/2016									
11/4/2016		<0.04				<0.04			
11/7/2016									
11/8/2016									
11/14/2016									
11/28/2016									
12/15/2016									
1/10/2017									0.0198 (J)
1/11/2017	<0.04		0.0074 (J)	<0.04					
1/12/2017					0.0076 (J)	<0.04			
1/13/2017							<0.04		
1/16/2017		<0.04						<0.04	
1/18/2017									
1/19/2017									
2/21/2017								<0.04	
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017	<0.04								
3/2/2017		<0.04	0.008 (J)	0.0084 (J)					
3/3/2017		-	(-/	\-					
3/6/2017							<0.04		
3/7/2017					0.0089 (J)	<0.04			
3/8/2017					1.3000 (0)	2.0.			0.0189 (J)
4/26/2017	<0.04			<0.04					0.0169 (J)
4/27/2017	-0.04	<0.04	0.0066 (J)	-0.07				-0.04	0.0101 (0)
4/28/2017		~U.U <del>4</del>	0.0000 (3)						
					0.0061 ( !)		<0.04		
5/1/2017 5/2/2017					0.0061 (J)	<0.04	<0.04		
5/2/2017						<0.04			

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
5/3/2017									
5/5/2017									
5/8/2017									
5/26/2017									
6/27/2017		0.006 (J)	0.0087 (J)		0.0079 (J)	<0.04			
6/28/2017	<0.04	0.000 (0)	0.0007 (0)	<0.04	0.0070 (0)	0.01			
6/29/2017	10.04			10.04			<0.04		
							<0.04	.0.04	0.0470 ( 1)
6/30/2017								<0.04	0.0173 (J)
7/5/2017									
7/7/2017									
7/10/2017									
7/11/2017									
7/17/2017									
10/3/2017		0.0071 (J)	0.0072 (J)		0.0094 (J)	<0.04			
10/4/2017	<0.04			<0.04				<0.04	
10/5/2017							<0.04		0.0173 (J)
10/6/2017									( )
10/9/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
6/5/2018			0.0052 (J)						
6/6/2018		<0.04	(1)		0.0098 (J)				
6/7/2018				0.004 (J)	(0)	<0.04	0.0045 (J)		
6/8/2018	<0.04			0.004 (0)		-0.0-1	0.0040 (0)		0.013 (J)
6/11/2018	10.04							0.014 ( 1)	0.013 (0)
								0.014 (J)	
6/12/2018									
6/13/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018					0.01 (J)	0.0057 (J)	0.005 (J)		
10/1/2018	<0.04	0.0049 (J)	0.021 (J)	<0.04					0.015 (J)
10/2/2018								<0.04	
10/3/2018									
2/25/2019									
3/26/2019									
3/27/2019									
		<0.04	0.005 ( !)						
3/28/2019		<0.04	0.005 (J)						0.01471)
3/29/2019	0.04								0.014 (J)
4/1/2019	<0.04			<0.04				<0.04	

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
4/2/2019									
4/3/2019					0.0076 (J)	0.0044 (J)	0.0055 (J)		
6/12/2019									
9/24/2019		0.0055 (J)	0.0064 (J)		0.01 (J)	0.0049 (J)			
9/25/2019	<0.04			0.0054 (J)			<0.04	<0.04	0.018 (J)
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		0.0087 (J)							0.02 (J)
3/19/2020	0.0053 (J)		0.0085 (J)	0.0073 (J)				0.0052 (J)	
3/20/2020									
3/24/2020					0.011 (J)	0.0068 (J)			
3/25/2020							0.011 (J)		
9/22/2020					0.0079 (J)	0.0053 (J)	<0.04		
9/23/2020	0.0073 (J)	<0.04	<0.04	0.012 (J)					
9/24/2020								0.0075 (J)	
9/25/2020									0.02 (J)
3/1/2021								<0.04	
3/2/2021					0.0068 (J)	0.011 (J)			0.017 (J)
3/3/2021	<0.04	<0.04	<0.04	<0.04			0.0056 (J)		
3/4/2021									

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016									
6/2/2016									
6/6/2016	<0.04	<0.04							
6/7/2016			<0.04	<0.04	<0.04				
6/8/2016			0.01	0.01	0.01	1.3	0.97	0.62	2.2
6/9/2016						1.5	0.37	0.02	2.2
7/25/2016									
7/26/2016									
7/27/2016	0.0059 (J)	<0.04	<0.04	0.008 (J)	.004				
7/28/2016					<0.04				
8/1/2016						1.36	0.932	0.643	2
8/2/2016									
8/30/2016									
8/31/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	0.0079 (J)			0.0086 (J)					
9/19/2016		<0.04	<0.04		<0.04				
9/20/2016						1.69	1.04	0.644	2.02
9/21/2016									
11/1/2016									
11/2/2016			<0.04						
11/3/2016	0.0082 (J)	<0.04		0.0077 (J)	<0.04				
11/4/2016									
11/7/2016						1.35	0.852	0.621	1.91
11/8/2016									
11/14/2016									
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017	0.0096 (J)	<0.04		0.0092 (J)					
1/12/2017									
1/13/2017			<0.04		<0.04				
1/16/2017									
1/18/2017							0.972	0.607	1.69
1/19/2017						1.15			
2/21/2017							0.972	0.624	
2/22/2017						1.3			
2/23/2017									1.76
2/24/2017									
3/1/2017	<0.04	<0.04							
3/2/2017				0.0095 (J)					
3/3/2017									
3/6/2017			<0.04		<0.04				
3/7/2017									
3/8/2017									
4/26/2017	0.0091 (J)	<0.04	<0.04		<0.04				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				<0.04					

	YGWA-18	S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
5/3/2017									0.676	
5/5/2017										
5/8/2017							1.51	1.05		2
5/26/2017										
6/27/2017										
6/28/2017	0.0079 (J)		<0.04							
6/29/2017				<0.04	0.0074 (J)	<0.04				
6/30/2017							1.47			2.28
7/5/2017										
7/7/2017										
7/10/2017								0.855	0.58	
7/11/2017								0.000	0.00	
7/17/2017										
						-0.04				
10/3/2017						<0.04				
10/4/2017				<0.04	0.0077 (J)					
10/5/2017			<0.04							
10/6/2017							1.31			
10/9/2017										1.82
10/10/2017								0.887	0.612	
10/11/2017	7									
10/12/2017	7									
10/16/2017	7									
11/20/2017	7									
1/10/2018										
1/11/2018										
2/19/2018										
2/20/2018										
4/2/2018										
4/3/2018										
6/5/2018						0.0092 (J)				
6/6/2018				0.0049 (J)		( )				
6/7/2018			<0.04	( )						
6/8/2018										
6/11/2018	0.0093 (J)				0.01 (J)					
6/12/2018					0.01 (0)		1.6			
6/13/2018							1.0	0.86	0.67	2.2
6/28/2018								0.80	0.07	2.2
8/6/2018										
8/7/2018										
9/19/2018										
9/24/2018										
9/25/2018			0.0046 (J)	<0.04	0.0096 (J)	0.0054 (J)				
9/26/2018										
10/1/2018										
10/2/2018							1.4	0.93	0.62	1.9
10/3/2018										
2/25/2019										
3/26/2019										
3/27/2019										
3/28/2019										
3/29/2019										
4/1/2019							1.4			2.4

4/2/2019	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg) 0.0066 (J)	YGWA-21I (bg) 0.011 (J)	YGWC-27S	YGWC-26I 0.9	YGWC-26S 0.63	YGWC-27I
4/3/2019	0.0053 (J)	<0.04	<0.04		(5)				
6/12/2019									
9/24/2019					0.018 (J)				
9/25/2019			<0.04	0.0081 (J)			0.86	0.63	
9/26/2019	0.0072 (J)	0.0062 (J)				1.5			1.9
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020									
3/19/2020								0.73	
3/20/2020						1.4	0.94		2.1
3/24/2020	0.01 (J)	0.0054 (J)	<0.04	0.0092 (J)	0.016 (J)				
3/25/2020									
9/22/2020									
9/23/2020	0.006 (J)	0.021 (J)	0.000470	0.0066 (J)	0.040 (1)	1.0	0.70	0.74	0.0
9/24/2020			0.0094 (J)		0.013 (J)	1.3	0.76	0.74	2.3
9/25/2020 3/1/2021									
3/2/2021								0.57	
3/3/2021	0.0094 (J)	<0.04	<0.04	0.01 (J)		1.2	0.69	0.07	2
3/4/2021	0.0054 (5)	TO.07	70.07	0.01 (0)	0.0079 (J)	1.2	0.03		<b>2</b>
0/-1/2021					0.0070 (0)				

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016								
6/2/2016								
6/6/2016								
6/7/2016								
6/8/2016								
6/9/2016	2.3	2.2	0.88					
7/25/2016								
7/26/2016								
7/27/2016								
7/28/2016								
8/1/2016								
8/2/2016	2.21	2.22	0.872					
8/30/2016				0.0166 (J)				
8/31/2016				(,,	0.0315 (J)			
9/13/2016					(0)			
9/14/2016						<0.04		
9/15/2016						0.01		
9/16/2016								
9/19/2016								
9/20/2016								
9/21/2016	2.54	2.65	0.853					
11/1/2016	2.0 .	2.00	0.000					
11/2/2016								
11/3/2016								
11/4/2016						<0.04		
11/7/2016	2.49		0.815			-0.04		
11/8/2016	2.43	2.44	0.010					
11/14/2016		2.77		0.0166 (J)				
11/28/2016				0.0100 (0)	0.0095 (J)			
12/15/2016					0.0000 (0)	0.0107 (J)		
1/10/2017						0.0107 (0)		
1/11/2017								
1/12/2017								
1/13/2017								
1/16/2017						<0.04		
1/18/2017	2.04	1.88						
1/19/2017			0.803					
2/21/2017	2.29							
2/22/2017		2.05	0.855		<0.04			
2/23/2017								
2/24/2017				0.0145 (J)				
3/1/2017				0.01.10 (0)				
3/2/2017								
3/3/2017						<0.04		
3/6/2017						-0.04		
3/7/2017								
3/8/2017								
4/26/2017								
4/27/2017								
4/28/2017						<0.04		
5/1/2017								
5/2/2017								

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
5/3/2017								
5/5/2017	3.41	3.01						
5/8/2017			0.884	0.0141 (J)	0.0084 (J)			
5/26/2017				(-)	(-,	<0.04		
6/27/2017								
6/28/2017						<0.04		
6/29/2017						-0.04		
6/30/2017								
		2.7	0.011					
7/5/2017	2.01	2.7	0.811					
7/7/2017	3.01							
7/10/2017				0.0404 (1)				
7/11/2017				0.0131 (J)	0.0000 (1)			
7/17/2017					0.0092 (J)			
10/3/2017						<0.04		
10/4/2017								
10/5/2017		2.53	0.851					
10/6/2017								
10/9/2017	2.76							
10/10/2017				0.0124 (J)				
10/11/2017							0.0135 (J)	
10/12/2017								0.0401
10/16/2017					<0.04			
11/20/2017							0.0251 (J)	0.156
1/10/2018								0.15
1/11/2018							0.0255 (J)	
2/19/2018					<0.04			0.146
2/20/2018							<0.04	
4/2/2018				0.013 (J)				
4/3/2018							0.033 (J)	0.12
6/5/2018								
6/6/2018								
6/7/2018						<0.04		
6/8/2018								
6/11/2018			0.9					
6/12/2018	2.9	2.8						
6/13/2018								
6/28/2018							0.053	0.16
8/6/2018					<0.04			
8/7/2018							0.024 (J)	0.12
9/19/2018				0.012 (J)			0.02 (0)	2
9/24/2018				0.012 (0)			0.028 (J)	0.099
9/25/2018							0.020 (3)	0.000
9/26/2018								
						<0.04		
10/1/2018			0.01			<0.04		
10/2/2018	2.4		0.81					
10/3/2018	2.4	2.3			-0.04			
2/25/2019					<0.04			0.000
3/26/2019				0.040 ( 1)			0.017 (1)	0.096
3/27/2019				0.013 (J)			0.017 (J)	
3/28/2019								
3/29/2019						0.0065 (J)		
4/1/2019		2.7	0.85					

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
4/2/2019	2.9							
4/3/2019								
6/12/2019					<0.04			
9/24/2019						0.0076 (J)		
9/25/2019			0.73					
9/26/2019	2.5	2.8						
10/8/2019				0.012 (J)	<0.04			
10/9/2019							0.017 (J)	0.079
3/17/2020				0.023 (J)	0.0051 (J)			
3/18/2020								
3/19/2020	2.5	2.4				0.0073 (J)		
3/20/2020			8.0					
3/24/2020								0.088 (J)
3/25/2020							0.043 (J)	
9/22/2020				0.0076 (J)	0.0079 (J)			
9/23/2020						<0.04		
9/24/2020	2.6	2.1	0.84				0.037 (J)	0.087 (J)
9/25/2020								
3/1/2021				0.013 (J)				
3/2/2021					<0.04			
3/3/2021	2.3	1.8	0.62			<0.04		
3/4/2021							0.033 (J)	0.078

6/1/2016	YGWA-3I (bg) 21	YGWA-1I (bg) 2.5	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
6/2/2016	21	2.5	12	28	33	2.4	8.8	1.3	1.3
6/6/2016				20	33	2.4	0.0	1.5	1.5
6/7/2016									
6/8/2016									
6/9/2016	00.0	0.10						4.47	
7/25/2016	20.3	2.16						1.17	
7/26/2016			11	24.5	32.3	2.12	7.69		1.24
7/27/2016									
7/28/2016									
8/1/2016									
8/2/2016									
8/30/2016									
8/31/2016									
9/13/2016		2.21	11.8						
9/14/2016	19.7				31	2.18	8.49		
9/15/2016				27					1.17
9/16/2016									
9/19/2016								1.05	
9/20/2016									
9/21/2016									
11/1/2016	18.4		11	25.6				1.14	
11/2/2016					30.9		7.83		1.23
11/3/2016									
11/4/2016		2.67				2.17 (J)			
11/7/2016									
11/8/2016									
11/14/2016									
11/28/2016									
12/15/2016									
1/10/2017									1.24
1/11/2017	20.3		11.2	27.5					
1/12/2017					35.7	2.37			
1/13/2017							8.08		
1/16/2017		2.45						1.23	
1/18/2017									
1/19/2017									
2/21/2017								1.25	
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017	18.6								
3/2/2017		2.57	11	27.5					
3/3/2017									
3/6/2017							8.64		
3/7/2017					32.7	2.34			
3/8/2017									1.21
4/26/2017	25.6			30.4				1.03	1.14
4/27/2017		2.38	11.1						
4/28/2017									
5/1/2017					37		13.4		
5/2/2017						2.17	-		

	YGWA-3I (bg)	VC/M/A 11 (b~)	YGWA-1D (bg)	VCM(A 3D (b=)	VOMA ED (ba)	VC\\\\ EL \(\begin{array}{c} \cdot \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	VC\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	YGWA-30I (bg)	VOWA 140 (ha)
F/2/2017	rGWA-3i (bg)	YGWA-1I (bg)	rGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-301 (bg)	YGWA-14S (bg)
5/3/2017									
5/5/2017									
5/8/2017									
5/26/2017									
6/27/2017		2.36	13.8		36.5	2.13			
6/28/2017	23.9			29.8					
6/29/2017							8.81		
6/30/2017								1.13	1.24
7/5/2017									
7/7/2017									
7/10/2017									
7/11/2017									
7/17/2017									
10/3/2017		2.21	14		30.9	2.15			
	00.1	2.21	14	20.7	30.9	2.13		1.00	
10/4/2017	22.1			29.7				1.09	
10/5/2017							9.29		1.11
10/6/2017									
10/9/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
6/5/2018			15.2 (J)						
6/6/2018		2.3	(0)		26.2				
6/7/2018		2.0		29.1	20.2	2.3	8.2		
6/8/2018	21.0 ( 1)			29.1		2.3	0.2		11
	21.9 (J)							4.4	1.1
6/11/2018								1.1	
6/12/2018									
6/13/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018					25.8	2.3	9.5 (J)		
10/1/2018	19.7	1.8	15.1	26.9					0.99
10/2/2018								1.1	
10/3/2018									
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019		2.2	13.3 (J)						
3/29/2019			V.7						1.1
4/1/2019	20.4 (J)			30.1				1.3	
	\-/							-	

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
4/2/2019									
4/3/2019					24.7 (J)	2.8	8.4		
6/12/2019									
9/24/2019		2.3	15.8		25.8	2.5			
9/25/2019	22.4			29.5			9.5	1.1	1.1
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		2.1							1.1
3/19/2020	21.9		15	31.5				1.2	
3/20/2020									
3/24/2020					26.1	2.5			
3/25/2020							10.5		
9/22/2020					27.2	2.6	9.6		
9/23/2020	23.6	1.8	14.1	28.6					
9/24/2020								1.1	
9/25/2020									1.3
3/1/2021								1.2	
3/2/2021					1.6	2.6			1.2
3/3/2021	20.6	1.8	14.1	29.8			7.7		
3/4/2021									

		YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
(	6/1/2016									
(	6/2/2016									
	6/6/2016	1.4	6.2							
	6/7/2016			2.3	2.2	3.7				
	6/8/2016						44	15	13	25
	6/9/2016						••			20
	7/25/2016									
	7/26/2016									
		4.40	4.70	0.00	•					
	7/27/2016	1.19	4.73	2.08	2	0.15				
	7/28/2016					3.15				
	8/1/2016						36.3	14.5	12.2	21.4
	8/2/2016									
	8/30/2016									
	8/31/2016									
	9/13/2016									
	9/14/2016									
(	9/15/2016									
9	9/16/2016	1.5			1.97					
9	9/19/2016		4.76	1.97		3.17				
9	9/20/2016						39.5	15.3	12.2	26.3
9	9/21/2016									
	11/1/2016									
	11/2/2016			2.13						
	11/3/2016	1.31	5.25		1.99	3.4				
	11/4/2016									
	11/7/2016						34.9	13.8	12.1	26.1
	11/8/2016									
	11/14/2016									
	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									
	1/18/2017							15.1	11.5	25.6
	1/19/2017						37			
	2/21/2017							14.6	11.7	
	2/22/2017						37.6			
	2/23/2017									28.2
	2/24/2017									EU.E
	3/1/2017	1.26	5.37							
	3/2/2017	1.20	0.07		2.15					
	3/3/2017				2.10					
	3/6/2017			2.48		6.28				
	3/7/2017			2.30		5.20				
	3/8/2017									
	4/26/2017	1.05	4.28	2.3		6.65				
	4/27/2017 4/27/2017	1.00	7.20	۷.5		0.05				
	4/27/2017 4/28/2017									
	5/1/2017									
	5/1/2017 5/2/2017				1.95					
•	U1 E1 EU 1 I				1.55					

5/3/2017	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S 11.9	YGWC-27I
								11.5	
5/5/2017									
5/8/2017						35.7	15.2		27.2
5/26/2017									
6/27/2017									
6/28/2017	1.06	4.95							
6/29/2017			2.54	2.02	6.04				
6/30/2017						36.2			27.2
7/5/2017									
7/7/2017									
7/10/2017							17.4	12.7	
7/11/2017									
7/17/2017									
10/3/2017					8.28				
10/4/2017	1.1		2.25	2.03					
10/5/2017	***	5.28	2.20	2.00					
10/6/2017		3.20				39.8			
						39.6			27.2
10/9/2017							45.5		27.3
10/10/2017							15.5	11.4	
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
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	1.4			2.1		36.2			
6/13/2018						30.2	15.5	12.5	29.4
6/28/2018							15.5	12.5	29.4
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018	1	4.6	2.3	2.1	10.4 (J)				
9/26/2018									
10/1/2018									
10/2/2018						39.1	14.7	12.4 (J)	29.2
10/3/2018									
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019									
3/29/2019									
4/1/2019						38			27.4
- <del>-</del>						-			

4/2/2019	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg) 2.5	YGWA-21I (bg) 8.8	YGWC-27S	YGWC-26I 16.1 (J)	YGWC-26S 11.9 (J)	YGWC-27I
4/3/2019	1.2	5.3	2.9	2.5	0.0		16.1 (3)	11.9 (3)	
6/12/2019	1.2	0.0	2.0						
9/24/2019					7.7				
9/25/2019			2.4	2.6			15.6	11.6	
9/26/2019	1.1	4.9				37.5			24.2
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020									
3/19/2020								13	
3/20/2020					_	42.1	17.1		30.3
3/24/2020	1	5.3	2.6	2.7	6				
3/25/2020									
9/22/2020 9/23/2020	0.01 (1)	5.2		2.6					
9/24/2020	0.91 (J)	5.2	2.6	2.0	7.8	38.6	16.9	11.3	27.9
9/25/2020			2.0		7.0	30.0	10.5	11.5	27.3
3/1/2021									
3/2/2021								12.9	
3/3/2021	0.96 (J)	5.2	2.4	2.5		30.2	16.1		25.7
3/4/2021					8.7				

					,					
	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)		
6/1/2016										
6/2/2016										
6/6/2016										
6/7/2016										
6/8/2016										
6/9/2016	26	36	12							
7/25/2016										
7/26/2016										
7/27/2016										
7/28/2016										
8/1/2016										
8/2/2016	25.8	35.5	11.7							
8/30/2016				20.9						
8/31/2016					9.31					
9/13/2016										
9/14/2016						23.5				
9/15/2016										
9/16/2016										
9/19/2016										
9/20/2016										
9/21/2016	24.9	33.2	11.1							
11/1/2016										
11/2/2016										
11/3/2016										
11/4/2016						23.7				
11/7/2016	25.1		11.4							
11/8/2016		33.8								
11/14/2016				18.6						
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				
1/18/2017	26.1	33.4								
1/19/2017			12							
2/21/2017	29									
2/22/2017		33.8	11.2		10.4					
2/23/2017										
2/24/2017				16.1						
3/1/2017										
3/2/2017										
3/3/2017						25.1				
3/6/2017										
3/7/2017										
3/8/2017										
4/26/2017										
4/27/2017										
4/28/2017						30.7				
5/1/2017										
5/2/2017										

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
5/3/2017								
5/5/2017	28.1	33.5						
5/8/2017			11.2	14.6	14.2			
5/26/2017						26.2		
6/27/2017								
6/28/2017						26.1		
6/29/2017								
6/30/2017								
7/5/2017		33.4	11.9					
7/7/2017	28.6							
7/10/2017								
7/11/2017				14.3				
7/17/2017					14.1			
10/3/2017						26.7		
10/4/2017								
10/5/2017		36.4	12					
10/6/2017								
10/9/2017	27.3							
10/10/2017				12.1				
10/11/2017							2.74	
10/12/2017								2.9
10/16/2017					13.6			
11/20/2017							1.81	10.4
1/10/2018								10.2
1/11/2018							1.54	
2/19/2018					<25			<25
2/20/2018							1.71	
4/2/2018				<25				
4/3/2018							1.4	6.3
6/5/2018								
6/6/2018								
6/7/2018						25		
6/8/2018								
6/11/2018			12.1					
6/12/2018	26.4	33.4						
6/13/2018								
6/28/2018							1.4	6.7
8/6/2018					11.4 (J)			
8/7/2018							1.2	6.3
9/19/2018				11.1 (J)				
9/24/2018				. ,			1.1	5.7
9/25/2018								
9/26/2018								
10/1/2018						25		
10/2/2018			11.7 (J)					
10/3/2018	25.8	32.6	.,					
2/25/2019	-	-			12.7 (J)			
3/26/2019					V-7			5.6
3/27/2019				10.8 (J)			1.5	
3/28/2019				` '				
3/29/2019						23.5 (J)		
4/1/2019		33.8	11.9 (J)			` '		
			\-/					

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
4/2/2019	25.7							
4/3/2019								
6/12/2019					18.9			
9/24/2019						26.4		
9/25/2019			10.7					
9/26/2019	26.1	32						
10/8/2019				9.7	28.3			
10/9/2019							2.4	4.9
3/17/2020				14.8	24.3			
3/18/2020								
3/19/2020	30.4	37.3				27.4		
3/20/2020			12.7					
3/24/2020								4.8
3/25/2020							2.7	
9/22/2020				10.1	31			
9/23/2020						26.3		
9/24/2020	30.8	34.3	12.4				3.7	4.4
9/25/2020								
3/1/2021				10.3				
3/2/2021					34.2			
3/3/2021	28.4	30.9	9.5			25.6		
3/4/2021							8.2	4.6

		YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
6/1	/2016	1.3	1.6	1.3						
6/2	2/2016				1.4	7.2	4.3	3.7	1.9	4.1
6/6	5/2016									
6/7	//2016									
6/8	3/2016									
6/9	/2016									
7/2	5/2016	1.3	1.4						1.7	
7/2	6/2016			1.2	1.6	6.6	4.4	3.6		4
7/2	7/2016									
	8/2016									
8/1	/2016									
	2/2016									
	0/2016									
	1/2016									
	3/2016		1.3	1.1						
	4/2016	1.3				6.6	3.8	3.4		
	5/2016				1.5					4.2
	6/2016									
	9/2016								1.6	
	0/2016									
	1/2016									
	/1/2016	1.4		1.3	1.7				1.8	
	/2/2016					7.6		4.5		4.9
	/3/2016					7.0		4.0		4.0
	4/2016		1.6				4.8			
	7/2016		1.0				4.0			
	/8/2016									
	14/2016									
	/28/2016									
	/15/2016									
	0/2017									4.1
	1/2017	1.1		1.1	1.2					4.1
	2/2017	1.1		1.1	1.2	6.8	3.8			
	3/2017					0.0	3.0	4.2		
	6/2017		1.4					4.2	1.7	
	8/2017		1.4						1.7	
	9/2017									
	1/2017								1.7	
	2/2017								1.7	
	3/2017									
	/4/2017 /2017	1.1								
	/2017	1.1	1.3	1	1.2					
			1.3	1	1.2					
	3/2017							3.6		
	5/2017 1/2017					6.8	4.5	5.0		
	7/2017					0.0	4.5			4.2
	3/2017	1.1			1.2				1 7	4.2
	26/2017	1.1	1.2	1	1.2				1.7	4.1
	7/2017		1.3	1						
	8/2017					7.0		4.2		
	/2017					7.2	4.6	4.3		
5/2	2/2017						4.6			

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
5/3/2017									
5/5/2017									
5/8/2017									
5/26/2017									
6/27/2017		1.4	1.1		7	4.3			
6/28/2017	1.2	1.4	***	1.3	•	4.0			
	1.2			1.5			4.2		
6/29/2017							4.2		
6/30/2017								1.8	3.7
7/5/2017									
7/7/2017									
7/10/2017									
7/11/2017									
7/17/2017									
10/3/2017		1.7	1.1		6.5	4.2			
10/4/2017	1.2			1.5				1.8	
10/5/2017							4.7		3.8
10/6/2017									
10/9/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/12/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
6/5/2018			1.1						
6/6/2018		1.4			4.7				
6/7/2018				1.2		4.5	4.4		
6/8/2018	1.2								3.4
6/11/2018								2	
6/12/2018									
6/13/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018					4.8	5.1	4.8		
10/1/2018	1.2	1.4	1.1	1.5					3.8
10/2/2018								1.8	
10/3/2018									
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019		1.5	1.4						
3/29/2019									4.2
4/1/2019	1.1			1.2				1.7	

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
4/2/2019									
4/3/2019					4	4.2	4.3		
6/12/2019									
9/24/2019		1.3	1.1		3.7	4.5			
9/25/2019	1.1			1.1			4.5	1.6	4.8
9/26/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020		1.4							5.2
3/19/2020	1.1		1.1	1.2				1.8	
3/20/2020									
3/24/2020					3.5	4.3			
3/25/2020							3.9		
9/22/2020					3.6	4.2	4.5		
9/23/2020	1	1.2	0.99 (J)	1.1					
9/24/2020								1.5	
9/25/2020									5.3
3/1/2021								1.6	
3/2/2021					3.2	4.3			4.9
3/3/2021	0.99 (J)	1.2	0.96 (J)	1.1			4.1		
3/4/2021									

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016									
6/2/2016									
6/6/2016	6.4	6.8							
6/7/2016			1.9	4.5	2.8				
6/8/2016					2.0	22	19	18	14
6/9/2016							10	10	17
7/25/2016									
7/26/2016		6.7	1.0	4.5					
7/27/2016	6.2	6.7	1.9	4.5	0.0				
7/28/2016					2.6				
8/1/2016						21	17	16	13
8/2/2016									
8/30/2016									
8/31/2016									
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						22	18	18	13
9/21/2016									
11/1/2016									
11/2/2016			2.6						
11/3/2016	7.4	7.5		5.4	2.9				
11/4/2016									
11/7/2016						24	17	16	14
11/8/2016									
11/14/2016									
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									
1/18/2017							19	17	14
1/19/2017						22			
2/21/2017							18	16	
2/22/2017						21			
2/23/2017									14
2/24/2017									
3/1/2017	6	6.9							
3/2/2017				4.8					
3/3/2017				4.0					
3/6/2017			1.9		2.1				
3/7/2017									
3/8/2017									
	6.6	7	2		2.1				
4/26/2017 4/27/2017	6.5	7	2		2.1				
4/28/2017									
5/1/2017				4.6					
5/2/2017				4.6					

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
5/3/2017								17	
5/5/2017									
5/8/2017						22	18		14
5/26/2017									
6/27/2017									
6/28/2017	6.4	7							
6/29/2017			2.6	4.5	2.8				
6/30/2017						21			14
7/5/2017									
7/7/2017									
7/10/2017							19	15	
7/11/2017									
7/17/2017									
10/3/2017					2.2				
10/4/2017	6.8		2.6	4.7					
10/5/2017	0.0	7	2.0	4.7					
10/6/2017		,				21			
10/9/2017						21			14
							10	45	14
10/10/2017							19	15	
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
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						19.8			
6/13/2018							18.1	14.2	13.1
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018	7.8	7.9	3.6	5.6	2.2				
9/26/2018	7.0	7.0	0.0	0.0	2.2				
10/1/2018									
10/1/2018						19.9	18.3	14	13.8
						13.3	10.5	17	13.8
10/3/2018									
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019									
3/29/2019									
4/1/2019						19.7			14.2

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
4/2/2019				4.8	2.5		17.9	13.5	
4/3/2019	6.3	6.9	3.1						
6/12/2019									
9/24/2019					3.1				
9/25/2019			2.8	5.7			17.1	14.4	
9/26/2019	7.1	7				19.6			14.3
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020									
3/19/2020								15.4	
3/20/2020						17.7	17.7		13
3/24/2020	6.8	7	2.7	5	2.8				
3/25/2020									
9/22/2020									
9/23/2020	7.2	7.2		6.6					
9/24/2020			2.7		2	17	17.1	15.7	13.3
9/25/2020									
3/1/2021									
3/2/2021								13.2	
3/3/2021	7.2	7	2.7	7.1		4	16.6		13
3/4/2021					1.8				

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016								
6/2/2016								
6/6/2016								
6/7/2016								
6/8/2016								
6/9/2016	19	18	15					
7/25/2016								
7/26/2016								
7/27/2016								
7/28/2016								
8/1/2016								
8/2/2016	18	18	14					
8/30/2016				5.2				
8/31/2016					4			
9/13/2016								
9/14/2016						1.1		
9/15/2016								
9/16/2016								
9/19/2016								
9/20/2016								
9/21/2016	19	18	14					
11/1/2016								
11/2/2016								
11/3/2016								
11/4/2016						1.4		
11/7/2016	20		14			1.4		
11/8/2016	20	18	1-7					
11/14/2016		.0		6.4				
11/28/2016				0.4	4.2			
12/15/2016					7.2	2.9		
1/10/2017						2.0		
1/11/2017								
1/12/2017								
1/13/2017								
1/16/2017						0.98		
1/18/2017	20	18				0.50		
1/19/2017	20	10	14					
2/21/2017	19		14					
2/22/2017	10	18	13		3.7			
2/23/2017		10	10		0.7			
2/24/2017				5.5				
3/1/2017				5.5				
3/2/2017								
3/3/2017						1.1		
3/6/2017						1.1		
3/7/2017								
3/8/2017								
4/26/2017								
4/27/2017								
4/28/2017						0.91		
5/1/2017						0.01		
5/2/2017								

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
5/3/2017								
5/5/2017	21	19						
5/8/2017			15	5.8	4.2			
5/26/2017						0.93		
6/27/2017								
6/28/2017						1		
6/29/2017								
6/30/2017								
7/5/2017		18	14					
7/7/2017	20							
7/10/2017								
7/11/2017				5.8				
7/17/2017					3.8			
10/3/2017						1.2		
10/4/2017								
10/5/2017		19	15					
10/6/2017								
10/9/2017	20							
10/10/2017				5.9				
10/11/2017							2.4	
10/12/2017								3.8
10/16/2017					4.2			
11/20/2017					7.2		1.8	4.4
1/10/2018							1.0	4.6
1/11/2018							1.6	
2/19/2018					4.3		1.0	4.6
2/20/2018					4.5		2	4.0
4/2/2018				4.8			2	
4/3/2018				4.0			3.3	5.9
6/5/2018							3.3	3.5
6/6/2018								
6/7/2018						1		
6/8/2018								
6/11/2018			13.6					
6/12/2018	19.3	17.6	13.0					
6/13/2018	19.5	17.0						
6/28/2018							2.1	5
					2.0		2.1	5
8/6/2018 8/7/2018					3.8		1.2	4.2
9/19/2018				4			1.2	4.3
				4			1.0	4.0
9/24/2018							1.3	4.9
9/25/2018								
9/26/2018						1.1		
10/1/2018			12.4			1.1		
10/2/2018	20.2		13.4					
10/3/2018	20.2	17.7			4.4			
2/25/2019					4.1			
3/26/2019				4.2			4.4	4.4
3/27/2019				4.3			1.4	
3/28/2019						1.0		
3/29/2019		17.0	10.1			1.2		
4/1/2019		17.2	13.1					

		YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
4/2/201	9	19.5							
4/3/201	9								
6/12/20	19					4.7			
9/24/20	19						0.95 (J)		
9/25/20	19			11.3					
9/26/20	19	19.5	17.3						
10/8/20	19				4.4	5.1			
10/9/20	19							2.1	5.1
3/17/20	20				4.1	4.8			
3/18/20	20								
3/19/20	20	18.1	16				0.97 (J)		
3/20/20	20			11.3					
3/24/20	20								4.7
3/25/20	20							1.9	
9/22/20	20				4.2	4.2			
9/23/20	20						0.88 (J)		
9/24/20	20	18	15.1	10.9				2.7	5
9/25/20	20								
3/1/202	1				3.7				
3/2/202	1					4.1			
3/3/202	1	18	14.6	6.7			0.86 (J)		
3/4/202	1							4.9	4.9

0/1/0010	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5D (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-14S (bg)
6/1/2016	0.12 (J)	<0.1	0.15 (J)	0.44 ( 1)		.0.4	0.00		0.4
6/2/2016				0.11 (J)	<0.1	<0.1	0.62	<0.1	<0.1
6/6/2016									
6/7/2016									
6/8/2016									
6/9/2016									
7/25/2016		0.06 (J)	0.14 (J)		0.06 (J)				
7/26/2016	0.08 (J)			0.05 (J)		<0.1	0.49	<0.1	0.02 (J)
7/27/2016									
7/28/2016									
8/1/2016									
8/2/2016									
8/30/2016									
8/31/2016									
9/13/2016	0.11 (J)	<0.1							
9/14/2016			0.18 (J)	0.04 (J)		<0.1		<0.1	
9/15/2016							0.54		<0.1
9/16/2016									
9/19/2016					<0.1				
9/20/2016									
9/21/2016									
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	
11/7/2016									
11/8/2016									
11/14/2016									
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				
1/18/2017									
1/19/2017									
2/21/2017					<0.1				
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017			<0.1						
3/2/2017	<0.1	<0.1					0.48		
3/3/2017	···						50		
3/6/2017						<0.1			
				~0.1		<b>~</b> 0.1		<b>-0.1</b>	
3/7/2017				<0.1				<0.1	-0.4
3/8/2017									<0.1
4/26/2017			0.08 (J)		<0.1		0.48		<0.1
4/27/2017	0.04 (J)	0.01 (J)							
4/28/2017									
5/1/2017				<0.1		<0.1			
5/2/2017								<0.1	

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-5D (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-14S (bg)
5/3/2017									
5/5/2017									
5/8/2017									
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			···= (v)			<0.1			
6/30/2017					<0.1	-0.1			<0.1
7/5/2017					40.1				-0.1
7/7/2017									
7/10/2017									
7/11/2017									
7/17/2017									
10/3/2017	<0.1	<0.1		<0.1				<0.1	
10/4/2017			<0.1		<0.1		<0.1		
10/5/2017						<0.1			<0.1
10/6/2017									
10/9/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
3/27/2018		<0.1			<0.1				<0.1
3/28/2018			<0.1				0.56		
3/29/2018	<0.1			<0.1		<0.1		<0.1	
3/30/2018									
4/2/2018									
4/3/2018									
6/5/2018	0.055 (J)								
6/6/2018		<0.1		0.15 (J)					
6/7/2018		-0.1		0.10 (0)		<0.1	0.48	<0.1	
6/8/2018			0.2 (J)			40.1	0.40	40.1	<0.1
6/11/2018			J.2 (J)		<0.1				·v.1
6/12/2018					-0.1				
6/13/2018									
6/28/2018									
6/28/2018 8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018						.0.4			
9/26/2018				<0.1		<0.1		<0.1	
10/1/2018	<0.1	<0.1	<0.1				0.44		<0.1
10/2/2018					<0.1				
10/3/2018									
2/25/2019									
2/26/2019					<0.1				<0.1

2/27/2019	YGWA-1D (bg) 0.052 (J)	YGWA-1I (bg) <0.1	YGWA-3I (bg) 0.13 (J)	YGWA-5D (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg) 0.53	YGWA-5I (bg)	YGWA-14S (bg)
3/4/2019	0.002 (0)	-0.1	0.13 (0)	0.19 (J)		<0.1	0.55	<0.1	
3/5/2019				0.13 (0)		-0.1		40.1	
3/6/2019									
3/26/2019									
3/27/2019									
3/28/2019	0.036 (1)	<0.1							
3/29/2019	0.036 (J)	<b>~0.1</b>							<0.1
4/1/2019			0.1 (J)		<0.1		0.45		<b>~</b> 0.1
4/2/2019			0.1 (3)		<0.1		0.45		
4/3/2019				0.047 (J)		<0.1		<0.1	
6/12/2019				0.047 (3)		<b>~0.1</b>		<b>~0.1</b>	
8/19/2019									
8/20/2019									
8/21/2019									
9/24/2019	0.063 (J)	<0.1		0.05 (J)				<0.1	
9/25/2019	0.003 (3)	<b>~0.1</b>	0.1 (J)	0.03 (3)	<0.1	<0.1	0.46	<b>~0.1</b>	<0.1
9/26/2019			0.1 (0)		10.1	40.1	0.40		30.1
10/8/2019									
10/9/2019									
2/10/2020	0.061 (J)	<0.1							
2/11/2020	0.001 (3)	<b>~0.1</b>	0.094 (J)						
2/11/2020			0.094 (3)	<0.1	<0.1	<0.1	0.4	<0.1	<0.1
2/13/2020				<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)	<b>10.1</b>	0.11 (J)		<0.1		0.51		30.1
3/20/2020	0.004 (0)		0.11(0)		10.1		0.51		
3/24/2020				<0.1				<0.1	
3/25/2020				-0.1		<0.1		-0.1	
8/26/2020						40.1			
8/27/2020									
9/22/2020				0.056 (J)		<0.1		<0.1	
9/23/2020	0.058 (J)	<0.1	0.098 (J)	0.000 (0)		-0.1	0.47	-0.1	
9/24/2020	0.000 (0)	-0.1	0.000 (0)		<0.1		0.47		
9/25/2020									<0.1
2/8/2021				0.055 (J)				<0.1	•
2/9/2021				0.000 (0)		<0.1		-0.1	
2/10/2021			<0.1				0.43		<0.1
2/11/2021					<0.1				***
2/12/2021	0.068 (J)	<0.1							
3/1/2021	2.000 (0)	· · ·			<0.1				
3/2/2021				<0.1				<0.1	<0.1
3/3/2021	0.078 (J)	<0.1	0.1			<0.1	0.44		***
3/4/2021	(0)		· · ·				****		

		YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-26I	YGWC-27I	YGWC-27S	YGWC-26S
6/1	1/2016									
6/2	2/2016									
	6/2016	<0.1	<0.1							
	7/2016			<0.1	<0.1	<0.1				
	3/2016						0.094 (J)	0.086 (J)	0.12 (J)	<0.1
	9/2016						( )	( )	,	
	25/2016									
	26/2016									
	27/2016	<0.1	<0.1		<0.1	<0.1				
	28/2016			0.02 (J)						
	1/2016			(0)			0.08 (J)	0.14 (J)	0.22 (J)	0.24 (J)
	2/2016						(5)	(5)	J.== (J)	· (-)
	30/2016									
	31/2016									
	13/2016									
	14/2016									
	15/2016									
	16/2016	<0.1			<0.1					
	19/2016	-0.1	<0.1	0.02 (J)	40.1	<0.1				
	20/2016		<b>~0.1</b>	0.02 (3)		<b>~</b> 0.1	0.05 (J)	<0.1	0.32	0.03 (J)
	21/2016						0.03 (3)	<b>~0.1</b>	0.32	0.03 (3)
	/1/2016									
						<0.1				
	/2/2016	-0.1	-0.1	-0.1	-0.1	<0.1				
	/3/2016	<0.1	<0.1	<0.1	<0.1					
	/4/2016						-0.1 (*)	-0.1 (*)	-0.1 (*)	0.44
	/7/2016						<0.1 (*)	<0.1 (*)	<0.1 (*)	0.44
	/8/2016									
	/14/2016									
	/28/2016									
	/15/2016									
	10/2017	.0.4			.0.4					
	11/2017	<0.1	<0.1		<0.1					
	12/2017									
	13/2017			<0.1		<0.1				
	16/2017									• 4 (1)
	18/2017						0.11 (J)	<0.1 (*)		<0.1 (*)
	19/2017						.0.4 (%)		0.25 (J)	0.4 (4)
	21/2017						<0.1 (*)		0.01 (1)	<0.1 (*)
	22/2017							-0.1 (*)	0.21 (J)	
	23/2017							<0.1 (*)		
	24/2017	-0.1	-0.4							
	1/2017	<0.1	<0.1		.0.4					
	2/2017				<0.1					
	3/2017			-0.4		-0.4				
	5/2017			<0.1		<0.1				
	7/2017									
	3/2017	0.4		0.04 ( 1)		.0.4				
	26/2017	<0.1	<0.1	0.04 (J)		<0.1				
	27/2017									
	28/2017									
	1/2017				-0.4					
5/2	2/2017				<0.1					

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-26I	YGWC-27I	YGWC-27S	YGWC-26S
5/3/2017									0.16 (J)
5/5/2017									
5/8/2017						0.08 (J)	0.07 (J)	0.19 (J)	
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							<0.1 (*)	0.2 (J)	
7/5/2017									
7/7/2017									
7/10/2017						<0.1 (*)			<0.1 (*)
7/11/2017									
7/17/2017									
10/3/2017			<0.1						
10/4/2017	<0.1			<0.1	<0.1				
10/5/2017		<0.1							
10/6/2017								<0.1 (*)	
10/9/2017							<0.1 (*)	- ()	
10/10/2017						<0.1	. ,		<0.1
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
3/27/2018									
3/28/2018	<0.1	<0.1		<0.1					
3/29/2018			<0.1		<0.1		<0.1	0.49	
3/30/2018						<0.1			0.35
4/2/2018									
4/3/2018									
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								0.037 (J)	
6/13/2018						0.088 (J)	<0.1		0.044 (J)
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018	<0.1	<0.1	0 (J)	<0.1	<0.1				
9/26/2018									
10/1/2018									
10/2/2018						<0.1	<0.1	<0.1	<0.1
10/3/2018									
2/25/2019									
2/26/2019									

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-26I	YGWC-27I	YGWC-27S	YGWC-26S
2/27/2019						<0.1	<0.1	0.14 (J)	<0.1
3/4/2019									
3/5/2019	<0.1		0.32	<0.1	<0.1				
3/6/2019		<0.1							
3/26/2019									
3/27/2019									
3/28/2019									
3/29/2019									
4/1/2019							0.034 (J)	0.088 (J)	
4/2/2019			0.12 (J)	<0.1		0.071 (J)			<0.1
4/3/2019	<0.1	<0.1			<0.1				
6/12/2019									
8/19/2019									
8/20/2019									
8/21/2019									
9/24/2019			0.15 (J)						
9/25/2019				<0.1	<0.1	0.064 (J)			<0.1
9/26/2019	<0.1	<0.1					0.14 (J)	0.22 (J)	
10/8/2019									
10/9/2019									
2/10/2020									
2/11/2020	<0.1	<0.1		<0.1					
2/12/2020			0.1 (J)		<0.1				
2/13/2020						<0.1	<0.1	0.11 (J)	<0.1
3/17/2020									
3/18/2020									
3/19/2020									<0.1
3/20/2020						0.06 (J)	<0.1	0.097 (J)	
3/24/2020	<0.1	<0.1	0.081 (J)	<0.1	<0.1				
3/25/2020									
8/26/2020									
8/27/2020									
9/22/2020									
9/23/2020	<0.1	<0.1		<0.1					
9/24/2020			0.079 (J)		<0.1	0.053 (J)	0.059 (J)	0.092 (J)	<0.1
9/25/2020									
2/8/2021	-0.1	-0.1	0.002 (1)		-0.1				
2/9/2021	<0.1	<0.1	0.092 (J)		<0.1	0.05 (1)	0.055 (1)	0.004 (1)	-0.4
2/10/2021						0.05 (J)	0.055 (J)	0.084 (J)	<0.1
2/11/2021 2/12/2021									
3/1/2021									
3/2/2021									<0.1
3/3/2021	<0.1	<0.1		<0.1	<0.1	0.05 (J)	0.058 (J)	<0.1	50.1
3/4/2021	-U. I	-0.1	0.091 (J)	-0.1	-0.1	0.00 (0)	5.000 (b)	-0.1	
JI-11 ZUZ I			0.001 (0)						

	YGWC-28I	YGWC-28S	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016								
6/2/2016								
6/6/2016								
6/7/2016								
6/8/2016								
6/9/2016	0.098 (J)	0.16 (J)	0.085 (J)					
7/25/2016	.,	. ,	. ,					
7/26/2016								
7/27/2016								
7/28/2016								
8/1/2016								
8/2/2016	0.38	0.5	0.09 (J)					
8/30/2016	0.00	0.0	0.00 (0)	0.09 (J)				
8/31/2016				0.00 (0)	0.14 (J)			
9/13/2016					0.14 (0)			
9/14/2016						0.08 (J)		
9/15/2016						0.00 (0)		
9/16/2016								
9/19/2016								
9/20/2016								
9/21/2016	0.08 (J)	0.25 (J)	0.09 (J)					
11/1/2016	0.08 (3)	0.23 (3)	0.09 (3)					
11/2/2016								
11/3/2016								
11/4/2016						<0.1		
		0.27 (1)	-0.1 (*)			<b>~</b> 0.1		
11/7/2016 11/8/2016	0.24 ( 1)	0.27 (J)	<0.1 (*)					
11/14/2016	0.24 (J)			0.18 (J)				
				0.16 (3)	0.10 (1)			
11/28/2016					0.12 (J)	0.06 (1)		
12/15/2016 1/10/2017						0.06 (J)		
1/11/2017								
1/12/2017								
1/13/2017						0.1 (1)		
1/16/2017	0.12 (1)	0.24				0.1 (J)		
1/18/2017	0.12 (J)	0.34	-0.1 (*)					
1/19/2017		0.27 (1)	<0.1 (*)					
2/21/2017	-0.1 (*)	0.27 (J)	-0.1 (*)		0.00 (1)			
2/22/2017 2/23/2017	<0.1 (*)		<0.1 (*)		0.09 (J)			
				0.05 (1)				
2/24/2017				0.05 (J)				
3/1/2017								
3/2/2017						-0.1		
3/3/2017						<0.1		
3/6/2017								
3/7/2017								
3/8/2017								
4/26/2017								
4/27/2017						0.06 (1)		
4/28/2017						0.06 (J)		
5/1/2017								
5/2/2017								

	YGWC-28I	YGWC-28S	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
5/3/2017								
5/5/2017	0.08 (J)	0.2 (J)						
5/8/2017			0.06 (J)	0.03 (J)	0.05 (J)			
5/26/2017						0.09 (J)		
6/27/2017								
6/28/2017						0.11 (J)		
6/29/2017								
6/30/2017								
7/5/2017	0.11 (J)		0.08 (J)					
7/7/2017		0.18 (J)						
7/10/2017								
7/11/2017				0.07 (J)				
7/17/2017					0.14 (J)			
10/3/2017						<0.1		
10/4/2017								
10/5/2017	<0.1 (*)		<0.1 (*)					
10/6/2017	( )		( )					
10/9/2017		<0.1 (*)						
10/10/2017		.,		<0.1				
10/11/2017							<0.1	
10/12/2017								<0.1
10/16/2017					0.12 (J)			
11/20/2017					(0)		<0.1	<0.1
1/10/2018							-0.1	<0.1
1/11/2018							<0.1	•
2/19/2018					0.17		-0.1	<0.1
2/20/2018					0.17		0.23	-0.1
3/27/2018							0.20	
3/28/2018						0.31		
3/29/2018			<0.1			0.51		
3/30/2018	<0.1	<0.1	<b>40.</b> I					
4/2/2018	<b>30.1</b>	-0.1		<0.1				
4/3/2018				-0.1			<0.1	<0.1
6/5/2018							-0.1	30.1
6/6/2018								
6/7/2018						0.11 (J)		
6/8/2018						0.11(0)		
6/11/2018			<0.1					
6/12/2018	<0.1	0.13 (J)	<b>40.</b> I					
6/13/2018	<b>~0.1</b>	0.13(0)						
6/28/2018							<0.1	<0.1
8/6/2018					0.087 (J)		<b>~0.1</b>	0.1
8/7/2018					0.067 (3)		0.049 ( 1)	<0.1
				-0.1			0.048 (J)	0.1
9/19/2018 9/24/2018				<0.1			<0.1	<0.1
							~U. I	~0.1
9/25/2018								
9/26/2018						-0.1		
10/1/2018			-0.1			<0.1		
10/2/2018	-0.1	0.21	<0.1					
10/3/2018	<0.1	0.31			0.14 (1)			
2/25/2019					0.14 (J)			
2/26/2019								

2/27/2019	YGWC-28I 0.14 (J)	YGWC-28S 0.22 (J)	YGWC-29I 0.15 (J)	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg) 0.12 (J)	YGWA-39 (bg)	YGWA-40 (bg)
3/4/2019	0.14 (3)	0.22 (3)	0.13 (3)			0.12 (3)		
3/5/2019								
3/6/2019								
								-0.4
3/26/2019				0.001 (1)			-0.1	<0.1
3/27/2019				0.081 (J)			<0.1	
3/28/2019								
3/29/2019						0.13 (J)		
4/1/2019	0.078 (J)		0.059 (J)					
4/2/2019		0.14 (J)						
4/3/2019								
6/12/2019					0.12 (J)			
8/19/2019					<0.1			
8/20/2019				<0.1				
8/21/2019							<0.1	<0.1
9/24/2019						0.081 (J)		
9/25/2019			0.054 (J)					
9/26/2019	0.29 (J)	0.28 (J)						
10/8/2019				0.034 (J)	0.052 (J)			
10/9/2019							<0.1	<0.1
2/10/2020								
2/11/2020						0.075 (J)		
2/12/2020							<0.1	<0.1
2/13/2020	0.14 (J)	0.18 (J)	0.053 (J)					
3/17/2020				<0.1	0.053 (J)			
3/18/2020								
3/19/2020	0.07 (J)	0.16 (J)				0.093 (J)		
3/20/2020			0.057 (J)					
3/24/2020								<0.1
3/25/2020							<0.1	
8/26/2020					0.068 (J)			
8/27/2020				<0.1				
9/22/2020				<0.1	0.058 (J)			
9/23/2020						0.08 (J)		
9/24/2020	0.073 (J)	0.16	0.06 (J)				<0.1	<0.1
9/25/2020								
2/8/2021								
2/9/2021								
2/10/2021						0.094 (J)	<0.1	<0.1
2/11/2021	0.066 (J)							
2/12/2021		0.069 (J)	0.17					
3/1/2021				<0.1				
3/2/2021					0.073 (J)			
3/3/2021	0.072 (J)	0.13	0.056 (J)			0.085 (J)		
3/4/2021							<0.1	<0.1

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-3D (bg)
8/27/2008	6.53								
3/3/2009	6.35								
11/18/2009	6.47								
3/3/2010	6.53								
3/10/2011	5.83								
9/8/2011	5.69								
3/5/2012	6.27								
9/10/2012	6.23								
2/6/2013	7.56								
8/12/2013	6.68								
2/5/2014	6.32								
8/3/2015	6.13 (D)								
2/16/2016	5.64								
6/1/2016		7.72	7.46	6.33					
6/2/2016					5.75	5.46	5.75	6.36	7.84
6/6/2016									
6/7/2016									
6/8/2016									
6/9/2016									
7/25/2016		7.74		6.21	5.82				
7/26/2016			7.43			5.45	5.72	6.22	7.88
7/27/2016									
7/28/2016									
8/1/2016									
8/2/2016									
8/30/2016									
9/13/2016			7.44	6.16					
9/14/2016		7.65					5.74	6.23	
9/15/2016						5.45			7.74
9/16/2016									
9/19/2016					5.78 (D)				
9/20/2016					, ,				
9/21/2016									
11/1/2016		7.7	7.24		5.62				7.75
11/2/2016					0.02	5.41		6.08	
11/3/2016						0		0.00	
11/4/2016				6.29			5.61		
11/7/2016				0.20			0.01		
11/8/2016									
11/14/2016									
	6.22								
11/28/2016	6.23								
12/15/2016						5.07			
1/10/2017						5.37			
1/11/2017		7.53	7.3						7.66
1/12/2017							5.71		
1/13/2017								6.19	
1/16/2017				6.29	5.72				
1/18/2017									
1/19/2017									
2/21/2017					5.67				
2/22/2017	6.21								
2/23/2017									

		GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-3D (bg)
	2/24/2017									
	3/1/2017		7.42							
	3/2/2017			7.23	6.28					7.68
:	3/3/2017									
	3/6/2017								6.2	
	3/7/2017							5.66		
	3/8/2017						5.41			
	4/26/2017		7.4			5.56	5.02			7.45
	4/27/2017			6.99	6.09	3.50	5.02			7.40
				0.99	0.09					
	4/28/2017								0.04	
	5/1/2017								6.21	
	5/2/2017							5.65		
	5/3/2017									
	5/5/2017									
	5/8/2017	6.12								
	5/26/2017									
	6/27/2017			6.87	6.21			5.7		
	6/28/2017		7.5							7.65
	6/29/2017								6.21	
	6/30/2017					5.72	5.39			
	7/5/2017									
	7/7/2017									
	7/10/2017									
	7/11/2017									
	7/17/2017	6.03								
	10/3/2017			6.81	5.98			5.79		
	10/4/2017		7.45			5.87				7.49
	10/5/2017						5.49		6.16	
	10/6/2017									
	10/9/2017									
	10/10/2017									
	10/11/2017									
	10/12/2017									
	10/16/2017	6.12								
	11/20/2017									
	1/10/2018									
	1/11/2018									
	2/19/2018	6.13								
	2/20/2018	0.10								
	3/27/2018				6.25	5.83	5.47			
	3/28/2018		7.74		0.23	3.03	5.47			7.91
	3/29/2018			7.38				5.63	6.09	7.91
				7.30				5.05	0.09	
	3/30/2018									
	4/2/2018									
	4/3/2018			7.10						
	6/5/2018			7.16						
	6/6/2018				6.17					
	6/7/2018							5.63	6.12	7.69
	6/8/2018		7.64				5.45			
	6/11/2018					5.69				
	6/12/2018									
	6/13/2018									

		GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/2	8/2018									
8/6/	5/2018	6.01								
8/7	//2018									
9/1	9/2018									
	4/2018									
	5/2018									
	6/2018							5.63	5.84	
	/1/2018		7.47	6.8	5.9		5.39			7.39
	/2/2018					5.39				
	/3/2018					0.00				
	5/2019	6.51								
	6/2019	0.01				5.77	5.46			
	7/2019		7.54	6.84	5.8	3.77	3.40			7.55
	/2019		7.54	0.04	3.0			5.75	6.18	7.55
	6/2019							3.73	0.10	
	5/2019									
	16/2019									
	7/2019									
				0.00	0.45					
	8/2019			6.99	6.15		F 24			
	9/2019		774			5.00	5.34			7.07
	/2019		7.74			5.62				7.87
	2/2019									
	3/2019							5.63	6.43	
	2/2019	6.3								
	9/2019	6.23								
	0/2019									
	1/2019									
	4/2019			7.07	6.23			5.6		
	5/2019		7.47			5.69	5.19		6.2	7.64
	6/2019									
10/	/8/2019	6.28								
	/9/2019									
	0/2020			7.2	6.1					
2/1	1/2020		7.09							
2/1	2/2020					5.8	5.48	5.83	6.15	7.83
2/1	3/2020									
3/1	7/2020	6.14								
3/1	8/2020				6.19		5.38			
3/1	9/2020		7.31	7.03		6				7.65
3/2	0/2020									
3/2	4/2020							5.81		
3/2	5/2020								6.26	
5/6	5/2020	6.24								
8/2	6/2020	5.67								
8/2	7/2020									
9/2	2/2020	5.78						5.99	5.8	
9/2	3/2020		7.37	7.15	6.01					7.57
	4/2020					5.67				
	5/2020						5.44			
	3/2021							5.67		
	/2021								6.06	
	0/2021		7.58				5.35			7.81

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-3D (bg)
2/11/2021					5.73				
2/12/2021			7.14	6.21					
3/1/2021					5.78				
3/2/2021	5.42					5.49	5.63		
3/3/2021		8.23	7.2	5.38				6.21	8.39
3/4/2021									

	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-27S	YGWC-26S	YGWC-26I
8/27/2008	TGWA-3D (bg)	TGWA-TOT (bg)	1GWA-103 (bg)	1GWA-173 (bg)	TGWA-211 (bg)	1GWA-203 (bg)	1GWC-273	1GWC-203	1GWC-201
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	7.67								
6/6/2016		6.17	5.71						
6/7/2016				5.62	6.1	5.77			
6/8/2016							6.24	5.24	5.85
6/9/2016									
7/25/2016									
7/26/2016	7.66								
	7.00	6 14	E 46	5.59		5.79			
7/27/2016		6.14	5.46	5.59	0.40	5.79			
7/28/2016					6.12		0.10	5.47	5.00
8/1/2016							6.12	5.17	5.83
8/2/2016									
8/30/2016									
9/13/2016									
9/14/2016	7.6								
9/15/2016									
9/16/2016				5.58					
9/19/2016		6.04	5.59		6.12	5.73			
9/20/2016							6.3	5.35	5.89
9/21/2016									
11/1/2016									
11/2/2016	7.35					5.67			
11/3/2016		5.97	5.39	5.59	6.07				
11/4/2016									
11/7/2016							6.25	5.35	5.91
11/8/2016									
11/14/2016									
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017		6.05	5.48	5.59					
1/12/2017	7.49								
1/13/2017	-				6.41	5.79			
1/16/2017									
1/18/2017								5.2	5.84
1/18/2017							6.2	J.Z	J.0 <del>4</del>
							J. <u>L</u>	5 14	5.70
2/21/2017							6.14	5.14	5.79
2/22/2017							6.14		
2/23/2017									

	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-27S	YGWC-26S	YGWC-26I
2/24/2017									
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	7.43								
3/8/2017									
4/26/2017		5.99	5.4		6.32	5.66			
4/27/2017									
4/28/2017									
5/1/2017	7.22								
5/2/2017				5.47					
5/3/2017								5.28	
5/5/2017									
5/8/2017							6.11		5.84
5/26/2017									
6/27/2017	7.32								
6/28/2017		6	5.36						
6/29/2017				5.56	6.47	5.85			
6/30/2017							6.17		
7/5/2017									
7/7/2017									
7/10/2017								5.25	5.92
7/11/2017								0.20	0.02
7/17/2017									
10/3/2017	7.48				6.56				
10/4/2017	7.40		5.32	5.57	0.50	5.83			
10/5/2017		6.11	5.52	3.37		3.03			
10/6/2017		0.11					6.13		
10/9/2017							0.13		
10/9/2017								5.17	5.84
10/10/2017								5.17	3.04
10/11/2017									
10/12/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
3/27/2018									
		6.1	E 24	E E0					
3/28/2018	7.02	6.1	5.34	5.59	6 75	E 02	6.25		
3/29/2018	7.02				6.75	5.93	6.25	E 10	6.10
3/30/2018								5.19	6.19
4/2/2018									
4/3/2018					0.00				
6/5/2018	7.40				6.09	5.00			
6/6/2018	7.43	5.00				5.86			
6/7/2018		5.98							
6/8/2018			5.00	5.50					
6/11/2018			5.28	5.58			0.00		
6/12/2018							6.22	5.40	F.00
6/13/2018								5.12	5.82

	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-27S	YGWC-26S	YGWC-26I
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018		5.81	4.86	5.59	6.67	5.84			
9/26/2018	7.13								
10/1/2018									
10/2/2018							5.99	4.95	5.81
10/3/2018									
2/25/2019									
2/26/2019									
2/27/2019							6.26	5	5.79
3/4/2019	7.46						0.20	Ü	0.70
3/5/2019	7.40		5.26	5.48	7.22	6.07			
3/6/2019		5.99	5.20	3.40	7.22	0.07			
3/26/2019		3.99							
3/27/2019									
3/28/2019									
3/29/2019							0.4		
4/1/2019				5.74	0.04		6.4	F 10	F 07
4/2/2019				5.74	6.94			5.13	5.87
4/3/2019	7.11	6.29	5.47			5.71			
6/12/2019									
8/19/2019									
8/20/2019									
8/21/2019									
9/24/2019	6.93				6.87				
9/25/2019				5.49		5.86		5.24	5.79
9/26/2019		6.04	5.2				6.22		
10/8/2019									
10/9/2019									
2/10/2020									
2/11/2020		6.07	5.3	5.58					
2/12/2020	7.52				7.13	6			
2/13/2020							6.31	5.29	5.93
3/17/2020									
3/18/2020									
3/19/2020								5.46	
3/20/2020							6.18		5.94
3/24/2020	7.34	5.98	5.33	5.57	6.35	5.86			
3/25/2020									
5/6/2020									
8/26/2020									
8/27/2020									
9/22/2020	7.19								
9/23/2020		6.01	5.29	5.58					
9/24/2020					6.7	5.8	6.27	5.46	5.86
9/25/2020									
2/8/2021									
2/9/2021		6.12	5.43		6.95	5.86			
2/10/2021							6.21	5.18	5.96

	YGWA-5D (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-27S	YGWC-26S	YGWC-26I
2/11/2021									
2/12/2021									
3/1/2021									
3/2/2021	7.15							5.38	
3/3/2021		5.89	5.31	5.52		5.89	6.35		5.93
3/4/2021					6.8				

	YGWC-27I	YGWC-28I	YGWC-28S	YGWC-29I	YGWA-47 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	
8/27/2008									
3/3/2009									
11/18/2009									
3/3/2010									
3/10/2011									
9/8/2011									
3/5/2012									
9/10/2012									
2/6/2013									
8/12/2013									
2/5/2014									
8/3/2015									
2/16/2016									
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016	6.32								
6/9/2016		6.42	6.39	6.19					
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016	6.34								
8/2/2016		6.43	6.35	6.17					
8/30/2016					5.75				
9/13/2016					0.70	7.41			
9/14/2016						7			
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016	6.36								
9/21/2016	0.30	6.45	6.39	6.2					
		0.45	0.39	0.2					
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016						7.12			
11/7/2016	6.3		6.36	6.1					
11/8/2016		6.37							
11/14/2016					5.59				
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			
1/18/2017	6.31	6.27	6.23						
1/19/2017				6.22					
2/21/2017			6.42						
2/22/2017		6.35		6.12					
2/23/2017	6.18								

	YGWC-27I	YGWC-28I	YGWC-28S	YGWC-29I	YGWA-47 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
2/24/2017					5.49			
3/1/2017								
3/2/2017								
3/3/2017						7.22		
3/6/2017								
3/7/2017								
3/8/2017								
4/26/2017								
4/27/2017								
4/28/2017						7.21		
5/1/2017								
5/2/2017								
5/3/2017								
5/5/2017		6.36	6.4					
	6.24	0.30	0.4	6.11	E E0			
5/8/2017	6.24			6.11	5.58	7.10		
5/26/2017						7.13		
6/27/2017								
6/28/2017						7.06		
6/29/2017								
6/30/2017	6.21							
7/5/2017		6.4		6.17				
7/7/2017			6.46					
7/10/2017								
7/11/2017					5.58			
7/17/2017								
10/3/2017						6.99		
10/4/2017								
10/5/2017		6.43		6.17				
10/6/2017								
10/9/2017	6.26		6.37					
10/10/201					5.49			
10/11/201							6.4	
10/12/201								5.43
10/16/201								
11/20/201							6.33	5.1
1/10/2018								4.97
1/11/2018							6.29	
2/19/2018							0.20	5.6
2/20/2018							7.22	0.0
3/27/2018							7.22	
						7.0		
3/28/2018				6.00		7.3		
3/29/2018		0.00	0.05	6.09				
3/30/2018		6.39	6.35					
4/2/2018					6.3 (0)		0.07	504
4/3/2018							6.87	5.84
6/5/2018								
6/6/2018								
6/7/2018						7.29		
6/8/2018								
6/11/2018				6.17				
6/12/2018		6.42	6.47					
6/13/2018	6.28							

0/00/0010	YGWC-27I	YGWC-28I	YGWC-28S	YGWC-29I	YGWA-47 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/28/2018							6.18	5.24
8/6/2018								
8/7/2018							6.08	5.18
9/19/2018					5.48			
9/24/2018							5.81	5.14
9/25/2018								
9/26/2018								
10/1/2018						7.07		
10/2/2018	5.9			6.17				
10/3/2018		6.21	6.01					
2/25/2019								
2/26/2019								
2/27/2019	6.31	6.32	6.38	6.19		7.27		
3/4/2019								
3/5/2019								
3/6/2019								
3/26/2019								5.3
3/27/2019					5.83		5.84	
3/28/2019								
3/29/2019						7.06		
4/1/2019	6.43	6.3		6.03				
4/2/2019			6.7					
4/3/2019								
6/12/2019								
8/19/2019								
8/20/2019					5.58			
8/21/2019							5.96	5.26
9/24/2019						7.01		
9/25/2019				6.21				
9/26/2019	6.3	6.43	6.47					
10/8/2019					5.59			
10/9/2019							5.81	5.22
2/10/2020								
2/11/2020						7.38		
2/12/2020							5.97	5.3
2/13/2020	6.4	6.49	6.53	6.32				
3/17/2020					5.57			
3/18/2020					0.07			
3/19/2020		7.01	6.98			7.22		
3/20/2020	6.32			6.17				
3/24/2020	0.02			0.17				5.29
3/25/2020							5.78	3.23
5/6/2020							3.70	
8/26/2020								
8/27/2020					4.88			
9/22/2020					5.46			
9/23/2020					5.40	7.22		
9/24/2020	6.36	6.41	6.53	6.2			5.7	5.43
9/25/2020	0.30	0.41	0.00	0.2			5.7	5.75
2/8/2021								
2/9/2021								
2/10/2021	6.29					7.29	5.8	5.19
LI 1012021	0.23					1.23	5.0	5.15

	YGWC-27I	YGWC-28I	YGWC-28S	YGWC-29I	YGWA-47 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
2/11/2021		6.57						
2/12/2021			6.6	6.24				
3/1/2021					5.48			
3/2/2021								
3/3/2021	6.43	6.51	6.61	6.27		7.92		
3/4/2021							5.54	5.23

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
6/1/2016	12	4.2	5						
6/2/2016				5.8	20	1.9	8	1.3	6.6
6/6/2016									
6/7/2016									
6/8/2016									
6/9/2016									
7/25/2016	8.4	3.7						1.2	
7/26/2016			5.4	6.7	20	1.8	7.7		6.1
7/27/2016									
7/28/2016									
8/1/2016									
8/2/2016									
8/30/2016									
8/31/2016									
9/13/2016		5.2	2.9						
9/14/2016	8.6				19	1.8	7.5		
9/15/2016				6					6.1
9/16/2016									
9/19/2016								1.2	
9/20/2016									
9/21/2016									
11/1/2016	8.9		3.9	4.9				1.3	
11/2/2016					20		8.2		6.3
11/3/2016									
11/4/2016		5				2			
11/7/2016									
11/8/2016									
11/14/2016									
11/28/2016									
12/15/2016									
1/10/2017									5.9
1/11/2017	8.6		3.7	4.5					0.0
1/12/2017	0.0		0.7	4.0	19	1.9			
1/13/2017					15	1.0	8.1		
1/16/2017		7.9					0.1	<1	
1/18/2017		7.5							
1/19/2017									
2/21/2017								1.4	
2/22/2017								11	
2/23/2017									
2/24/2017									
3/1/2017	9.3								
3/2/2017	5.5	7.4	4.6	4.4					
3/3/2017		7.4	4.0	7.7					
3/6/2017							8		
3/7/2017					20	2.1	•		
3/8/2017					20	£. 1			7
4/26/2017	11			5.1				1.4	7
4/27/2017	11	7.4	5.2	5.1				1.4	,
4/27/2017		7.4	J.Z						
5/1/2017					20		8.4		
5/1/2017					20	2	0.4		
J. L. L. U. I. I						_			

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
5/3/2017									
5/5/2017									
5/8/2017									
5/26/2017									
6/27/2017		6.4	5.9		18	2.1			
6/28/2017	12	0.4	0.0	5.4	10	2.1			
	12			3.4			0.2		
6/29/2017							9.2		0.5
6/30/2017								<1	6.5
7/5/2017									
7/7/2017									
7/10/2017									
7/11/2017									
7/17/2017									
10/3/2017		5.9	6.6		16	2.3			
10/4/2017	12			6.2				1.4	
10/5/2017							9.6		7.9
10/6/2017									
10/9/2017									
10/10/2017									
10/11/2017									
10/11/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
6/5/2018			6.4						
6/6/2018		4.4			8.3				
6/7/2018				6.7		2	8.5		
6/8/2018	9.6								6.4
6/11/2018								1.1	
6/12/2018									
6/13/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018					7.9	2.3	10.2		
10/1/2018	9.1	4	5.6	7.1					6.8
10/2/2018								1	
10/3/2018									
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019		4.3	8						
3/29/2019									7.3
4/1/2019	8.5			7.2				0.96 (J)	
	-							\-/	

		YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
4/2	2/2019									
4/3	3/2019					7	2.1	8.5		
6/	12/2019									
9/2	24/2019		4.3	5.3		5.5	2.4			
9/2	25/2019	13.8			7			8.5	0.81 (J)	6.6
9/2	26/2019									
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	
3/2	20/2020									
3/2	24/2020					5.9	2.1			
3/2	25/2020							8.8		
9/2	22/2020					5.5	2.1	8.2		
9/2	23/2020	16.8	3.4	8.1	6.9					
9/2	24/2020								0.69 (J)	
9/2	25/2020									6.1
3/	1/2021								0.88 (J)	
3/2	2/2021					2.6	2.3			6
3/3	3/2021	9.6	4.4	9	7			7.8		
3/4	4/2021									

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016									
6/2/2016									
6/6/2016	1.8	1.2							
6/7/2016			<1	4.4	5.2				
6/8/2016						26	81	110	3.2
6/9/2016						20	0.		0.2
7/25/2016									
7/26/2016									
7/27/2016	1.9	1.7	0.08 (J)	4.7					
7/28/2016	1.5	1.7	0.00 (0)	4.7	5.1				
8/1/2016					5.1	27	75	96	3.6
8/2/2016						27	73	30	3.0
8/30/2016									
8/31/2016									
9/13/2016									
9/14/2016									
9/15/2016	4.7			4.0					
9/16/2016	1.7	1.0	0.00 (1)	4.8	4.0				
9/19/2016		1.8	0.08 (J)		4.8	01	70	100	5.0
9/20/2016						21	78	100	5.6
9/21/2016									
11/1/2016									
11/2/2016			0.1 (J)		_				
11/3/2016	1.9	0.69 (J)		5.3	5				
11/4/2016									
11/7/2016						24	81	100	5.4
11/8/2016									
11/14/2016									
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									
1/18/2017							95	100	3.5
1/19/2017						25			
2/21/2017							80	96	
2/22/2017						24			
2/23/2017									4.9
2/24/2017									
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									
4/26/2017	1.9	1.6	<1		4.9				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				5					

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
5/3/2017								100	
5/5/2017									
5/8/2017						23	84		3.9
5/26/2017									
6/27/2017									
6/28/2017	<1	<1							
	~1		.4	F 0					
6/29/2017			<1	5.2	5.5				_
6/30/2017						23			5
7/5/2017									
7/7/2017									
7/10/2017							84	100	
7/11/2017									
7/17/2017									
10/3/2017					5.8				
10/4/2017	1.7		<1	5.3					
10/5/2017	1.7	1.6		0.0					
		1.0				00			
10/6/2017						23			
10/9/2017									5.1
10/10/2017							82	97	
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
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						18.1			
6/13/2018							76.5	93.3	6.1
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018					_				
9/25/2018	1.5	1	0.13 (J)	6.1	7				
9/26/2018									
10/1/2018									
10/2/2018						20.2	83.9	99	6.1
10/3/2018									
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019									
3/29/2019									
4/1/2019						18.3			4.1
2010						.5.5			

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)		YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
4/2/2019				5.1	3.8		77.6	94.5	
4/3/2019	1.3	0.82 (J)	0.12 (J)						
6/12/2019									
9/24/2019					1				
9/25/2019			<1	5.5			80.1	97	
9/26/2019	1	0.64 (J)				18.2			4.2
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020									
3/19/2020								99.4	
3/20/2020						21.1	84.7		5.2
3/24/2020	0.99 (J)	<1	<1	5.4	3				
3/25/2020									
9/22/2020									
9/23/2020	1.1	0.53 (J)		5.1					
9/24/2020			<1		3.6	16.6	85.6	92.3	3
9/25/2020									
3/1/2021									
3/2/2021								92.7	
3/3/2021	1	<1	<1	5.2		451	89.3		2.6
3/4/2021					4.5				

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
6/9/2016	5.2	8.7	33						
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/2/2016	4.5	7.5	32						
8/30/2016	4.0	7.0	<u> </u>	160					
8/31/2016				100	29				
9/13/2016					20				
9/14/2016						9.4			
9/15/2016						5.4			
9/16/2016									
9/19/2016									
9/20/2016									
	~1 /*\	0	22						
9/21/2016	<1 (*)	8	32						
11/1/2016									
11/2/2016									
11/3/2016						40			
11/4/2016	4.0		00			13			
11/7/2016	4.3	0.0	33						
11/8/2016		8.3							
11/14/2016				150					
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			
1/18/2017	2.7	8							
1/19/2017			32						
2/21/2017	3								
2/22/2017		8.2	31		43				
2/23/2017									
2/24/2017				120					
3/1/2017									
3/2/2017									
3/3/2017						8.8			
3/6/2017									
3/7/2017									
3/8/2017									
4/26/2017									
4/27/2017									
4/28/2017						10			
5/1/2017									
5/2/2017									

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
5/3/2017								
5/5/2017	<1 (*)	<1 (*)						
5/8/2017			32	120	60			
5/26/2017						12		
6/27/2017								
6/28/2017						11		
6/29/2017								
6/30/2017								
7/5/2017		8.1	31					
7/7/2017	2.7							
7/10/2017								
7/11/2017				110				
7/17/2017					63			
10/3/2017						7.9		
10/4/2017								
10/5/2017		8.6	31					
10/6/2017		0.0	31					
10/9/2017	2.9							
	2.9			02				
10/10/2017				93			20	
10/11/2017							20	47
10/12/2017								17
10/16/2017					62			
11/20/2017							24	71
1/10/2018								66
1/11/2018							23	
2/19/2018					64.6			57.2
2/20/2018							20.6	
4/2/2018				88.8				
4/3/2018							24.5	49.4
6/5/2018								
6/6/2018								
6/7/2018						8.8		
6/8/2018								
6/11/2018			30.6					
6/12/2018	2.9	8.2						
6/13/2018								
6/28/2018							22	43.8
8/6/2018					42.1			
8/7/2018							20.7	40.5
9/19/2018				75				
9/24/2018				, ,			21.2	39.7
9/25/2018							21.2	00.7
9/26/2018								
						0.1		
10/1/2018			30.8			9.1		
10/2/2018	2.1	0	30.8					
10/3/2018	2.1	8			10.1			
2/25/2019					42.1			24.2
3/26/2019								34.3
3/27/2019				65.9			17.7	
3/28/2019								
3/29/2019						9		
4/1/2019		8.2	30.4					

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
4/2/2019	2.4							
4/3/2019								
6/12/2019					83.4			
9/24/2019						9.1		
9/25/2019			30					
9/26/2019	1.6	7.9						
10/8/2019				52.3	128			
10/9/2019							15	27.9
3/17/2020				71.6	98.6			
3/18/2020								
3/19/2020	1.7	9.1				12.4		
3/20/2020			33					
3/24/2020								25.2
3/25/2020							14.3	
9/22/2020				51.5	145			
9/23/2020						11.8		
9/24/2020	0.99 (J)	7.2	26.2				11.7	22.9
9/25/2020								
3/1/2021				51.6				
3/2/2021					156			
3/3/2021	4.9	8.6	26.6			10.6		
3/4/2021							12	21.5

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
6/1/2016	150	54	120						
6/2/2016				130	160	66	96	36	46
6/6/2016									
6/7/2016									
6/8/2016									
6/9/2016									
7/25/2016	135	48						50	
7/26/2016			94	141	177	78	92		54
7/27/2016									
7/28/2016									
8/1/2016									
8/2/2016									
8/30/2016									
8/31/2016									
9/13/2016		67	105						
9/13/2016	127	07	103		187	73	102		
9/15/2016	127			153	107	73	102		54
				155					54
9/16/2016								0.5	
9/19/2016								35	
9/20/2016									
9/21/2016									
11/1/2016	75		44	92				<25	
11/2/2016					181		115		71
11/3/2016									
11/4/2016		60				75			
11/7/2016									
11/8/2016									
11/14/2016									
11/28/2016									
12/15/2016									
1/10/2017									45
1/11/2017	148		107	159					
1/12/2017					202	86			
1/13/2017							67		
1/16/2017		65						47	
1/18/2017									
1/19/2017									
2/21/2017								<25	
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017	182								
3/2/2017		61	98	117					
3/3/2017									
3/6/2017							159		
3/7/2017					257	108			
3/8/2017									178
4/26/2017	92			181				55	52
4/27/2017		31	116	-				-	
4/28/2017									
5/1/2017					165		107		
5/2/2017						103			

	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
5/3/2017									
5/5/2017									
5/8/2017									
5/26/2017									
6/27/2017		42	89		189	73			
	106	42		160	109	73			
6/28/2017	126			169					
6/29/2017							79		
6/30/2017								42	45
7/5/2017									
7/7/2017									
7/10/2017									
7/11/2017									
7/17/2017									
10/3/2017		58	119		170	89			
10/4/2017	147			141				31	
10/5/2017							95		40
10/6/2017									
10/9/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
6/5/2018			127						
6/6/2018		96			151				
6/7/2018				95		142	90		
6/8/2018	158								114
6/11/2018								59	
6/12/2018									
6/13/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018					144	86	116		
10/1/2018	138	60	117	165					50
10/2/2018								57	
10/3/2018									
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	

		YGWA-3I (bg)	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3D (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-14S (bg)
4/2/201	19									
4/3/201	19					142	83	111		
6/12/20	)19									
9/24/20	)19		54	124		129	79			
9/25/20	)19	159			157			117	51	64
9/26/20	)19									
10/8/20	)19									
10/9/20	)19									
3/17/20	)20									
3/18/20	)20		35							57
3/19/20	020	148		116	146				47	
3/20/20	)20									
3/24/20	020					139	68			
3/25/20	)20							146		
9/22/20	)20					104	75	83		
9/23/20	)20	155	15	108	157					
9/24/20	)20								51	
9/25/20	)20									54
3/1/202	21								23	
3/2/202	21					52	67			67
3/3/202	21	111	39	99	137			80		
3/4/202	21									

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016									
6/2/2016									
6/6/2016	58	120							
6/7/2016			38	28	60				
6/8/2016						210	220	200	190
6/9/2016									
7/25/2016									
7/26/2016									
7/27/2016	35	94	74	74					
7/28/2016	00	0.7	7-7	, ,	81				
8/1/2016					01	209	211	191	191
8/2/2016						200	211	101	101
8/30/2016									
8/31/2016									
9/13/2016									
9/14/2016									
9/15/2016									
	25			67					
9/16/2016	35	02	45	07	60				
9/19/2016		92	45		68	224	217	212	205
9/20/2016						224	217	213	205
9/21/2016									
11/1/2016									
11/2/2016			53						
11/3/2016	48	104		41	61				
11/4/2016									
11/7/2016						291	301	284	264
11/8/2016									
11/14/2016									
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									
1/18/2017							265 (D)	158 (D)	167 (D)
1/19/2017						215 (D)			
2/21/2017							158	137	
2/22/2017						262			
2/23/2017									253
2/24/2017									
3/1/2017	79	119							
3/2/2017				77					
3/3/2017									
3/6/2017			164		167				
3/7/2017									
3/8/2017									
4/26/2017	36	162	34		50				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017				142					

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg)	YGWC-27S	YGWC-26I	YGWC-26S	YGWC-27I
5/3/2017								269	
5/5/2017									
5/8/2017						187	207		174
5/26/2017									
6/27/2017									
6/28/2017	45	98							
6/29/2017			68	53	94				
6/30/2017						209			193
7/5/2017									
7/7/2017									
7/10/2017							219	183	
7/11/2017									
7/17/2017									
10/3/2017					149				
10/4/2017	45		54	61					
10/5/2017		104							
10/6/2017						183			
10/9/2017									185
10/10/2017							194	179	100
10/11/2017								.,,	
10/12/2017									
10/16/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
4/2/2018									
4/3/2018									
6/5/2018			70		109				
6/6/2018			79						
6/7/2018		68							
6/8/2018									
6/11/2018	74			70					
6/12/2018						208			
6/13/2018							228	196	219
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/24/2018									
9/25/2018	63	109	73	86	122				
9/26/2018									
10/1/2018									
10/2/2018						206	227	191	227
10/3/2018									
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019									
3/29/2019									
4/1/2019						221			198

4/2/2019	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-21I (bg) 134	YGWC-27S	YGWC-26I 223	YGWC-26S 224	YGWC-27I
4/3/2019	63	89	57	,,,	104		220	22-7	
6/12/2019									
9/24/2019					157				
9/25/2019			75	81			225	190	
9/26/2019	72	126				225			198
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020									
3/19/2020								194	
3/20/2020						182	211		195
3/24/2020	59	91	76	71	117				
3/25/2020									
9/22/2020	0.1	100		00					
9/23/2020 9/24/2020	81	103	69	99	113	185	212	171	186
9/25/2020			09		113	103	212	171	100
3/1/2021									
3/2/2021								154	
3/3/2021	37	95	53	57		178	205		173
3/4/2021					110				

### **Prediction Limit**

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/10/2021 3:51 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
6/9/2016	210	240	150						
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/2/2016	202	226	155						
8/30/2016				319					
8/31/2016					209				
9/13/2016									
9/14/2016						152			
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
9/21/2016	216	214	138						
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016						148			
11/7/2016	399		291						
11/8/2016	000	229	20.						
11/14/2016				280					
11/28/2016					102				
12/15/2016					.02	191			
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017						180			
1/18/2017	215 (D)	243 (D)							
1/19/2017	( - /	_ := (_ /	145 (D)						
2/21/2017	198		- ( )						
2/22/2017		310	185		164				
2/23/2017									
2/24/2017				162					
3/1/2017									
3/2/2017									
3/3/2017						156			
3/6/2017									
3/7/2017									
3/8/2017									
4/26/2017									
4/27/2017									
4/28/2017						130			
5/1/2017									
5/2/2017									

### **Prediction Limit**

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/10/2021 3:51 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
5/3/2017								
5/5/2017	347	289						
5/8/2017			114	194	145			
5/26/2017						223		
6/27/2017								
6/28/2017						166		
6/29/2017								
6/30/2017								
7/5/2017		217	136					
7/7/2017	236							
7/10/2017								
7/11/2017				193				
7/17/2017					185			
10/3/2017						153		
10/4/2017								
10/5/2017		221	139					
10/6/2017								
10/9/2017	204							
10/10/2017				175				
10/11/2017							68	
10/12/2017								74
10/16/2017					218			
11/20/2017							139	179
1/10/2018								140
1/11/2018							153	
2/19/2018					173			119
2/20/2018							87	
4/2/2018				192				
4/3/2018							85	106
6/5/2018								
6/6/2018								
6/7/2018						146		
6/8/2018								
6/11/2018			156					
6/12/2018	243	234						
6/13/2018								
6/28/2018							88	112
8/6/2018					158			
8/7/2018							89	103
9/19/2018				186				
9/24/2018							82	107
9/25/2018								
9/26/2018								
10/1/2018						155		
10/2/2018			154					
10/3/2018	237	232						
2/25/2019					92			
3/26/2019								90
3/27/2019				170			75	
3/28/2019								
3/29/2019						150		
4/1/2019		238	147					

### **Prediction Limit**

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/10/2021 3:51 PM View: Appendix III
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-47 (bg)	GWA-2 (bg)	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
4/2/2019	<25							
4/3/2019								
6/12/2019					226			
9/24/2019						146		
9/25/2019			162					
9/26/2019	239	241						
10/8/2019				172	276			
10/9/2019							119	98
3/17/2020				165	185			
3/18/2020								
3/19/2020	202	212				148		
3/20/2020			137					
3/24/2020								84
3/25/2020							158	
9/22/2020				141	281			
9/23/2020						161		
9/24/2020	226	209	133				170	77
9/25/2020								
3/1/2021				145				
3/2/2021					296			
3/3/2021	217	184	110			138		
3/4/2021							168	57

## FIGURE E.

# Appendix III Trend Tests - Prediction Limits Exceedances - Significant Results Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 2:57 PM

	Plant Yates	Client: Southern Company	Data: Yates	Ash Pond	12 Printe	ed 5/7/	2021, 2	:57 PM				
Constituent	Well		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	YGWA-21I (bg)		-0.006801	-60	-58	Yes	16	56.25	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)		-0.06529	-59	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)		-0.05699	-66	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-26S		-0.8658	-70	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-28I		-0.3155	-68	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)		-0.5003	-45	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	)	0.3002	76	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	)	0.189	71	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)		-0.9116	-83	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)		1.091	76	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)		0.4938	60	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)		-25.19	-71	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)		-3.687	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)		-12.05	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)		-3.891	-96	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)		0.09335	70	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)		25.64	66	48	Yes	14	0	n/a	n/a	0.01	NP

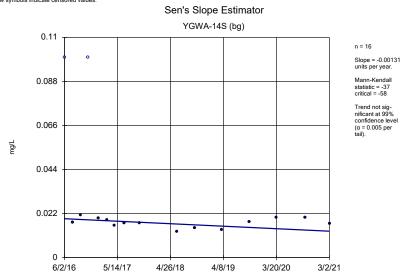
## Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Appendix III 1	Plant Yates Client: Southern Compan	y Data: Yate					-57 PM	.03 -	/ \II I \	Cou	ito
Constituent	Well	Slope	Calc.	<u>Critical</u>	Sig.			Normality	Xform	<u>Alpha</u>	Method
Boron (mg/L)	YGWA-14S (bg)	-0.00131	-37	-58	No.	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0	-2	-58	No	16	25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-23	-58	No	16		n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-18	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-28	-58	No	16	81.25		n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-8	-58	No	16	56.25		n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-23	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-26I	-0.03933	-44	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-26S	0.004704	16	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-27I	0.03779	17	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-27S	0	-4	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-28I	0.006966	2	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-28S	0.04804	17	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-29I	-0.02029	-52	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-47 (bg)	-0.02029	-39	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-17S (bg)	-0.0002497	-11	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0.0002497	-34	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003285	-14	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0.0003283	-15	-58	No	16	87.5	n/a	n/a	0.01	NP
, • ,		-0.006801	-60	-58	Yes	16	56.25			0.01	NP
Boron (mg/L) Boron (mg/L)	YGWA-21I (bg) YGWA-39 (bg)	0.002402	14	<b>-36</b> 43	No	13	7.692		n/a n/a	0.01	NP NP
Boron (mg/L)	YGWA-40 (bg)	-0.02279	-41	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-41 (bg)	0.02279	-41			16	62.5			0.01	NP
Boron (mg/L)	YGWA-41 (bg)	0.0001974	12	-58 E9	No No	16	12.5	n/a n/a	n/a n/a	0.01	NP
	YGWA-5I (bg)			58		16	56.25				
Boron (mg/L)		-0.0019	-46 E	-58	No				n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg) YGWA-14S (bg)	0.1626	5	48	No	14	57.14 0	n/a	n/a	0.01	NP NP
Chloride (mg/L)	YGWA-1D (bg)	-0.02735	30	58	No	16	0	n/a	n/a	0.01 0.01	NP
Chloride (mg/L)			-40	-58	No	16		n/a	n/a		
Chloride (mg/L)	YGWA-1I (bg)	-0.02869	-33	-58	No No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.05296	-45	-58	No No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	0	-21	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.06529	-59	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05699	-66	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-26I	-0.2376	-33	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-26S	-0.8658	-70	-58	Yes		0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-27I	0	-5	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-28S	-0.3155	-68 1F	- <b>58</b>	Yes	16	0	n/a	n/a	0.01	<b>NP</b> NP
Chloride (mg/L)		-0.1389	-15	-58	No	16		n/a	n/a	0.01	
Chloride (mg/L)	YGWA-47 (bg)	-0.5003	-45	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	<b>0.3002</b> 0.05099	76	58	Yes	<b>16</b> 16	0	n/a	n/a	0.01	<b>NP</b> NP
Chloride (mg/L) Chloride (mg/L)	YGWA-18I (bg)	0.2082	35 50	58	No	16	0	n/a	n/a	0.01 0.01	NP
, ,	YGWA-18S (bg)	0.2082	50	58	No	16	0 <b>0</b>	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)		71	58	Yes			n/a	n/a		
Chloride (mg/L) Chloride (mg/L)	YGWA-21I (bg)	-0.1117	-28	-58	No	16	0	n/a	n/a	0.01	NP
, ,	YGWA-39 (bg)	0.2329	13	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.1751	26	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.1099	36	58	No	16	0	n/a	n/a	0.01	NP ND
Chloride (mg/L)	YGWA-5D (bg)	<b>-0.9116</b>	-83 -1	-58 50	Yes	16 16	0	n/a	n/a	0.01	NP ND
Chloride (mg/L)	YGWA-5I (bg)	0 1272	-1 20	-58 49	No	16	0	n/a	n/a	0.01	NP ND
Chloride (mg/L)	GWA-2 (bg)	0.1272	29	48	No	14	0	n/a	n/a	0.01	NP ND
Sulfate (mg/L)	YGWA-14S (bg)	0.09469	17	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.091	76	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1I (bg)	-0.2947	-23	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.1728	11	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.08892	-28	-58	No	16	12.5	n/a	n/a	0.01	NP

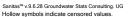
# Appendix III Trend Tests - Prediction Limits Exceedances - All Results 2 Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 2:57 PM

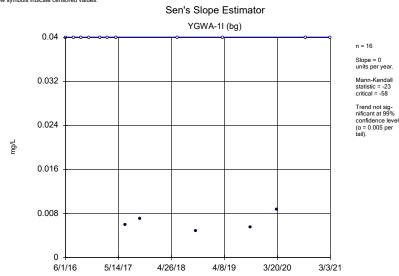
	Plant Yates Client: Southern Company	Data: Yates	Ash Pond	12 Printe	d 5/7/2	2021, 2:	57 PM				
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Sulfate (mg/L)	YGWA-3D (bg)	0.4938	60	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3I (bg)	0.6094	45	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-27S	-1.986	-54	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-25.19	-71	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.1322	51	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2007	-54	-58	No	16	25	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.1939	-48	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	24	58	No	16	62.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.2852	-25	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.687	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-12.05	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-4I (bg)	0.1751	39	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-3.891	-96	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.09335	70	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	25.64	66	48	Yes	14	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



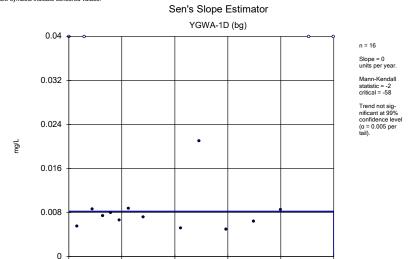
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2





Constituent: Boron Analysis Run 5/7/2021 2:55 PM View: Appendix III - Trend Tests
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Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

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4/26/18

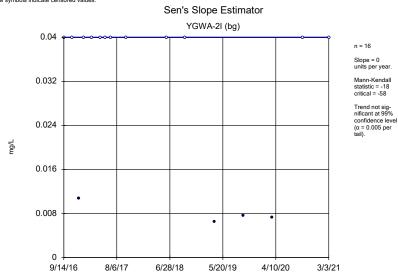
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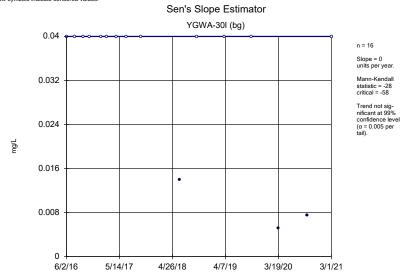
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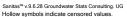


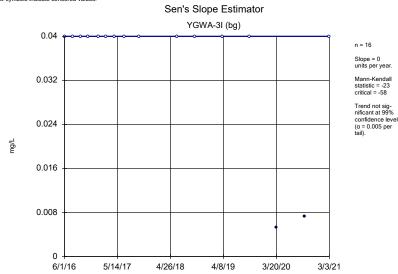
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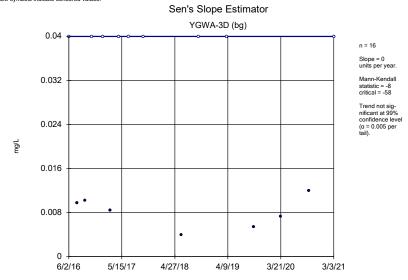
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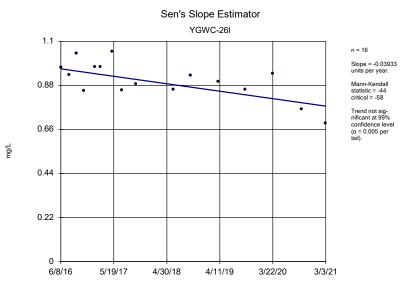


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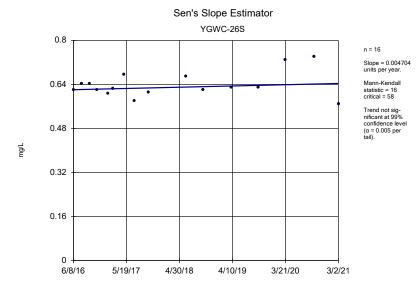
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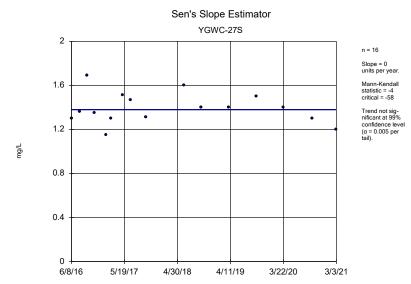
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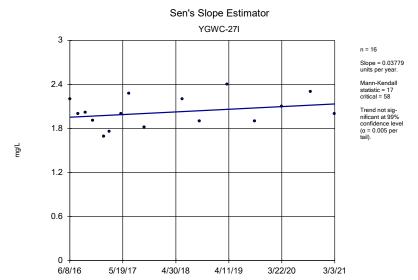
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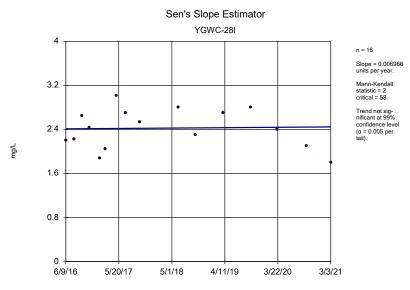
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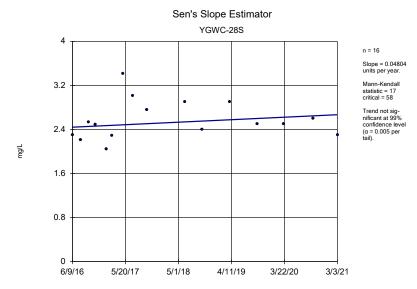
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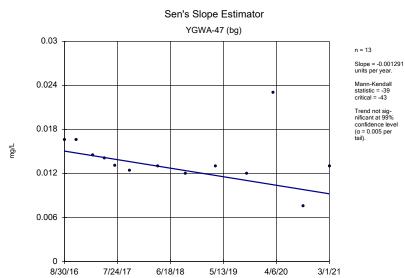
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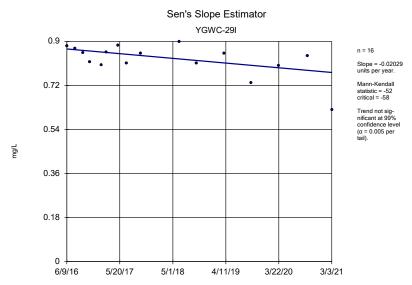
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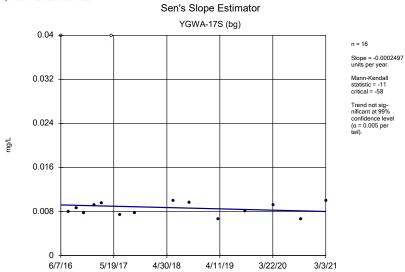


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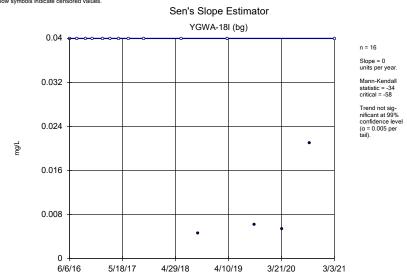
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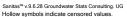


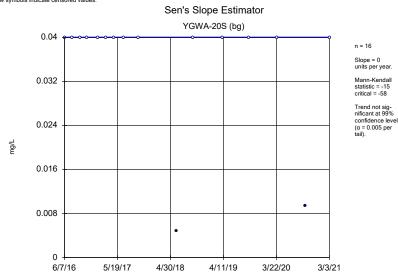
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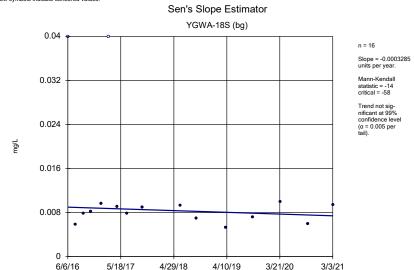
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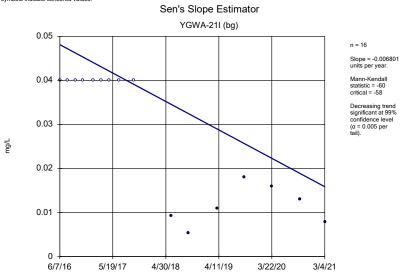
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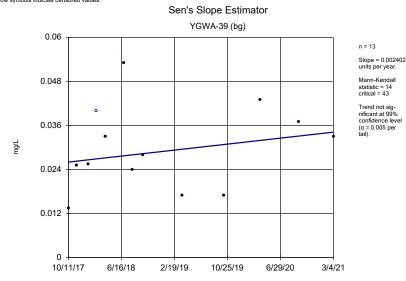
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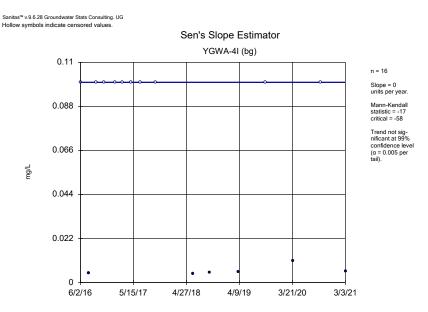
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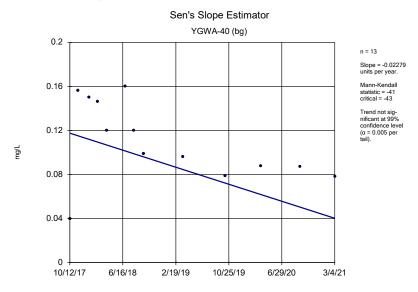
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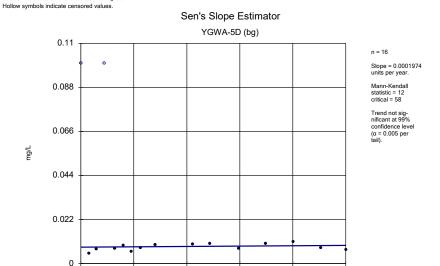
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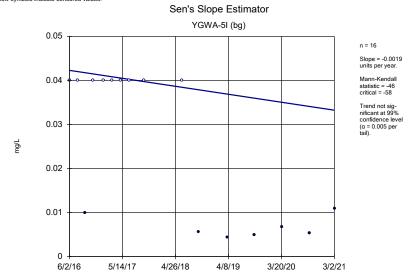
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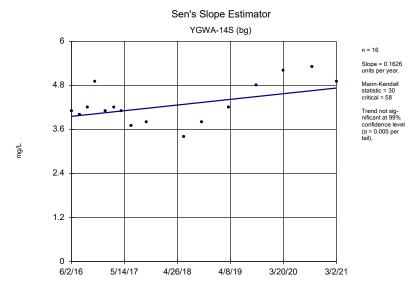
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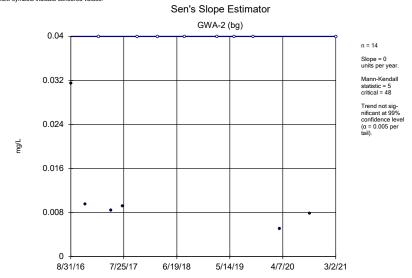
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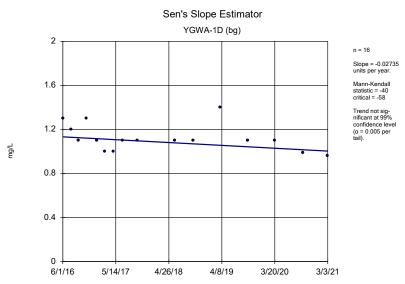


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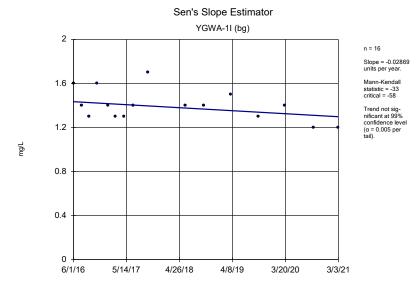
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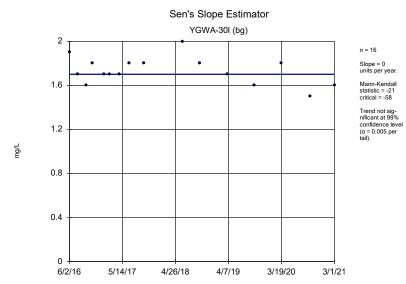
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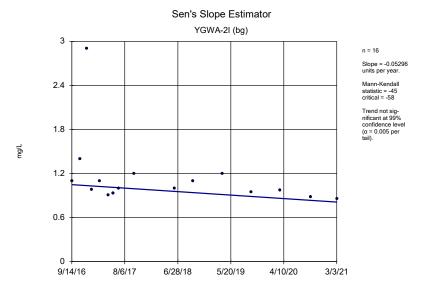
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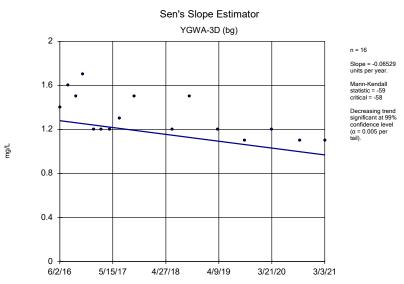
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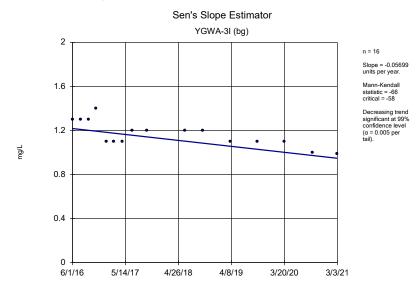


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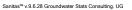


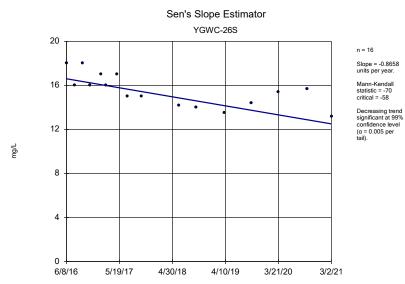
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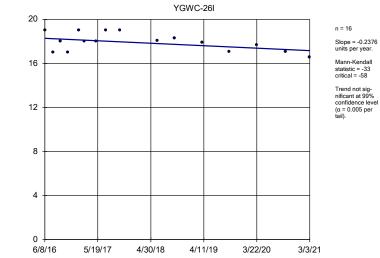
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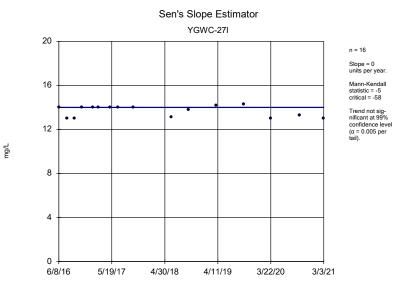


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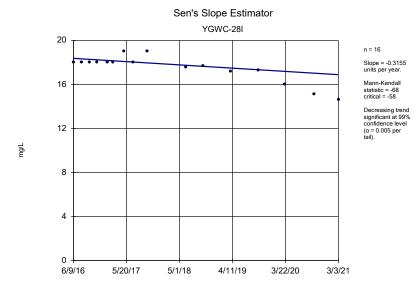
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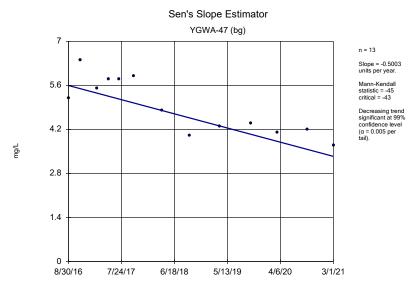
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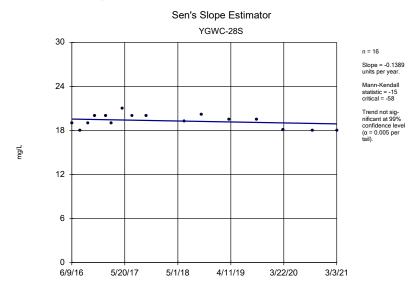
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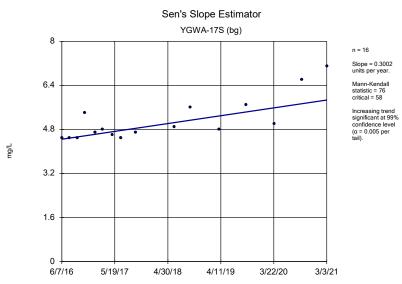
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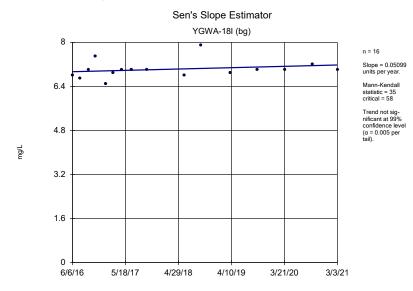
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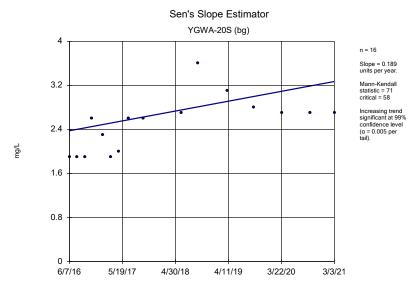
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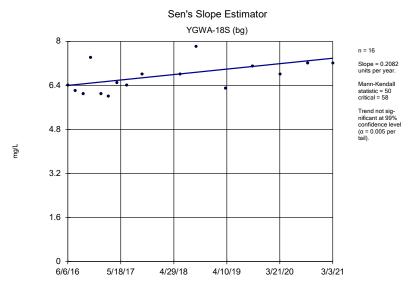
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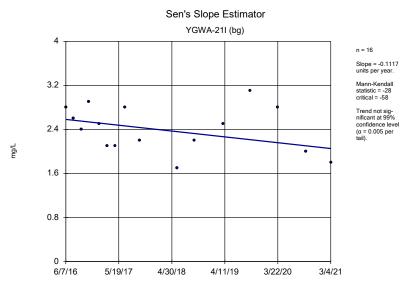
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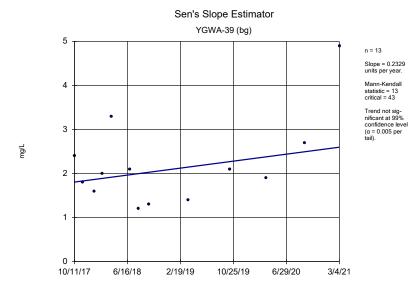
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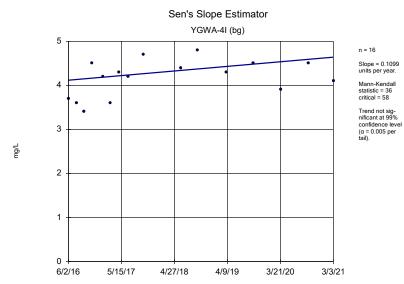
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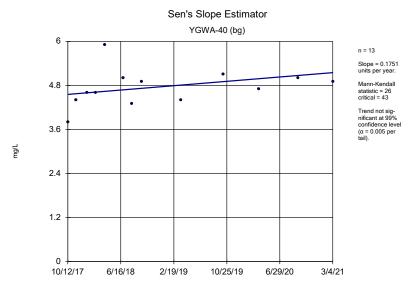
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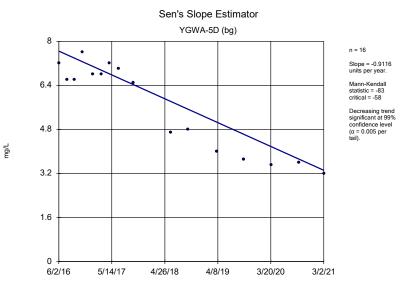
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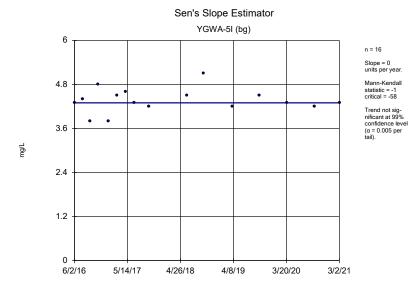
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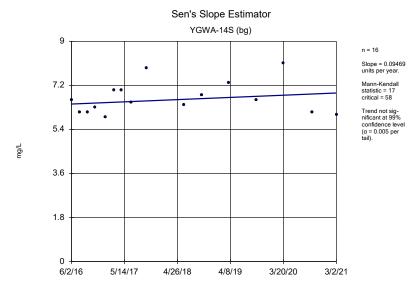
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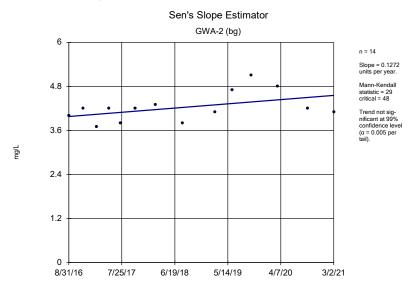
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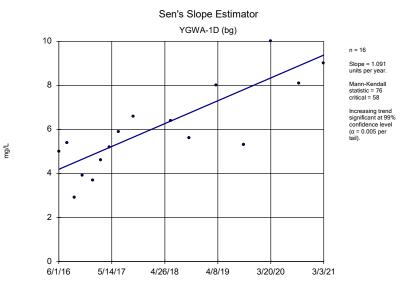
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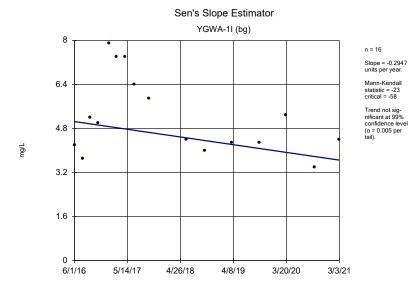
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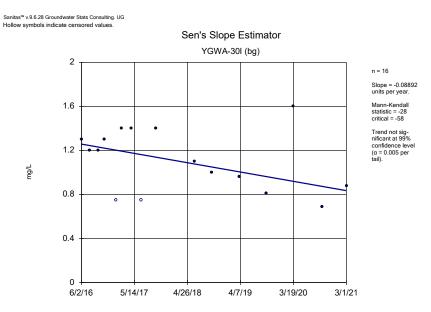
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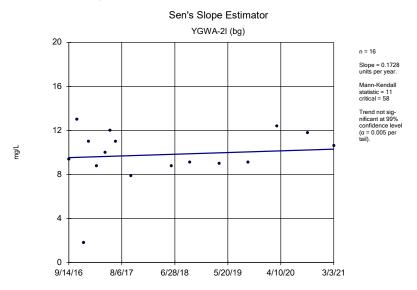
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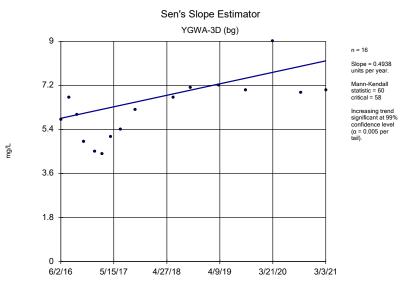
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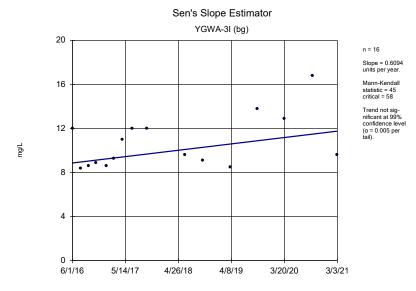


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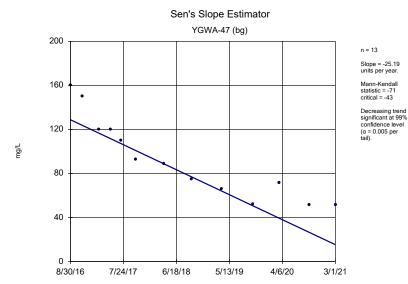


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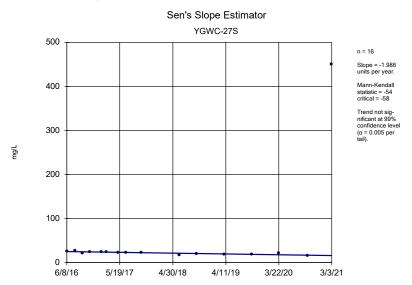
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



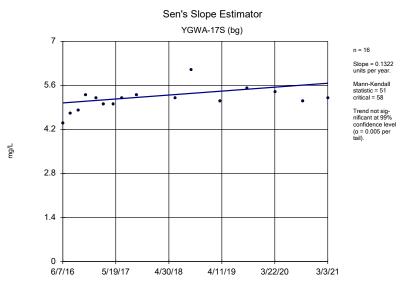
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



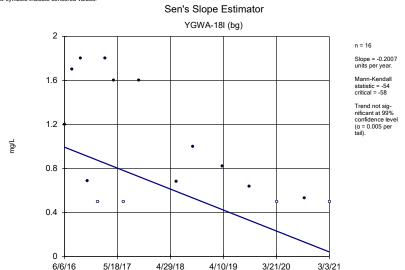
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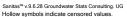
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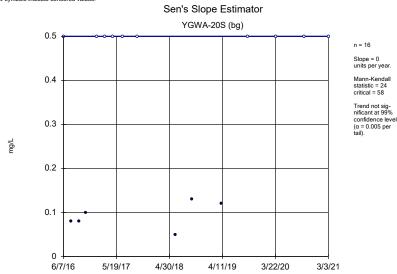
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Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



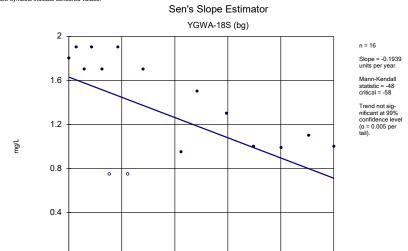
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2





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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

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Plant Yates Client: Southern Company Data: Yates Ash Pond 2

4/29/18

4/10/19

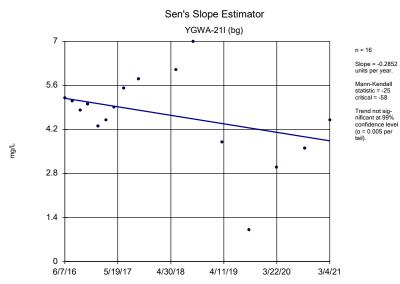
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#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

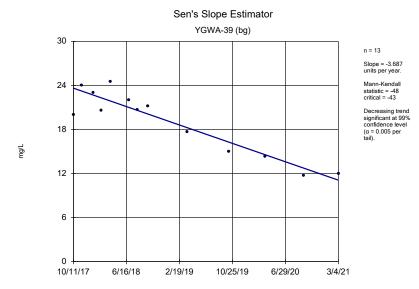
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5/18/17

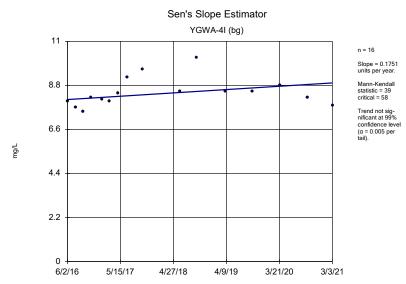


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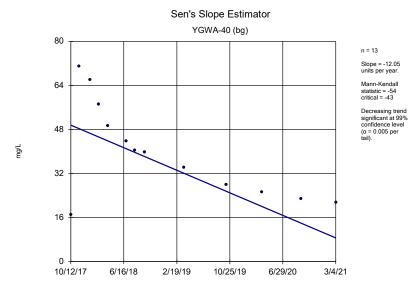
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



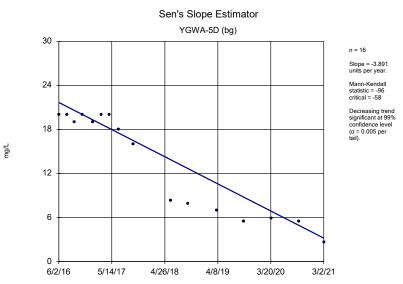
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



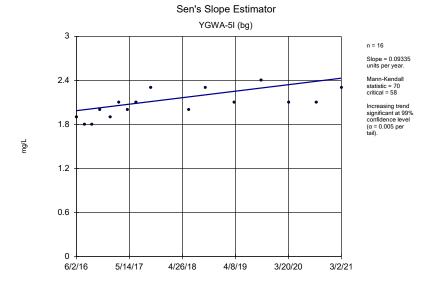
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



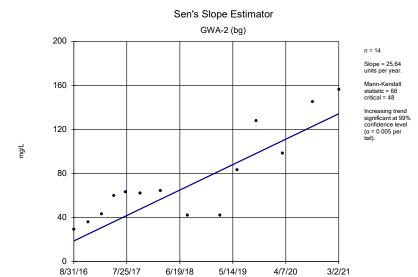
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Plant Yates Client: Southern Company Data: Yates Ash Pond 2



Constituent: Sulfate Analysis Run 5/7/2021 2:56 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



Constituent: Sulfate Analysis Run 5/7/2021 2:56 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond 2



Constituent: Sulfate Analysis Run 5/7/2021 2:56 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

## FIGURE F.

## Upper Tolerance Limits Summary Table

Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 12:01 PM Constituent Upper Lim. Lower Lim. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. <u>Transform</u> <u>Alpha</u> Method 0.0047 n/a 315 86.03 Antimony (mg/L) n/a n/a n/a n/a n/a NaN NP Inter(NDs) NP Inter(NDs) Arsenic (mg/L) 0.005 n/a 363 n/a 77.96 n/a n/a NaN Barium (mg/L) 0.071 n/a 363 n/a 3.03 n/a NaN NP Inter(normality) n/a n/a n/a Beryllium (mg/L) 0.0005 n/a 347 81.27 NaN NP Inter(NDs) Cadmium (mg/L) NP Inter(NDs) 0.0005 n/a n/a 347 n/a n/a 95.68 n/a NaN n/a Chromium (mg/L) 0.0093 n/a 315 n/a 77.46 n/a n/a NaN NP Inter(NDs) Cobalt (mg/L) NP Inter(NDs) 0.035 n/a 69.72 n/a NaN n/a n/a 360 n/a n/a Combined Radium 226 + 228 (pCi/L) 6.92 342 0 NP Inter(normality) NP Inter(NDs) Fluoride (mg/L) 0.68 68.51 n/a n/a 362 n/a n/a n/a n/a NaN Lead (mg/L) 0.0013 n/a 317 82.65 NP Inter(NDs) NP Inter(normality) Lithium (mg/L) 0.03 n/a 342 n/a 27.49 n/a NaN n/a n/a n/a Mercury (mg/L) 0.0002 n/a 278 93.17 NaN NP Inter(NDs) Molybdenum (mg/L) 0.014 NP Inter(NDs) n/a n/a 306 n/a n/a 59.8 n/a n/a NaN Selenium (mg/L) 0.005 n/a 345 91.59 n/a NaN NP Inter(NDs) Thallium (mg/L) 0.001 96.64 n/a NP Inter(NDs) n/a n/a 298 n/a n/a n/a NaN

## FIGURE G.

YATES ASH POND 2 GWPS											
		CCR-Rule	Background	Federal	State						
Constituent Name	MCL	Specified	Limit	GWPS	GWPS						
Antimony, Total (mg/L)	0.006		0.0047	0.006	0.006						
Arsenic, Total (mg/L)	0.01		0.005	0.01	0.01						
Barium, Total (mg/L)	2		0.071	2	2						
Beryllium, Total (mg/L)	0.004		0.0005	0.004	0.004						
Cadmium, Total (mg/L)	0.005		0.0005	0.005	0.005						
Chromium, Total (mg/L)	0.1		0.0093	0.1	0.1						
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035						
Combined Radium, Total (pCi/L)	5		6.92	6.92	6.92						
Fluoride, Total (mg/L)	4		0.68	4	4						
Lead, Total (mg/L)		0.015	0.0013	0.015	0.0013						
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03						
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002						
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014						
Selenium, Total (mg/L)	0.05		0.005	0.05	0.05						
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002						

<sup>\*</sup>Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level

<sup>\*</sup>MCL = Maximum Contaminant Level

<sup>\*</sup>CCR = Coal Combustion Residual

<sup>\*</sup>GWPS = Groundwater Protection Standard

## FIGURE H.

# Federal Confidence Intervals - All Results (No Significant) Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 12:14 PM

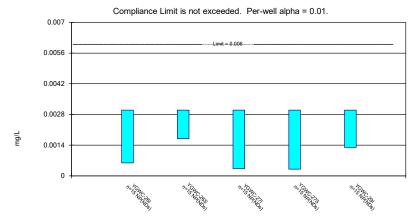
		Plant Yates	s Client: So	outhern Comp	any	Data:	Yates Ash Po	nd 2 Print	ed 5/7/202	1, 12:14 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Antimony (mg/L)	YGWC-26I	0.003	0.00059	0.006	No	15	0.002674	0.0008604	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-26S	0.003	0.0017	0.006	No	15	0.00282	0.0004754	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-27I	0.003	0.00033	0.006	No	15	0.002822	0.0006894	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-27S	0.003	0.0003	0.006	No	15	0.00282	0.0006971	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-29I	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-27I	0.005	0.0006	0.01	No	19	0.003181	0.002196	57.89	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-28S	0.005	0.00069	0.01	No	19	0.003185	0.002188	57.89	None	No	0.01	NP (NDs)
Barium (mg/L)	YGWC-26I	0.06639	0.06267	2	No	19	0.06453	0.003182	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-26S	0.02896	0.02661	2	No	19	0.02778	0.002008	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-27I	0.0728	0.063	2	No	19	0.06902	0.007204	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-27S	0.1047	0.09313	2	No	19	0.09891	0.009866	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-28I	0.09012	0.08399	2	No	19	0.08706	0.005237	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-28S	0.221	0.196	2	No	19	0.2026	0.03864	0	None	x^4	0.01	Param.
Barium (mg/L)	YGWC-29I	0.0781	0.057	2	No	19	0.07414	0.03394	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-26S	0.0002	0.00011	0.004	No	17	0.0001932	0.0001222		None	No	0.01	NP (normality)
													, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Beryllium (mg/L)	YGWC-27I	0.00023	0.00014	0.004	No No	17	0.0002371	0.0001321		None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-27S	0.0005	0.000066	0.004	No	17	0.0004745	0.0001053		None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-28I	0.0005	0.0001	0.005	No	17	0.0002418	0.0001791		None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-28S	0.0005	0.00048	0.005	No	17	0.0004988	0.0000048		None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-29I	0.0002194	0.0001256	0.005	No	17	0.0002553	0.0001322		Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	YGWC-26I	0.005	0.00065	0.1	No	17	0.003202	0.002205	52.94	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-26S	0.002486	0.001092	0.1	No	17	0.002517	0.00169	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	YGWC-27S	0.015	0.0027	0.1	No	17	0.004668	0.00319	70.59	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-28I	0.005	0.0005	0.1	No	17	0.004201	0.00178	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-28S	0.005	0.0006	0.1	No	17	0.004211	0.001757	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-29I	0.005	0.0005	0.1	No	17	0.004735	0.001091	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-26S	0.002781	0.001865	0.035	No	19	0.002363	0.0008532	5.263	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	YGWC-27I	0.01683	0.003275	0.035	No	19	0.01862	0.02682	0	None	In(x)	0.01	Param.
Cobalt (mg/L)	YGWC-27S	0.0026	0.0022	0.035	No	19	0.002474	0.0006497	5.263	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-28I	0.005	0.00042	0.035	No	19	0.004759	0.001051	94.74	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-28S	0.0012	0.00092	0.035	No	19	0.001424	0.001268	10.53	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-29I	0.005	0.0007	0.035	No	19	0.003845	0.001988	73.68	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YGWC-26I	1.062	0.4927	6.92	No	18	0.8202	0.5153	5.556	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-26S	0.8845	0.5432	6.92	No	19	0.7138	0.2914	5.263	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-27I	4.054	2.769	6.92	No	19	3.412	1.098	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-27S	1.078	0.6625	6.92	No	19	0.8703	0.3549	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-28I	0.948	0.261	6.92	No	19	0.6337	0.3534	5.263	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	YGWC-28S	0.9055	0.4908	6.92	No	19	0.6981	0.3541	5.263	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-29I	1.148	0.7362	6.92	No	19	0.9422	0.3517	5.263	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-26I	0.1	0.06	4	No	20	0.0825	0.02103	40	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-26S	0.16	0.044	4	No	20	0.1332	0.09928	70	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-27I	0.14	0.07	4	No	20	0.0921	0.02603	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-27S	0.2052	0.1014	4	No	20	0.1634	0.1047	20	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-28I	0.14	0.078	4	No	20	0.1269	0.08215	25	None	No	0.01	NP (normality)
Fluoride (mg/L)	YGWC-28S	0.2651	0.1498	4	No	20	0.2075	0.1015	10	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-29I	0.09525	0.05897	4	No	20	0.0882	0.03115	35	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	YGWC-26I	0.001	0.000059	0.015	No	15	0.000874	0.0003325	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-26S	0.001	0.000064	0.015	No	15	0.00069	0.0004539		None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-27S	0.001	0.0002	0.015	No	15	0.0007625	0.0003766		None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-28S	0.001	0.000063	0.015	No	15	0.0006876	0.0004573		None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-29I	0.001	0.00016	0.015	No	15	0.0008214	0.0004373		None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-26I	0.007	0.006541	0.013	No	19	0.006821	0.0003702		None	No	0.01	Param.
Lithium (mg/L) Lithium (mg/L)	YGWC-27I	0.007101	0.008039	0.04	No	19	0.000821	0.0004779	0	None	No	0.01	Param.
Lithium (mg/L) Lithium (mg/L)	YGWC-27S	0.01037	0.000039	0.04	No	19	0.009205	0.001991	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-28I	0.007044	0.00663	0.04	No	19	0.02646	0.000097		None	No	0.01	Param.
Lithium (mg/L) Lithium (mg/L)	YGWC-28I	0.007044	0.0053	0.04		19	0.006837	0.005667	94.74			0.01	NP (NDs)
	YGWC-285 YGWC-29I	0.03	0.0053		No	19	0.0287	0.005581	5.263	None	No No	0.01	, ,
Lithium (mg/L)	1 G v v G - 2 3 1	0.0074	0.0002	0.04	No	19	0.001220	0.000081	J.203	None	No	0.01	NP (normality)

### Federal Confidence Intervals - All Results (No Significant)

Page 2

Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 5/7/2021, 12:14 PM <u>Well</u> ND Adj. Transform Alpha Constituent  $\underline{\text{Upper Lim.}} \quad \underline{\text{Lower Lim.}} \quad \underline{\text{Compliance}} \quad \underline{\text{Sig.}} \quad \underline{\text{N}}$ <u>Mean</u> Std. Dev. %NDs Method Molybdenum (mg/L) YGWC-27I 0.01 0.0014 0.1 No 19 0.005942 0.004398 52.63 None No NP (NDs) YGWC-28I 0.01 0.0012 0.005411 0.004474 47.37 0.01 NP (normality) Molybdenum (mg/L) 0.1 No 19 No None 0.00083 Molybdenum (mg/L) YGWC-28S 0.01 0.1 No 19 0.008046 0.003887 78.95 None No 0.01 NP (NDs) Molybdenum (mg/L) YGWC-29I 0.01 0.00083 0.1 No 19 0.009517 0.002104 94.74 0.01 NP (NDs) None No 0.0018 0.01 Selenium (mg/L) YGWC-26I 0.0031 0.05 No 17 0.002476 0.001067 11.76 None No NP (normality) Selenium (mg/L) YGWC-26S 0.005 0.0014 0.05 No 0.004076 0.001731 76.47 No 0.01 NP (NDs) Selenium (mg/L) YGWC-28I 0.005 0.0012 0.05 No 17 0.004776 0.0009216 94.12 0.01 NP (NDs) None No YGWC-28S 0.005 0.001 0.05 0.004765 0.0009701 94.12 NP (NDs) Selenium (mg/L) No 17 0.01 No None

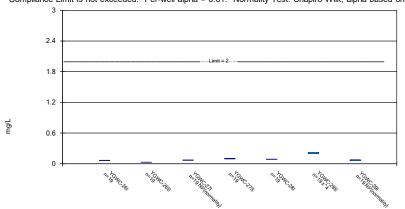
#### Non-Parametric Confidence Interval



Constituent: Antimony Analysis Run 5/7/2021 12:13 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

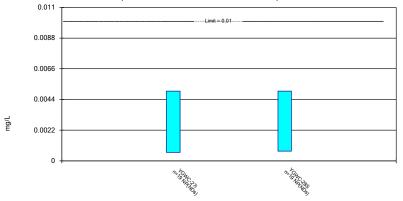
## Parametric and Non-Parametric (NP) Confidence Interval Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/7/2021 12:13 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

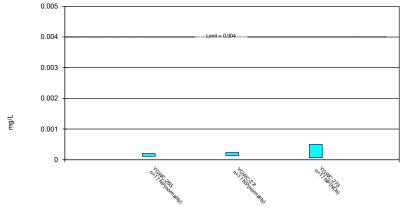


Constituent: Arsenic Analysis Run 5/7/2021 12:13 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

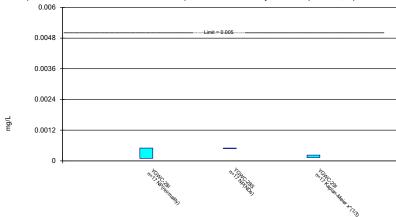
### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



#### 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.

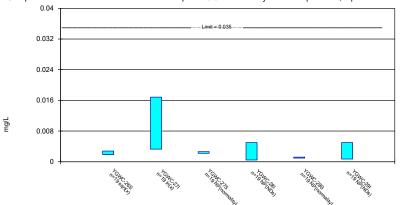


Constituent: Cadmium Analysis Run 5/7/2021 12:13 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

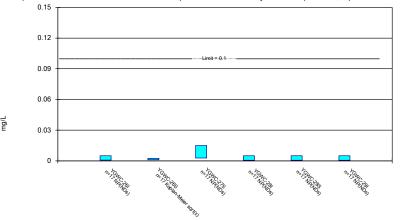


Constituent: Cobalt Analysis Run 5/7/2021 12:13 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

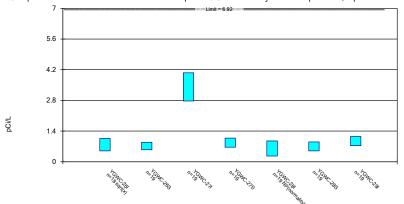


Constituent: Chromium Analysis Run 5/7/2021 12:13 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

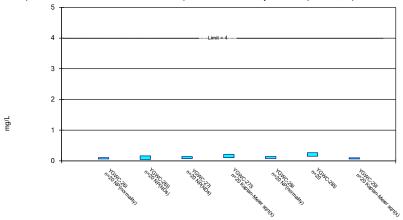
#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

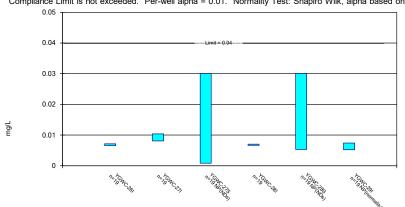


Constituent: Fluoride Analysis Run 5/7/2021 12:13 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

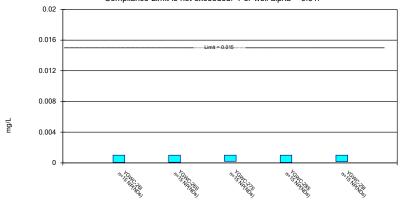


## Constituent: Lithium Analysis Run 5/7/2021 12:13 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Non-Parametric Confidence Interval

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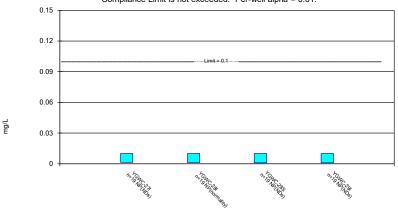
Constituent: Lead Analysis Run 5/7/2021 12:13 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

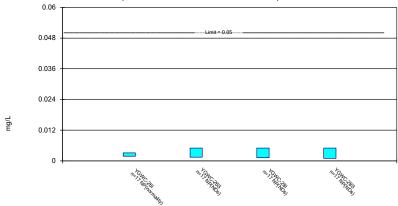
#### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



#### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 5/7/2021 12:13 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

# FIGURE I.

## State Confidence Intervals - All Results (No Significant)

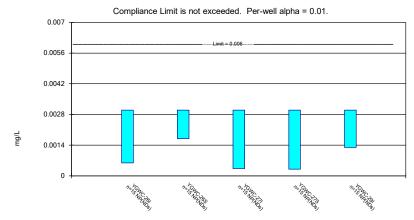
		Plant Yate	s Client: So	outhern Comp	any	Data:	Yates Ash Po	ond 2 Print	ed 5/7/202	1, 12:16 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Antimony (mg/L)	YGWC-26I	0.003	0.00059	0.006	No	15	0.002674	0.0008604	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-26S	0.003	0.0017	0.006	No	15	0.00282	0.0004754	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-27I	0.003	0.00033	0.006	No	15	0.002822	0.0006894	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-27S	0.003	0.0003	0.006	No	15	0.00282	0.0006971	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-29I	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-27I	0.005	0.0006	0.01	No	19	0.003181	0.002196	57.89	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-28S	0.005	0.00069	0.01	No	19	0.003185	0.002188	57.89	None	No	0.01	NP (NDs)
Barium (mg/L)	YGWC-26I	0.06639	0.06267	2	No	19	0.06453	0.003182	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-26S	0.02896	0.02661	2	No	19	0.02778	0.002008	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-27I	0.0728	0.063	2	No	19	0.06902	0.007204	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-27S	0.1047	0.09313	2	No	19	0.09891	0.009866	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-28I	0.09012	0.08399	2	No	19	0.08706	0.005237	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-28S	0.221	0.196	2	No	19	0.2026	0.03864	0	None	x^4	0.01	Param.
Barium (mg/L)	YGWC-29I	0.0781	0.057	2	No	19	0.07414	0.03394	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-26S	0.0002	0.00011	0.004	No	17	0.0001932	0.0001222	11.76	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-27I	0.00023	0.00014	0.004	No	17	0.0002371	0.0001321	17.65	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-27S	0.0005	0.000066	0.004	No	17	0.0004745	0.0001053	94.12	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-28I	0.0005	0.0001	0.005	No	17	0.0002418	0.0001791	11.76	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-28S	0.0005	0.00048	0.005	No	17	0.0004988	0.0000048	5194.12	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-29I	0.0002194	0.0001256	0.005	No	17	0.0002553	0.0001322	17.65	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	YGWC-26I	0.005	0.00065	0.1	No	17	0.003202	0.002205	52.94	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-26S	0.002486	0.001092	0.1	No	17	0.002517	0.00169	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	YGWC-27S	0.015	0.0027	0.1	No	17	0.004668	0.00319	70.59	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-28I	0.005	0.0005	0.1	No	17	0.004201	0.00178	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-28S	0.005	0.0006	0.1	No	17	0.004211	0.001757	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-29I	0.005	0.0005	0.1	No	17	0.004735	0.001091	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-26S	0.002781	0.001865	0.035	No	19	0.002363	0.0008532	5.263	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	YGWC-27I	0.01683	0.003275	0.035	No	19	0.01862	0.02682	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	YGWC-27S	0.0026	0.0022	0.035	No	19	0.002474	0.0006497		None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-28I	0.005	0.00042	0.035	No	19	0.004759	0.001051	94.74	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-28S	0.0012	0.00092	0.035	No	19	0.001424	0.001268	10.53	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-29I	0.005	0.0007	0.035	No	19	0.003845	0.001988	73.68	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YGWC-26I	1.062	0.4927	6.92	No	18	0.8202	0.5153	5.556	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-26S	0.8845	0.5432	6.92	No	19	0.7138	0.2914	5.263	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-27I	4.054	2.769	6.92	No	19	3.412	1.098	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)		1.078	0.6625	6.92	No	19	0.8703	0.3549	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)		0.948	0.261	6.92	No	19	0.6337	0.3534	5.263	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	YGWC-28S	0.9055	0.4908	6.92	No	19	0.6981	0.3541	5.263	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-29I	1.148	0.7362	6.92	No	19	0.9422	0.3517	5.263	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-26I	0.1	0.06	4	No	20	0.0825	0.02103	40	None	No	0.01	NP (normality)
Fluoride (mg/L) Fluoride (mg/L)	YGWC-26S YGWC-27I	0.16 0.14	0.044	4	No	20 20	0.1332	0.09928	70 60	None None	No	0.01	NP (NDs)
, ,					No		0.0921				No		NP (NDs)
Fluoride (mg/L)	YGWC-27S	0.2052	0.1014	4	No	20	0.1634	0.1047	20	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L) Fluoride (mg/L)	YGWC-28I YGWC-28S	0.14 0.2651	0.078 0.1498	4	No No	20 20	0.1269 0.2075	0.08215 0.1015	25 10	None None	No No	0.01	NP (normality) Param.
Fluoride (mg/L)	YGWC-29I	0.09525	0.05897	4	No	20	0.0882	0.03115	35	Kaplan-Meier	sqrt(x)	0.01	Param.
, , ,	YGWC-26I	0.09323	0.000059	0.0013			0.0002	0.0003325		•		0.01	NP (NDs)
Lead (mg/L) Lead (mg/L)	YGWC-26S	0.001	0.000059	0.0013	No No	15 15	0.000874	0.0003325		None None	No No	0.01	NP (NDs)
Lead (mg/L)	YGWC-20S	0.001	0.000084	0.0013	No	15	0.00069	0.0004539		None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-28S	0.001	0.0002	0.0013	No	15	0.0007623	0.0003700		None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-29I	0.001	0.000063	0.0013	No	15	0.0008214	0.0004373		None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-26I	0.007	0.006541	0.0013	No	19	0.0068214	0.0003702		None	No	0.01	Param.
Lithium (mg/L)	YGWC-261 YGWC-271	0.007101	0.008039	0.03	No	19	0.000021	0.0004779	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-27S	0.03	0.00081	0.03	No	19	0.003263	0.006697	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-28I	0.007044	0.00663	0.03	No	19	0.006837	0.0003531		None	No	0.01	Param.
Lithium (mg/L)	YGWC-28S	0.03	0.0053	0.03	No	19	0.0287	0.005667	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	YGWC-29I	0.0074	0.0052	0.03	No	19	0.007226	0.005581	5.263	None	No	0.01	NP (normality)
· 3-/										-			, <i>,</i>

#### Page 2

## State Confidence Intervals - All Results (No Significant)

		Plant Yates	s Client: So	outhern Comp	any	Data:	Yates Ash Po	nd 2 Printe	ed 5/7/202	1, 12:16 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Molybdenum (mg/L)	YGWC-27I	0.01	0.0014	0.014	No	19	0.005942	0.004398	52.63	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-28I	0.01	0.0012	0.014	No	19	0.005411	0.004474	47.37	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-28S	0.01	0.00083	0.014	No	19	0.008046	0.003887	78.95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YGWC-29I	0.01	0.00083	0.014	No	19	0.009517	0.002104	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	YGWC-26I	0.0031	0.0018	0.05	No	17	0.002476	0.001067	11.76	None	No	0.01	NP (normality)
Selenium (mg/L)	YGWC-26S	0.005	0.0014	0.05	No	17	0.004076	0.001731	76.47	None	No	0.01	NP (NDs)
Selenium (mg/L)	YGWC-28I	0.005	0.0012	0.05	No	17	0.004776	0.0009216	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	YGWC-28S	0.005	0.001	0.05	No	17	0.004765	0.0009701	94.12	None	No	0.01	NP (NDs)

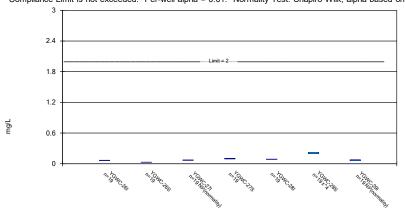
#### Non-Parametric Confidence Interval



Constituent: Antimony Analysis Run 5/7/2021 12:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

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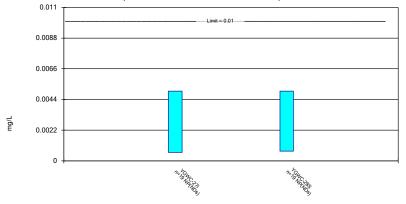
## Parametric and Non-Parametric (NP) Confidence Interval Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/7/2021 12:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

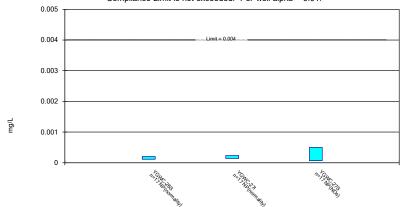


Constituent: Arsenic Analysis Run 5/7/2021 12:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

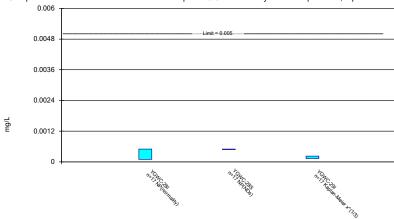
### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



#### 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.

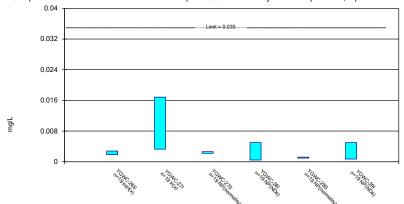


Constituent: Cadmium Analysis Run 5/7/2021 12:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

#### Parametric and Non-Parametric (NP) Confidence Interval

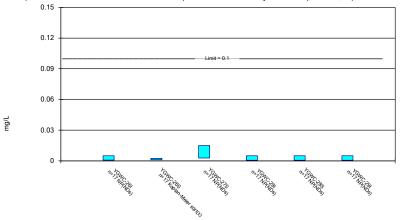
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/7/2021 12:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

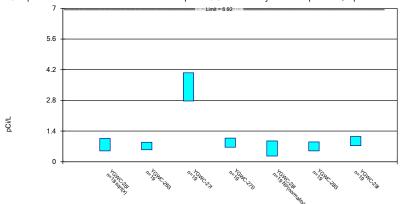


Constituent: Chromium Analysis Run 5/7/2021 12:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

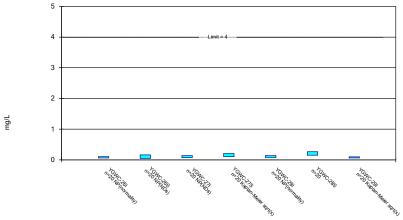
#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

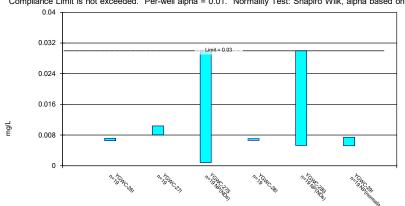


Constituent: Fluoride Analysis Run 5/7/2021 12:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

#### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

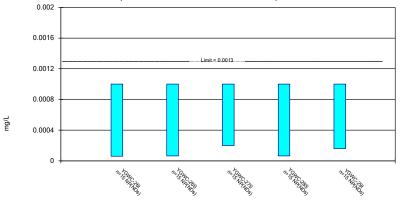


# Constituent: Lithium Analysis Run 5/7/2021 12:15 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



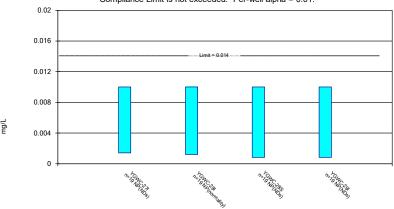
Constituent: Lead Analysis Run 5/7/2021 12:15 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

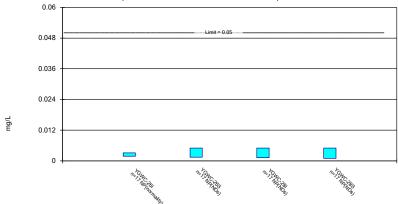
#### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



#### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 5/7/2021 12:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Constituent: Antimony (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-29I
6/8/2016	<0.003	<0.003	<0.003	<0.003	
6/9/2016					<0.003
8/1/2016	<0.003	<0.003	<0.003	<0.003	
8/2/2016					<0.003
9/20/2016	<0.003	<0.003	<0.003	<0.003	
9/21/2016					<0.003
11/7/2016	<0.003	<0.003	<0.003	<0.003	<0.003
1/18/2017	<0.003	<0.003	<0.003		
1/19/2017				<0.003	<0.003
2/21/2017	<0.003	<0.003			
2/22/2017				<0.003	<0.003
2/23/2017			<0.003		
5/3/2017		<0.003			
5/8/2017	<0.003		<0.003	<0.003	<0.003
6/30/2017			<0.003	<0.003	
7/5/2017					<0.003
7/10/2017	<0.003	<0.003			
3/29/2018			<0.003	<0.003	<0.003
3/30/2018	<0.003	<0.003			
2/27/2019	<0.003	<0.003	<0.003	<0.003	<0.003
2/13/2020	0.00052 (J)	0.0016 (J)	<0.003	<0.003	<0.003
3/19/2020		0.0017 (J)			
3/20/2020	0.00059 (J)		0.00033 (J)	0.0003 (J)	<0.003
9/24/2020	<0.003	<0.003	<0.003	<0.003	0.0013 (J)
2/10/2021	<0.003	<0.003	<0.003	<0.003	
2/12/2021					<0.003
3/2/2021		<0.003			
3/3/2021	<0.003		<0.003	<0.003	<0.003
Mean	0.002674	0.00282	0.002822	0.00282	0.002887
Std. Dev.	0.0008604	0.0004754	0.0006894	0.0006971	0.0004389
Upper Lim.	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.00059	0.0017	0.00033	0.0003	0.0013

Constituent: Arsenic (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27I	YGWC-28S
6/8/2016	0.0011 (J)	
6/9/2016		0.00094 (J)
8/1/2016	0.0009 (J)	
8/2/2016		<0.005
9/20/2016	<0.005	
9/21/2016		<0.005
11/7/2016	<0.005	<0.005
1/18/2017	<0.005	<0.005
2/21/2017		<0.005
2/23/2017	<0.005	
5/5/2017		<0.005
5/8/2017	0.0006 (J)	
6/30/2017	<0.005 (*)	
7/7/2017		0.0007 (J)
3/29/2018	0.0006 (J)	
3/30/2018		0.00069 (J)
6/12/2018		0.00075 (J)
6/13/2018	<0.005	
10/2/2018	<0.005	
10/3/2018		0.0007 (J)
2/27/2019	0.00069 (J)	<0.005
4/1/2019	<0.005	
4/2/2019		<0.005
9/26/2019	0.00058 (J)	0.00057 (J)
2/13/2020	0.00055 (J)	0.00065 (J)
3/19/2020		0.00051 (J)
3/20/2020	0.00042 (J)	
9/24/2020	<0.005	<0.005
2/10/2021	<0.005	
2/12/2021		<0.005
3/3/2021	<0.005	<0.005
Mean	0.003181	0.003185
Std. Dev.	0.002196	0.002188
Upper Lim.	0.005	0.005
Lower Lim.	0.0006	0.00069

Constituent: Barium (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.068	0.029	0.081	0.12			
6/9/2016					0.1	0.22	0.082
8/1/2016	0.0688	0.0316	0.0838	0.115			
8/2/2016					0.0836	0.212	0.0781
9/20/2016	0.0663	0.0298	0.0687	0.108			
9/21/2016					0.0889	0.228	0.0782
11/7/2016	0.065	0.0289	0.0639	0.102		0.214	0.0712
11/8/2016					0.0886		
1/18/2017	0.0625	0.0278	0.0645		0.0862	0.213	
1/19/2017				0.102			0.0689
2/21/2017	0.0655	0.0282				0.222	
2/22/2017				0.106	0.0915		0.0741
2/23/2017			0.0728				
5/3/2017		0.0282					
5/5/2017					0.0891	0.219	
5/8/2017	0.0699		0.0721	0.102			0.0725
6/30/2017			0.0666	0.0963			
7/5/2017					0.0862		0.0677
7/7/2017						0.205	
7/10/2017	0.0691	0.0274					
3/29/2018			0.062	0.097			0.055
3/30/2018	0.063	0.026			0.087	0.2	
6/11/2018							0.068
6/12/2018				0.095	0.088	0.21	
6/13/2018	0.064	0.026	0.063				
10/2/2018	0.066	0.026	0.062	0.1			0.067
10/3/2018					0.092	0.22	
2/27/2019	0.065	0.027	0.066	0.096	0.086	0.21	0.067
4/1/2019			0.066	0.099	0.088		0.063
4/2/2019	0.065	0.027				0.2	
9/25/2019	0.063	0.026					0.061
9/26/2019			0.065	0.099	0.087	0.18	
2/13/2020	0.06	0.025	0.063	0.097	0.089	0.21	0.053
3/19/2020		0.027			0.089	0.2	
3/20/2020	0.063		0.062	0.095			0.057
9/24/2020	0.058	0.025	0.069	0.087	0.079	0.18	0.056
2/10/2021	0.06	0.031	0.08	0.088			
2/11/2021					0.078		
2/12/2021						0.057	0.21
3/2/2021		0.031					
3/3/2021	0.064		0.08	0.075	0.077	0.25	0.059
Mean	0.06453	0.02778	0.06902	0.09891	0.08706	0.2026	0.07414
Std. Dev.	0.003182	0.002008	0.007204	0.009866	0.005237	0.03864	0.03394
Upper Lim.	0.06639	0.02896	0.0728	0.1047	0.09012	0.221	0.0781
Lower Lim.	0.06267	0.02661	0.063	0.09313	0.08399	0.196	0.057

Constituent: Beryllium (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-27I	YGWC-27S
6/8/2016	<0.0005	<0.0005	<0.0005
8/1/2016	0.0002 (J)	<0.0005	<0.0005
9/20/2016	0.0001 (J)	9E-05 (J)	<0.0005
11/7/2016	0.0001 (J)	0.0001 (J)	<0.0005
1/18/2017	0.0002 (J)	0.0002 (J)	
1/19/2017			<0.0005
2/21/2017	0.0002 (J)		
2/22/2017			<0.0005
2/23/2017		0.0002 (J)	
5/3/2017	0.0002 (J)		
5/8/2017		0.0002 (J)	<0.0005
6/30/2017		0.0002 (J)	<0.0005
7/10/2017	0.0002 (J)		
3/29/2018		<0.0005	<0.0005
3/30/2018	<0.0005		
2/27/2019	0.00018 (J)	0.00022 (J)	<0.0005
4/1/2019		0.00022 (J)	<0.0005
4/2/2019	0.00015 (J)		
9/25/2019	0.00011 (J)		
9/26/2019		0.0002 (J)	<0.0005
2/13/2020	0.00015 (J)	0.00021 (J)	<0.0005
3/19/2020	0.00012 (J)		
3/20/2020		0.00023 (J)	<0.0005
9/24/2020	8.5E-05 (J)	0.00019 (J)	<0.0005
2/10/2021	0.00013 (J)	0.00014 (J)	6.6E-05 (J)
3/2/2021	0.00016 (J)		
3/3/2021		0.00013 (J)	<0.0005
Mean	0.0001932	0.0002371	0.0004745
Std. Dev.	0.0001222	0.0001321	0.0001053
Upper Lim.	0.0002	0.00023	0.0005
Lower Lim.	0.00011	0.00014	6.6E-05

Constituent: Cadmium (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28I	YGWC-28S	YGWC-29I
6/9/2016	0.00055 (J)	<0.0005	<0.0005
8/2/2016	0.0001 (J)	<0.0005	0.0001 (J)
9/21/2016	0.0001 (J)	<0.0005	0.0002 (J)
11/7/2016		<0.0005	0.0002 (J)
11/8/2016	9E-05 (J)		
1/18/2017	9E-05 (J)	<0.0005	
1/19/2017			0.0001 (J)
2/21/2017		<0.0005	
2/22/2017	0.0001 (J)		0.0001 (J)
5/5/2017	9E-05 (J)	<0.0005	
5/8/2017			0.0002 (J)
7/5/2017	0.0002 (J)		0.0002 (J)
7/7/2017		<0.0005	
3/29/2018			<0.0005
3/30/2018	<0.0005	<0.0005	
2/27/2019	0.00014 (J)	<0.0005	0.00026 (J)
4/1/2019	0.00043 (J)		0.00022 (J)
4/2/2019		<0.0005	
9/25/2019			0.00024 (J)
9/26/2019	<0.0005	<0.0005	
2/13/2020	0.00013 (J)	<0.0005	0.00018 (J)
3/19/2020	0.00016 (J)	<0.0005	
3/20/2020			0.00022 (J)
9/24/2020	0.00027 (J)	<0.0005	0.00033 (J)
2/11/2021	0.00052 (J)		
2/12/2021		0.00048 (J)	<0.0005
3/3/2021	0.00014 (J)	<0.0005	0.00029 (J)
Mean	0.0002418	0.0004988	0.0002553
Std. Dev.	0.0001791	4.851E-06	0.0001322
Upper Lim.	0.0005	0.0005	0.0002194
Lower Lim.	0.0001	0.00048	0.0001256

Constituent: Chromium (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26S	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	<0.005	<0.005	<0.005			
6/9/2016				<0.005	<0.005	<0.005
8/1/2016	0.0008 (J)	0.0026 (J)	<0.005			
8/2/2016				0.0005 (J)	0.0005 (J)	0.0005 (J)
9/20/2016	<0.005	0.001 (J)	<0.005			
9/21/2016				<0.005	<0.005	<0.005
11/7/2016	<0.005	0.0013 (J)	<0.005		<0.005	<0.005
11/8/2016				<0.005		
1/18/2017	<0.005	0.002 (J)		<0.005	<0.005	
1/19/2017			<0.005			<0.005
2/21/2017	<0.005	0.0019 (J)			<0.005	
2/22/2017			<0.005	<0.005		<0.005
5/3/2017		0.0037 (J)				
5/5/2017				<0.005	<0.005	
5/8/2017	0.0006 (J)		<0.005			<0.005
6/30/2017			<0.005			
7/5/2017				<0.005		<0.005
7/7/2017					<0.005	
7/10/2017	<0.005 (*)	<0.005 (*)				
3/29/2018			<0.005			<0.005
3/30/2018	<0.005	<0.005		<0.005	<0.005	
2/27/2019	0.0049 (J)	0.0055 (J)	0.015	<0.005	<0.005	<0.005
4/1/2019			<0.005	<0.005		<0.005
4/2/2019	<0.005	0.003 (J)			<0.005	
9/25/2019	0.00048 (J)	0.0012 (J)				<0.005
9/26/2019			<0.005	0.00044 (J)	<0.005	
2/13/2020	0.00044 (J)	0.0012 (J)	<0.005	0.00047 (J)	<0.005	<0.005
3/19/2020		0.0018 (J)		<0.005	0.00049 (J)	
3/20/2020	0.0009 (J)		0.0005 (J)			<0.005
9/24/2020	0.00067 (J)	0.00068 (J)	0.00057 (J)	<0.005	0.0006 (J)	<0.005
2/10/2021	0.00065 (J)	0.00091 (J)	0.0027 (J)			
2/11/2021				<0.005		
2/12/2021					<0.005	<0.005
3/2/2021		0.001 (J)				
3/3/2021	<0.005		0.00058 (J)	<0.005	<0.005	<0.005
Mean	0.003202	0.002517	0.004668	0.004201	0.004211	0.004735
Std. Dev.	0.002205	0.00169	0.00319	0.00178	0.001757	0.001091
Upper Lim.	0.005	0.002486	0.015	0.005	0.005	0.005
Lower Lim.	0.00065	0.001092	0.0027	0.0005	0.0006	0.0005

Constituent: Cobalt (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.0032	0.0016 (J)	0.0024 (J)			
6/9/2016				0.00042 (J)	0.00085 (J)	0.00052 (J)
8/1/2016	0.003 (J)	0.0014 (J)	0.0026 (J)			
8/2/2016				<0.005	0.0008 (J)	0.0006 (J)
9/20/2016	0.003 (J)	0.002 (J)	0.0026 (J)			
9/21/2016				<0.005	0.0008 (J)	0.0007 (J)
11/7/2016	0.0025 (J)	0.0016 (J)	0.0025 (J)		0.001 (J)	<0.005
11/8/2016				<0.005		
1/18/2017	0.0022 (J)	0.0017 (J)		<0.005	0.001 (J)	
1/19/2017			0.0024 (J)			<0.005
2/21/2017	0.0022 (J)				0.0011 (J)	
2/22/2017			0.0023 (J)	<0.005		<0.005
2/23/2017		0.002 (J)				
5/3/2017	0.002 (J)					
5/5/2017				<0.005	0.0012 (J)	
5/8/2017		0.0029 (J)	0.0023 (J)			<0.005
6/30/2017		0.0044 (J)	0.0022 (J)			
7/5/2017				<0.005		0.0003 (J)
7/7/2017					0.0012 (J)	
7/10/2017	0.002 (J)					
3/29/2018		0.0495 (D)	<0.005			<0.005
3/30/2018	<0.005			<0.005	<0.005	
6/11/2018						<0.005
6/12/2018			0.0025 (J)	<0.005	0.0011 (J)	
6/13/2018	0.0017 (J)	0.092				
10/2/2018	0.002 (J)	0.078	0.0023 (J)			<0.005
10/3/2018				<0.005	0.0013 (J)	
2/27/2019	0.0017 (J)	0.035	0.0024 (J)	<0.005	0.00093 (J)	<0.005
4/1/2019		0.025	0.0023 (J)	<0.005		<0.005
4/2/2019	0.0022 (J)				0.0011 (J)	
9/25/2019	0.0033 (J)					<0.005
9/26/2019		0.014	0.0021 (J)	<0.005	0.00098 (J)	
2/13/2020	0.0019 (J)	0.012	0.0026 (J)	<0.005	0.00092 (J)	<0.005
3/19/2020	0.0021 (J)			<0.005	0.00093 (J)	
3/20/2020		0.014	0.0022 (J)			<0.005
9/24/2020	0.0011 (J)	0.0076	0.0021 (J)	<0.005	0.00085 (J)	<0.005
2/10/2021	0.0017 (J)	0.0048 (J)	0.0025 (J)			
2/11/2021				<0.005		
2/12/2021					<0.005	0.00094 (J)
3/2/2021	0.0021 (J)					
3/3/2021		0.0042 (J)	0.0017 (J)	<0.005	0.001 (J)	<0.005
Mean	0.002363	0.01862	0.002474	0.004759	0.001424	0.003845
Std. Dev.	0.0008532	0.02682	0.0006497	0.001051	0.001268	0.001988
Upper Lim.	0.002781	0.01683	0.0026	0.005	0.0012	0.005
Lower Lim.	0.001865	0.003275	0.0022	0.00042	0.00092	0.0007

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	6.68 (o)	0.677	1.81	0.257 (U)			
6/9/2016					0.194 (U)	0.715	0.523
8/1/2016	0.606 (U)	0.457 (U)	3.79	0.453 (U)			
8/2/2016					0.331 (U)	0.526 (U)	1.25
9/20/2016	0.565 (U)	0.555 (U)	3.12	1.27			
9/21/2016					0.335 (U)	0.176 (U)	1.21 (U)
11/7/2016	0.773 (U)	0.647 (U)	2.66	0.877 (U)		0.609 (U)	1.16
11/8/2016					0.245 (U)		
1/18/2017	0.263 (U)	0.6 (U)	3.44		0.261 (U)	0.0752 (U)	
1/19/2017				0.764 (U)			0.933 (U)
2/21/2017	1.06 (U)	1.11 (U)				0.404 (U)	
2/22/2017				1.26 (U)	0.516 (U)		1.45 (U)
2/23/2017			4.73				
5/3/2017		0.654 (U)					
5/5/2017					0.713 (U)	0.868 (U)	
5/8/2017	0.291 (U)		3.87	0.789 (U)			0.21 (U)
6/30/2017			2.85	0.592 (U)			
7/5/2017					0.292 (U)		0.62 (U)
7/7/2017						1.29	
7/10/2017	0.912	0.649 (U)					
3/29/2018			1.41	0.916 (U)			1.37
3/30/2018	0.23 (U)	0.501 (U)			0.948 (U)	0.195 (U)	
6/11/2018							1.27 (U)
6/12/2018				0.666 (U)	0.869 (U)	1.02 (U)	
6/13/2018	0.427 (U)	1.09 (U)	3.69				
10/2/2018	1.41 (U)	0.747 (U)	4.5	0.774 (U)			0.442 (U)
10/3/2018					0.864 (U)	0.713 (U)	
2/27/2019	0.614 (U)	1.27	4.69	1.19	0.947 (U)	0.543 (U)	0.902 (U)
4/1/2019			5	0.777 (U)	0.162 (U)		0.584 (U)
4/2/2019	0.84 (U)	0.708 (U)				0.521 (U)	
9/25/2019	1.01 (U)	1.18 (U)					1.03 (U)
9/26/2019			3.37	1.01 (U)	1.06 (U)	1.16	
2/13/2020	1.86	0.178 (U)	4.48	0.961 (U)	1.12 (U)	1.04	0.806 (U)
3/19/2020		0.796 (U)			0.913 (U)	1.01 (U)	
3/20/2020	2.03		4.13	1.5			1.42
9/24/2020	<1.88	<1.88	3.42	1.49	<1.88	<1.88	<1.88
2/10/2021	0.513 (U)	0.41 (U)	2.47	0.663 (U)			
2/11/2021					1.07		
2/12/2021						0.419 (U)	0.826
3/2/2021		0.394 (U)					
3/3/2021	0.419 (U)		1.39	0.327 (U)	0.261 (U)	1.04	0.955
Mean	0.8202	0.7138	3.412	0.8703	0.6337	0.6981	0.9422
Std. Dev.	0.5153	0.2914	1.098	0.3549	0.3534	0.3541	0.3517
Upper Lim.	1.062	0.8845	4.054	1.078	0.948	0.9055	1.148
Lower Lim.	0.4927	0.5432	2.769	0.6625	0.261	0.4908	0.7362

Constituent: Fluoride (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26S	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.094 (J)	<0.1	0.086 (J)	0.12 (J)			
6/9/2016					0.098 (J)	0.16 (J)	0.085 (J)
8/1/2016	0.08 (J)	0.24 (J)	0.14 (J)	0.22 (J)			
8/2/2016					0.38	0.5	0.09 (J)
9/20/2016	0.05 (J)	0.03 (J)	<0.1	0.32			
9/21/2016					0.08 (J)	0.25 (J)	0.09 (J)
11/7/2016	<0.1 (*)	0.44	<0.1 (*)	<0.1 (*)		0.27 (J)	<0.1 (*)
11/8/2016					0.24 (J)		
1/18/2017	0.11 (J)	<0.1 (*)	<0.1 (*)		0.12 (J)	0.34	
1/19/2017				0.25 (J)			<0.1 (*)
2/21/2017	<0.1 (*)	<0.1 (*)				0.27 (J)	
2/22/2017				0.21 (J)	<0.1 (*)		<0.1 (*)
2/23/2017			<0.1 (*)				
5/3/2017		0.16 (J)					
5/5/2017					0.08 (J)	0.2 (J)	
5/8/2017	0.08 (J)		0.07 (J)	0.19 (J)			0.06 (J)
6/30/2017			<0.1 (*)	0.2 (J)			
7/5/2017					0.11 (J)		0.08 (J)
7/7/2017						0.18 (J)	
7/10/2017	<0.1 (*)	<0.1 (*)					
10/5/2017					<0.1 (*)		<0.1 (*)
10/6/2017				<0.1 (*)			
10/9/2017			<0.1 (*)			<0.1 (*)	
10/10/2017	<0.1	<0.1					
3/29/2018			<0.1	0.49			<0.1
3/30/2018	<0.1	0.35			<0.1	<0.1	
6/11/2018							<0.1
6/12/2018				0.037 (J)	<0.1	0.13 (J)	
6/13/2018	0.088 (J)	0.044 (J)	<0.1				
10/2/2018	<0.1	<0.1	<0.1	<0.1			<0.1
10/3/2018					<0.1	0.31	
2/27/2019	<0.1	<0.1	<0.1	0.14 (J)	0.14 (J)	0.22 (J)	0.15 (J)
4/1/2019			0.034 (J)	0.088 (J)	0.078 (J)		0.059 (J)
4/2/2019	0.071 (J)	<0.1				0.14 (J)	
9/25/2019	0.064 (J)	<0.1					0.054 (J)
9/26/2019			0.14 (J)	0.22 (J)	0.29 (J)	0.28 (J)	
2/13/2020	<0.1	<0.1	<0.1	0.11 (J)	0.14 (J)	0.18 (J)	0.053 (J)
3/19/2020		<0.1			0.07 (J)	0.16 (J)	
3/20/2020	0.06 (J)		<0.1	0.097 (J)			0.057 (J)
9/24/2020	0.053 (J)	<0.1	0.059 (J)	0.092 (J)	0.073 (J)	0.16	0.06 (J)
2/10/2021	0.05 (J)	<0.1	0.055 (J)	0.084 (J)			
2/11/2021					0.066 (J)		
2/12/2021						0.069 (J)	0.17
3/2/2021		<0.1					
3/3/2021	0.05 (J)		0.058 (J)	<0.1	0.072 (J)	0.13	0.056 (J)
Mean	0.0825	0.1332	0.0921	0.1634	0.1269	0.2075	0.0882
Std. Dev.	0.02103	0.09928	0.02603	0.1047	0.08215	0.1015	0.03115
Upper Lim.	0.1	0.16	0.14	0.2052	0.14	0.2651	0.09525
Lower Lim.	0.06	0.044	0.07	0.1014	0.078	0.1498	0.05897

Constituent: Lead (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26S	YGWC-27S	YGWC-28S	YGWC-29I
6/8/2016	<0.001	<0.001	<0.001 (*)		
6/9/2016				<0.001	<0.001
8/1/2016	<0.001	<0.001	<0.001		
8/2/2016				<0.001	<0.001
9/20/2016	<0.001	<0.001	0.0002 (J)		
9/21/2016				<0.001	<0.001
11/7/2016	<0.001	<0.001	<0.001	<0.001	<0.001
1/18/2017	<0.001	<0.001		<0.001	
1/19/2017			<0.001		<0.001
2/21/2017	<0.001	<0.001		<0.001	
2/22/2017			<0.001		<0.001
5/3/2017		<0.001 (*)			
5/5/2017				<0.001 (*)	
5/8/2017	<0.001		<0.001		<0.001
6/30/2017			<0.001		
7/5/2017					<0.001
7/7/2017				7E-05 (J)	
7/10/2017	<0.001	8E-05 (J)			
3/29/2018			<0.001		<0.001
3/30/2018	<0.001	<0.001		<0.001	
2/27/2019	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2020	<0.001	<0.001	6.2E-05 (J)	5.4E-05 (J)	<0.001
3/19/2020		0.0001 (J)		7.5E-05 (J)	
3/20/2020	5.9E-05 (J)		8.5E-05 (J)		<0.001
9/24/2020	<0.001	6.4E-05 (J)	0.00037 (J)	6.3E-05 (J)	9.5E-05 (J)
2/10/2021	5.1E-05 (J)	5E-05 (J)	0.00072 (J)		
2/12/2021				5.2E-05 (J)	6.6E-05 (J)
3/2/2021		5.6E-05 (J)			
3/3/2021	<0.001		<0.001	<0.001	0.00016 (J)
Mean	0.000874	0.00069	0.0007625	0.0006876	0.0008214
Std. Dev.	0.0003325	0.0004539	0.0003766	0.0004573	0.0003702
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	5.9E-05	6.4E-05	0.0002	6.3E-05	0.00016

Constituent: Lithium (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-27I	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.007	0.0067	<0.03			
6/9/2016				0.0073	<0.03	0.0075
8/1/2016	0.0068 (J)	0.008 (J)	<0.03			
8/2/2016				0.0073 (J)	<0.03	0.0078 (J)
9/20/2016	0.0062 (J)	0.0111 (J)	<0.03			
9/21/2016				0.0067 (J)	<0.03	0.0074 (J)
11/7/2016	0.0057 (J)	0.0097 (J)	<0.03		<0.03	0.0057 (J)
11/8/2016				0.0072 (J)		
1/18/2017	0.0066 (J)	0.01 (J)		0.0067 (J)	<0.03	
1/19/2017			<0.03			0.0055 (J)
2/21/2017	0.0067 (J)				<0.03	
2/22/2017			<0.03	0.0064 (J)		0.0063 (J)
2/23/2017		0.0099 (J)				
5/5/2017				0.007 (J)	<0.03	
5/8/2017	0.007 (J)	0.0086 (J)	<0.03			0.0066 (J)
6/30/2017		0.0108 (J)	<0.03			
7/5/2017				0.0072 (J)		0.0058 (J)
7/7/2017					<0.03	
7/10/2017	0.0064 (J)					
3/29/2018		0.011 (J)	<0.03			0.0049 (J)
3/30/2018	0.0068 (J)			0.007 (J)	<0.03	
6/11/2018						0.0064 (J)
6/12/2018			<0.03	0.0073 (J)	<0.03	
6/13/2018	0.0071 (J)	0.014 (J)				
10/2/2018	0.0064 (J)	0.012 (J)	<0.03			0.006 (J)
10/3/2018				0.0069 (J)	<0.03	
2/27/2019	0.0069 (J)	0.0096 (J)	<0.03	0.0063 (J)	<0.03	0.0053 (J)
4/1/2019		0.0082 (J)	<0.03	0.0065 (J)		0.0052 (J)
4/2/2019	0.0064 (J)				<0.03	
9/25/2019	0.0073 (J)					0.0057 (J)
9/26/2019		0.0075 (J)	<0.03	0.0064 (J)	<0.03	
2/13/2020	0.0073 (J)	0.0079 (J)	<0.03	0.0069 (J)	<0.03	0.0057 (J)
3/19/2020				0.007 (J)	<0.03	
3/20/2020	0.0072 (J)	0.0091 (J)	<0.03			0.0051 (J)
9/24/2020	0.0074 (J)	0.0075 (J)	<0.03	0.0065 (J)	<0.03	0.005 (J)
2/10/2021	0.0067 (J)	0.0067 (J)	0.00081 (J)			
2/11/2021				0.007 (J)		
2/12/2021					0.0053 (J)	<0.03
3/3/2021	0.0077 (J)	0.0066 (J)	<0.03	0.0063 (J)	<0.03	0.0054 (J)
Mean	0.006821	0.009205	0.02846	0.006837	0.0287	0.007226
Std. Dev.	0.0004779	0.001991	0.006697	0.0003531	0.005667	0.005581
Upper Lim.	0.007101	0.01037	0.03	0.007044	0.03	0.0074
Lower Lim.	0.006541	0.008039	0.00081	0.00663	0.0053	0.0052

Constituent: Molybdenum (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV Plant Yates Client: Southern Company Data: Yates Ash Pond 2

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	YGWC-27I	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.0011 (J)			
6/9/2016		0.0011 (J)	<0.01	<0.01
8/1/2016	0.0018 (J)			
8/2/2016		0.0014 (J)	0.0006 (J)	<0.01
9/20/2016	<0.01			
9/21/2016		<0.01	<0.01	<0.01
11/7/2016	<0.01		<0.01	<0.01
11/8/2016		<0.01		
1/18/2017	<0.01	<0.01	<0.01	
1/19/2017				<0.01
2/21/2017			<0.01	
2/22/2017		<0.01		<0.01
2/23/2017	<0.01			
5/5/2017		0.0014 (J)	0.0007 (J)	
5/8/2017	0.0011 (J)			<0.01
6/30/2017	<0.01			
7/5/2017		0.0014 (J)		<0.01
7/7/2017			<0.01	
3/29/2018	<0.01			<0.01
3/30/2018		<0.01	<0.01	
6/11/2018				<0.01
6/12/2018		<0.01	<0.01	
6/13/2018	<0.01			
10/2/2018	<0.01			<0.01
10/3/2018		<0.01	<0.01	
2/27/2019	<0.01	<0.01	<0.01	<0.01
4/1/2019	<0.01	<0.01		<0.01
4/2/2019			<0.01	
9/25/2019				<0.01
9/26/2019	0.0013 (J)	0.0013 (J)	<0.01	
2/13/2020	0.0014 (J)	0.0013 (J)	<0.01	<0.01
3/19/2020		0.0014 (J)	<0.01	
3/20/2020	0.0014 (J)			<0.01
9/24/2020	0.0015 (J)	0.0012 (J)	0.00075 (J)	<0.01
2/10/2021	0.0016 (J)			
2/11/2021		0.0012 (J)		
2/12/2021			<0.01	0.00083 (J)
3/3/2021	0.0017 (J)	0.0011 (J)	0.00083 (J)	<0.01
Mean	0.005942	0.005411	0.008046	0.009517
Std. Dev.	0.004398	0.004474	0.003887	0.002104
Upper Lim.	0.01	0.01	0.01	0.01
Lower Lim.	0.0014	0.0012	0.00083	0.00083

Constituent: Selenium (mg/L) Analysis Run 5/7/2021 12:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26S	YGWC-28I	YGWC-28S
6/8/2016	0.0016	0.0003 (J)		
6/9/2016			<0.005	<0.005
8/1/2016	0.0023 (J)	0.0014 (J)		
8/2/2016			<0.005	<0.005
9/20/2016	0.0022 (J)	<0.005		
9/21/2016			<0.005	0.001 (J)
11/7/2016	0.0017 (J)	<0.005		<0.005
11/8/2016			<0.005	
1/18/2017	0.002 (J)	0.0012 (J)	<0.005	<0.005
2/21/2017	0.0018 (J)	0.0014 (J)		<0.005
2/22/2017			0.0012 (J)	
5/3/2017		<0.005		
5/5/2017			<0.005	<0.005
5/8/2017	<0.005			
7/5/2017			<0.005	
7/7/2017				<0.005
7/10/2017	0.002 (J)	<0.005		
3/30/2018	<0.005	<0.005	<0.005	<0.005
2/27/2019	0.002 (J)	<0.005	<0.005	<0.005
4/1/2019			<0.005	
4/2/2019	0.0017 (J)	<0.005		<0.005
9/25/2019	0.0019 (J)	<0.005		
9/26/2019			<0.005	<0.005
2/13/2020	0.0019 (J)	<0.005	<0.005	<0.005
3/19/2020		<0.005	<0.005	<0.005
3/20/2020	0.0019 (J)			
9/24/2020	0.0031 (J)	<0.005	<0.005	<0.005
2/10/2021	0.0026 (J)	<0.005		
2/11/2021			<0.005	
2/12/2021				<0.005
3/2/2021		<0.005		
3/3/2021	0.0034 (J)		<0.005	<0.005
Mean	0.002476	0.004076	0.004776	0.004765
Std. Dev.	0.001067	0.001731	0.0009216	0.0009701
Upper Lim.	0.0031	0.005	0.005	0.005
Lower Lim.	0.0018	0.0014	0.0012	0.001



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