

Georgia Power Company
Plant Yates – Pond 2
Newnan, Georgia
Coweta County

**ANNUAL 2017 GROUNDWATER MONITORING &
CORRECTIVE ACTION REPORT**



ATLANTIC COAST
CONSULTING, INC.



CERTIFICATION STATEMENT

This 2017 *Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company - Plant Yates - Ash Pond 2 (AP-2)* has been prepared to comply with the United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule 40 Code of Federal Regulations [CFR] 257 Subpart D, published in 80 FR 21302-21501, April 17, 2015, by a licensed professional engineer with:

ATLANTIC COAST CONSULTING, INC.

A blue ink signature of Evan B. Perry, written in a cursive style.

Evan B. Perry, P.G.
Project Manager

A blue ink signature of Richard T. Deason, written in a cursive style.

Richard T. Deason, P.E.
Chief Operating Officer



TABLE OF CONTENTS

Cover Sheet

Certification Statement

Table of Contents

Section	Page No.
1.0 INTRODUCTION	1
1.1 Site Location & Description.....	1
1.2 Regional Geology & Hydrogeologic Setting.....	1
1.3 Groundwater Monitoring System	2
2.0 GROUNDWATER MONITORING ACTIVITIES.....	2
2.1 Monitoring Well Installation/Maintenance	2
2.2 Detection Monitoring Program.....	3
3.0 SAMPLE METHODOLOGY & ANALYSES	3
3.1 Groundwater Elevation Measurement	3
3.2 Groundwater Gradient and Flow Velocity.....	4
3.3 Groundwater Sampling.....	4
3.4 Laboratory Analyses	5
3.5 Quality Assurance & Quality Control Summary.....	5
4.0 STATISTICAL ANALYSIS.....	5
4.1 Statistical Method.....	6
4.2 Statistical Analyses Results	6
4.3 Appendix IV Background Data	7
5.0 MONITORING PROGRAM STATUS	7
6.0 CONCLUSIONS & FUTURE ACTIONS	7
7.0 REFERENCES	7

Tables

- Table 1 - Monitoring Well Network Summary
- Table 2 - Groundwater Sampling Event Summary
- Table 3 - Summary of Groundwater Elevations
- Table 4 - Groundwater Flow Velocity Calculations – October 2017

Figures

- Figure 1 - Site Location Map
- Figure 2 - Well Location Map
- Figure 3 - Potentiometric Contour Map – October 2017

Appendices

- Appendix A –Background Data Summary Tables
- Appendix B - Analytical Data Reports
- Appendix C - Statistical Analyses

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D; published in 80 FR 21302-21501, April 17, 2015), this 2017 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2017 groundwater monitoring activities conducted at Georgia Power Company's (GPC's) Plant Yates, Ash Pond 2 (AP-2) and satisfies the requirements of §257.90(e). Groundwater monitoring and reporting for Plant Yates is performed in accordance with the requirements §257.90 through §257.98.

This report documents the activities completed to establish the groundwater monitoring program and actions through the 2017 calendar year.

1.1 Site Location & Description

Plant Yates is located at 708 Dyer Road, on the east bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line, 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, Site Location Map, depicts the site location relative to the surrounding area. Plant Yates, once a coal fired, power generation facility, was converted to natural-gas-combustion turbines. Figure 2, Well Location Map, depicts the general configuration of AP-2 and the location of the monitoring wells.

1.2 Regional Geology & Hydrogeologic Setting

1.2.1 Regional Geology

Plant Yates lies within the Dadeville Complex of the Inner Piedmont of western Georgia, immediately southeast of the regional zone of deformation referred to as the Brevard Zone. Dadeville Complex rock units are interlayered gneiss and schists. At ground surface the units have weathered in place to form a layer of saprolite. A regional thrust fault, the Katy Creek Fault, forms boundary between the Brevard Zone, and the Dadeville Complex. The Dadeville Complex is considered to represent an Ordovician-age Island Arc. The rocks in the area have been subjected to several episodes of metamorphism and intrusion by igneous bodies. Extensive jointing occurs in the area. Surface expressions of the joints are observed on topographic maps and aerial photos of the Plant Yates area.

Rocks within the Dadeville complex are generally more mafic near the Brevard Zone, becoming more felsic in areas farther southeast of the Brevard Zone. The mafic portion of the Dadeville Complex observed northwest of Plant Yates primarily consists of biotite gneiss and layers of amphibolite/hornblende gneiss. The continuous and discontinuous amphibolite layers and lenses weather more deeply but less uniformly than the surrounding biotite gneiss in this area. Units underlying that area around Plant Yates and further southeast are more felsic, being comprised of a mixture of granitic intrusives, migamitic and biotite gneiss, and aluminosilicate schists.

1.2.2 Site Geology

A thin layer of soil from one to two feet thick overlies a thick layer of saprolite. The saprolite, which extends to typical depths of 20-40 feet below ground surface, was formed from the physical and chemical weathering of the underlying metamorphic rocks. There is typically a zone of variable thickness (approximately 5-20 feet) of transitionally weathered rock between the

saprolite and competent bedrock. Localized alluvial soils consisting of generally coarser material (silty-sand, clayey silt, and silty clay with well-rounded gravel and cobbles) than that observed in saprolite may be related to historical river channel migration.

1.2.3 Site Hydrogeology

At Plant Yates, shallow groundwater is typically encountered slightly above the saprolite/weathered rock interface. Rock becomes increasingly competent with depth and movement of groundwater occurs only in 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 ponds were established along a topographically low area formed by a tributary to the Chattahoochee River. A recent potentiometric contour map showing overall flow directions is provided in Figure 3, Potentiometric Surface Contour Map.

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.

Hydraulic conductivity is defined as the rate at which water can move through a permeable medium. In situ rising head and falling slug tests were performed at multiple locations on the site. The range in hydraulic conductivity at these locations was very low, indicating a fairly uniform medium across the saprolite and weathered rock horizon (typically range from 10^{-3} to 10^{-4} cm/sec). The values from the field test fall within the standard range of hydraulic conductivity values associated with a silty sand.

1.3 Groundwater Monitoring System

Pursuant to §257.91, GPC installed a groundwater monitoring system within the uppermost aquifer at CCR Unit AP-2. The monitoring system is designed to monitor groundwater passing the waste boundary of AP-2 within the uppermost aquifer. Wells were located to serve as upgradient and downgradient monitoring points based on groundwater flow direction (Table 1, Monitoring Well Network Summary). Wells suffixed with an "S" are installed in overburden (saprolitic soil), an "I" indicates partially weathered rock (transition zone), and "D" indicates upper bedrock. As typical of the Piedmont Physiographic Province, there is a high degree of connectivity between the overburden, partially weathered rock, fractured bedrock and the materials comprise a single uppermost aquifer.

2.0 GROUNDWATER MONITORING ACTIVITIES

As required by §257.90(e), the following describes monitoring-related activities performed during the preceding year. Since this is the first Annual Groundwater Monitoring and Corrective Action Report, it also describes activities performed prior to 2017 to establish the groundwater monitoring program. All groundwater sampling was performed in accordance with §257.93. Samples were collected from each well in the monitoring system shown on Figure 2.

Pursuant to §257.90(e)(3), Table 2, Groundwater Sampling Event Summary, presents a summary of groundwater sampling events completed at Plant Yates.

2.1 Monitoring Well Installation/Maintenance

In accordance with §257.91, a groundwater monitoring system was installed that (1) consists of a sufficient number of wells, (2) installed at appropriate locations and depths to yield groundwater

samples from the uppermost aquifer, and (3) meets the performance standards of §257.91(a). In summary, groundwater monitoring activities included the installation of the following:

- Seven upgradient groundwater monitoring network wells (YGWA-1I, YGWA-1D, YGWA-2I, YGWA-3I, YGWA-3D, YGWA-14S, and YGWA-30I) and seven downgradient groundwater monitoring network wells (YGWC-26S, YGWC-26I, YGWC-27S, YGWC-27I, YGWC-28S, YGWC-28I, and YGWC-29I)
- Water level only piezometers: PZ-01S, PZ-03S, PZ-13S, PZ-13I, PZ-14I, PZ-25S, PZ-25I, and PZ-31S were also installed during this period.
- Dedicated QED bladder pumps for groundwater sampling.

The number, spacing, and depths of the groundwater monitoring wells were selected by a PE based on the characterization of site-specific hydrogeologic conditions. Groundwater monitoring wells were designed to monitor the uppermost water-bearing zone. Monitoring well designations were determined based on measured groundwater levels at the site. Upgradient wells were installed at locations pursuant to §257.91(a)(1). Downgradient monitoring wells were installed along the downgradient waste boundary pursuant to §257.91(a)(2).

2.2 Detection Monitoring Program

In accordance with §257.94(b), a detection monitoring program was implemented by collecting eight (8) background samples. In addition, a ninth round of groundwater samples were collected as the initial detection monitoring event.

2.2.1 Background Monitoring

A minimum of eight (8) independent samples were collected from the certified well network for AP-2 and analyzed for the constituents listed in Appendix III and IV. Tables summarizing the results for each well are included in Appendix A, Background Data Summary Tables. Pursuant to §257.90(e)(3), data reports for each sampling event are included in Appendix B, Analytical Data Reports.

2.2.2 Initial Detection Monitoring

Following completion of the eight independent sampling events, groundwater samples were collected October 3-11, 2017 and analyzed for Appendix III constituents as part of the first semi-annual detection monitoring event. Pursuant to §257.90(e)(3), data reports for each sampling event are included in Appendix B.

3.0 SAMPLE METHODOLOGY & ANALYSES

The following describes the methods used to complete groundwater monitoring at AP-2. The monitoring well system was inspected prior to each sampling event and the area near each monitoring well is maintained for safety, and collection of representative groundwater samples.

3.1 Groundwater Elevation Measurement

Prior to each sampling event, groundwater elevations were recorded from piezometers and each well in the network at AP-2. Groundwater elevations recorded during the background and detection monitoring events are summarized in Table 3, Summary of Groundwater Elevations. Groundwater elevation data was used to develop potentiometric surface elevation contour map provided as Figure 3. The general direction of groundwater flow across the site is towards the

west. The groundwater flow pattern observed during the October 2017 detection monitoring event is consistent with recordings made during the background monitoring period.

3.2 Groundwater Gradient and Flow Velocity

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

Equation

$$v = \frac{k (dh/dl)}{P_e} \quad \text{where:} \quad \begin{array}{l} v = \text{ground water velocity} \\ k = \text{hydraulic conductivity} \\ dh/dl = \text{hydraulic gradient} \\ P_e = \text{effective porosity} \end{array}$$

Groundwater flow velocities were calculated for the site based on hydraulic gradients, average permeability based on previous slug test data, and an estimated effective porosity of 20% (based on silt content). Using the broad range of hydraulic conductivity measurements obtained from slug testing of multiple site wells [9.7 x 10⁻⁵ to 3.7 x 10⁻³ centimeters per second (cm/sec)] and an effective porosity range of 0.20, the flow velocity ranges between 0.033 to 1.23 feet per day or 12 to 451 feet per year. Groundwater flow velocities have been calculated and are tabulated on Table 4, Groundwater Flow Velocity Calculations – October 2017. The higher flow velocities are noted near the Chattahoochee River, likely due to the occurrence of coarser-grained alluvial soils. However, these calculated velocities are best estimates based on field data and default data for soils, and therefore, should not be taken as absolute values, but rather as estimated values.

3.3 Groundwater Sampling

Groundwater samples were collected in accordance with §257.93(a). All monitoring wells at AP-2 are currently equipped with dedicated QED bladder pumps. During the first several sampling events (prior to the installation of the dedicated pumps) wells were purged and sampled using either a peristaltic pump or non-dedicated QED bladder pump. In all cases pump intakes were located 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 using procedures described in the latest version of the Region 4 USEPA SESD Operating Procedure for Field Equipment Cleaning and Decontamination as a guide.

Monitoring wells were purged and sampled using low-flow sampling procedures. Prior to sampling, during well purging, the following field monitoring parameters are periodically recorded: water level, pH (field), conductivity, temperature, oxidation/reduction potential (ORP), dissolved oxygen (DO), and total purge volume. Wells are purged until indicator parameters are stable within limits shown below. Once the wells have been purged, and indicator parameters are stable, samples are collected in laboratory-supplied containers.

Groundwater samples were collected when the following stabilization criteria were met:

- 0.1 standard units for pH
- 5% for specific conductance
- 0.2 milligrams per liter (mg/L) or 10% for DO greater than 0.5 mg/L (whichever is greater)

- Turbidity measurements less than 5 nephelometric turbidity units (NTU)

Once stabilization was achieved, samples were collected directly into appropriately-preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to the analytical laboratory following chain-of-custody protocol. Stabilization logs for each well during each monitoring event are included in Appendix B.

3.4 Laboratory Analyses

Groundwater samples were collected for both Appendix III and Appendix IV parameters during background monitoring. Groundwater samples collected in October 2017 for the first detection monitoring event were analyzed for Appendix III monitoring parameters only. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in Appendix B.

Laboratory analyses for background event 1 were performed by Test America, Inc. (TAL) of Pensacola, Florida, and TAL of St. Louis Missouri. All subsequent laboratory analyses were performed by Pace Analytical Services, LLC (Pace) of Peachtree Corners, Georgia and Greensburg, Pennsylvania. Both TAL and Pace are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintains a NELAP certification for all parameters analyzed for this project. In addition, TAL and Pace are certified to perform analysis by the State of Georgia. Laboratory reports and chain-of-custody records for the monitoring events are presented in Appendix B.

3.5 Quality Assurance & Quality Control Summary

During each sampling event, quality assurance/quality control samples (QA/QC) are collected at a rate of one sample per every 10 detection samples. Equipment blanks (where non-dedicated sampling equipment is used) and duplicate samples were collected during each sampling events. QA/QC sample data was evaluated during data validation and is included in Appendix B.

Groundwater quality data in this report was independently 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 digestions spikes, laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags are applied to the data using USEPA procedures as guidance (USEPA, 2017).

Values followed by a "J" flag indicate that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (PQL). 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 is not used when performing statistical analysis.

4.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III groundwater monitoring data was performed pursuant to §257.93 and according to the PE certified statistical method for AP-2.

4.1 Statistical Method

The results of the statistical screening analysis determined that groundwater quality data will be evaluated through use of interwell prediction limits, combined with a 1-of-2 resampling strategy, for parameters boron, calcium, chloride, and sulfate. Using this method, upgradient well data are pooled to establish a background statistical limit. Data from the October 2017 detection monitoring event were compared to the statistical limit to determine whether any concentrations exceed background levels. When an initial statistically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier.

For the parameters fluoride, pH, and TDS, groundwater quality data will be evaluated through use of intrawell prediction limits, combined initially with the 1-of-3 resampling strategy. Using this method, background data from the parameter at the well (e.g. pH at YGWC-26S) are used to establish a background statistical limit for that parameter at that well; therefore, each parameter will have a different statistical limit at each well. Data from the October 2017 detection monitoring event were compared to the statistical limit to determine whether any concentrations exceed background levels. When an SSI or questionable result occurs, up to 2 additional samples may be collected to verify the initial result or determine if the result was an outlier. The resampling plan may be changed to a 1-of-2 resampling strategy for the intrawell method when at least 10 background measurements are available.

If the initial finding is not verified by resampling, the resampled value will replace the initial finding. When the resample confirms the initial finding, the exceedance will be reported.

The following are also applicable to the site statistical analysis method:

- Statistical analyses are not performed on analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain less than 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 practical quantitation limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

The Sanitas Groundwater statistical software was used to perform the statistical analyses. Sanitas is a proprietary 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 (USEPA, 2009) document.

4.2 Statistical Analyses Results

Analytical data from the initial detection monitoring event in October 2017 at AP-2 was statistically analyzed in accordance with the PE-certified statistical methods. Resampling to confirm SSIs was not performed, therefore, initial SSIs are treated as verified. The statistical analysis and comparison to prediction limits are included as Appendix C, Statistical Analyses.

Based on the statistical results presented in Appendix C, the following summarizes parameters exhibiting SSIs as follows:

- Boron: YGWC-26S, YGWC-26I, YGWC-27S, YGWC-27I, YGWC-28S, YGWC-28I, and YGWC-29I
- Calcium: YGWC-27S and YGWC-28I
- Chloride: YGWC-26S, YGWC-26I, YGWC-27S, YGWC-27I, YGWC-28S, YGWC-28I, and YGWC-29I
- Sulfate: YGWC-26S, YGWC-26I, YGWC-27S, and YGWC-29I

Pursuant to §257.90(e), within 90 days from determining an SSI, GPC will either (1) prepare a demonstration that a source other than AP-2 was the cause, or (2) implement assessment monitoring per §257.95

4.3 Appendix IV Background Data

Pursuant to §257.95, Appendix IV groundwater quality data was statistically analyzed and will be compared to groundwater protection standards if assessment monitoring is implemented. GPC is currently performing detection monitoring per §257.94 and has not implemented assessment monitoring. Therefore, statistical analysis of the Appendix IV data has not been performed.

5.0 MONITORING PROGRAM STATUS

Plant Yates AP-2 is in detection monitoring. SSIs of Appendix III parameters have been identified. Pursuant to §257.94(e)(1), Plant Yates has 90 days from the date of determination to either (1) prepare a demonstration that a source other than AP-2 was the cause, or (2) implement assessment monitoring per §257.95. GPC will address the reported SSIs in accordance with the requirements, and options, of §257.90(e)(1-3) and (f).

6.0 CONCLUSIONS & FUTURE ACTIONS

Statistical evaluations of the groundwater monitoring data for AP-2 identified SSIs of Appendix III groundwater monitoring parameters. In accordance with §257.94(e)(1), GPC will prepare an alternate source demonstration or initiate assessment monitoring program within 90 days.

The first 2018 semi-annual detection monitoring event is planned for April 2018.

7.0 REFERENCES

EPRI, 2015 Technical Report, Groundwater Monitoring Guidance for the Coal Combustion Residuals Rule.

State Waste Management Board. 2016. State Solid Waste Management Regulations – (9VAC20 81 et seq.). January.

USEPA, 1986 RCRA Groundwater Monitoring Technical Enforcement Guidance Document.

USEPA, 1993. Subpart E, Groundwater Monitoring and Corrective Action, in Chapter 5, Solid Waste Disposal Facility Criteria Technical Manual. EA530-R-93-017.

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. 2015. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. 40 CFR Parts 257 and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. [USEPA HQ RCRA-2009-0640; FRL-9919-44-OSWER]. RIN-2050-AE81. April.

USEPA. 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC. January.

TABLES

**Table 1
MONITORING WELL NETWORK SUMMARY
Georgia Power – Plant Yates Ash Pond 2**

Well ID	Hydraulic Location	Easting	Northing	Top of Casing Elevation (ft MSL)	Total Depth (ft BTOC)	Top of Screen Elevation (ft MSL)	Bottom of Screen Elevation (ft MSL)	Screen Length (ft)
ASH POND 2 MONITORING WELL NETWORK								
YGWA-1I	Upgradient	2070099	1256877	836.48	53.82	792.99	782.66	10
YGWA-1D	Upgradient	2070106	1256868	837.13	128.6	758.86	708.53	50
YGWA-2I	Upgradient	2070791	1256145	866.15	64.30	812.18	801.85	10
YGWA-3I	Upgradient	2072025	1256406	796.33	59.10	747.56	737.23	10
YGWA-3D	Upgradient	2072027	1256400	796.70	135.2	711.83	661.50	50
YGWA-14S	Upgradient	2072538	1257830	748.77	35.55	723.75	713.42	10
YGWA-30I	Upgradient	2071106	1258422	762.59	59.62	713.30	702.97	10
YGWC-26S	Downgradient	2070615	1259735	716.20	40.25	686.28	675.95	10
YGWC-26I	Downgradient	2070613	1259726	715.91	69.90	656.34	646.01	10
YGWC-27S	Downgradient	2070455	1259416	716.66	39.50	687.49	677.16	10
YGWC-27I	Downgradient	2070462	1259423	716.23	80.15	646.41	636.08	10
YGWC-28S	Downgradient	2070323	1259218	717.92	44.86	683.39	673.06	10
YGWC-28I	Downgradient	2070329	1259226	717.89	70.07	658.15	647.82	10
YGWC-29I	Downgradient	2070204	1258973	717.24	39.15	688.42	678.09	10

Notes:

1. ft BTOC indicates feet below top of casing.
2. ft MSL indicates feet mean sea level.
3. Northings and Eastings are GA State Plane West (NAD83)

**Table 2
GROUNDWATER SAMPLING EVENT SUMMARY
Georgia Power – Plant Yates Ash Pond 2**

Well ID	Hydraulic Location	Summary of Sampling Events											Status of Monitoring Well
		Jun. 1-9, 2016	Jul. 25 – Aug. 2, 2016	Sept. 13-21, 2016	Nov. 1-14, 2016	Dec. 15, 2016	Jan. 11-19, 2017	Feb. 21 – Mar. 9, 2017	Apr. 26 – May 8, 2017	May 26, 2017	Jun. 27 – July 11, 2017	Oct. 3-11, 2017	
Purpose of Sampling Event		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Detection
ASH POND 2 MONITORING WELL NETWORK													
YGWA-1I	Upgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWA-1D	Upgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWA-2I	Upgradient	--	--	BG01	BG02	BG03	BG04	BG05	BG06	BG07	BG08	D01	Detection
YGWA-3I	Upgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWA-3D	Upgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWA-14S	Downgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWA-30I	Downgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWC-26S	Downgradient	BG01	BG02	BG03	BG02	--	BG03	BG04	BG05	--	BG06	D01	Detection
YGWC-26I	Downgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWC-27S	Downgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWC-27I	Downgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWC-28S	Downgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWC-28I	Downgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection
YGWC-29I	Downgradient	BG01	BG02	BG03	BG04	--	BG05	BG06	BG07	--	BG08	D01	Detection

Notes:
 BGXX = Background Event Number
 DXX = Detection Event Number
 -- = Did not sample

**Table 3
SUMMARY OF GROUNDWATER ELEVATIONS
Georgia Power – Plant Yates Ash Pond 2**

Well ID	Hydraulic Location	Status of Monitoring Well											
		May 31, 2016	July 20, 2016	August 29, 2016	October 31 – November 1, 2016	December 15, 2016	January 9-10, 2017	February 20, 2017	April 25, 2017	May 26, 2017	June 26, 2017	October 2-3, 2017	
Purpose of Sampling Event		Background	Background	Background	Background	Background (YGWA-2I)	Background	Background	Background	Background	Background (YGWA-2I)	Background	Detection
YGWA-1I	Upgradient	801.53	800.06	799.00	799.80	-	797.01	796.93	797.31	-	796.60	791.86	
YGWA-1D	Upgradient	788.95	787.29	786.23	784.31	-	783.80	784.31	784.81	-	784.84	784.98	
YGWA-2I	Upgradient	823.39	822.24	821.47	820.30	819.53	819.36	819.21	819.72	820.06	820.67	820.26	
YGWA-3I	Upgradient	747.18	746.73	746.12	745.82	-	746.60	746.93	747.01	-	747.13	742.98	
YGWA-3D	Upgradient	766.86	766.81	765.95	764.93	-	763.79	764.26	763.54	-	764.11	759.49	
YGWA-14S	Downgradient	733.88	731.27	729.86	728.06	-	728.16	730.30	732.75	-	732.94	732.04	
YGWA-30I	Downgradient	726.33	725.33	724.91	723.99	-	724.21	724.29	724.92	-	725.26	725.66	
YGWC-26S	Downgradient	695.51	694.76	694.70	693.88	-	695.14	695.70	696.12	-	697.38	695.45	
YGWC-26I	Downgradient	691.55	691.05	713.89	690.60	-	691.34	691.49	692.13	-	692.74	691.33	
YGWC-27S	Downgradient	689.15	689.09	688.75	688.58	-	689.63	689.24	690.29	-	689.99	688.68	
YGWC-27I	Downgradient	688.03	688.05	687.65	687.45	-	688.58	688.15	689.28	-	688.90	687.60	
YGWC-28S	Downgradient	695.28	694.61	694.98	694.30	-	695.52	695.37	695.68	-	695.92	694.74	
YGWC-28I	Downgradient	692.66	692.99	693.01	692.79	-	693.89	693.78	694.46	-	694.59	693.46	
YGWC-29I	Downgradient	690.55	690.29	689.92	689.72	-	690.92	690.86	691.17	-	691.46	690.14	

Notes:
Groundwater Elevation in feet above mean sea level (ft msl)
- = Denotes did not sample
ND = No Data

PROJECT NUMBER: I054-103 PAGE: 1 OF 1
 PROJECT NAME: Plant Yates BY: MM DATE: November 2017
 SUBJECT: Ash Pond 2 CHK'D: EP DATE: November 2017

Table 4
GROUNDWATER FLOW VELOCITY CALCULATIONS
October 2017

Equation

$$v = \frac{k (dh/dl)}{P_e} \quad \text{where: } v = \text{ground water velocity}$$

$k = \text{hydraulic conductivity}$
 $dh/dl = \text{hydraulic gradient}$
 $P_e = \text{effective porosity}$

Values Used in Calculation

Value	Source
$k_{max} = 3.7E-03 \text{ cm/sec}$ 10 ft/day	See note 1.
$k_{min} = 9.7E-05 \text{ cm/sec}$ 0.28 ft/day	
$i_1 = 0.029 \text{ unitless}$ $i_2 = 0.018 \text{ unitless}$ $i_{avg} = 0.024 \text{ unitless}$	Hydraulic gradient from YGWA-30I to YGWC-28I PZ-48 to PZ-25S Average
$P_e = 0.20 \text{ unitless}$	See note 2.

Minimum Flow Velocity

$$v_{min} = \frac{(0.28)(0.024)}{0.20}$$

$$v_{min} = 0.033 \text{ ft/day, or } 12 \text{ ft/year}$$

Maximum Flow Velocity

$$v_{max} = \frac{(10)(0.024)}{0.20}$$

$$v_{max} = 1.2 \text{ ft/day, or } 451 \text{ ft/year}$$

Notes

- (1) Slug tests performed by Atlantic Coast Consulting, Inc. (2017)
- (2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)

FIGURES

C:\Users\eperry\Desktop\Plant Yates Site Location Map.dwg 2018-01-30 EVAN PERRY



ATLANTIC COAST CONSULTING, INC.
630 Colonial Park Dr.
Suite 110
Roswell, GA 30075
o 770.594.5998
www.atlcc.net

PROJECT:

PLANT YATES
ASH POND 2

708 DYER ROAD
NEWNAN, GEORGIA

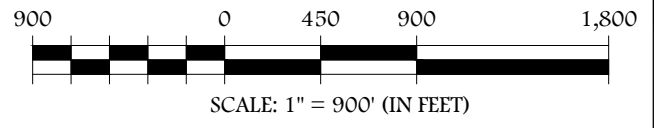
REVISIONS

Drawn by: MM Checked by: EP

PROJECT NUMBER:
I054-103
January 2018

SITE LOCATION
MAP
FIGURE 1

NOTE:
1. AERIAL PHOTOGRAPH DATED
NOVEMBER 2012.



C:\Users\eperry\Desktop\Plant Yates Pond 2 Well Location Map(rev1).dwg 2018-01-30 EVAN PERRY



EXISTING	DESCRIPTION
YGWA-4I	GROUNDWATER MONITORING WELL (AP-2)
PZ-06I	NON-NETWORK LOCATION (AP-2)
YGWA-1I	GROUNDWATER MONITORING WELL (NOT RELATED TO AP-2)
PZ-01S	NON-NETWORK LOCATION (NOT RELATED TO AP-2)



ATLANTIC COAST CONSULTING, INC.
630 Colonial Park Dr.
Suite 110
Roswell, GA 30075
o 770.594.5998
www.atlcc.net

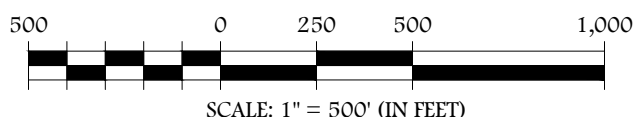
PROJECT:
PLANT YATES
ASH POND 2

708 DYER ROAD
NEWMAN, GEORGIA

REVISIONS

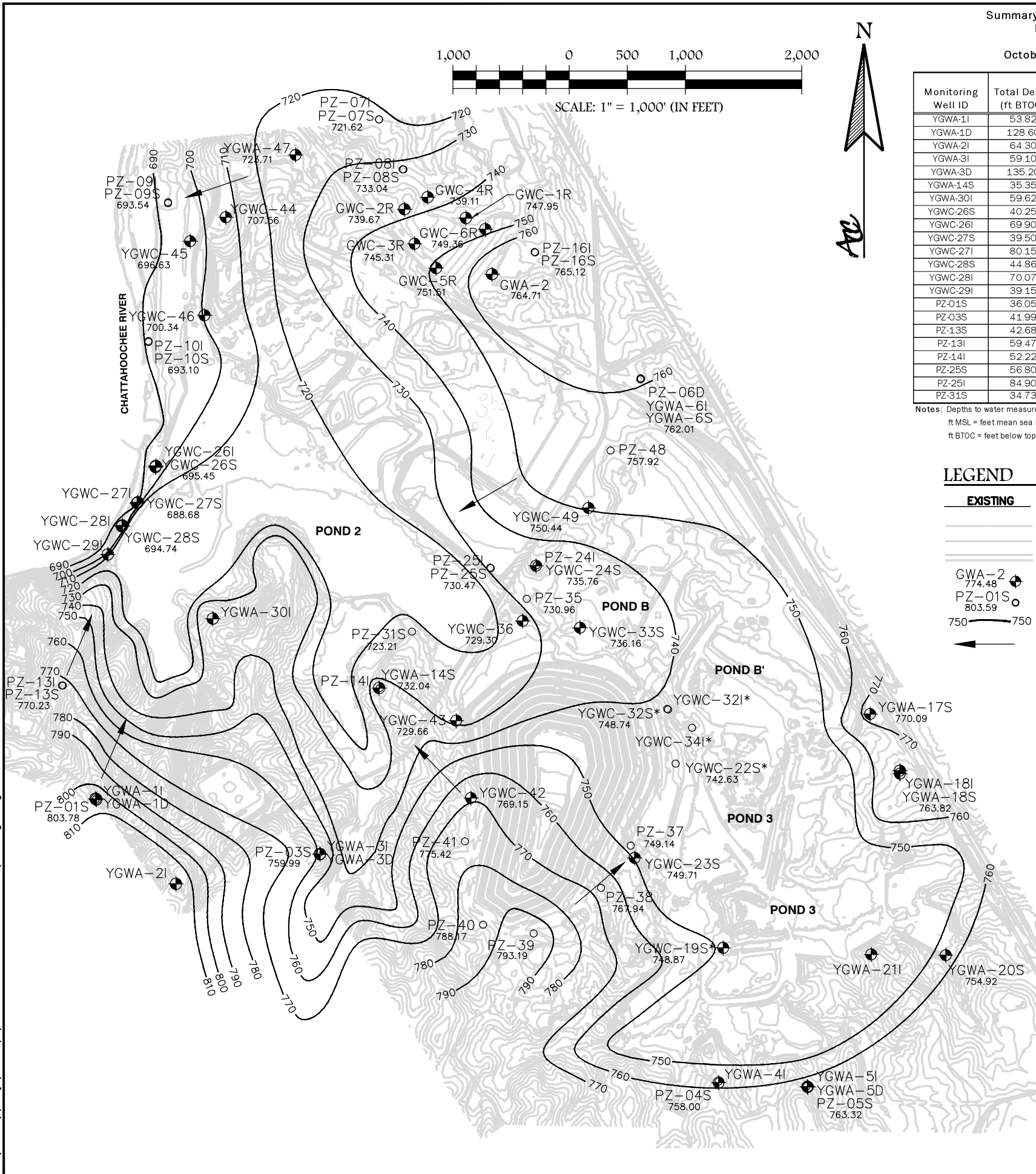
Drawn by: MM	Checked by: EP
PROJECT NUMBER: I054-103 January 2018	

NOTE:
1. AERIAL PHOTOGRAPH DATED NOVEMBER 2012.



WELL LOCATION MAP
FIGURE 2

C:\Users\eperry\Desktop\Plant Yates October 2017 Map - Fig3.dwg 2018-01-30 EVAN PERRY



Summary of Groundwater Elevations
Plant Yates Landfill
Ash Pond 2
October 2017 Sampling Event

Monitoring Well ID	Total Depth (ft BTOC)	Top of Casing (ft MSL)	Depth to Water (ft BTOC)	Groundwater Elevation (ft MSL)
YGWA-1I	53.82	836.48	44.62	791.86
YGWA-1D	128.60	837.13	52.15	784.98
YGWA-2I	64.30	866.15	45.89	820.26
YGWA-3I	59.10	796.33	53.35	742.98
YGWA-3D	135.20	796.70	37.21	759.49
YGWA-14S	35.35	748.77	16.73	732.04
YGWA-30I	59.62	762.59	36.43	726.16
YGWC-26S	40.25	716.20	20.75	695.45
YGWC-26I	69.90	715.91	24.58	691.33
YGWC-27S	39.50	716.66	27.98	688.68
YGWC-27I	80.15	716.23	28.63	687.60
YGWC-28S	44.86	717.92	23.18	694.74
YGWC-28I	70.07	717.89	24.43	693.46
YGWC-29I	39.15	717.24	27.10	690.14
PZ-01S	36.05	836.74	32.96	803.78
PZ-03S	41.99	796.21	36.22	759.99
PZ-13S	42.68	807.89	37.66	770.23
PZ-13I	59.47	807.72	40.25	767.47
PZ-14I	52.22	749.11	17.75	731.36
PZ-25S	56.80	766.50	36.03	730.47
PZ-25I	84.90	766.25	37.30	728.95
PZ-31S	34.73	738.79	15.58	723.21

Notes: Depths to water measured within a 24-hour period on October 2-3, 2017.
ft MSL = feet mean sea level
ft BTOC = feet below top of casing

LEGEND

EXISTING	DESCRIPTION
(Solid line)	PROMINENT CONTOUR (5-FOOT INTERVAL)
(Dashed line)	RAILROAD
(Double line)	ACCESS ROAD
(Circle with crosshair)	GROUNDWATER MONITORING WELL
(Circle with dot)	PIEZOMETER
(Circle with number)	GROUNDWATER ELEVATION
(Dashed line)	GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
(Arrow)	GROUNDWATER FLOW DIRECTION

Summary of Groundwater Elevations
Plant Yates Landfill
Ash Ponds 3 & B/B
October 2017 Sampling Event

Monitoring Well ID	Total Depth (ft BTOC)	Top of Casing (ft MSL)	Depth to Water (ft BTOC)	Groundwater Elevation (ft MSL)
YGWA-4I	48.70	784.18	24.61	759.57
YGWA-5I	57.60	784.53	21.32	763.21
YGWA-5D	128.80	784.53	28.99	755.54
YGWA-6S	39.55	782.28	20.27	762.01
YGWA-6I	69.00	782.58	20.59	761.99
YGWA-17S	40.10	783.03	12.94	770.09
YGWA-18S	40.30	790.53	26.71	763.82
YGWA-18I	80.00	790.56	24.65	765.91
YGWA-20S	29.52	767.30	12.38	754.92
YGWA-21I	80.35	783.62	32.90	750.72
YGWC-19S	30.43	764.48	15.61	748.87
YGWC-22S	40.11	751.60	8.97	742.63
YGWC-23S	29.79	764.62	14.91	749.71
YGWC-24S	57.57	764.12	28.36	735.76
YGWC-32S	22.90	757.31	8.57	748.74
YGWC-32I	39.97	758.21	14.44	743.77
YGWC-33S	38.53	744.54	8.38	736.16
YGWC-34I	38.69	773.67	24.23	749.44
YGWC-36	55.86	739.53	10.23	729.30
PZ-04S	32.97	784.22	26.22	758.00
PZ-05S	41.90	784.64	21.32	763.32
PZ-06D	135.85	781.93	23.65	758.28
PZ-24I	90.37	764.33	29.00	735.33
PZ-35	49.37	743.74	12.78	730.96
PZ-48	59.04	779.88	21.96	757.92

Notes: Depths to water measured within a 24-hour period on October 2-3, 2017.
ft MSL = feet mean sea level
ft BTOC = feet below top of casing

Summary of Groundwater Elevations
Plant Yates Landfill
Other Site-Wide Monitoring Locations
October 2017 Sampling Event

Monitoring Well ID	Total Depth (ft BTOC)	Top of Casing (ft MSL)	Depth to Water (ft BTOC)	Groundwater Elevation (ft MSL)
GWA-2	52.00	805.31	40.60	764.71
GWC-1R	36.35	773.28	25.33	747.95
GWC-2R	43.80	769.41	29.74	739.67
GWC-3R	38.40	775.28	29.97	745.31
GWC-4R	31.00	757.02	17.91	739.11
GWC-5R	42.00	782.54	31.03	751.51
GWC-6R	51.95	788.60	39.24	749.36
YGWA-47	59.40	758.04	34.33	723.71
YGWC-42	59.95	797.75	28.60	769.15
YGWC-43	79.85	744.99	15.33	729.66
YGWC-44	89.95	758.27	50.71	707.56
YGWC-45	73.80	719.30	22.67	696.63
YGWC-46	82.98	747.23	46.89	700.34
YGWC-49	78.55	782.72	32.28	750.44
PZ-07S	37.10	747.88	26.26	721.62
PZ-07I	59.20	748.00	26.53	721.47
PZ-08S	54.65	747.58	14.54	733.04
PZ-08I	79.50	747.81	14.22	733.59
PZ-09S	59.15	711.90	18.36	693.54
PZ-09I	79.79	712.04	18.60	693.44
PZ-10S	18.90	700.35	7.25	693.10
PZ-10I	49.53	700.27	14.28	685.99
PZ-16S	47.20	809.36	44.24	765.12
PZ-16I	69.50	809.36	44.76	764.60
PZ-37	46.50	760.53	11.39	749.14
PZ-38	50.39	799.45	31.51	767.94
PZ-39	68.61	817.99	24.80	793.19
PZ-40	48.34	815.63	27.46	788.17
PZ-41	67.94	803.83	28.41	775.42

Notes: Depths to water measured within a 24-hour period on October 2-3, 2017.
ft MSL = feet mean sea level
ft BTOC = feet below top of casing

- NOTES:
- AERIAL PHOTOGRAPH DATED MARCH 18, 2017.
 - WELLS WITH "D" & "I" SUFFIXES MONITOR DEEPER INTERVALS AND ARE NOT USED TO CONSTRUCT WATER TABLE CONTOURS.
- * DENOTES THAT LOCATION WAS ABANDONED IN JANUARY 2018.



ATLANTIC COAST CONSULTING, INC.
630 Colonial Park Dr.
Suite 110
Roswell, GA 30075
o 770.594.5998
www.atlcc.net

PROJECT:
**PLANT YATES
ASH POND 2**

708 DYER ROAD
NEWNAN, GEORGIA

REVISIONS

NO.	DATE	DESCRIPTION

Drawn by: MM Checked by: EP

PROJECT NUMBER:
I054-103
January 2018

**OCTOBER 2017
POTENTIOMETRIC
CONTOUR MAP**

APPENDICES

APPENDIX A

BACKGROUND DATA SUMMARY TABLES

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWA-1D	YGWA-1D	YGWA-1D	YGWA-1D	YGWA-1D	YGWA-1D	YGWA-1D	YGWA-1D	YGWA-1D
		6/1/2016	7/26/2016	9/13/2016	11/1/2016	1/11/2017	3/2/2017	4/27/2017	6/27/2017	
APPENDIX III	Boron	N/R	ND	ND (0.0055 J)	ND	ND (0.0086 J)	ND (0.0074 J)	ND (0.0080 J)	ND (0.0066 J)	ND (0.0087 J)
	Calcium	N/R	12.0	11.0	11.8	11.0	11.2	11.0	11.1	13.8
	Chloride	(250)	1.3	1.2	1.1	1.3	1.1	1.0	1.0	1.1
	Fluoride	4	ND (0.12 J)	ND (0.08 J)	ND (0.11 J)	ND (0.10 J)	ND (0.05 J)	ND (0.09 J)	ND (0.04 J)	ND (0.06 J)
	Sulfate	(250)	5.0	5.4	2.9	3.9	3.7	4.6	5.2	5.9
	TDS	(500)	120	94	105	44	107	98	116	89
APPENDIX IV	Antimony	0.006	ND	ND (0.001 J)	ND (0.001 J)	ND (0.0015 J)	ND	ND (0.0004 J)	ND (0.0004 J)	ND
	Arsenic	0.01	0.0021	ND (0.0016 J)	ND	ND	ND (0.0017 J)	ND (0.0014 J)	ND (0.0018 J)	ND (0.0018 J)
	Barium	2	0.008	ND (0.006 J)	ND (0.0084 J)	ND (0.0062 J)	ND (0.0069 J)	ND (0.0071 J)	ND (0.0064 J)	ND (0.0054 J)
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND (0.0002 J)	ND	ND	ND
	Chromium	0.1	0.0035	ND (0.0009 J)	ND	ND	ND	ND (0.0009 J)	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND (0.00056 J)	ND	ND (0.0001 J)	ND	ND	ND (0.0001 J)	ND	ND
	Lithium	N/R	0.015	ND (0.0135 J)	ND (0.0112 J)	ND (0.0163 J)	ND (0.0166 J)	ND (0.0159 J)	ND (0.0137 J)	ND (0.0094 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND (0.014 J)	0.0132	0.0127	ND (0.0092 J)	ND (0.0093 J)	ND (0.0099 J)	0.0103	ND (0.0097 J)
	Radium	5	0.321 U	0.707 U	1.22	0.805 U	0.705 U	0.251 U	1.08	1.02 U
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWA-1I	YGWA-1I	YGWA-1I	YGWA-1I	YGWA-1I	YGWA-1I	YGWA-1I	YGWA-1I	
		6/1/2016	7/25/2016	9/13/2016	11/4/2016	1/16/2017	3/2/2017	4/27/2017	6/27/2017	
APPENDIX III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND (0.006 J)
	Calcium	N/R	2.50	2.16	2.21	2.67	2.45	2.57	2.38	2.36
	Chloride	(250)	1.6	1.4	1.3	1.6	1.4	1.3	1.3	1.4
	Fluoride	4	ND	ND (0.06 J)	ND	ND (0.07 J)	ND (0.03 J)	ND (0.06 J)	ND (0.01 J)	ND (0.06 J)
	Sulfate	(250)	4.2	3.7	5.2	5.0	7.9	7.4	7.4	6.4
	TDS	(500)	54	48	67	60	65	61	31	42
APPENDIX IV	Antimony	0.006	ND	ND (0.001 J)	ND	ND	ND	ND	ND (0.0017 J)	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.012	ND (0.0091 J)	ND (0.008 J)	ND (0.0067 J)	ND (0.0096 J)	0.0112	0.0106	ND (0.0092 J)
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND (0.0007 J)	ND	ND	ND	ND (0.0004 J)	ND	ND
	Cobalt	N/R	ND (0.00082 J)	ND (0.0008 J)	ND (0.0009 J)	ND (0.0025 J)	ND (0.0027 J)	ND (0.0022 J)	ND (0.0018 J)	ND (0.0023 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND (0.002 J)	ND	ND	ND (0.0023 J)	ND (0.0025 J)	ND (0.0027 J)	ND (0.0024 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND (0.012 J)	ND (0.0098 J)	ND (0.01 J)	0.010	ND (0.0086 J)	0.0100	0.0101	ND (0.0093 J)
	Radium	5	0.42	1.83	0.841 U	0.166 U	0.000 U	0.504 U	0.593 U	0.657 U
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWA-2I	YGWA-2I	YGWA-2I	YGWA-2I	YGWA-2I	YGWA-2I	YGWA-2I	YGWA-2I	
		9/14/2016	11/4/2016	12/15/2016	1/16/2017	3/3/2017	4/28/2017	5/26/2017	6/28/2017	
APPENDIX III	Boron	N/R	ND	ND	ND (0.0107 J)	ND	ND	ND	ND	ND
	Calcium	N/R	23.5	23.7	23.1	23.3	25.1	30.7	26.2	26.1
	Chloride	(250)	1.1	1.4	2.9	0.98	1.1	0.91	0.93	1.0
	Fluoride	4	ND (0.08 J)	ND (0.12 J)	ND (0.06 J)	ND (0.10 J)	ND (0.11 J)	ND (0.06 J)	ND (0.09 J)	ND (0.11 J)
	Sulfate	(250)	9.4	13	1.8	11	8.8	10	12	11
	TDS	(500)	152	148	191	180	156	130	223	166
APPENDIX IV	Antimony	0.006	ND	ND	ND (0.0012 J)	ND	ND	ND (0.0015 J)	ND (0.0005 J)	ND
	Arsenic	0.01	ND	ND (0.0017 J)	ND (0.0023 J)	ND (0.0018 J)	ND (0.0016 J)	ND (0.0020 J)	ND (0.0005 J)	ND (0.0016 J)
	Barium	2	ND (0.0037 J)	ND (0.0059 J)	ND (0.0056 J)	ND (0.0049 J)	ND (0.0046 J)	ND (0.0039 J)	ND (0.0034 J)	ND (0.003 J)
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND (0.0005 J)	ND (0.0004 J)	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND (0.0040 J)	ND	ND (0.0026 J)	ND (0.0023 J)	ND (0.0013 J)	ND (0.0031 J)	ND (0.0038 J)	ND (0.0026 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND (0.0039 J)	ND (0.0077 J)	ND (0.0066 J)	ND (0.0056 J)	ND (0.0049 J)	ND (0.0040 J)	ND (0.0029 J)	ND (0.0036 J)
	Radium	5	0.980 U	0.277 U	0.0710 U	0.702 U	0.448 U	0.548 U	0.000 U	0.608 U
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWA-3D	YGWA-3D	YGWA-3D	YGWA-3D	YGWA-3D	YGWA-3D	YGWA-3D	YGWA-3D	
		6/2/2016	7/26/2016	9/15/2016	11/1/2016	1/11/2017	3/2/2017	4/26/2017	6/28/2017	
APPENDIX III	Boron	N/R	ND	ND (0.0097 J)	ND (0.0102 J)	ND	ND	ND (0.0084 J)	ND	ND
	Calcium	N/R	28.0	24.5	27.0	25.6	27.5	27.5	30.4	29.8
	Chloride	(250)	1.4	1.6	1.5	1.7	1.2	1.2	1.2	1.3
	Fluoride	4	0.62	0.49	0.54	0.68	0.49	0.48	0.48	0.47
	Sulfate	(250)	5.8	6.7	6.0	4.9	4.5	4.4	5.1	5.4
	TDS	(500)	130	141	153	92	159	117	181	169
APPENDIX IV	Antimony	0.006	ND	ND (0.0020 J)	ND (0.0027 J)	ND	ND	ND (0.0008 J)	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND (0.0009 J)	ND (0.0007 J)
	Barium	2	0.0100	ND (0.0088 J)	ND (0.0090 J)	ND (0.0079 J)	ND (0.0075 J)	ND (0.0090 J)	ND (0.0078 J)	ND (0.0071 J)
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND (0.0001 J)	ND	ND	ND
	Chromium	0.1	ND (0.0013 J)	ND (0.0006 J)	ND	ND	ND	ND (0.0006 J)	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND (0.0056 J)	ND (0.0001 J)	ND (0.0002 J)	ND	ND	ND (0.0002 J)	ND	ND
	Lithium	N/R	0.0180	ND (0.0221 J)	ND (0.0197 J)	ND (0.0194 J)	ND (0.0177 J)	ND (0.0185 J)	ND (0.0183 J)	ND (0.0173 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND (0.00006 J)	ND	ND
	Molybdenum	N/R	ND (0.0093 J)	0.0113	0.0112	ND (0.0099 J)	ND (0.0093 J)	0.0103	0.0100	0.0102
	Radium	5	2.51	3.82	4.24	3.92	2.52	3.13	2.35	2.60
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	0.002	ND	ND (0.0001 J)	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWA-3I	YGWA-3I	YGWA-3I	YGWA-3I	YGWA-3I	YGWA-3I	YGWA-3I	YGWA-3I	
		6/1/2016	7/25/2016	9/14/2016	11/1/2016	1/11/2017	3/1/2017	4/26/2017	6/28/2017	
APPENDIX III	Boron	N/R	ND	ND	ND	ND	ND	ND (0.0063 J)	ND	ND
	Calcium	N/R	21.0	20.3	19.7	18.4	20.3	18.6	25.6	23.9
	Chloride	(250)	1.3	1.3	1.3	1.4	1.1	1.1	1.1	1.2
	Fluoride	4	ND (0.15 J)	ND (0.14 J)	ND (0.18 J)	ND (0.15 J)	ND (0.090 J)	ND (0.20 J)	ND (0.08 J)	ND (0.12 J)
	Sulfate	(250)	12	8.4	8.6	8.9	8.6	9.3	11	12
	TDS	(500)	150	135	127	75	148	182	92	126
APPENDIX IV	Antimony	0.006	ND	ND (0.0002 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND (0.0004 J)	ND (0.0014 J)	ND (0.0011 J)
	Barium	2	0.0038	ND (0.0031 J)	ND (0.0027 J)	ND (0.0027 J)	ND (0.0036 J)	ND (0.0036 J)	ND (0.0038 J)	ND (0.004 J)
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND (0.00008 J)	ND	ND	ND
	Chromium	0.1	ND	ND (0.0007 J)	ND	ND	ND	ND (0.0004 J)	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	0.0100	ND (0.0132 J)	ND (0.0120 J)	ND (0.0115 J)	ND (0.0085 J)	ND (0.0114 J)	ND (0.0092 J)	ND (0.0085 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND (0.0055 J)	ND (0.0037 J)	ND (0.0034 J)	ND (0.0025 J)	ND (0.0033 J)	ND (0.0044 J)	ND (0.0075 J)	ND (0.008 J)
	Radium	5	0.896	2.28	0.821 U	0.585 U	1.22	0.877 U	0.672 U	1.07 U
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWA-14S	YGWA-14S	YGWA-14S	YGWA-14S	YGWA-14S	YGWA-14S	YGWA-14S	YGWA-14S	YGWA-14S
		6/2/2016	7/26/2016	9/15/2016	11/2/2016	1/10/2017	3/8/2017	4/26/2017	6/30/2017	
APPENDIX III	Boron	N/R	ND	ND (0.0177 J)	ND (0.0214 J)	ND (0.0151 J)	ND (0.0198 J)	ND (0.0189 J)	ND (0.0161 J)	ND (0.0173 J)
	Calcium	N/R	1.30	1.24	1.17	1.23	1.24	1.21	1.14	1.24
	Chloride	(250)	4.1	4.0	4.2	4.9	4.1	4.2	4.1	3.7
	Fluoride	4	ND	ND (0.02 J)	ND	ND (0.04 J)	0.5	ND (0.04 J)	ND	ND
	Sulfate	(250)	6.6	6.1	6.1	6.3	5.9	7.0	7.0	6.5
	TDS	(500)	46	54	54	71	45	178	52	45
APPENDIX IV	Antimony	0.006	ND	ND (0.0005 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND (0.0007 J)	ND
	Barium	2	0.0081	ND (0.0082 J)	ND (0.0087 J)	ND (0.0082 J)	ND (0.0086 J)	ND (0.0088 J)	ND (0.0085 J)	ND (0.0081 J)
	Beryllium	0.004	ND	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)
	Cadmium	0.005	ND	ND	ND	ND	ND	ND (0.00007 J)	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND (0.0005 J)	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND (0.0001 J)	ND	ND
	Lithium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND (0.00012 J)	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.329 U	1.51	1.04 U	0.496 U	0.376 U	0.0745 U	0.282 U	0.994
Selenium	0.05	ND (0.0011 J)	ND (0.0016 J)	ND (0.0014 J)	ND	ND (0.0012 J)	ND	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWA-30I	YGWA-30I	YGWA-30I	YGWA-30I	YGWA-30I	YGWA-30I	YGWA-30I	YGWA-30I	YGWA-30I
		6/2/2016	7/25/2016	9/19/2016	11/1/2016	1/16/2017	2/21/2017	4/26/2017	6/30/2017	
APPENDIX III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	1.30	1.17	1.05	1.14	1.23	1.25	1.03	1.13
	Chloride	(250)	1.9	1.7	1.6	1.8	1.7	1.7	1.7	1.8
	Fluoride	4	ND	ND (0.06 J)	ND	ND (0.07 J)	ND	ND (0.05 J)	ND	ND (0.01 J)
	Sulfate	(250)	1.3	1.2	1.2	1.3	1.4	1.4	1.4	1.5
	TDS	(500)	36	50	35	ND	47	ND	55	42
APPENDIX IV	Antimony	0.006	ND	ND (0.0007 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0064	ND (0.0071 J)	ND (0.0069 J)	ND (0.0070 J)	ND (0.0071 J)	ND (0.0077 J)	ND (0.0074 J)	ND (0.0076 J)
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND (0.0016 J)	ND
	Cobalt	N/R	0.0350	0.0312	0.0275	0.0255	0.0245	0.0272	0.0244	0.0233
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND (0.00006 J)
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.0652 U	3.01	0.871 U	0.307 U	0.284 U	0.503 U	0.204 U	0.738 U
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWC-26I	YGWC-26I	YGWC-26I	YGWC-26I	YGWC-26I	YGWC-26I	YGWC-26I	YGWC-26I	YGWC-26I
		6/8/2016	8/1/2016	9/20/2016	11/7/2016	1/18/2017	2/21/2017	5/8/2017	7/10/2017	
APPENDIX III	Boron	N/R	0.970	0.932	1.04	0.852	0.972	0.972	1.05	0.855
	Calcium	N/R	15.0	14.5	15.3	13.8	15.1	14.6	15.2	17.4
	Chloride	(250)	19	17	18	17	19	18	18	19
	Fluoride	4	ND (0.094 J)	ND (0.08 J)	ND (0.05 J)	ND (0.12 J)	ND (0.11 J)	ND (0.10 J)	ND (0.08 J)	ND (0.04 J)
	Sulfate	(250)	81	75	78	81	95	80	84	84
	TDS	(500)	220	211	217	301	265	158	207	219
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0680	0.0688	0.0663	0.0650	0.0625	0.0655	0.0699	0.0691
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND (0.0008 J)	ND	ND	ND	ND	ND (0.0006 J)	ND (0.0005 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	0.0070	ND (0.0068 J)	ND (0.0062 J)	ND (0.0057 J)	ND (0.0066 J)	ND (0.0067 J)	ND (0.0070 J)	ND (0.0064 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	6.68	0.606 U	0.565 U	0.773 U	0.263 U	1.06 U	0.291 U	0.912
	Selenium	0.05	0.0016	ND (0.0023 J)	ND (0.0022 J)	ND (0.0017 J)	ND (0.0020 J)	ND (0.0018 J)	ND	ND (0.0020 J)
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWC-26S	YGWC-26S	YGWC-26S	YGWC-26S	YGWC-26S	YGWC-26S	YGWC-26S	YGWC-26S	YGWC-26S
		6/8/2016	8/1/2016	9/20/2016	11/7/2016	1/18/2017	2/21/2017	5/3/2017	7/10/2017	
APPENDIX III	Boron	N/R	0.620	0.643	0.644	0.621	0.607	0.624	0.676	0.580
	Calcium	N/R	13.0	12.2	12.2	12.1	11.5	11.7	11.9	12.7
	Chloride	(250)	18	16	18	16	17	16	17	15
	Fluoride	4	ND	ND (0.24 J)	ND (0.03 J)	0.44	ND (0.07 J)	ND (0.11 J)	ND (0.16 J)	ND (0.04 J)
	Sulfate	(250)	110	96	100	100	100	96	100	100
	TDS	(500)	200	191	213	284	158	137	269	183
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0290	0.0316	0.0298	0.0289	0.0278	0.0282	0.0282	0.0274
	Beryllium	0.004	ND	ND (0.0002 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND (0.0026 J)	ND (0.0010 J)	ND (0.0013 J)	ND (0.0020 J)	ND (0.0019 J)	ND (0.0037 J)	ND (0.0025 J)
	Cobalt	N/R	0.0032	ND (0.0030 J)	ND (0.0030 J)	ND (0.0025 J)	ND (0.0022 J)	ND (0.0022 J)	ND (0.0020 J)	ND (0.0020 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND (0.0001 J)	ND (0.00008 J)
	Lithium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.677	0.457 U	0.555 U	0.647 U	0.600 U	1.11 U	0.654 U	0.649 U
Selenium	0.05	ND (0.0003 J)	ND (0.0014 J)	ND	ND	ND (0.0012 J)	ND (0.0014 J)	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWC-27I	YGWC-27I	YGWC-27I	YGWC-27I	YGWC-27I	YGWC-27I	YGWC-27I	YGWC-27I	YGWC-27I
		6/8/2016	8/1/2016	9/20/2016	11/7/2016	1/18/2017	2/23/2017	5/8/2017	6/30/2017	
APPENDIX III	Boron	N/R	2.20	2.00	2.02	1.91	1.69	1.76	2.00	2.28
	Calcium	N/R	25.0	21.4	26.3	26.1	25.6	28.2	27.2	27.2
	Chloride	(250)	14	13	13	14	14	14	14	14
	Fluoride	4	ND (0.086 J)	ND (0.14 J)	ND	ND (0.12 J)	ND (0.080 J)	ND (0.08 J)	ND (0.07 J)	ND (0.03 J)
	Sulfate	(250)	3.2	3.6	5.6	5.4	3.5	4.9	3.9	5.0
	TDS	(500)	190	191	205	264	167	253	174	193
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND (0.0011 J)	ND (0.0009 J)	ND	ND	ND	ND	ND (0.0006 J)	ND (0.0011 J)
	Barium	2	0.0810	0.0838	0.0687	0.0639	0.0645	0.0728	0.0721	0.0666
	Beryllium	0.004	ND	ND	ND (0.00009 J)	ND (0.0001 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.0016 J)	ND (0.0014 J)	ND (0.0020 J)	ND (0.0016 J)	ND (0.0017 J)	ND (0.0020 J)	ND (0.0029 J)	ND (0.0044 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	0.0067	ND (0.0080 J)	ND (0.0111 J)	ND (0.0097 J)	ND (0.0100 J)	ND (0.0099 J)	ND (0.0086 J)	ND (0.0108 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND (0.00006 J)
	Molybdenum	N/R	ND (0.0011 J)	ND (0.0018 J)	ND	ND	ND	ND	ND (0.0011 J)	ND
	Radium	5	1.81	3.79	3.12	2.66	3.44	4.73	3.87	2.85
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWC-27S	YGWC-27S	YGWC-27S	YGWC-27S	YGWC-27S	YGWC-27S	YGWC-27S	YGWC-27S	YGWC-27S
		6/8/2016	8/1/2016	9/20/2016	11/7/2016	1/19/2017	2/22/2017	5/8/2017	6/30/2017	
APPENDIX III	Boron	N/R	1.30	1.36	1.69	1.35	1.15	1.30	1.51	1.47
	Calcium	N/R	44.0	36.3	39.5	34.9	37.0	37.6	35.7	36.2
	Chloride	(250)	22	21	22	24	22	21	22	21
	Fluoride	4	ND (0.12 J)	ND (0.22 J)	0.32	ND (0.20 J)	ND (0.25 J)	ND (0.21 J)	ND (0.19 J)	ND (0.20 J)
	Sulfate	(250)	26	27	21	24	25	24	23	23
	TDS	(500)	210	209	224	291	215	262	187	209
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND (0.0005 J)
	Barium	2	0.120	0.115	0.108	0.102	0.102	0.106	0.102	0.0963
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.0024 J)	ND (0.0026 J)	ND (0.0026 J)	ND (0.0025 J)	ND (0.0024 J)	ND (0.0023 J)	ND (0.0023 J)	ND (0.0022 J)
	Lead	0.015	ND (0.0012 J)	ND	ND (0.0002 J)	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND (0.0001 J)
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.257 U	0.453 U	1.27	0.877 U	0.764 U	1.26 U	0.789 U	0.592 U
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	0.002	ND (0.00012 J)	ND (0.0001 J)	ND	ND	ND	ND	ND (0.0001 J)	ND (0.0001 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWC-28I	YGWC-28I	YGWC-28I	YGWC-28I	YGWC-28I	YGWC-28I	YGWC-28I	YGWC-28I	YGWC-28I
		6/9/2016	8/2/2016	9/21/2016	11/8/2016	1/18/2017	2/22/2017	5/5/2017	7/5/2017	
APPENDIX III	Boron	N/R	2.20	2.22	2.65	2.44	1.88	2.05	3.01	2.70
	Calcium	N/R	36.0	35.5	33.2	33.8	33.4	33.8	33.5	33.4
	Chloride	(250)	18	18	18	18	18	18	19	18
	Fluoride	4	ND (0.098 J)	0.38	ND (0.08 J)	ND (0.24 J)	ND (0.12 J)	ND (0.15 J)	ND (0.08 J)	ND (0.11 J)
	Sulfate	(250)	8.7	7.5	8.0	8.3	8.0	8.2	8.4	8.1
	TDS	(500)	240	226	214	229	243	310	289	217
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.100	0.0836	0.0889	0.0886	0.0862	0.0915	0.0891	0.0862
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND (0.00055 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.00009 J)	ND (0.00009 J)	ND (0.0001 J)	ND (0.00009 J)	ND (0.0002 J)
	Chromium	0.1	ND	ND (0.0005 J)	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.00042 J)	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	0.0073	ND (0.0073 J)	ND (0.0067 J)	ND (0.0072 J)	ND (0.0067 J)	ND (0.0064 J)	ND (0.0070 J)	ND (0.0072 J)
	Mercury	0.002	ND (0.000078 J)	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND (0.0011 J)	ND (0.0014 J)	ND	ND	ND	ND	ND (0.0014 J)	ND (0.0014 J)
	Radium	5	0.194 U	0.331 U	0.335 U	0.245 U	0.261 U	0.516 U	0.713 U	0.292 U
Selenium	0.05	ND	ND	ND	ND	ND	ND (0.0012 J)	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWC-28S	YGWC-28S	YGWC-28S	YGWC-28S	YGWC-28S	YGWC-28S	YGWC-28S	YGWC-28S	YGWC-28S
		6/9/2016	8/2/2016	9/21/2016	11/7/2016	1/18/2017	2/21/2017	5/5/2017	7/7/2017	
APPENDIX III	Boron	N/R	2.30	2.21	2.54	2.49	2.04	2.29	3.41	3.01
	Calcium	N/R	26.0	25.8	24.9	25.1	26.1	29.0	28.1	28.6
	Chloride	(250)	19	18	19	20	20	19	21	20
	Fluoride	4	ND (0.16 J)	0.50	ND (0.25 J)	ND (0.27 J)	0.34	ND (0.27 J)	ND (0.20 J)	ND (0.18 J)
	Sulfate	(250)	5.2	4.5	4.1	4.3	2.7	3.0	4.7	2.7
	TDS	(500)	210	202	216	399	215	198	347	236
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND (0.00094 J)	ND	ND	ND	ND	ND	ND	ND (0.0007 J)
	Barium	2	0.220	0.212	0.228	0.214	0.213	0.222	0.219	0.205
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND (0.0005 J)	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.00085 J)	ND (0.0008 J)	ND (0.0008 J)	ND (0.0010 J)	ND (0.0010 J)	ND (0.0011 J)	ND (0.0012 J)	ND (0.0012 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND (0.00009 J)	ND (0.00007 J)
	Lithium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND (0.000081 J)	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND (0.0006 J)	ND	ND	ND	ND	ND (0.0007 J)	ND
	Radium	5	0.715	0.526 U	0.176 U	0.609 U	0.0752 U	0.404 U	0.868 U	1.29
Selenium	0.05	ND	ND	ND (0.0010 J)	ND	ND	ND	ND	ND	
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Yates Ash Ponds
Analytical Data Summary**

Substance	MCL/ (SMCL)	Well ID								
		YGWC-29I	YGWC-29I	YGWC-29I	YGWC-29I	YGWC-29I	YGWC-29I	YGWC-29I	YGWC-29I	YGWC-29I
		6/9/2016	8/2/2016	9/21/2016	11/7/2016	1/19/2017	2/22/2017	5/8/2017	7/5/2017	
APPENDIX III	Boron	N/R	0.880	0.872	0.853	0.815	0.803	0.855	0.884	0.811
	Calcium	N/R	12.0	11.7	11.1	11.4	12.0	11.2	11.2	11.9
	Chloride	(250)	15	14	14	14	14	13	15	14
	Fluoride	4	ND (0.085 J)	ND (0.09 J)	ND (0.09 J)	ND (0.11 J)	ND (0.060 J)	ND (0.09 J)	ND (0.06 J)	ND (0.08 J)
	Sulfate	(250)	33	32	32	33	32	31	32	31
	TDS	(500)	150	155	138	291	145	185	114	136
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0820	0.0781	0.0782	0.0712	0.0689	0.0741	0.0725	0.0677
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND (0.0001 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0002 J)	ND (0.0002 J)
	Chromium	0.1	ND	ND (0.0005 J)	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.00052 J)	ND (0.0006 J)	ND (0.0007 J)	ND	ND	ND	ND	ND (0.0003 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	0.0075	ND (0.0078 J)	ND (0.0074 J)	ND (0.0057 J)	ND (0.0055 J)	ND (0.0063 J)	ND (0.0066 J)	ND (0.0058 J)
	Mercury	0.002	ND (0.000081 J)	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.523	1.25	1.21 U	1.16	0.933 U	1.45 U	0.210 U	0.620 U
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

APPENDIX B

ANALYTICAL DATA REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122509-1

TestAmerica Sample Delivery Group: AP

Client Project/Site: CCR Plant Yates

For:

Southern Company

241 Ralph McGill Blvd SE

B10185

Atlanta, Georgia 30308

Attn: Joju Abraham



Authorized for release by:

6/8/2016 5:14:56 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13



Table of Contents

Cover Page	1
Table of Contents	2
Detection Summary	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	9
Chronicle	10
QC Association	11
QC Sample Results	13
Chain of Custody	17
Receipt Checklists	19
Certification Summary	20

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Client Sample ID: YGWA-1D

Lab Sample ID: 400-122509-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.3		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.12	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	5.0		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.0021		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.0080		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	12		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0035		0.0025	0.0011	mg/L	5		6020	Total Recoverable
Lead	0.00056	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Lithium	0.015		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.014	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	120		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-1I

Lab Sample ID: 400-122509-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.6		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	4.2		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.012		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.5		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00082	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Molybdenum	0.012	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	54		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-3I

Lab Sample ID: 400-122509-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.3		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.15	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	12		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.0038		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	21		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.010		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.0055	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	150		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122509-1	YGWA-1D	Water	06/01/16 13:48	06/03/16 08:42
400-122509-2	YGWA-1I	Water	06/01/16 16:50	06/03/16 08:42
400-122509-3	YGWA-3I	Water	06/01/16 17:15	06/03/16 08:42

1

2

3

4

5

6

7

8

9

10

11

12

13

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Client Sample ID: YGWA-1D

Lab Sample ID: 400-122509-1

Date Collected: 06/01/16 13:48

Matrix: Water

Date Received: 06/03/16 08:42

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.3		1.0	0.89	mg/L			06/03/16 21:53	1
Fluoride	0.12	J	0.20	0.082	mg/L			06/03/16 21:53	1
Sulfate	5.0		1.0	0.70	mg/L			06/03/16 21:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/06/16 18:53	5
Arsenic	0.0021		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 18:53	5
Barium	0.0080		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 18:53	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 18:53	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 18:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 18:53	5
Calcium	12		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 18:53	5
Chromium	0.0035		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 18:53	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 18:53	5
Lead	0.00056	J	0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 18:53	5
Lithium	0.015		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 18:53	5
Molybdenum	0.014	J	0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 18:53	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 18:53	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 18:53	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/16 12:27	06/06/16 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	120		5.0	3.4	mg/L			06/03/16 16:02	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Client Sample ID: YGWA-11

Lab Sample ID: 400-122509-2

Date Collected: 06/01/16 16:50

Matrix: Water

Date Received: 06/03/16 08:42

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.89	mg/L			06/03/16 22:16	1
Fluoride	<0.082		0.20	0.082	mg/L			06/03/16 22:16	1
Sulfate	4.2		1.0	0.70	mg/L			06/03/16 22:16	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/06/16 19:33	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 19:33	5
Barium	0.012		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 19:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:33	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 19:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:33	5
Calcium	2.5		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 19:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 19:33	5
Cobalt	0.00082	J	0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 19:33	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 19:33	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 19:33	5
Molybdenum	0.012	J	0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 19:33	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 19:33	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 19:33	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/16 12:27	06/06/16 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	54		5.0	3.4	mg/L			06/03/16 16:02	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Client Sample ID: YGWA-3I

Lab Sample ID: 400-122509-3

Date Collected: 06/01/16 17:15

Matrix: Water

Date Received: 06/03/16 08:42

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.3		1.0	0.89	mg/L			06/03/16 22:39	1
Fluoride	0.15	J	0.20	0.082	mg/L			06/03/16 22:39	1
Sulfate	12		1.0	0.70	mg/L			06/03/16 22:39	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/06/16 19:38	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 19:38	5
Barium	0.0038		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 19:38	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:38	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 19:38	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:38	5
Calcium	21		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 19:38	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 19:38	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 19:38	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 19:38	5
Lithium	0.010		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 19:38	5
Molybdenum	0.0055	J	0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 19:38	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 19:38	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 19:38	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/16 12:28	06/06/16 12:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		5.0	3.4	mg/L			06/03/16 16:02	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Client Sample ID: YGWA-1D

Date Collected: 06/01/16 13:48

Date Received: 06/03/16 08:42

Lab Sample ID: 400-122509-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 21:53	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 18:53	GKP	TAL PEN
Total/NA	Prep	7470A			308529	06/03/16 12:27	DN1	TAL PEN
Total/NA	Analysis	7470A		1	308785	06/06/16 12:42	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	308587	06/03/16 16:02	CAC	TAL PEN

Client Sample ID: YGWA-1I

Date Collected: 06/01/16 16:50

Date Received: 06/03/16 08:42

Lab Sample ID: 400-122509-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 22:16	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 19:33	GKP	TAL PEN
Total/NA	Prep	7470A			308529	06/03/16 12:27	DN1	TAL PEN
Total/NA	Analysis	7470A		1	308785	06/06/16 12:53	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	308587	06/03/16 16:02	CAC	TAL PEN

Client Sample ID: YGWA-3I

Date Collected: 06/01/16 17:15

Date Received: 06/03/16 08:42

Lab Sample ID: 400-122509-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 22:39	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 19:38	GKP	TAL PEN
Total/NA	Prep	7470A			308529	06/03/16 12:28	DN1	TAL PEN
Total/NA	Analysis	7470A		1	308785	06/06/16 12:54	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	308587	06/03/16 16:02	CAC	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

HPLC/IC

Analysis Batch: 308629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122229-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
400-122229-A-11 MS	Matrix Spike	Total/NA	Water	300.0	
400-122509-1	YGWA-1D	Total/NA	Water	300.0	
400-122509-2	YGWA-1I	Total/NA	Water	300.0	
400-122509-3	YGWA-3I	Total/NA	Water	300.0	
LCS 400-308629/5	Lab Control Sample	Total/NA	Water	300.0	
LCS 400-308629/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-308629/4	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 308529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122474-J-2-B MS	Matrix Spike	Total/NA	Water	7470A	
400-122474-J-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
400-122509-1	YGWA-1D	Total/NA	Water	7470A	
400-122509-2	YGWA-1I	Total/NA	Water	7470A	
400-122509-3	YGWA-3I	Total/NA	Water	7470A	
LCS 400-308529/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-308529/14-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 308677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122509-1	YGWA-1D	Total Recoverable	Water	3005A	
400-122509-1 MS	YGWA-1D	Total Recoverable	Water	3005A	
400-122509-1 MSD	YGWA-1D	Total Recoverable	Water	3005A	
400-122509-2	YGWA-1I	Total Recoverable	Water	3005A	
400-122509-3	YGWA-3I	Total Recoverable	Water	3005A	
LCS 400-308677/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-308677/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 308785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122474-J-2-B MS	Matrix Spike	Total/NA	Water	7470A	308529
400-122474-J-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	308529
400-122509-1	YGWA-1D	Total/NA	Water	7470A	308529
400-122509-2	YGWA-1I	Total/NA	Water	7470A	308529
400-122509-3	YGWA-3I	Total/NA	Water	7470A	308529
LCS 400-308529/15-A	Lab Control Sample	Total/NA	Water	7470A	308529
MB 400-308529/14-A	Method Blank	Total/NA	Water	7470A	308529

Analysis Batch: 308895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122509-1	YGWA-1D	Total Recoverable	Water	6020	308677
400-122509-1 MS	YGWA-1D	Total Recoverable	Water	6020	308677
400-122509-1 MSD	YGWA-1D	Total Recoverable	Water	6020	308677
400-122509-2	YGWA-1I	Total Recoverable	Water	6020	308677
400-122509-3	YGWA-3I	Total Recoverable	Water	6020	308677
LCS 400-308677/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	308677
MB 400-308677/1-A ^5	Method Blank	Total Recoverable	Water	6020	308677

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

General Chemistry

Analysis Batch: 308587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122445-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	
400-122509-1	YGWA-1D	Total/NA	Water	SM 2540C	
400-122509-2	YGWA-1I	Total/NA	Water	SM 2540C	
400-122509-3	YGWA-3I	Total/NA	Water	SM 2540C	
LCS 400-308587/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-308587/1	Method Blank	Total/NA	Water	SM 2540C	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-308629/4
Matrix: Water
Analysis Batch: 308629

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/03/16 12:00	1
Fluoride	<0.082		0.20	0.082	mg/L			06/03/16 12:00	1
Sulfate	<0.70		1.0	0.70	mg/L			06/03/16 12:00	1

Lab Sample ID: LCS 400-308629/5
Matrix: Water
Analysis Batch: 308629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.96		mg/L		100	90 - 110
Fluoride	10.0	10.1		mg/L		101	90 - 110
Sulfate	10.0	10.8		mg/L		108	90 - 110

Lab Sample ID: LCSD 400-308629/6
Matrix: Water
Analysis Batch: 308629

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.78		mg/L		98	90 - 110	2	15
Fluoride	10.0	10.1		mg/L		101	90 - 110	0	15
Sulfate	10.0	10.8		mg/L		108	90 - 110	0	15

Lab Sample ID: 400-122229-A-5 MSD
Matrix: Water
Analysis Batch: 308629

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	57	E	10.0	66.2	E 4	mg/L		89	80 - 120	0	20
Fluoride	0.31		10.0	11.0		mg/L		107	80 - 120	1	20
Sulfate	<0.70	F1	10.0	12.3	F1	mg/L		123	80 - 120	0	20

Lab Sample ID: 400-122229-A-11 MS
Matrix: Water
Analysis Batch: 308629

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	28		10.0	37.6		mg/L		99	80 - 120
Fluoride	0.84		10.0	11.6		mg/L		108	80 - 120
Sulfate	2.9	F1	10.0	15.4	F1	mg/L		124	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-308677/1-A ^5
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 18:44	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 18:44	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 400-308677/1-A ^5
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 18:44	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 18:44	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 18:44	5
Calcium	<0.13		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 18:44	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 18:44	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 18:44	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 18:44	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 18:44	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 18:44	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 18:44	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 18:44	5

Lab Sample ID: LCS 400-308677/2-A ^1
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0548		mg/L		110	80 - 120
Arsenic	0.0500	0.0533		mg/L		107	80 - 120
Barium	0.0500	0.0465		mg/L		93	80 - 120
Beryllium	0.0500	0.0477		mg/L		95	80 - 120
Boron	0.100	0.0987		mg/L		99	80 - 120
Cadmium	0.0500	0.0501		mg/L		100	80 - 120
Calcium	5.00	5.15		mg/L		103	80 - 120
Chromium	0.0500	0.0517		mg/L		103	80 - 120
Cobalt	0.0500	0.0510		mg/L		102	80 - 120
Lead	0.0500	0.0489		mg/L		98	80 - 120
Lithium	0.0500	0.0516		mg/L		103	80 - 120
Molybdenum	0.0500	0.0511		mg/L		102	80 - 120
Selenium	0.0500	0.0530		mg/L		106	80 - 120
Thallium	0.0100	0.00990		mg/L		99	80 - 120

Lab Sample ID: 400-122509-1 MS
Matrix: Water
Analysis Batch: 308895

Client Sample ID: YGWA-1D
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0544		mg/L		109	75 - 125
Arsenic	0.0021		0.0500	0.0547		mg/L		105	75 - 125
Barium	0.0080		0.0500	0.0546		mg/L		93	75 - 125
Beryllium	<0.00034		0.0500	0.0476		mg/L		95	75 - 125
Boron	<0.021		0.100	0.114		mg/L		114	75 - 125
Cadmium	<0.00034		0.0500	0.0504		mg/L		101	75 - 125
Calcium	12		5.00	16.5		mg/L		97	75 - 125
Chromium	0.0035		0.0500	0.0515		mg/L		96	75 - 125
Cobalt	<0.00040		0.0500	0.0512		mg/L		102	75 - 125
Lead	0.00056	J	0.0500	0.0472		mg/L		93	75 - 125
Lithium	0.015		0.0500	0.0616		mg/L		94	75 - 125
Molybdenum	0.014	J	0.0500	0.0653		mg/L		102	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-122509-1 MS
Matrix: Water
Analysis Batch: 308895

Client Sample ID: YGWA-1D
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Selenium	<0.00024		0.0500	0.0529		mg/L		106	75 - 125
Thallium	<0.000085		0.0100	0.00980		mg/L		98	75 - 125

Lab Sample ID: 400-122509-1 MSD
Matrix: Water
Analysis Batch: 308895

Client Sample ID: YGWA-1D
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0532		mg/L		106	75 - 125	2	20
Arsenic	0.0021		0.0500	0.0549		mg/L		106	75 - 125	0	20
Barium	0.0080		0.0500	0.0584		mg/L		101	75 - 125	7	20
Beryllium	<0.00034		0.0500	0.0481		mg/L		96	75 - 125	1	20
Boron	<0.021		0.100	0.110		mg/L		110	75 - 125	4	20
Cadmium	<0.00034		0.0500	0.0510		mg/L		102	75 - 125	1	20
Calcium	12		5.00	16.7		mg/L		101	75 - 125	1	20
Chromium	0.0035		0.0500	0.0526		mg/L		98	75 - 125	2	20
Cobalt	<0.00040		0.0500	0.0509		mg/L		102	75 - 125	1	20
Lead	0.00056	J	0.0500	0.0519		mg/L		103	75 - 125	9	20
Lithium	0.015		0.0500	0.0626		mg/L		96	75 - 125	1	20
Molybdenum	0.014	J	0.0500	0.0645		mg/L		100	75 - 125	1	20
Selenium	<0.00024		0.0500	0.0522		mg/L		104	75 - 125	1	20
Thallium	<0.000085		0.0100	0.00985		mg/L		99	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-308529/14-A
Matrix: Water
Analysis Batch: 308785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/16 12:20	06/06/16 12:15	1

Lab Sample ID: LCS 400-308529/15-A
Matrix: Water
Analysis Batch: 308785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000962		mg/L		96	80 - 120

Lab Sample ID: 400-122474-J-2-B MS
Matrix: Water
Analysis Batch: 308785

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 308529

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00195		mg/L		97	80 - 120

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 400-122474-J-2-C MSD
Matrix: Water
Analysis Batch: 308785

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 308529

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00194		mg/L		96	80 - 120	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-308587/1
Matrix: Water
Analysis Batch: 308587

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/03/16 16:02	1

Lab Sample ID: LCS 400-308587/2
Matrix: Water
Analysis Batch: 308587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	278		mg/L		95	78 - 122

Lab Sample ID: 400-122445-A-1 DU
Matrix: Water
Analysis Batch: 308587

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1500		1590		mg/L		5	5

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

Company: Southern Company Services
 Report To: Joju Abraham
 Address: 241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308
 Phone/Fax: 404-506-7239
 Contact: Joju Abraham
 Project Location: Plant Yates
 Account Number: _____
 Special Instructions: Yates AP CCR GW

Sample Shipment Date: 6/2/16
 Sample Received Date: _____
 Sampled By: R. Hillard
 ¹² Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰	Sample Type Key: ²²
	Date	Time					HNO3	Ice	HNO3		
YG-WA-1A	6/1/16	1348	Ash Pond 2, upgradient	G	GW	3	Metals app. III & IV EPA 6020 & EPA 7470	N	I	N	G-Grab C-Other C-Composite
YG-WA-1Z	6/1/16	1650	Ash Pond 2, upgradient	G	GW	3	CL, F, SO4 EPA 300 TDS SM2540C Radium 226 & 228 Ga Tech	I		N	S-Solid W-Wipe SW-Surface Water GW-Ground Water WW-Waste Water DW-Drinking Water
											P-Preservative Key: ²⁴ H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SP-Sodium Sulfate P-Phosphoric Acid ST-Sodium Thiosulfate H-Hose U-Unpreserved

LAB USE ONLY - Sample Receipt Information

Relinquished by: R. Hillard Date/Time: 6/2/16 0700
 Received by: [Signature] Date/Time: 6/2/16 0730
 Relinquished by: [Signature] Date/Time: 6/2/16 0814
 Received by: [Signature] Date/Time: 6/2/16 0842
 Remarks: Relinquished to Foster. namesby: Cheryl Dunbar 6/3/16 0842
 Temperature: 0.7°C DL-5



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. _____
Reviewed By: _____

Georgia Power Environmental Laboratory
NELAP Certification #E57554
2480 Maner Road, BIN 39110
Atlanta, Georgia 30339
Phone: (404) 799-2100
Company: 8-530-2100

11 Page 1 of 1
12 Standard Turnaround Time
X

Sample Shipment Date: 6/2/16
Sample Received Date:
Sampled By: Wesley Bowen

of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Company: Southern Company Services
Report To: Joju Abraham
Address: 241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308
Phone/Fax: 404-506-7239
Contact: Joju Abraham
Project Location: Plant Yates
Account Number:
Special Instructions: Yates AP CCR GW

Sample Type Key: 22
C-Grab O-Other C-Composite
Matrix Key: 23
O-Oil S-Sludge SW-Surface Water WW-Waste Water
W-Wipe W-Water
G-Ground Water D-DW-Drinking Water
Preservative Key: 24
H-Hydrochloric Acid N-Nitric Acid
S-Sulfuric Acid SH-Sodium Hydroxide
SS-Sodium Sulfate P-Phosphoric Acid
ST-Sodium Thiosulfate I-Ice U-Unpreserved

PRESERVATIVE		ANALYSIS REQUESTED	
HNO3	N	Ice	N
HNO3	N		
Metals app. III & IV		EPA 6020 & EPA 7470	
Cl, F, SO4 EPA 300		TDS SM2540C	
Radium 226 & 228		Ga Tech	

Sample Number	Collection Date	Time	Sample Description	Sample Type	No. of Containers		
					17	18	19
YG-WA-3I	6/1/16	1715	Upgradient AP-2	G	3	0	0

LAB USE ONLY: Sample Receipt Information	
Relinquished by: [Signature]	Date/Time: 6/2/16 0700
Received by: [Signature]	Date/Time: 6/2/16 0800
Relinquished by: [Signature]	Date/Time: 6/2/16 0844
Received by: [Signature]	Date/Time: 6/2/16 0842
Temperature: 0.7°C	
Relinquished by: [Signature]	
Received by: [Signature]	

Relinquished by: [Signature]
Received by: [Signature]

Relinquished by: [Signature]
Received by: [Signature]

1
2
3
4
5
6
7
8
9
10
11
12
13

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122509-1

SDG Number: AP

Login Number: 122509

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	0.7°C, IR-5
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	ID changed from YGWA-1A to YGWA-1D.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-1
SDG: AP

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-17 *
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122509-2

TestAmerica Sample Delivery Group: AP

Client Project/Site: CCR Plant Yates

For:

Southern Company

241 Ralph McGill Blvd SE

B10185

Atlanta, Georgia 30308

Attn: Joju Abraham



Authorized for release by:

7/6/2016 4:39:28 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12



Table of Contents

Cover Page	1
Table of Contents	2
Method Summary	3
Sample Summary	4
Client Sample Results	5
Definitions	8
Chronicle	9
QC Association	10
QC Sample Results	11
Chain of Custody	13
Receipt Checklists	15
Certification Summary	16

Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Sample Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122509-1	YGWA-1D	Water	06/01/16 13:48	06/03/16 08:42
400-122509-2	YGWA-1I	Water	06/01/16 16:50	06/03/16 08:42
400-122509-3	YGWA-3I	Water	06/01/16 17:15	06/03/16 08:42

1

2

3

4

5

6

7

8

9

10

11

12

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Client Sample ID: YGWA-1D

Lab Sample ID: 400-122509-1

Date Collected: 06/01/16 13:48

Matrix: Water

Date Received: 06/03/16 08:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.203		0.0625	0.0651	1.00	0.0563	pCi/L	06/12/16 14:40	07/04/16 16:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					06/12/16 14:40	07/04/16 16:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.117	U	0.208	0.208	1.00	0.354	pCi/L	06/12/16 15:00	06/24/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					06/12/16 15:00	06/24/16 13:41	1
Y Carrier	92.7		40 - 110					06/12/16 15:00	06/24/16 13:41	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.321	U	0.217	0.218	5.00	0.354	pCi/L		07/05/16 13:08	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Client Sample ID: YGWA-11

Lab Sample ID: 400-122509-2

Date Collected: 06/01/16 16:50

Matrix: Water

Date Received: 06/03/16 08:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0194	U	0.0362	0.0362	1.00	0.0638	pCi/L	06/12/16 14:40	07/04/16 16:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					06/12/16 14:40	07/04/16 16:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.400		0.227	0.230	1.00	0.338	pCi/L	06/12/16 15:00	06/24/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					06/12/16 15:00	06/24/16 13:41	1
Y Carrier	91.6		40 - 110					06/12/16 15:00	06/24/16 13:41	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.420		0.230	0.233	5.00	0.338	pCi/L		07/05/16 13:08	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Client Sample ID: YGWA-3I

Lab Sample ID: 400-122509-3

Date Collected: 06/01/16 17:15

Matrix: Water

Date Received: 06/03/16 08:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.321		0.0949	0.0993	1.00	0.104	pCi/L	06/12/16 14:40	07/04/16 16:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		40 - 110					06/12/16 14:40	07/04/16 16:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.575		0.315	0.320	1.00	0.471	pCi/L	06/12/16 15:00	06/24/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		40 - 110					06/12/16 15:00	06/24/16 13:41	1
Y Carrier	93.5		40 - 110					06/12/16 15:00	06/24/16 13:41	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.896		0.329	0.335	5.00	0.471	pCi/L		07/05/16 13:08	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Client Sample ID: YGWA-1D

Date Collected: 06/01/16 13:48

Date Received: 06/03/16 08:42

Lab Sample ID: 400-122509-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256056	06/12/16 14:40	JAS	TAL SL
Total/NA	Analysis	9315		1	258971	07/04/16 16:24	ALS	TAL SL
Total/NA	Prep	PrecSep_0			256057	06/12/16 15:00	JAS	TAL SL
Total/NA	Analysis	9320		1	257879	06/24/16 13:41	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259200	07/05/16 13:08	CAH	TAL SL

Client Sample ID: YGWA-1I

Date Collected: 06/01/16 16:50

Date Received: 06/03/16 08:42

Lab Sample ID: 400-122509-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256056	06/12/16 14:40	JAS	TAL SL
Total/NA	Analysis	9315		1	258971	07/04/16 16:24	ALS	TAL SL
Total/NA	Prep	PrecSep_0			256057	06/12/16 15:00	JAS	TAL SL
Total/NA	Analysis	9320		1	257879	06/24/16 13:41	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259200	07/05/16 13:08	CAH	TAL SL

Client Sample ID: YGWA-3I

Date Collected: 06/01/16 17:15

Date Received: 06/03/16 08:42

Lab Sample ID: 400-122509-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256056	06/12/16 14:40	JAS	TAL SL
Total/NA	Analysis	9315		1	258971	07/04/16 16:24	ALS	TAL SL
Total/NA	Prep	PrecSep_0			256057	06/12/16 15:00	JAS	TAL SL
Total/NA	Analysis	9320		1	257879	06/24/16 13:41	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259200	07/05/16 13:08	CAH	TAL SL

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Rad

Prep Batch: 256056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122509-1	YGWA-1D	Total/NA	Water	PrecSep-21	
400-122509-2	YGWA-1I	Total/NA	Water	PrecSep-21	
400-122509-3	YGWA-3I	Total/NA	Water	PrecSep-21	
400-122509-3 DU	YGWA-3I	Total/NA	Water	PrecSep-21	
LCS 160-256056/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
MB 160-256056/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 256057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122509-1	YGWA-1D	Total/NA	Water	PrecSep_0	
400-122509-2	YGWA-1I	Total/NA	Water	PrecSep_0	
400-122509-3	YGWA-3I	Total/NA	Water	PrecSep_0	
400-122509-3 DU	YGWA-3I	Total/NA	Water	PrecSep_0	
LCS 160-256057/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
MB 160-256057/1-A	Method Blank	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-256056/1-A
Matrix: Water
Analysis Batch: 258971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256056

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06498	U	0.0536	0.0539	1.00	0.0822	pCi/L	06/12/16 14:40	07/04/16 16:23	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					06/12/16 14:40	07/04/16 16:23	1

Lab Sample ID: LCS 160-256056/2-A
Matrix: Water
Analysis Batch: 258971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256056

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	13.37		1.29	1.00	0.0781	pCi/L	120	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	87.7		40 - 110						

Lab Sample ID: 400-122509-3 DU
Matrix: Water
Analysis Batch: 258971

Client Sample ID: YGWA-3I
Prep Type: Total/NA
Prep Batch: 256056

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.321		0.4252		0.0993	1.00	0.0686	pCi/L	0.52	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	81.5		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-256057/1-A
Matrix: Water
Analysis Batch: 257879

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256057

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3315	U	0.279	0.281	1.00	0.445	pCi/L	06/12/16 15:00	06/24/16 13:39	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					06/12/16 15:00	06/24/16 13:39	1
Y Carrier	91.6		40 - 110					06/12/16 15:00	06/24/16 13:39	1

QC Sample Results

Client: Southern Company
 Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
 SDG: AP

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-256057/2-A
Matrix: Water
Analysis Batch: 257879

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256057

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	15.0	19.83		2.07	1.00	0.383	pCi/L	133	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.7		40 - 110
Y Carrier	93.1		40 - 110

Lab Sample ID: 400-122509-3 DU
Matrix: Water
Analysis Batch: 257879

Client Sample ID: YGWA-3I
Prep Type: Total/NA
Prep Batch: 256057

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.575		0.1636	U	0.287	1.00	0.484	pCi/L	0.68	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	81.5		40 - 110
Y Carrier	92.7		40 - 110

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

Sample Shipment Date:⁸ 6/2/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ R. Hillard
 # of Business Days (Rush) _____
 (Must be cleared through Env. Lab. Prior to shipment)

X Standard Turnaround Time

Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰			Sample Type Key: 22				
	Date	Time					HNO3	Ice	HNO3	g-Grab	O-Other	C-Composite		Oil	S-Solid	SL-Sludge	W-Wipe
							N	I	N					SW-Surface Water	GW-Ground Water	W-Wipe	W-Wipe
YG-WA-1A	6/1/16	1348	Ash Pond 2, upgradient	G-GW		3	X		X	X							
YG-WA-1Z	6/1/16	1650	Ash Pond 2, upgradient	G-GW		3	X		X	X							

Metals app. III & IV EPA 6020 & EPA 7470
 Cl, F, SO4 EPA 300 TDS SM2540C
 Radium 226 & 228 Ga Tech

PREPRESERVATIVE KEY:
 H-Hydrochloric Acid N-Nitric Acid
 S-Sulfuric Acid SH-Sodium Hydroxide
 SS-Sodium Selenate P-Phosphoric Acid
 ST-Sodium Thiosulfate H-H Chloroform U-Uppressed

LAB USE ONLY - Sample Receipt Information

Relinquished by:²⁶ R. Hillard Date/Time: 6/2/16 0700
 Received by:²⁷ [Signature] Date/Time: 6/2/16 0730
 Relinquished by:²⁸ [Signature] Date/Time: 6/2/16 0814
 Received by:²⁹ [Signature] Date/Time: 6/2/16 0814

Remarks:³⁰ Ignited down to Featex. names by: Cheryl Dunson 6/3/16 0842

1 2 3 4 5 6 7 8 9 10 11 12

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Sample Shipment Date:⁸ 6/21/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ Wesley Bowen
 # of Business Days (Rush) _____
 (Must be cleared through Env. Lab. Prior to shipment)

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			Sample Type Key: 22 C-Grab O-Other C-Composite Matrix Key: 23 O-Oil S-Sludge SW-Surface Water WW-Waste Water P-Phosphoric Acid H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SB-Sodium Bisulfite P-Phosphoric Acid ST-Sodium Thiosulfate I-Ice U-Unpreserved
	Date	Time				HNO3	Ice	HNO3	
YG-WA-3I	6/1/16	1715	UPGRADIANT AP-2	GW	3	N	I	N	X

Signature: _____
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

LAB USE ONLY: Sample Receipt Information
 Relinquished by:²⁶ _____ Date/Time 6/21/16 0700
 Received by:²⁷ _____ Date/Time 6/21/16 0700
 Relinquished by:²⁸ _____ Date/Time 6/21/16 0844
 Received by:²⁹ _____ Date/Time 6/21/16 0844
 Relinquished by:³⁰ _____ Date/Time 6/21/16 0844
 Temperature: 0.7°C
 Remarks: recovered by Cheryl Dunbar 6/21/16 0844
Relinquished by: Cheryl Dunbar To Facility



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122509-2

SDG Number: AP

Login Number: 122509

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	0.7°C, IR-5
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	ID changed from YGWA-1A to YGWA-1D.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16 *
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16 *
Michigan	State Program	5	9912	06-30-16 *
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	08-31-16

Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-16 *
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	07-31-16 *
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16 *
Missouri	State Program	7	780	06-30-16 *
Nevada	State Program	9	MO000542016-1	07-31-16 *
New Jersey	NELAP	2	MO002	06-30-16 *
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-16 *
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122509-2
SDG: AP

Laboratory: TestAmerica St. Louis (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-16 *
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16 *
Texas	NELAP	6	T104704193-15-9	07-31-16 *
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16 *
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-16 *
West Virginia DEP	State Program	3	381	08-31-16 *

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122890-1

TestAmerica Sample Delivery Group: AP

Client Project/Site: CCR Plant Yates

For:

Southern Company

241 Ralph McGill Blvd SE

B10185

Atlanta, Georgia 30308

Attn: Joju Abraham



Authorized for release by:

6/17/2016 3:43:21 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13

14



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	6
Sample Summary	7
Client Sample Results	8
Definitions	12
Chronicle	13
QC Association	15
QC Sample Results	17
Chain of Custody	21
Receipt Checklists	24
Certification Summary	25

Case Narrative

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Job ID: 400-122890-1

Laboratory: TestAmerica Pensacola

Narrative

**Job Narrative
400-122890-1**

HPLC/IC

Method(s) 300.0: The matrix spike (MS) recoveries for analytical batch 309960 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Metals

Method(s) 6020: The native sample, post-digestion spike (PDS), matrix spike, and matrix spike duplicate (MS/MSD) associated with preparation batch 309716 and analytical batch 310197 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Boron and Calcium in the PDS and MS/MSD was above the instrument calibration range. The data have been reported and qualified.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Client Sample ID: YGWC-28I

Lab Sample ID: 400-122890-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.098	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	8.7	F1	1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.10		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cadmium	0.00055	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	36		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00042	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0073		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.0011	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Boron - DL	2.2		0.25	0.11	mg/L	25		6020	Total Recoverable
Mercury	0.000078	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	240		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-3

Lab Sample ID: 400-122890-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0012	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.32		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0018	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Lead	0.0065		0.0013	0.00035	mg/L	5		6020	Total Recoverable
Mercury	0.000089	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	10		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-29I

Lab Sample ID: 400-122890-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	15		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.085	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	33		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.082		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.88		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	12		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00052	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0075		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Mercury	0.000081	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	150		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-28S

Lab Sample ID: 400-122890-4

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
 Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
 SDG: AP

Client Sample ID: YGWC-28S (Continued)

Lab Sample ID: 400-122890-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	19		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.16	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	5.2		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.00094	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.22		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	26		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00085	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Boron - DL	2.3		0.25	0.11	mg/L	25		6020	Total Recoverable
Mercury	0.000081	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	210		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola



Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122890-1	YGWC-28I	Water	06/09/16 09:33	06/11/16 09:11
400-122890-2	FB-3	Water	06/09/16 10:35	06/11/16 09:11
400-122890-3	YGWC-29I	Water	06/09/16 09:55	06/11/16 09:11
400-122890-4	YGWC-28S	Water	06/09/16 11:35	06/11/16 09:11

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Client Sample ID: YGWC-281

Lab Sample ID: 400-122890-1

Date Collected: 06/09/16 09:33

Matrix: Water

Date Received: 06/11/16 09:11

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		1.0	0.89	mg/L			06/14/16 07:19	1
Fluoride	0.098	J	0.20	0.082	mg/L			06/14/16 07:19	1
Sulfate	8.7	F1	1.0	0.70	mg/L			06/14/16 07:19	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/13/16 08:27	06/16/16 17:11	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/13/16 08:27	06/16/16 17:11	5
Barium	0.10		0.0025	0.00049	mg/L		06/13/16 08:27	06/16/16 17:11	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 17:11	5
Cadmium	0.00055	J	0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 17:11	5
Calcium	36		0.25	0.13	mg/L		06/13/16 08:27	06/16/16 17:11	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/13/16 08:27	06/16/16 17:11	5
Cobalt	0.00042	J	0.0025	0.00040	mg/L		06/13/16 08:27	06/16/16 17:11	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/13/16 08:27	06/16/16 17:11	5
Lithium	0.0073		0.0050	0.0032	mg/L		06/13/16 08:27	06/16/16 17:11	5
Molybdenum	0.0011	J	0.015	0.00085	mg/L		06/13/16 08:27	06/16/16 17:11	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/13/16 08:27	06/16/16 17:11	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/13/16 08:27	06/16/16 17:11	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.2		0.25	0.11	mg/L		06/13/16 08:27	06/16/16 17:46	25

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000078	J B	0.00020	0.000070	mg/L		06/13/16 10:06	06/15/16 09:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	240		5.0	3.4	mg/L			06/14/16 09:51	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Client Sample ID: FB-3
Date Collected: 06/09/16 10:35
Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/14/16 08:05	1
Fluoride	<0.082		0.20	0.082	mg/L			06/14/16 08:05	1
Sulfate	<0.70		1.0	0.70	mg/L			06/14/16 08:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/13/16 08:27	06/16/16 15:11	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/13/16 08:27	06/16/16 15:11	5
Barium	0.0012	J	0.0025	0.00049	mg/L		06/13/16 08:27	06/16/16 15:11	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 15:11	5
Boron	<0.021		0.050	0.021	mg/L		06/13/16 08:27	06/16/16 15:11	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 15:11	5
Calcium	0.32		0.25	0.13	mg/L		06/13/16 08:27	06/16/16 15:11	5
Chromium	0.0018	J	0.0025	0.0011	mg/L		06/13/16 08:27	06/16/16 15:11	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/13/16 08:27	06/16/16 15:11	5
Lead	0.0065		0.0013	0.00035	mg/L		06/13/16 08:27	06/16/16 15:11	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/13/16 08:27	06/16/16 15:11	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/13/16 08:27	06/16/16 15:11	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/13/16 08:27	06/16/16 15:11	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/13/16 08:27	06/16/16 15:11	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000089	J B	0.00020	0.000070	mg/L		06/13/16 10:06	06/15/16 09:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10		5.0	3.4	mg/L			06/14/16 09:51	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Client Sample ID: YGWC-29I

Lab Sample ID: 400-122890-3

Date Collected: 06/09/16 09:55

Matrix: Water

Date Received: 06/11/16 09:11

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		1.0	0.89	mg/L			06/14/16 08:27	1
Fluoride	0.085	J	0.20	0.082	mg/L			06/14/16 08:27	1
Sulfate	33		1.0	0.70	mg/L			06/14/16 08:27	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/13/16 08:27	06/16/16 17:15	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/13/16 08:27	06/16/16 17:15	5
Barium	0.082		0.0025	0.00049	mg/L		06/13/16 08:27	06/16/16 17:15	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 17:15	5
Boron	0.88		0.050	0.021	mg/L		06/13/16 08:27	06/16/16 17:15	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 17:15	5
Calcium	12		0.25	0.13	mg/L		06/13/16 08:27	06/16/16 17:15	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/13/16 08:27	06/16/16 17:15	5
Cobalt	0.00052	J	0.0025	0.00040	mg/L		06/13/16 08:27	06/16/16 17:15	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/13/16 08:27	06/16/16 17:15	5
Lithium	0.0075		0.0050	0.0032	mg/L		06/13/16 08:27	06/16/16 17:15	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/13/16 08:27	06/16/16 17:15	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/13/16 08:27	06/16/16 17:15	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/13/16 08:27	06/16/16 17:15	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000081	J B	0.00020	0.000070	mg/L		06/13/16 10:06	06/15/16 09:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		5.0	3.4	mg/L			06/14/16 09:51	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Client Sample ID: YGWC-28S

Lab Sample ID: 400-122890-4

Date Collected: 06/09/16 11:35

Matrix: Water

Date Received: 06/11/16 09:11

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		1.0	0.89	mg/L			06/14/16 08:50	1
Fluoride	0.16	J	0.20	0.082	mg/L			06/14/16 08:50	1
Sulfate	5.2		1.0	0.70	mg/L			06/14/16 08:50	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/13/16 08:27	06/16/16 17:19	5
Arsenic	0.00094	J	0.0013	0.00046	mg/L		06/13/16 08:27	06/16/16 17:19	5
Barium	0.22		0.0025	0.00049	mg/L		06/13/16 08:27	06/16/16 17:19	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 17:19	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 17:19	5
Calcium	26		0.25	0.13	mg/L		06/13/16 08:27	06/16/16 17:19	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/13/16 08:27	06/16/16 17:19	5
Cobalt	0.00085	J	0.0025	0.00040	mg/L		06/13/16 08:27	06/16/16 17:19	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/13/16 08:27	06/16/16 17:19	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/13/16 08:27	06/16/16 17:19	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/13/16 08:27	06/16/16 17:19	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/13/16 08:27	06/16/16 17:19	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/13/16 08:27	06/16/16 17:19	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.3		0.25	0.11	mg/L		06/13/16 08:27	06/16/16 18:08	25

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000081	J B	0.00020	0.000070	mg/L		06/13/16 10:06	06/15/16 09:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	210		5.0	3.4	mg/L			06/14/16 09:51	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Client Sample ID: YGWC-28I

Date Collected: 06/09/16 09:33

Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309960	06/14/16 07:19	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309716	06/13/16 08:27	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 17:11	RJB	TAL PEN
Total Recoverable	Prep	3005A	DL		309716	06/13/16 08:27	RJB	TAL PEN
Total Recoverable	Analysis	6020	DL	25	310197	06/16/16 17:46	RJB	TAL PEN
Total/NA	Prep	7470A			309741	06/13/16 10:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	310100	06/15/16 09:24	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309892	06/14/16 09:51	CAC	TAL PEN

Client Sample ID: FB-3

Date Collected: 06/09/16 10:35

Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309960	06/14/16 08:05	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309716	06/13/16 08:27	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 15:11	RJB	TAL PEN
Total/NA	Prep	7470A			309741	06/13/16 10:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	310100	06/15/16 09:32	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309892	06/14/16 09:51	CAC	TAL PEN

Client Sample ID: YGWC-29I

Date Collected: 06/09/16 09:55

Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309960	06/14/16 08:27	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309716	06/13/16 08:27	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 17:15	RJB	TAL PEN
Total/NA	Prep	7470A			309741	06/13/16 10:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	310100	06/15/16 09:34	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309892	06/14/16 09:51	CAC	TAL PEN

Client Sample ID: YGWC-28S

Date Collected: 06/09/16 11:35

Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309960	06/14/16 08:50	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309716	06/13/16 08:27	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 17:19	RJB	TAL PEN
Total Recoverable	Prep	3005A	DL		309716	06/13/16 08:27	RJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Client Sample ID: YGWC-28S

Lab Sample ID: 400-122890-4

Date Collected: 06/09/16 11:35

Matrix: Water

Date Received: 06/11/16 09:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020	DL	25	310197	06/16/16 18:08	RJB	TAL PEN
Total/NA	Prep	7470A			309741	06/13/16 10:06	JAP	TAL PEN
Total/NA	Analysis	7470A		1	310100	06/15/16 09:35	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309892	06/14/16 09:51	CAC	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

HPLC/IC

Analysis Batch: 309960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
400-122890-1	YGWC-28I	Total/NA	Water	300.0	
400-122890-1 MS	YGWC-28I	Total/NA	Water	300.0	
400-122890-2	FB-3	Total/NA	Water	300.0	
400-122890-3	YGWC-29I	Total/NA	Water	300.0	
400-122890-4	YGWC-28S	Total/NA	Water	300.0	
LCS 400-309960/36	Lab Control Sample	Total/NA	Water	300.0	
LCS 400-309960/37	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-309960/35	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 309716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122890-1	YGWC-28I	Total Recoverable	Water	3005A	
400-122890-1 - DL	YGWC-28I	Total Recoverable	Water	3005A	
400-122890-2	FB-3	Total Recoverable	Water	3005A	
400-122890-3	YGWC-29I	Total Recoverable	Water	3005A	
400-122890-4 - DL	YGWC-28S	Total Recoverable	Water	3005A	
400-122890-4	YGWC-28S	Total Recoverable	Water	3005A	
400-122891-B-1-B MS ^25 -	Matrix Spike	Total Recoverable	Water	3005A	
400-122891-B-1-C MSD ^25	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
LCS 400-309716/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-309716/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 309741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122890-1	YGWC-28I	Total/NA	Water	7470A	
400-122890-2	FB-3	Total/NA	Water	7470A	
400-122890-3	YGWC-29I	Total/NA	Water	7470A	
400-122890-4	YGWC-28S	Total/NA	Water	7470A	
600-132357-A-1-E MS	Matrix Spike	Total/NA	Water	7470A	
600-132357-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
LCS 400-309741/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-309741/14-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 310100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122890-1	YGWC-28I	Total/NA	Water	7470A	309741
400-122890-2	FB-3	Total/NA	Water	7470A	309741
400-122890-3	YGWC-29I	Total/NA	Water	7470A	309741
400-122890-4	YGWC-28S	Total/NA	Water	7470A	309741
600-132357-A-1-E MS	Matrix Spike	Total/NA	Water	7470A	309741
600-132357-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	309741
LCS 400-309741/15-A	Lab Control Sample	Total/NA	Water	7470A	309741
MB 400-309741/14-A	Method Blank	Total/NA	Water	7470A	309741

Analysis Batch: 310197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122890-1	YGWC-28I	Total Recoverable	Water	6020	309716

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Metals (Continued)

Analysis Batch: 310197 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122890-1 - DL	YGWC-28I	Total Recoverable	Water	6020	309716
400-122890-2	FB-3	Total Recoverable	Water	6020	309716
400-122890-3	YGWC-29I	Total Recoverable	Water	6020	309716
400-122890-4	YGWC-28S	Total Recoverable	Water	6020	309716
400-122890-4 - DL	YGWC-28S	Total Recoverable	Water	6020	309716
400-122891-B-1-B MS ^25 -	Matrix Spike	Total Recoverable	Water	6020	309716
400-122891-B-1-C MSD ^25	Matrix Spike Duplicate	Total Recoverable	Water	6020	309716
LCS 400-309716/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	309716
MB 400-309716/1-A ^5	Method Blank	Total Recoverable	Water	6020	309716

General Chemistry

Analysis Batch: 309892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122890-1	YGWC-28I	Total/NA	Water	SM 2540C	
400-122890-2	FB-3	Total/NA	Water	SM 2540C	
400-122890-3	YGWC-29I	Total/NA	Water	SM 2540C	
400-122890-4	YGWC-28S	Total/NA	Water	SM 2540C	
400-122891-A-3 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 400-309892/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-309892/1	Method Blank	Total/NA	Water	SM 2540C	

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-309960/35
Matrix: Water
Analysis Batch: 309960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/14/16 00:05	1
Fluoride	<0.082		0.20	0.082	mg/L			06/14/16 00:05	1
Sulfate	<0.70		1.0	0.70	mg/L			06/14/16 00:05	1

Lab Sample ID: LCS 400-309960/36
Matrix: Water
Analysis Batch: 309960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.49		mg/L		95	90 - 110
Fluoride	10.0	9.88		mg/L		99	90 - 110
Sulfate	10.0	9.37		mg/L		94	90 - 110

Lab Sample ID: LCSD 400-309960/37
Matrix: Water
Analysis Batch: 309960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.58		mg/L		96	90 - 110	1	15
Fluoride	10.0	10.0		mg/L		100	90 - 110	2	15
Sulfate	10.0	9.38		mg/L		94	90 - 110	0	15

Lab Sample ID: 400-122843-A-9 MSD
Matrix: Water
Analysis Batch: 309960

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<8.9		100	111		mg/L		111	80 - 120	0	20
Fluoride	<0.82		100	111		mg/L		111	80 - 120	1	20
Sulfate	850	E	100	951	E 4	mg/L		102	80 - 120	0	20

Lab Sample ID: 400-122890-1 MS
Matrix: Water
Analysis Batch: 309960

Client Sample ID: YGWC-281
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	18		10.0	29.2		mg/L		112	80 - 120
Fluoride	0.098	J	10.0	12.1		mg/L		120	80 - 120
Sulfate	8.7	F1	10.0	21.7	F1	mg/L		130	80 - 120

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-309716/1-A ^5
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 309716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/13/16 08:27	06/16/16 14:54	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/13/16 08:27	06/16/16 14:54	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 400-309716/1-A ^5
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 309716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00049		0.0025	0.00049	mg/L		06/13/16 08:27	06/16/16 14:54	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 14:54	5
Boron	<0.021		0.050	0.021	mg/L		06/13/16 08:27	06/16/16 14:54	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/13/16 08:27	06/16/16 14:54	5
Calcium	<0.13		0.25	0.13	mg/L		06/13/16 08:27	06/16/16 14:54	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/13/16 08:27	06/16/16 14:54	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/13/16 08:27	06/16/16 14:54	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/13/16 08:27	06/16/16 14:54	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/13/16 08:27	06/16/16 14:54	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/13/16 08:27	06/16/16 14:54	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/13/16 08:27	06/16/16 14:54	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/13/16 08:27	06/16/16 14:54	5

Lab Sample ID: LCS 400-309716/2-A ^1
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 309716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0520		mg/L		104	80 - 120
Arsenic	0.0500	0.0493		mg/L		99	80 - 120
Barium	0.0500	0.0483		mg/L		97	80 - 120
Beryllium	0.0500	0.0452		mg/L		90	80 - 120
Boron	0.100	0.0949		mg/L		95	80 - 120
Cadmium	0.0500	0.0493		mg/L		99	80 - 120
Calcium	5.00	4.77		mg/L		95	80 - 120
Chromium	0.0500	0.0477		mg/L		95	80 - 120
Cobalt	0.0500	0.0480		mg/L		96	80 - 120
Lead	0.0500	0.0521		mg/L		104	80 - 120
Lithium	0.0500	0.0475		mg/L		95	80 - 120
Molybdenum	0.0500	0.0472		mg/L		94	80 - 120
Selenium	0.0500	0.0485		mg/L		97	80 - 120
Thallium	0.0100	0.00965		mg/L		97	80 - 120

Method: 6020 - Metals (ICP/MS) - DL

Lab Sample ID: 400-122891-B-1-B MS ^25
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 309716

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony - DL	<0.0010		0.0500	0.0595		mg/L		119	75 - 125
Arsenic - DL	0.0016		0.0500	0.0561		mg/L		109	75 - 125
Barium - DL	0.14		0.0500	0.195		mg/L		112	75 - 125
Beryllium - DL	<0.00034		0.0500	0.0494		mg/L		99	75 - 125
Boron - DL	18	E	0.100	20.1	E 4	mg/L		2437	75 - 125
Cadmium - DL	0.00052	J	0.0500	0.0540		mg/L		107	75 - 125
Calcium - DL	880	E	5.00	850	4	mg/L		-570	75 - 125
Chromium - DL	<0.0011		0.0500	0.0510		mg/L		102	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Method: 6020 - Metals (ICP/MS) - DL (Continued)

Lab Sample ID: 400-122891-B-1-B MS ^25
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 309716

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt - DL	0.0026		0.0500	0.0529		mg/L		101	75 - 125
Lead - DL	0.00059	J	0.0500	0.0509		mg/L		101	75 - 125
Lithium - DL	0.0057		0.0500	0.0575		mg/L		104	75 - 125
Molybdenum - DL	0.0024	J	0.0500	0.0522	J	mg/L		100	75 - 125
Selenium - DL	0.00099	J	0.0500	0.0545		mg/L		107	75 - 125
Thallium - DL	0.00022	J	0.0100	0.0109		mg/L		107	75 - 125

Lab Sample ID: 400-122891-B-1-C MSD ^25
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 309716

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony - DL	<0.0010		0.0500	0.0570		mg/L		114	75 - 125	4	20
Arsenic - DL	0.0016		0.0500	0.0542		mg/L		105	75 - 125	4	20
Barium - DL	0.14		0.0500	0.194		mg/L		111	75 - 125	0	20
Beryllium - DL	<0.00034		0.0500	0.0470		mg/L		94	75 - 125	5	20
Boron - DL	18	E	0.100	18.9	E 4	mg/L		1227	75 - 125	6	20
Cadmium - DL	0.00052	J	0.0500	0.0531		mg/L		105	75 - 125	2	20
Calcium - DL	880	E	5.00	826	4	mg/L		-1053	75 - 125	3	20
Chromium - DL	<0.0011		0.0500	0.0496		mg/L		99	75 - 125	3	20
Cobalt - DL	0.0026		0.0500	0.0526		mg/L		100	75 - 125	1	20
Lead - DL	0.00059	J	0.0500	0.0492		mg/L		97	75 - 125	3	20
Lithium - DL	0.0057		0.0500	0.0538		mg/L		96	75 - 125	7	20
Molybdenum - DL	0.0024	J	0.0500	0.0507	J	mg/L		97	75 - 125	3	20
Selenium - DL	0.00099	J	0.0500	0.0525		mg/L		103	75 - 125	4	20
Thallium - DL	0.00022	J	0.0100	0.0101		mg/L		99	75 - 125	8	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-309741/14-A
Matrix: Water
Analysis Batch: 310100

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309741

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000752	J	0.00020	0.000070	mg/L		06/13/16 09:54	06/15/16 08:51	1

Lab Sample ID: LCS 400-309741/15-A
Matrix: Water
Analysis Batch: 310100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309741

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.000984		mg/L		98	80 - 120

Lab Sample ID: 600-132357-A-1-E MS
Matrix: Water
Analysis Batch: 310100

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 309741

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00185		mg/L		92	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Lab Sample ID: 600-132357-A-1-F MSD
Matrix: Water
Analysis Batch: 310100

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 309741

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00187		mg/L		93	80 - 120	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-309892/1
Matrix: Water
Analysis Batch: 309892

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/14/16 09:51	1

Lab Sample ID: LCS 400-309892/2
Matrix: Water
Analysis Batch: 309892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	264		mg/L		90	78 - 122

Lab Sample ID: 400-122891-A-3 DU
Matrix: Water
Analysis Batch: 309892

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	4800		4710		mg/L		2	5

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No.
 Reviewed By:

Page 1 of 1

400-122890 COC

Sample Shipment Date: 8/19/16
 Sample Received Date: 8/19/16
 X Standard Turnaround Time

Company: 1 Southern Company Services
 Report To Joju Abraham
 Address: 2 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax: 3 404-506-7239
 Contact: 4 Joju Abraham
 Project Location: 5 Plant Yates
 Account Number: 6
 Special Instructions: 7 Yates AP CCR GW

Sampled By: 10 Charles Watson
 # of Business Days (Rush) (Must be cleared through Env. Lab. Prior to shipment)

LAB USE ONLY LAB ID	Sample Number 14	Collection 15		Sample Description 16	Sample Type 17	Matrix 18	No. of Containers 19	PRESERVATIVE 20			ANALYSIS REQUESTED 21			Sample Type Key: 22 G-Grab C-Other C-Composite					
		Date	Time					Ice	Ice	Matrix Key: 23	C-Other	C-Composite	S-Solid		S-Sludge	S-Strip	S-Substrate Water	S-Surface Water	S-Water
	YGWC-25 I	6/9/16	9:33		G		3												
	FB-3	6/9/16	10:35	Field blank	G	DW	3												

Signature: *Charles Watson*
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.
 HNO3 N
 Ice I
 TDS SM2540C
 CI, F, SO4 EPA 300
 EPA 6020 & EPA 7470
 Metals app. III & IV
 Matrix
 No. of Containers
 Sample Type
 Matrix
 No. of Containers
 ANALYSIS REQUESTED 21
 Matrix Key: 23
 S-Solid S-Sludge S-Strip S-Substrate Water S-Surface Water S-Water
 Sample Type Key: 22
 G-Grab C-Other C-Composite
 PRESERVATIVE 20
 CW MMS HWZ
 Ice Tech
 SW-816
 9315 + 9320
 Radon 226 & 228
 Lab Use Only Comments

LAB USE ONLY: Sample Receipt Information 25
 Relinquished by: 26 *Charles Watson* Date/Time 8/19/16 11:02
 Received by: 27 *Wesley Bunker* Date/Time 8/19/16 11:22
 Relinquished by: 28 *CJS* Date/Time 8/19/16 13:50
 Received by: 29 *Charles Watson* Date/Time 8/19/16 @ 13:50
 Relinquished by: 30 *Charles Watson* Date/Time 8/19/16 @ 13:50
 32°C (60°F) with dry color in green condition, seal, pH 2
 25.1°C, 0.6°C, 15.4°C JRC

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Sample Shipment Date:⁸ 6/19/16

Sample Received Date:⁹ _____

Company:¹ Southern Company Services

Report To: Joju Abraham

Address:² 241 Ralph McGill Blvd SE B10185

Atlanta, GA 30308

Phone/Fax:³ 404-506-7239

Contact:⁴ Joju Abraham

Plant Yates

Project Location:⁵ _____

Account Number:⁶ _____

Special _____

Instructions:⁷ Yates AP CCR GW

Standard Turnaround Time 12

of Business Days (Rush) _____
 (Must be cleared through Env. Lab. Prior to shipment)

Sampled By:¹⁰ Wesley Bowen

Signature [Signature]

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE ²⁰		ANALYSIS REQUESTED ²¹		Sample Type Key: 22
HNO3 N	loc I	FINO3 N	FINO3 N	
Matrix EPA 6020 & EPA 7470 Metals app. III & IV CI, F, SO4 EPA 300 TDS SM2540C Radium-226 & 228 mBq - On Tech SW-846 9315 and 9320 - On Tech				Matrix Key: 23 S-Solid S-Surface Water W-Waste Water C-Composite U-Unpreserved
Sample Type G-GW G-Grab C-Composite				Preservative Key: 24 H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SS-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate H-Hex U-Unpreserved

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹		Sample Type Key: 22
		Date	Time					FINO3	loc	
	Y6-WC-29Z	6/19/16	0955		G		3			X

Relinquished by:²⁶ [Signature] Date/Time 6/19/16 1350
 Received by:²⁷ [Signature] Date/Time 6/19/16 @ 13:50 Hand.
 Relinquished by:²⁸ [Signature] Date/Time 6/19/16 @ 9:00
 Received by:²⁹ [Signature] Date/Time 6/19/16 0911

LAB USE ONLY Sample Receipt Information

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

**ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD**

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____
 11 Page 1 of 1

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

Sample Shipment Date:⁸ 6/9/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ Michael Hutchison
 ¹² Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Signature:

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE ²⁰		ANALYSIS REQUESTED ²¹	
HNO3	Ice	HNO3	Ice
N	1	N	1

Matrix Key: ²³ S-Solid, SI-Sludge, W-Wipe, SW-Surface Water, GW-Ground Water, WW-Waste Water, DW-Drinking Water

Preservative Key: ²⁴ H-Hydrochloric Acid, N-Nitric Acid, S-Sulfuric Acid, SH-Sodium Hydroxide, SP-Sodium Bisulfate, P-Phosphoric Acid, ST-Sodium Thiosulfate, I-Ice, U-Unpreserved

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type	Matrix	No. of Containers	EPA 6020 & EPA 7470 Metals app. III & IV	CI, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Cat Tech	SW-846 931549320	Matrix Key: ²³	Sample Type Key: ²²
		Date	Time										
	YGWC-28S	6-9-16	1135		G	GW	3	X	X				

LAB USE ONLY: Sample Receipt Information

Relinquished by: ²⁶ Date/Time 6/16/16 1235
 Received by: ²⁷ Date/Time 6/16/16 1235
 Relinquished by: Date/Time 6/16/16 1350
 Received by: Date/Time 6/9/16 @ 13:50

3-20 (GPEL-R-UP), white, center in good condition, seal PHL 2
 Hand.
 6/11/16 0911
 Relinquished by: to FedEx. 6/10/16 @ 9:00



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122890-1

SDG Number: AP

Login Number: 122890

List Number: 1

Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	25.1°C, 0.6°C, 15.4°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-1
SDG: AP

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-17 *
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122890-2

TestAmerica Sample Delivery Group: AP

Client Project/Site: CCR Plant Yates

For:

Southern Company

241 Ralph McGill Blvd SE

B10185

Atlanta, Georgia 30308

Attn: Joju Abraham



Authorized for release by:

7/13/2016 5:08:24 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12



Table of Contents

Cover Page	1
Table of Contents	2
Method Summary	3
Sample Summary	4
Client Sample Results	5
Definitions	8
Chronicle	9
QC Association	10
QC Sample Results	11
Chain of Custody	13
Receipt Checklists	16
Certification Summary	17

Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Sample Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122890-1	YGWC-28I	Water	06/09/16 09:33	06/11/16 09:11
400-122890-2	FB-3	Water	06/09/16 10:35	06/11/16 09:11
400-122890-3	YGWC-29I	Water	06/09/16 09:55	06/11/16 09:11
400-122890-4	YGWC-28S	Water	06/09/16 11:35	06/11/16 09:11

1

2

3

4

5

6

7

8

9

10

11

12

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Client Sample ID: YGWC-28I

Lab Sample ID: 400-122890-1

Date Collected: 06/09/16 09:33

Matrix: Water

Date Received: 06/11/16 09:11

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.138		0.0719	0.0730	1.00	0.0936	pCi/L	06/17/16 11:44	07/11/16 07:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					06/17/16 11:44	07/11/16 07:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0563	U	0.252	0.252	1.00	0.440	pCi/L	06/17/16 16:20	07/06/16 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					06/17/16 16:20	07/06/16 13:05	1
Y Carrier	89.3		40 - 110					06/17/16 16:20	07/06/16 13:05	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.194	U	0.262	0.262	5.00	0.440	pCi/L		07/13/16 12:58	1

Client Sample ID: FB-3

Lab Sample ID: 400-122890-2

Date Collected: 06/09/16 10:35

Matrix: Water

Date Received: 06/11/16 09:11

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00218	U	0.0491	0.0491	1.00	0.0963	pCi/L	06/17/16 11:44	07/11/16 07:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					06/17/16 11:44	07/11/16 07:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.208	U	0.274	0.274	1.00	0.455	pCi/L	06/17/16 16:20	07/06/16 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					06/17/16 16:20	07/06/16 13:05	1
Y Carrier	91.2		40 - 110					06/17/16 16:20	07/06/16 13:05	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Client Sample ID: FB-3
Date Collected: 06/09/16 10:35
Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-2
Matrix: Water

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.210	U	0.278	0.279	5.00	0.455	pCi/L		07/13/16 12:58	1

Client Sample ID: YGWC-29I
Date Collected: 06/09/16 09:55
Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.259		0.0920	0.0949	1.00	0.0995	pCi/L	06/17/16 11:44	07/11/16 07:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.9		40 - 110					06/17/16 11:44	07/11/16 07:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.263	U	0.286	0.287	1.00	0.469	pCi/L	06/17/16 16:20	07/06/16 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.9		40 - 110					06/17/16 16:20	07/06/16 13:05	1
Y Carrier	89.0		40 - 110					06/17/16 16:20	07/06/16 13:05	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.523		0.301	0.303	5.00	0.469	pCi/L		07/13/16 12:58	1

Client Sample ID: YGWC-28S
Date Collected: 06/09/16 11:35
Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.229		0.0868	0.0892	1.00	0.0980	pCi/L	06/17/16 11:44	07/11/16 11:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.1		40 - 110					06/17/16 11:44	07/11/16 11:08	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Client Sample ID: YGWC-28S

Lab Sample ID: 400-122890-4

Date Collected: 06/09/16 11:35

Matrix: Water

Date Received: 06/11/16 09:11

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.485		0.261	0.265	1.00	0.385	pCi/L	06/17/16 16:20	07/06/16 13:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.1		40 - 110					06/17/16 16:20	07/06/16 13:05	1
Y Carrier	93.1		40 - 110					06/17/16 16:20	07/06/16 13:05	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.715		0.275	0.279	5.00	0.385	pCi/L		07/13/16 12:58	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Client Sample ID: YGWC-28I

Date Collected: 06/09/16 09:33

Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256889	06/17/16 11:44	MCJ	TAL SL
Total/NA	Analysis	9315		1	259959	07/11/16 07:13	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256928	06/17/16 16:20	MCJ	TAL SL
Total/NA	Analysis	9320		1	259383	07/06/16 13:05	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: FB-3

Date Collected: 06/09/16 10:35

Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256889	06/17/16 11:44	MCJ	TAL SL
Total/NA	Analysis	9315		1	259959	07/11/16 07:13	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256928	06/17/16 16:20	MCJ	TAL SL
Total/NA	Analysis	9320		1	259383	07/06/16 13:05	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-29I

Date Collected: 06/09/16 09:55

Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256889	06/17/16 11:44	MCJ	TAL SL
Total/NA	Analysis	9315		1	259959	07/11/16 07:13	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256928	06/17/16 16:20	MCJ	TAL SL
Total/NA	Analysis	9320		1	259383	07/06/16 13:05	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-28S

Date Collected: 06/09/16 11:35

Date Received: 06/11/16 09:11

Lab Sample ID: 400-122890-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256889	06/17/16 11:44	MCJ	TAL SL
Total/NA	Analysis	9315		1	259959	07/11/16 11:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256928	06/17/16 16:20	MCJ	TAL SL
Total/NA	Analysis	9320		1	259383	07/06/16 13:05	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Rad

Prep Batch: 256889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-65902-A-8-A MS	Matrix Spike	Total/NA	Water	PrecSep-21	
240-65902-A-8-B MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
400-122890-1	YGWC-28I	Total/NA	Water	PrecSep-21	
400-122890-2	FB-3	Total/NA	Water	PrecSep-21	
400-122890-3	YGWC-29I	Total/NA	Water	PrecSep-21	
400-122890-4	YGWC-28S	Total/NA	Water	PrecSep-21	
LCS 160-256889/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
MB 160-256889/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 256928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-65902-A-8-C MS	Matrix Spike	Total/NA	Water	PrecSep_0	
240-65902-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	
400-122890-1	YGWC-28I	Total/NA	Water	PrecSep_0	
400-122890-2	FB-3	Total/NA	Water	PrecSep_0	
400-122890-3	YGWC-29I	Total/NA	Water	PrecSep_0	
400-122890-4	YGWC-28S	Total/NA	Water	PrecSep_0	
LCS 160-256928/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
MB 160-256928/1-A	Method Blank	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-256889/1-A
Matrix: Water
Analysis Batch: 259959

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256889

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01998	U	0.0492	0.0493	1.00	0.0899	pCi/L	06/17/16 11:44	07/11/16 07:13	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	40 - 110							
	85.5				06/17/16 11:44	07/11/16 07:13	1			

Lab Sample ID: LCS 160-256889/2-A
Matrix: Water
Analysis Batch: 260167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256889

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.2	15.27		1.48	1.00	0.0932	pCi/L	137	68 - 137
Carrier	LCS LCS		Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier	40 - 110						
	85.5				06/17/16 11:44	07/11/16 07:13	1		

Lab Sample ID: 240-65902-A-8-A MS
Matrix: Water
Analysis Batch: 259961

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 256889

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
						Uncert. (2σ+/-)					
Radium-226	0.245		11.2	15.08		1.47	1.00	0.0798	pCi/L	133	75 - 138
Carrier	MS MS		Limits		Prepared	Analyzed	Dil Fac				
Ba Carrier	%Yield	Qualifier	40 - 110								
	88.0				06/17/16 11:44	07/11/16 07:13	1				

Lab Sample ID: 240-65902-A-8-B MSD
Matrix: Water
Analysis Batch: 259961

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 256889

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
						Uncert. (2σ+/-)							
Radium-226	0.245		11.2	15.63		1.53	1.00	0.122	pCi/L	138	75 - 138	0.18	1
Carrier	MSD MSD		Limits		Prepared	Analyzed	Dil Fac						
Ba Carrier	%Yield	Qualifier	40 - 110										
	84.9				06/17/16 11:44	07/11/16 07:13	1						

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-256928/1-A
Matrix: Water
Analysis Batch: 259383

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256928

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2534	U	0.257	0.258	1.00	0.418	pCi/L	06/17/16 16:20	07/06/16 13:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					06/17/16 16:20	07/06/16 13:04	1
Y Carrier	89.0		40 - 110					06/17/16 16:20	07/06/16 13:04	1

Lab Sample ID: LCS 160-256928/2-A
Matrix: Water
Analysis Batch: 259383

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256928

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.9	19.37		2.02	1.00	0.428	pCi/L	130	56 - 140
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	85.5		40 - 110						
Y Carrier	90.8		40 - 110						

Lab Sample ID: 240-65902-A-8-C MS
Matrix: Water
Analysis Batch: 259383

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 256928

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	0.161	U	14.9	17.59		1.84	1.00	0.370	pCi/L	118	45 - 150
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	88.0		40 - 110								
Y Carrier	95.0		40 - 110								

Lab Sample ID: 240-65902-A-8-D MSD
Matrix: Water
Analysis Batch: 259383

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 256928

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.161	U	14.9	19.74		2.06	1.00	0.400	pCi/L	133	45 - 150	0.55	1
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	84.9		40 - 110										
Y Carrier	89.3		40 - 110										

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100



400-122890 COC

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No.
 Reviewed By:

Page 1 of 1

Sample Shipment Date: 6/19/16

Sample Received Date:

X Standard Turnaround Time

Sampled By: Charles Watson

of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Company: Southern Company Services
 Report To: Joju Abraham
 Address: 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax: 404-506-7239
 Contact: Joju Abraham
 Project Location: Plant Yates
 Account Number:
 Special Instructions: Yates AP CCR GW

HNO3 N	Ice I	PRESERVATIVE CW HNO3 TP	ANALYSIS REQUESTED 21	Sample Type		Sample Type Key: 22
				G-Grab	C-Composite	

16	17	18	19
No. of Containers	Sample Type	Matrix	

LAB USE ONLY LAB ID	Sample Number	Collection		Sample Description	Signature
		Date	Time		
	YGWC-25 I	6/19/16	9:33		
	FB-3	6/19/16	10:35	Field blank	

LAB USE ONLY - Sample Receipt Information

20	21	22	23	24
Matrix	Sample Type	Matrix	No. of Containers	Signature

LAB USE ONLY - Sample Receipt Information

Relinquished by: CW
 Received by: Joju Abraham
 Relinquished by: CW
 Received by: Joju Abraham
 Relinquished by: Joju Abraham
 Received by: Joju Abraham
 Relinquished by: Joju Abraham
 Received by: Joju Abraham

32°C (60°F-18-40) with icy color in great condition, seal, pH 2
 Hand:
 25.1°C, 0.6°C, 15.4°C JR 6

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Georgia Power Environmental Laboratory
 NELAP Certification #E57554

2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Sample Shipment Date:⁸ 6/9/16

Sample Received Date:⁹

Company:¹ Southern Company Services

Report To: Joju Abraham

Address:² 241 Ralph McGill Blvd SE B10185

Atlanta, GA 30308

Phone/Fax:³ 404-506-7239

Contact:⁴ Joju Abraham

Plant Yates

Project Location:⁵

Account Number:⁶

Special

Instructions:⁷ Yates AP CCR GW

¹² Standard Turnaround Time

of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Signature: *[Signature]*

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE ²⁰				ANALYSIS REQUESTED ²¹				Sample Type Key: ²²	
HNO3	IOE	FINO3	HNO3	C-Grab	C-Other	C-Composite	Matrix Key: ²³	Preservative Key: ²⁴	
N	I	+	N	S-Solid	S-Surface Water	W-VIpe	S-Solid	H-Hydrochloric Acid	N-Nitric Acid
				SW-Surface Water	W-Waste Water	DW-Drinking Water	SI-Sludge	S-Sulfuric Acid	SH-Sodium Hydroxide
							SW-Surface Water	SS-Sodium Bisulfate	P-Phosphoric Acid
								ST-Sodium Thiosulfate	H-Hex
									U-Unpreserved

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection Date	Collection Time ¹⁵	Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	EPA 6020 & EPA 7470 Metals app. III & IV	CI, F, SO4 EPA 300 TDS SM2540C	- Radium-226 & 228 mBq - On Tech	SW-BV6 Q315 AND Q320	LAB USE ONLY COMMENTS
	YG-WC-29Z	6/9/16	0955		G	GW	3	X	X	X		

Relinquished by:²⁶ *[Signature]* Date/Time 6/9/16 1350
 Received by:²⁷ *[Signature]* Date/Time 6/9/16 @ 13:50 Hand.
 Relinquished by:²⁸ *[Signature]* Date/Time 6/10/16 @ 9:00
 Received by:²⁹ *[Signature]* Date/Time 6/11/16 0911



Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

**ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD**

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____
 11 Page 1 of 1

Sample Shipment Date:⁸ 6/9/16 ¹² Standard Turnaround Time
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ Michael Hutchison # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Plant Yates
 Project Location:⁵ Yates AP CCR GW
 Account Number:⁶ _____
 Special Instructions:⁷ _____

PRESERVATIVE ²⁰		ANALYSIS REQUESTED ²¹		Sample Type Key: ²²	
HNO3 N	Ice I	MA HNO3 N	SI Solid W/Wife	G-Grab	O-Other
		C-Composite		Matrix Key: ²³	
		S-Surface Water		O-Oil	
		SI-Solid		SI-Surface Water	
		W-Waste Water		GW-Ground Water	
		D-Water		DW-Drinking Water	
		P-Preservative		Preservative Key: ²⁴	
		H-Hydrochloric Acid		H-Hydrochloric Acid	
		N-Nitric Acid		N-Nitric Acid	
		S-Sulfuric Acid		S-Sulfuric Acid	
		SH-Sodium Hydroxide		SH-Sodium Hydroxide	
		SB-Sodium Bisulfate		SB-Sodium Bisulfate	
		P-Phosphoric Acid		P-Phosphoric Acid	
		ST-Sodium Thiosulfate		ST-Sodium Thiosulfate	
		I-Ice		I-Ice	
		U-Unpreserved		U-Unpreserved	

LAB USE ONLY ¹⁸ LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	Metals app. III & IV EPA 6020 & EPA 7470	CI, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Cat Tech	SM-816 931549320
		Date	Time								
	YGWC-28S	6-9-16	1135		G GW		3				X

LAB USE ONLY ¹⁸ LAB ID		Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	Metals app. III & IV EPA 6020 & EPA 7470	CI, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Cat Tech	SM-816 931549320
Date	Time										

Relinquished by:²⁶ [Signature] Date/Time 6/9/16 1235
 Received by:²⁷ [Signature] Date/Time 6/9/16 1235
 Relinquished by: [Signature] Date/Time 6/6/16 1350
 Received by: [Signature] Date/Time 6/9/16 @ 13:50
 Relinquished by: [Signature] Date/Time 6/11/16 0911
 Relinquished by: [Signature] to FedEx. 6/10/16 @ 9:00

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122890-2

SDG Number: AP

Login Number: 122890

List Number: 1

Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	25.1°C, 0.6°C, 15.4°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16 *
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16 *
Michigan	State Program	5	9912	06-30-16 *
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	08-31-16

Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	07-31-16 *
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16 *
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-16 *
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-16 *
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122890-2
SDG: AP

Laboratory: TestAmerica St. Louis (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-16 *
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16 *
Texas	NELAP	6	T104704193-15-9	07-31-16 *
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16 *
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-16 *
West Virginia DEP	State Program	3	381	08-31-16 *

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122569-1

TestAmerica Sample Delivery Group: AP

Client Project/Site: CCR Plant Yates

For:

Southern Company

241 Ralph McGill Blvd SE

B10185

Atlanta, Georgia 30308

Attn: Joju Abraham



Authorized for release by:

6/9/2016 4:56:45 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13

14



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	7
Sample Summary	8
Client Sample Results	9
Definitions	19
Chronicle	20
QC Association	24
QC Sample Results	27
Chain of Custody	32
Receipt Checklists	35
Certification Summary	36

Case Narrative

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Job ID: 400-122569-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-122569-1

HPLC/IC

Method(s) 300.0: The matrix spike (MS) recoveries for analytical batch 308855 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-6S

Lab Sample ID: 400-122569-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	18		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.011		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.032	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	3.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0011	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	70		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-30I

Lab Sample ID: 400-122569-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.9		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.3		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.0064		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.035		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	36		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-14S

Lab Sample ID: 400-122569-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.1	F1	1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	6.6	F1	1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.0081		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Selenium	0.0011	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	46		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-1

Lab Sample ID: 400-122569-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.00060	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable

Client Sample ID: YGWA-4I

Lab Sample ID: 400-122569-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.7		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	8.0		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.013		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	8.8		0.25	0.13	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-4I (Continued)

Lab Sample ID: 400-122569-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.00082	J	0.0025	0.00040	mg/L	5		6020	Total
Lithium	0.013		0.0050	0.0032	mg/L	5		6020	Total
Total Dissolved Solids	96		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-1

Lab Sample ID: 400-122569-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.9		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.3		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.0086		0.0025	0.00049	mg/L	5		6020	Total
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total
Cobalt	0.035		0.0025	0.00040	mg/L	5		6020	Total
Total Dissolved Solids	36		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-3D

Lab Sample ID: 400-122569-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.4		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.62		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	5.8		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.010		0.0025	0.00049	mg/L	5		6020	Total
Calcium	28		0.25	0.13	mg/L	5		6020	Total
Chromium	0.0013	J	0.0025	0.0011	mg/L	5		6020	Total
Lead	0.00056	J	0.0013	0.00035	mg/L	5		6020	Total
Lithium	0.018		0.0050	0.0032	mg/L	5		6020	Total
Molybdenum	0.0093	J	0.015	0.00085	mg/L	5		6020	Total
Total Dissolved Solids	130		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-5I

Lab Sample ID: 400-122569-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.3		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.9		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.019		0.0025	0.00049	mg/L	5		6020	Total
Calcium	2.4		0.25	0.13	mg/L	5		6020	Total
Total Dissolved Solids	66		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-5D

Lab Sample ID: 400-122569-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.2		1.0	0.89	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-5D (Continued)

Lab Sample ID: 400-122569-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.11	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	20		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.00071	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.0084		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	33		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0049	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.0035	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	160		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-01

Lab Sample ID: 400-122569-10

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122569-1	YGWA-6S	Water	06/03/16 09:16	06/04/16 09:30
400-122569-2	YGWA-30I	Water	06/02/16 10:16	06/04/16 09:30
400-122569-3	YGWA-14S	Water	06/02/16 13:25	06/04/16 09:30
400-122569-4	FB-1	Water	06/02/16 13:46	06/04/16 09:30
400-122569-5	YGWA-4I	Water	06/02/16 16:29	06/04/16 09:30
400-122569-6	DUP-1	Water	06/02/16 00:00	06/04/16 09:30
400-122569-7	YGWA-3D	Water	06/02/16 10:32	06/04/16 09:30
400-122569-8	YGWA-5I	Water	06/02/16 14:15	06/04/16 09:30
400-122569-9	YGWA-5D	Water	06/02/16 16:35	06/04/16 09:30
400-122569-10	EB-01	Water	06/02/16 15:20	06/04/16 09:30



Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-6S

Lab Sample ID: 400-122569-1

Date Collected: 06/03/16 09:16

Matrix: Water

Date Received: 06/04/16 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1		1.0	0.89	mg/L			06/06/16 21:19	1
Fluoride	<0.082		0.20	0.082	mg/L			06/06/16 21:19	1
Sulfate	18		1.0	0.70	mg/L			06/06/16 21:19	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 19:42	5
Barium	0.011		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 19:42	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:42	5
Boron	0.032	J	0.050	0.021	mg/L		06/05/16 11:49	06/06/16 19:42	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:42	5
Calcium	3.4		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 19:42	5
Chromium	0.0011	J	0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 19:42	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 19:42	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 19:42	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 19:42	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 19:42	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 19:42	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 19:42	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 14:29	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	70		5.0	3.4	mg/L			06/08/16 12:29	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-30I

Lab Sample ID: 400-122569-2

Date Collected: 06/02/16 10:16

Matrix: Water

Date Received: 06/04/16 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.89	mg/L			06/06/16 21:42	1
Fluoride	<0.082		0.20	0.082	mg/L			06/06/16 21:42	1
Sulfate	1.3		1.0	0.70	mg/L			06/06/16 21:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 19:47	5
Barium	0.0064		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 19:47	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:47	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 19:47	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:47	5
Calcium	1.3		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 19:47	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 19:47	5
Cobalt	0.035		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 19:47	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 19:47	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 19:47	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 19:47	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 19:47	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 19:47	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 14:52	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	36		5.0	3.4	mg/L			06/08/16 12:29	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-14S

Lab Sample ID: 400-122569-3

Date Collected: 06/02/16 13:25

Matrix: Water

Date Received: 06/04/16 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.1	F1	1.0	0.89	mg/L			06/06/16 22:04	1
Fluoride	<0.082	F1	0.20	0.082	mg/L			06/06/16 22:04	1
Sulfate	6.6	F1	1.0	0.70	mg/L			06/06/16 22:04	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 19:51	5
Barium	0.0081		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 19:51	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:51	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 19:51	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:51	5
Calcium	1.3		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 19:51	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 19:51	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 19:51	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 19:51	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 19:51	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 19:51	5
Selenium	0.0011	J	0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 19:51	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 19:51	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 14:57	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	46		5.0	3.4	mg/L			06/08/16 12:29	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: FB-1
Date Collected: 06/02/16 13:46
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-4
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/06/16 22:50	1
Fluoride	<0.082		0.20	0.082	mg/L			06/06/16 22:50	1
Sulfate	<0.70		1.0	0.70	mg/L			06/06/16 22:50	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 19:56	5
Barium	0.00060	J	0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 19:56	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:56	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 19:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 19:56	5
Calcium	<0.13		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 19:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 19:56	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 19:56	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 19:56	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 19:56	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 19:56	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 19:56	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 19:56	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 15:01	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/08/16 12:29	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-4I

Lab Sample ID: 400-122569-5

Date Collected: 06/02/16 16:29

Matrix: Water

Date Received: 06/04/16 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		1.0	0.89	mg/L			06/06/16 23:13	1
Fluoride	<0.082		0.20	0.082	mg/L			06/06/16 23:13	1
Sulfate	8.0		1.0	0.70	mg/L			06/06/16 23:13	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 20:00	5
Barium	0.013		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 20:00	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:00	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 20:00	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:00	5
Calcium	8.8		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 20:00	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 20:00	5
Cobalt	0.00082	J	0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 20:00	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 20:00	5
Lithium	0.013		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 20:00	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 20:00	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 20:00	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 20:00	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 15:06	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	96		5.0	3.4	mg/L			06/08/16 12:29	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: DUP-1
Date Collected: 06/02/16 00:00
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-6
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.89	mg/L			06/06/16 23:36	1
Fluoride	<0.082		0.20	0.082	mg/L			06/06/16 23:36	1
Sulfate	1.3		1.0	0.70	mg/L			06/06/16 23:36	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 20:05	5
Barium	0.0086		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 20:05	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:05	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 20:05	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:05	5
Calcium	1.2		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 20:05	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 20:05	5
Cobalt	0.035		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 20:05	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 20:05	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 20:05	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 20:05	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 20:05	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 20:05	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 15:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	36		5.0	3.4	mg/L			06/08/16 12:29	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-3D

Lab Sample ID: 400-122569-7

Date Collected: 06/02/16 10:32

Matrix: Water

Date Received: 06/04/16 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4		1.0	0.89	mg/L			06/07/16 00:44	1
Fluoride	0.62		0.20	0.082	mg/L			06/07/16 00:44	1
Sulfate	5.8		1.0	0.70	mg/L			06/07/16 00:44	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 20:09	5
Barium	0.010		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 20:09	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:09	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 20:09	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:09	5
Calcium	28		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 20:09	5
Chromium	0.0013	J	0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 20:09	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 20:09	5
Lead	0.00056	J	0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 20:09	5
Lithium	0.018		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 20:09	5
Molybdenum	0.0093	J	0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 20:09	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 20:09	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 20:09	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 15:15	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	130		5.0	3.4	mg/L			06/08/16 12:29	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-5I

Lab Sample ID: 400-122569-8

Date Collected: 06/02/16 14:15

Matrix: Water

Date Received: 06/04/16 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.3		1.0	0.89	mg/L			06/07/16 01:07	1
Fluoride	<0.082		0.20	0.082	mg/L			06/07/16 01:07	1
Sulfate	1.9		1.0	0.70	mg/L			06/07/16 01:07	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 20:14	5
Barium	0.019		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 20:14	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:14	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 20:14	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:14	5
Calcium	2.4		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 20:14	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 20:14	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 20:14	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 20:14	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 20:14	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 20:14	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 20:14	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 20:14	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 15:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	66		5.0	3.4	mg/L			06/08/16 12:29	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-5D

Lab Sample ID: 400-122569-9

Date Collected: 06/02/16 16:35

Matrix: Water

Date Received: 06/04/16 09:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		1.0	0.89	mg/L			06/07/16 01:30	1
Fluoride	0.11	J	0.20	0.082	mg/L			06/07/16 01:30	1
Sulfate	20		1.0	0.70	mg/L			06/07/16 01:30	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00071	J	0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 20:36	5
Barium	0.0084		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 20:36	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:36	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 20:36	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:36	5
Calcium	33		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 20:36	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 20:36	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 20:36	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 20:36	5
Lithium	0.0049	J	0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 20:36	5
Molybdenum	0.0035	J	0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 20:36	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 20:36	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 20:36	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 15:24	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 14:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	160		5.0	3.4	mg/L			06/08/16 15:34	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: EB-01
Date Collected: 06/02/16 15:20
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-10
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/07/16 01:53	1
Fluoride	<0.082		0.20	0.082	mg/L			06/07/16 01:53	1
Sulfate	<0.70		1.0	0.70	mg/L			06/07/16 01:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 20:41	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 20:41	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:41	5
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 20:41	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 20:41	5
Calcium	<0.13		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 20:41	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 20:41	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 20:41	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 20:41	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 20:41	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 20:41	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 20:41	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 20:41	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 15:28	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 14:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/08/16 15:34	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-6S

Date Collected: 06/03/16 09:16

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/06/16 21:19	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 19:42	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 14:29	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 13:43	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309137	06/08/16 12:29	CAC	TAL PEN

Client Sample ID: YGWA-30I

Date Collected: 06/02/16 10:16

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/06/16 21:42	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 19:47	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 14:52	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 13:44	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309137	06/08/16 12:29	CAC	TAL PEN

Client Sample ID: YGWA-14S

Date Collected: 06/02/16 13:25

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/06/16 22:04	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 19:51	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 14:57	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 13:45	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309137	06/08/16 12:29	CAC	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: FB-1

Date Collected: 06/02/16 13:46

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/06/16 22:50	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 19:56	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 15:01	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 13:47	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309137	06/08/16 12:29	CAC	TAL PEN

Client Sample ID: YGWA-4I

Date Collected: 06/02/16 16:29

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/06/16 23:13	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 20:00	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 15:06	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 13:48	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309137	06/08/16 12:29	CAC	TAL PEN

Client Sample ID: DUP-1

Date Collected: 06/02/16 00:00

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/06/16 23:36	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 20:05	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 15:10	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 13:49	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309137	06/08/16 12:29	CAC	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: YGWA-3D

Lab Sample ID: 400-122569-7

Date Collected: 06/02/16 10:32

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/07/16 00:44	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 20:09	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 15:15	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 13:50	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309137	06/08/16 12:29	CAC	TAL PEN

Client Sample ID: YGWA-5I

Lab Sample ID: 400-122569-8

Date Collected: 06/02/16 14:15

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/07/16 01:07	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 20:14	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 15:19	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 13:51	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309137	06/08/16 12:29	CAC	TAL PEN

Client Sample ID: YGWA-5D

Lab Sample ID: 400-122569-9

Date Collected: 06/02/16 16:35

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/07/16 01:30	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 20:36	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 15:24	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 14:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309184	06/08/16 15:34	CAC	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Client Sample ID: EB-01
Date Collected: 06/02/16 15:20
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308855	06/07/16 01:53	TAJ	TAL PEN
Total Recoverable	Prep	3005A			308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	308895	06/06/16 20:41	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		308677	06/05/16 11:49	DN1	TAL PEN
Total Recoverable	Analysis	6020	RA	5	309094	06/07/16 15:28	GKP	TAL PEN
Total/NA	Prep	7470A			308725	06/06/16 10:10	JAP	TAL PEN
Total/NA	Analysis	7470A		1	308985	06/07/16 14:02	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309184	06/08/16 15:34	CAC	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

HPLC/IC

Analysis Batch: 308855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122569-1	YGWA-6S	Total/NA	Water	300.0	
400-122569-2	YGWA-30I	Total/NA	Water	300.0	
400-122569-3	YGWA-14S	Total/NA	Water	300.0	
400-122569-3 MS	YGWA-14S	Total/NA	Water	300.0	
400-122569-4	FB-1	Total/NA	Water	300.0	
400-122569-5	YGWA-4I	Total/NA	Water	300.0	
400-122569-6	DUP-1	Total/NA	Water	300.0	
400-122569-7	YGWA-3D	Total/NA	Water	300.0	
400-122569-8	YGWA-5I	Total/NA	Water	300.0	
400-122569-9	YGWA-5D	Total/NA	Water	300.0	
400-122569-10	EB-01	Total/NA	Water	300.0	
460-114702-G-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 400-308855/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-308855/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-308855/4	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 308677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122509-B-1-C MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-122509-B-1-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
400-122569-1	YGWA-6S	Total Recoverable	Water	3005A	
400-122569-1 - RA	YGWA-6S	Total Recoverable	Water	3005A	
400-122569-2	YGWA-30I	Total Recoverable	Water	3005A	
400-122569-2 - RA	YGWA-30I	Total Recoverable	Water	3005A	
400-122569-3 - RA	YGWA-14S	Total Recoverable	Water	3005A	
400-122569-3	YGWA-14S	Total Recoverable	Water	3005A	
400-122569-4	FB-1	Total Recoverable	Water	3005A	
400-122569-4 - RA	FB-1	Total Recoverable	Water	3005A	
400-122569-5 - RA	YGWA-4I	Total Recoverable	Water	3005A	
400-122569-5	YGWA-4I	Total Recoverable	Water	3005A	
400-122569-6 - RA	DUP-1	Total Recoverable	Water	3005A	
400-122569-6	DUP-1	Total Recoverable	Water	3005A	
400-122569-7 - RA	YGWA-3D	Total Recoverable	Water	3005A	
400-122569-7	YGWA-3D	Total Recoverable	Water	3005A	
400-122569-8 - RA	YGWA-5I	Total Recoverable	Water	3005A	
400-122569-8	YGWA-5I	Total Recoverable	Water	3005A	
400-122569-9 - RA	YGWA-5D	Total Recoverable	Water	3005A	
400-122569-9	YGWA-5D	Total Recoverable	Water	3005A	
400-122569-10	EB-01	Total Recoverable	Water	3005A	
400-122569-10 - RA	EB-01	Total Recoverable	Water	3005A	
LCS 400-308677/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-308677/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 308725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122549-K-3-B MS	Matrix Spike	Total/NA	Water	7470A	
400-122549-K-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
400-122569-1	YGWA-6S	Total/NA	Water	7470A	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Metals (Continued)

Prep Batch: 308725 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122569-2	YGWA-30I	Total/NA	Water	7470A	
400-122569-3	YGWA-14S	Total/NA	Water	7470A	
400-122569-4	FB-1	Total/NA	Water	7470A	
400-122569-5	YGWA-4I	Total/NA	Water	7470A	
400-122569-6	DUP-1	Total/NA	Water	7470A	
400-122569-7	YGWA-3D	Total/NA	Water	7470A	
400-122569-8	YGWA-5I	Total/NA	Water	7470A	
400-122569-9	YGWA-5D	Total/NA	Water	7470A	
400-122569-10	EB-01	Total/NA	Water	7470A	
LCS 400-308725/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-308725/14-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 308895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122509-B-1-C MS ^5	Matrix Spike	Total Recoverable	Water	6020	308677
400-122509-B-1-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	308677
400-122569-1	YGWA-6S	Total Recoverable	Water	6020	308677
400-122569-2	YGWA-30I	Total Recoverable	Water	6020	308677
400-122569-3	YGWA-14S	Total Recoverable	Water	6020	308677
400-122569-4	FB-1	Total Recoverable	Water	6020	308677
400-122569-5	YGWA-4I	Total Recoverable	Water	6020	308677
400-122569-6	DUP-1	Total Recoverable	Water	6020	308677
400-122569-7	YGWA-3D	Total Recoverable	Water	6020	308677
400-122569-8	YGWA-5I	Total Recoverable	Water	6020	308677
400-122569-9	YGWA-5D	Total Recoverable	Water	6020	308677
400-122569-10	EB-01	Total Recoverable	Water	6020	308677
LCS 400-308677/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	308677
MB 400-308677/1-A ^5	Method Blank	Total Recoverable	Water	6020	308677

Analysis Batch: 308985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122549-K-3-B MS	Matrix Spike	Total/NA	Water	7470A	308725
400-122549-K-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	308725
400-122569-1	YGWA-6S	Total/NA	Water	7470A	308725
400-122569-2	YGWA-30I	Total/NA	Water	7470A	308725
400-122569-3	YGWA-14S	Total/NA	Water	7470A	308725
400-122569-4	FB-1	Total/NA	Water	7470A	308725
400-122569-5	YGWA-4I	Total/NA	Water	7470A	308725
400-122569-6	DUP-1	Total/NA	Water	7470A	308725
400-122569-7	YGWA-3D	Total/NA	Water	7470A	308725
400-122569-8	YGWA-5I	Total/NA	Water	7470A	308725
400-122569-9	YGWA-5D	Total/NA	Water	7470A	308725
400-122569-10	EB-01	Total/NA	Water	7470A	308725
LCS 400-308725/15-A	Lab Control Sample	Total/NA	Water	7470A	308725
MB 400-308725/14-A	Method Blank	Total/NA	Water	7470A	308725

Analysis Batch: 309094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122569-1 - RA	YGWA-6S	Total Recoverable	Water	6020	308677
400-122569-2 - RA	YGWA-30I	Total Recoverable	Water	6020	308677
400-122569-3 - RA	YGWA-14S	Total Recoverable	Water	6020	308677

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Metals (Continued)

Analysis Batch: 309094 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122569-4 - RA	FB-1	Total Recoverable	Water	6020	308677
400-122569-5 - RA	YGWA-4I	Total Recoverable	Water	6020	308677
400-122569-6 - RA	DUP-1	Total Recoverable	Water	6020	308677
400-122569-7 - RA	YGWA-3D	Total Recoverable	Water	6020	308677
400-122569-8 - RA	YGWA-5I	Total Recoverable	Water	6020	308677
400-122569-9 - RA	YGWA-5D	Total Recoverable	Water	6020	308677
400-122569-10 - RA	EB-01	Total Recoverable	Water	6020	308677
MB 400-308677/1-A ^5	Method Blank	Total Recoverable	Water	6020	308677
MRL 400-309094/19	Lab Control Sample	Total/NA	Water	6020	

General Chemistry

Analysis Batch: 309137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122549-I-4 DU	Duplicate	Total/NA	Water	SM 2540C	
400-122569-1	YGWA-6S	Total/NA	Water	SM 2540C	
400-122569-2	YGWA-30I	Total/NA	Water	SM 2540C	
400-122569-3	YGWA-14S	Total/NA	Water	SM 2540C	
400-122569-4	FB-1	Total/NA	Water	SM 2540C	
400-122569-5	YGWA-4I	Total/NA	Water	SM 2540C	
400-122569-6	DUP-1	Total/NA	Water	SM 2540C	
400-122569-7	YGWA-3D	Total/NA	Water	SM 2540C	
400-122569-8	YGWA-5I	Total/NA	Water	SM 2540C	
LCS 400-309137/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-309137/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 309184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122549-I-5 DU	Duplicate	Total/NA	Water	SM 2540C	
400-122569-9	YGWA-5D	Total/NA	Water	SM 2540C	
400-122569-10	EB-01	Total/NA	Water	SM 2540C	
LCS 400-309184/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-309184/1	Method Blank	Total/NA	Water	SM 2540C	

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-308855/4
Matrix: Water
Analysis Batch: 308855

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/06/16 12:42	1
Fluoride	<0.082		0.20	0.082	mg/L			06/06/16 12:42	1
Sulfate	<0.70		1.0	0.70	mg/L			06/06/16 12:42	1

Lab Sample ID: LCS 400-308855/5
Matrix: Water
Analysis Batch: 308855

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.97		mg/L		100	90 - 110
Fluoride	10.0	10.1		mg/L		101	90 - 110
Sulfate	10.0	10.8		mg/L		108	90 - 110

Lab Sample ID: LCSD 400-308855/6
Matrix: Water
Analysis Batch: 308855

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.2		mg/L		102	90 - 110	2	15
Fluoride	10.0	10.3		mg/L		103	90 - 110	1	15
Sulfate	10.0	10.9		mg/L		109	90 - 110	1	15

Lab Sample ID: 400-122569-3 MS
Matrix: Water
Analysis Batch: 308855

Client Sample ID: YGWA-14S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.1	F1	10.0	7.55	F1	mg/L		35	80 - 120
Fluoride	<0.082	F1	10.0	5.58	F1	mg/L		56	80 - 120
Sulfate	6.6	F1	10.0	9.39	F1	mg/L		28	80 - 120

Lab Sample ID: 460-114702-G-6 MSD
Matrix: Water
Analysis Batch: 308855

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	21		10.0	32.4		mg/L		114	80 - 120	1	20
Sulfate	33		10.0	45.4		mg/L		120	80 - 120	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-308677/1-A ^5
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/16 11:49	06/06/16 18:44	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/05/16 11:49	06/06/16 18:44	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 18:44	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 400-308677/1-A ^5
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		06/05/16 11:49	06/06/16 18:44	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/16 11:49	06/06/16 18:44	5
Calcium	<0.13		0.25	0.13	mg/L		06/05/16 11:49	06/06/16 18:44	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/16 11:49	06/06/16 18:44	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/16 11:49	06/06/16 18:44	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/16 11:49	06/06/16 18:44	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/16 11:49	06/06/16 18:44	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/16 11:49	06/06/16 18:44	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/16 11:49	06/06/16 18:44	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/16 11:49	06/06/16 18:44	5

Lab Sample ID: MB 400-308677/1-A ^5
Matrix: Water
Analysis Batch: 309094

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/16 11:49	06/07/16 14:25	5

Lab Sample ID: LCS 400-308677/2-A ^1
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.0500	0.0548		mg/L		110	80 - 120
Arsenic	0.0500	0.0533		mg/L		107	80 - 120
Barium	0.0500	0.0465		mg/L		93	80 - 120
Beryllium	0.0500	0.0477		mg/L		95	80 - 120
Boron	0.100	0.0987		mg/L		99	80 - 120
Cadmium	0.0500	0.0501		mg/L		100	80 - 120
Calcium	5.00	5.15		mg/L		103	80 - 120
Chromium	0.0500	0.0517		mg/L		103	80 - 120
Cobalt	0.0500	0.0510		mg/L		102	80 - 120
Lead	0.0500	0.0489		mg/L		98	80 - 120
Lithium	0.0500	0.0516		mg/L		103	80 - 120
Molybdenum	0.0500	0.0511		mg/L		102	80 - 120
Selenium	0.0500	0.0530		mg/L		106	80 - 120
Thallium	0.0100	0.00990		mg/L		99	80 - 120

Lab Sample ID: 400-122509-B-1-C MS ^5
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0010		0.0500	0.0544		mg/L		109	75 - 125
Arsenic	0.0021		0.0500	0.0547		mg/L		105	75 - 125
Barium	0.0080		0.0500	0.0546		mg/L		93	75 - 125
Beryllium	<0.00034		0.0500	0.0476		mg/L		95	75 - 125
Boron	<0.021		0.100	0.114		mg/L		114	75 - 125
Cadmium	<0.00034		0.0500	0.0504		mg/L		101	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-122509-B-1-C MS ^5
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	12		5.00	16.5		mg/L		97	75 - 125
Chromium	0.0035		0.0500	0.0515		mg/L		96	75 - 125
Cobalt	<0.00040		0.0500	0.0512		mg/L		102	75 - 125
Lead	0.00056	J	0.0500	0.0472		mg/L		93	75 - 125
Lithium	0.015		0.0500	0.0616		mg/L		94	75 - 125
Molybdenum	0.014	J	0.0500	0.0653		mg/L		102	75 - 125
Selenium	<0.00024		0.0500	0.0529		mg/L		106	75 - 125
Thallium	<0.000085		0.0100	0.00980		mg/L		98	75 - 125

Lab Sample ID: 400-122509-B-1-D MSD ^5
Matrix: Water
Analysis Batch: 308895

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 308677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0532		mg/L		106	75 - 125	2	20
Arsenic	0.0021		0.0500	0.0549		mg/L		106	75 - 125	0	20
Barium	0.0080		0.0500	0.0584		mg/L		101	75 - 125	7	20
Beryllium	<0.00034		0.0500	0.0481		mg/L		96	75 - 125	1	20
Boron	<0.021		0.100	0.110		mg/L		110	75 - 125	4	20
Cadmium	<0.00034		0.0500	0.0510		mg/L		102	75 - 125	1	20
Calcium	12		5.00	16.7		mg/L		101	75 - 125	1	20
Chromium	0.0035		0.0500	0.0526		mg/L		98	75 - 125	2	20
Cobalt	<0.00040		0.0500	0.0509		mg/L		102	75 - 125	1	20
Lead	0.00056	J	0.0500	0.0519		mg/L		103	75 - 125	9	20
Lithium	0.015		0.0500	0.0626		mg/L		96	75 - 125	1	20
Molybdenum	0.014	J	0.0500	0.0645		mg/L		100	75 - 125	1	20
Selenium	<0.00024		0.0500	0.0522		mg/L		104	75 - 125	1	20
Thallium	<0.000085		0.0100	0.00985		mg/L		99	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-308725/14-A
Matrix: Water
Analysis Batch: 308985

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308725

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/06/16 10:10	06/07/16 13:26	1

Lab Sample ID: LCS 400-308725/15-A
Matrix: Water
Analysis Batch: 308985

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308725

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00107		mg/L		106	80 - 120

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 400-122549-K-3-B MS
Matrix: Water
Analysis Batch: 308985

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 308725
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00204		mg/L		101	80 - 120

Lab Sample ID: 400-122549-K-3-C MSD
Matrix: Water
Analysis Batch: 308985

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 308725
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00197		mg/L		98	80 - 120	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-309137/1
Matrix: Water
Analysis Batch: 309137

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/08/16 12:29	1

Lab Sample ID: LCS 400-309137/2
Matrix: Water
Analysis Batch: 309137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	266		mg/L		91	78 - 122

Lab Sample ID: 400-122549-I-4 DU
Matrix: Water
Analysis Batch: 309137

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	410		424		mg/L		3	5

Lab Sample ID: MB 400-309184/1
Matrix: Water
Analysis Batch: 309184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/08/16 15:34	1

Lab Sample ID: LCS 400-309184/2
Matrix: Water
Analysis Batch: 309184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	256		mg/L		87	78 - 122

QC Sample Results

Client: Southern Company
 Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
 SDG: AP

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 400-122549-I-5 DU
Matrix: Water
Analysis Batch: 309184

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1500		1470		mg/L		1	5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

Work Order No. _____

Reviewed By: _____

Page 1 of _____

LAB USE ONLY

Sample Shipment Date:⁸ 6/3/16 ¹² Standard Turnaround Time

Sample Received Date:⁹ 6/1/16 # of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Sampled By:¹⁰ LAH:1/16-2

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

Signature
LAH
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

<p>PRESERVATIVE²⁰</p> <p>ANALYSIS REQUESTED²¹</p>	<p>Sample Type Key: 22</p> <p>G-Grab O-Other C-Composite</p> <p>Matrix Key: 23</p> <p>O-Oil S-Solid SL-Sludge W-Wipe SV-Surface Water GW-Ground Water WW-Waste Water DW-Drinking Water</p> <p>Preservative Key: 24</p> <p>H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SP-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate L-Lica U-Unpreserved</p>
---------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



HNO3	N	Ice	I	HNO3	N					
							Metals app. III & IV EPA 6020 & EPA 7470	CI, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Ga Tech	400-122569 COC

LAB USE ONLY	ABID	Sample Number ¹⁴	Collection Date ¹⁵	Time	Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹
		YGWA-6S	6/3/16	09:16		GW	GW	3

LAB USE ONLY: Sample Receipt Information²⁵

Relinquished by:²⁶ *[Signature]* Date/Time 6/3/16 12:47

Received by:²⁷ *[Signature]* Date/Time 6-3-16 1:14P

Relinquished by: *[Signature]* Date/Time 6/3/16 @ 12:50

Received by: *[Signature]* Date/Time 6-4-16 4:48

12.6°C 202
JRG

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. _____
 Reviewed By: _____
 Page 1 of _____

Sample Shipment Date:⁸ 6/3/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ R. Hilliard
 ¹² Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹		PRESERVATIVE ²⁰		Sample Type Key: 22
		Date	Time					HNO3	Ice	HNO3	N	
	Y6WA-30I	6/2/16	10:16		G	GW	3	Metals app. III & IV EPA 6020 & EPA 7470				
	Y6WA-14S	6/2/16	13:25		G	GW	3	CI, F, SO4 EPA 300 TDS SM2540C				
	FB-1	6/2/16	13:46	Field Blank	G	DW	3					
	Y6WA-4I	6/2/16	16:29		G	GW	3	Radium 226 & 228 Ga Tech				
	PUR-1	6/2/16	---	Field Duplicate	G	GW	3					

Signature: R Hill
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.
 Matrix Key: 23
 O-Oil S-Solid SI-Sludge W-Wipe
 SW-Surface Water GW-Ground Water
 WW-Waste Water DW-Drinking Water
 Preservative Key: 24
 H-Hydrochloric Acid N-Nitric Acid
 S-Sulfuric Acid SH-Sodium Hydroxide
 SB-Sodium Bisulfate P-Phosphoric Acid
 ST-Sodium Thiosulfate Hce U-Unpreserved

Relinquished by:²⁶ Wesley Brown Date/Time 6/3/16 0715
 Received by:²⁷ [Signature] Date/Time 6/3/16 0725
 Relinquished by:²⁸ [Signature] Date/Time 6/3/16 0816
 Received by:²⁹ [Signature] Date/Time 6/3/16 0820

Relinquished by: [Signature] to FedEx.
JD 6-4-16 AB0



Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Sample Shipment Date:⁸ 6/3/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ Wesley Brown
 Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

PRESERVATIVE ²⁰		ANALYSIS REQUESTED ²¹		Sample Type Key: 22	
HN03 N	Ice I	HN03 N		G-Grab C-Other C-Composite	
Metals app. III & IV EPA 6020 & EPA 7470		Cl, F, SO4 EPA 300 TDS SM2540C		O-Oil S-Solid St-Sludge SW-Surface Water WW-Waste Water DW-Drinking Water	W-Wipe GW-Ground Water DW-Drinking Water
				Preservative Key: 24	
				H-Hydrochloric Acid S-Sulfuric Acid SP-Sodium Bisulfate ST-Sodium Thiosulfate	N-Nitric Acid SH-Sodium Hydroxide P-Phosphoric Acid U-Unpreserved

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	Signature	
		Date	Time						
	YG-WA-3D	6/2/16	1032		G	GW	3		
	YG-WA-SI	6/2/16	1415		G	GW	3		
	YG-WA-SD	6/2/16	1635		G	GW	3		
	EB-01	6/2/16	1520	Equipment Blank	G	DW	3		

LAB USE ONLY Sample Receipt Information ²³	
Relinquished by: ²⁶ [Signature]	Date/Time 06/3/16 0715
Received by: ²⁷ [Signature]	Date/Time 06/3/16 0715
Relinquished by: [Signature]	Date/Time 06/3/16 0816
Received by: [Signature]	Date/Time 06/3/16 0816
Relinquished by: [Signature]	Date/Time 06/3/16 0816

Relinquished by: [Signature] to Fed. [Signature]
 Date: 6/3/16 8:10
 0-4-16 930

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122569-1

SDG Number: AP

Login Number: 122569

List Number: 1

Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	12.6°C, 12.0°C, 0.0°C, 0.0°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	



Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-1
SDG: AP

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-17 *
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122569-2

TestAmerica Sample Delivery Group: AP

Client Project/Site: CCR Plant Yates

For:

Southern Company

241 Ralph McGill Blvd SE

B10185

Atlanta, Georgia 30308

Attn: Joju Abraham



Authorized for release by:

7/11/2016 6:56:54 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	12
Chronicle	13
QC Association	16
QC Sample Results	17
Chain of Custody	19
Receipt Checklists	22
Certification Summary	23

Case Narrative

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Job ID: 400-122569-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-122569-2

RAD

Method(s) PrecSep_0: Radium-228 Batch: 160-255491: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: YGWA-6S (400-122569-1), YGWA-30I (400-122569-2), YGWA-14S (400-122569-3), FB-1 (400-122569-4), YGWA-4I (400-122569-5), DUP-1 (400-122569-6), YGWA-3D (400-122569-7), YGWA-5I (400-122569-8), YGWA-5D (400-122569-9) and EB-01 (400-122569-10). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead.

Method(s) PrecSep-21: Radium-226 Batch: 160-255489: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: YGWA-6S (400-122569-1), YGWA-30I (400-122569-2), YGWA-14S (400-122569-3), FB-1 (400-122569-4), YGWA-4I (400-122569-5), DUP-1 (400-122569-6), YGWA-3D (400-122569-7), YGWA-5I (400-122569-8), YGWA-5D (400-122569-9) and EB-01 (400-122569-10). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead.



Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Sample Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122569-1	YGWA-6S	Water	06/03/16 09:16	06/04/16 09:30
400-122569-2	YGWA-30I	Water	06/02/16 10:16	06/04/16 09:30
400-122569-3	YGWA-14S	Water	06/02/16 13:25	06/04/16 09:30
400-122569-4	FB-1	Water	06/02/16 13:46	06/04/16 09:30
400-122569-5	YGWA-4I	Water	06/02/16 16:29	06/04/16 09:30
400-122569-6	DUP-1	Water	06/02/16 00:00	06/04/16 09:30
400-122569-7	YGWA-3D	Water	06/02/16 10:32	06/04/16 09:30
400-122569-8	YGWA-5I	Water	06/02/16 14:15	06/04/16 09:30
400-122569-9	YGWA-5D	Water	06/02/16 16:35	06/04/16 09:30
400-122569-10	EB-01	Water	06/02/16 15:20	06/04/16 09:30



Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: YGWA-6S

Lab Sample ID: 400-122569-1

Date Collected: 06/03/16 09:16

Matrix: Water

Date Received: 06/04/16 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.150		0.0666	0.0679	1.00	0.0774	pCi/L	06/08/16 14:17	06/30/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		40 - 110					06/08/16 14:17	06/30/16 07:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0909	U	0.255	0.255	1.00	0.440	pCi/L	06/08/16 14:41	06/24/16 13:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		40 - 110					06/08/16 14:41	06/24/16 13:47	1
Y Carrier	94.2		40 - 110					06/08/16 14:41	06/24/16 13:47	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.241	U	0.263	0.264	5.00	0.440	pCi/L		07/07/16 18:25	1

Client Sample ID: YGWA-30I

Lab Sample ID: 400-122569-2

Date Collected: 06/02/16 10:16

Matrix: Water

Date Received: 06/04/16 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0489	U	0.0507	0.0509	1.00	0.0807	pCi/L	06/08/16 14:17	06/30/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110					06/08/16 14:17	06/30/16 07:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0162	U	0.217	0.217	1.00	0.388	pCi/L	06/08/16 14:41	06/24/16 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110					06/08/16 14:41	06/24/16 13:48	1
Y Carrier	93.5		40 - 110					06/08/16 14:41	06/24/16 13:48	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: YGWA-30I

Lab Sample ID: 400-122569-2

Date Collected: 06/02/16 10:16

Matrix: Water

Date Received: 06/04/16 09:30

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0652	U	0.222	0.223	5.00	0.388	pCi/L		07/07/16 18:25	1

Client Sample ID: YGWA-14S

Lab Sample ID: 400-122569-3

Date Collected: 06/02/16 13:25

Matrix: Water

Date Received: 06/04/16 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0488	U	0.0497	0.0499	1.00	0.0781	pCi/L	06/08/16 14:17	06/30/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.4		40 - 110					06/08/16 14:17	06/30/16 07:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.281	U	0.261	0.262	1.00	0.419	pCi/L	06/08/16 14:41	06/24/16 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.4		40 - 110					06/08/16 14:41	06/24/16 13:48	1
Y Carrier	92.3		40 - 110					06/08/16 14:41	06/24/16 13:48	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.329	U	0.266	0.267	5.00	0.419	pCi/L		07/07/16 18:25	1

Client Sample ID: FB-1

Lab Sample ID: 400-122569-4

Date Collected: 06/02/16 13:46

Matrix: Water

Date Received: 06/04/16 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0352	U	0.0491	0.0492	1.00	0.0830	pCi/L	06/08/16 14:17	06/30/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					06/08/16 14:17	06/30/16 07:01	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: FB-1

Date Collected: 06/02/16 13:46

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-4

Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.344	U	0.258	0.260	1.00	0.405	pCi/L	06/08/16 14:41	06/24/16 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					06/08/16 14:41	06/24/16 13:48	1
Y Carrier	95.0		40 - 110					06/08/16 14:41	06/24/16 13:48	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.379	U	0.263	0.265	5.00	0.405	pCi/L		07/07/16 18:25	1

Client Sample ID: YGWA-4I

Date Collected: 06/02/16 16:29

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.619		0.120	0.132	1.00	0.103	pCi/L	06/08/16 14:17	06/30/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					06/08/16 14:17	06/30/16 07:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.103	U	0.206	0.206	1.00	0.352	pCi/L	06/08/16 14:41	06/24/16 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					06/08/16 14:41	06/24/16 13:48	1
Y Carrier	95.0		40 - 110					06/08/16 14:41	06/24/16 13:48	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.721		0.238	0.245	5.00	0.352	pCi/L		07/07/16 18:25	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: DUP-1
Date Collected: 06/02/16 00:00
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-6
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0668	U	0.0527	0.0531	1.00	0.0780	pCi/L	06/08/16 14:17	06/30/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					06/08/16 14:17	06/30/16 07:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.332	U	0.235	0.237	1.00	0.363	pCi/L	06/08/16 14:41	06/24/16 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					06/08/16 14:41	06/24/16 13:48	1
Y Carrier	93.8		40 - 110					06/08/16 14:41	06/24/16 13:48	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.399		0.241	0.243	5.00	0.363	pCi/L		07/07/16 18:25	1

Client Sample ID: YGWA-3D
Date Collected: 06/02/16 10:32
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-7
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.07		0.164	0.190	1.00	0.0866	pCi/L	06/08/16 14:17	06/30/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.4		40 - 110					06/08/16 14:17	06/30/16 07:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.44		0.391	0.413	1.00	0.489	pCi/L	06/08/16 14:41	06/24/16 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.4		40 - 110					06/08/16 14:41	06/24/16 13:48	1
Y Carrier	93.5		40 - 110					06/08/16 14:41	06/24/16 13:48	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: YGWA-3D

Date Collected: 06/02/16 10:32

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-7

Matrix: Water

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.51		0.424	0.454	5.00	0.489	pCi/L		07/07/16 18:25	1

Client Sample ID: YGWA-5I

Date Collected: 06/02/16 14:15

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-8

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.193		0.0721	0.0742	1.00	0.0721	pCi/L	06/08/16 14:17	06/30/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					06/08/16 14:17	06/30/16 07:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.421		0.271	0.273	1.00	0.416	pCi/L	06/08/16 14:41	06/24/16 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					06/08/16 14:41	06/24/16 13:48	1
Y Carrier	95.7		40 - 110					06/08/16 14:41	06/24/16 13:48	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.614		0.280	0.283	5.00	0.416	pCi/L		07/07/16 18:25	1

Client Sample ID: YGWA-5D

Date Collected: 06/02/16 16:35

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	4.83		0.309	0.533	1.00	0.0778	pCi/L	06/08/16 14:17	06/30/16 07:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110					06/08/16 14:17	06/30/16 07:02	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: YGWA-5D

Lab Sample ID: 400-122569-9

Date Collected: 06/02/16 16:35

Matrix: Water

Date Received: 06/04/16 09:30

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.285	U	0.232	0.233	1.00	0.366	pCi/L	06/08/16 14:41	06/24/16 13:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110					06/08/16 14:41	06/24/16 13:49	1
Y Carrier	94.2		40 - 110					06/08/16 14:41	06/24/16 13:49	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	5.11		0.386	0.582	5.00	0.366	pCi/L		07/07/16 18:25	1

Client Sample ID: EB-01

Lab Sample ID: 400-122569-10

Date Collected: 06/02/16 15:20

Matrix: Water

Date Received: 06/04/16 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0748		0.0499	0.0504	1.00	0.0674	pCi/L	06/08/16 14:17	06/30/16 07:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					06/08/16 14:17	06/30/16 07:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.142	U	0.299	0.299	1.00	0.508	pCi/L	06/08/16 14:41	06/24/16 13:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					06/08/16 14:41	06/24/16 13:34	1
Y Carrier	92.7		40 - 110					06/08/16 14:41	06/24/16 13:34	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.217	U	0.303	0.303	5.00	0.508	pCi/L		07/07/16 18:25	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: YGWA-6S

Date Collected: 06/03/16 09:16

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:01	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:47	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Client Sample ID: YGWA-30I

Date Collected: 06/02/16 10:16

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:01	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:48	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Client Sample ID: YGWA-14S

Date Collected: 06/02/16 13:25

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:01	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:48	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Client Sample ID: FB-1

Date Collected: 06/02/16 13:46

Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:01	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:48	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: YGWA-4I

Lab Sample ID: 400-122569-5

Date Collected: 06/02/16 16:29

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:01	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:48	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Client Sample ID: DUP-1

Lab Sample ID: 400-122569-6

Date Collected: 06/02/16 00:00

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:01	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:48	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Client Sample ID: YGWA-3D

Lab Sample ID: 400-122569-7

Date Collected: 06/02/16 10:32

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:01	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:48	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Client Sample ID: YGWA-5I

Lab Sample ID: 400-122569-8

Date Collected: 06/02/16 14:15

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:01	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:48	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Client Sample ID: YGWA-5D

Lab Sample ID: 400-122569-9

Date Collected: 06/02/16 16:35

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:02	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257878	06/24/16 13:49	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Client Sample ID: EB-01

Lab Sample ID: 400-122569-10

Date Collected: 06/02/16 15:20

Matrix: Water

Date Received: 06/04/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			255489	06/08/16 14:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	258632	06/30/16 07:02	ALS	TAL SL
Total/NA	Prep	PrecSep_0			255491	06/08/16 14:41	MCJ	TAL SL
Total/NA	Analysis	9320		1	257881	06/24/16 13:34	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259609	07/07/16 18:25	RTM	TAL SL

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Rad

Prep Batch: 255489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122569-1	YGWA-6S	Total/NA	Water	PrecSep-21	
400-122569-2	YGWA-30I	Total/NA	Water	PrecSep-21	
400-122569-3	YGWA-14S	Total/NA	Water	PrecSep-21	
400-122569-4	FB-1	Total/NA	Water	PrecSep-21	
400-122569-5	YGWA-4I	Total/NA	Water	PrecSep-21	
400-122569-6	DUP-1	Total/NA	Water	PrecSep-21	
400-122569-7	YGWA-3D	Total/NA	Water	PrecSep-21	
400-122569-8	YGWA-5I	Total/NA	Water	PrecSep-21	
400-122569-9	YGWA-5D	Total/NA	Water	PrecSep-21	
400-122569-10	EB-01	Total/NA	Water	PrecSep-21	
LCS 160-255489/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-255489/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
MB 160-255489/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 255491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122569-1	YGWA-6S	Total/NA	Water	PrecSep_0	
400-122569-2	YGWA-30I	Total/NA	Water	PrecSep_0	
400-122569-3	YGWA-14S	Total/NA	Water	PrecSep_0	
400-122569-4	FB-1	Total/NA	Water	PrecSep_0	
400-122569-5	YGWA-4I	Total/NA	Water	PrecSep_0	
400-122569-6	DUP-1	Total/NA	Water	PrecSep_0	
400-122569-7	YGWA-3D	Total/NA	Water	PrecSep_0	
400-122569-8	YGWA-5I	Total/NA	Water	PrecSep_0	
400-122569-9	YGWA-5D	Total/NA	Water	PrecSep_0	
400-122569-10	EB-01	Total/NA	Water	PrecSep_0	
LCS 160-255491/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-255491/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
MB 160-255491/1-A	Method Blank	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-255489/1-A
Matrix: Water
Analysis Batch: 258671

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255489

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.002888	U	0.0396	0.0396	1.00	0.0807	pCi/L	06/08/16 14:17	06/30/16 06:53	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	92.6		40 - 110	06/08/16 14:17	06/30/16 06:53	1				

Lab Sample ID: LCS 160-255489/2-A
Matrix: Water
Analysis Batch: 258671

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255489

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.2	13.92		1.35	1.00	0.0764	pCi/L	125	68 - 137
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed				
Ba Carrier	93.4		40 - 110	06/08/16 14:17	06/30/16 06:53	1			

Lab Sample ID: LCSD 160-255489/3-A
Matrix: Water
Analysis Batch: 258671

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 255489

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
				Uncert. (2σ+/-)							
Radium-226	11.2	14.61		1.42	1.00	0.0841	pCi/L	131	68 - 137	0.25	1
Carrier	LCSD LCSD		Limits			Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed						
Ba Carrier	90.3		40 - 110	06/08/16 14:17	06/24/16 13:46	1					

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-255491/1-A
Matrix: Water
Analysis Batch: 257878

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255491

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.02463	U	0.242	0.242	1.00	0.435	pCi/L	06/08/16 14:41	06/24/16 13:46	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	92.6		40 - 110	06/08/16 14:41	06/24/16 13:46	1				
Y Carrier	%Yield	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
Y Carrier	88.2		40 - 110	06/08/16 14:41	06/24/16 13:46	1				

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-255491/2-A
Matrix: Water
Analysis Batch: 257878

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255491

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	15.0	18.36		1.92	1.00	0.422	pCi/L	123	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.4		40 - 110
Y Carrier	89.3		40 - 110

Lab Sample ID: LCSD 160-255491/3-A
Matrix: Water
Analysis Batch: 257878

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 255491

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	15.0	17.73		1.87	1.00	0.445	pCi/L	118	56 - 140	0.16	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	90.3		40 - 110
Y Carrier	89.7		40 - 110

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶
 Special Instructions:⁷ Yates AP CCR GW

Sample Shipment Date:⁸ 6/3/16
 Sample Received Date:⁹ 6/3/16
 Sampled By:¹⁰ LH:Ma-z
 ¹² Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

LAB USE ONLY
 Work Order No.
 Reviewed By:
 Page 1 of 1

LAB USE ONLY ABID		Collection ¹⁵		Sample Number ¹⁴		Sample Description ¹⁶		Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰			Sample Type Key: 22			
Date	Time										HNO3	Ice	HNO3	G-Grab	O-Other	C-Composite				
		6/3/16	09:16	YGWA-6S		Yates AP CCR GW		GA	GW	3	Metals app. III & IV EPA 6020 & EPA 7470	CI, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Ga Tech							
LAB USE ONLY ABID											400-122569 COC			LAB USE ONLY Comments						

Signature: *[Signature]*
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

Relinquished by:²⁶ [Signature] Date/Time: 6/3/16 12:47
 Received by:²⁷ [Signature] Date/Time: 6-3-16 13:18
 Relinquished by:²⁸ [Signature] Date/Time: 6/3/16 12:50
 Received by:²⁹ [Signature] Date/Time: 6-4-16 08

17.6°C 20°C
Ree



LAB USE ONLY

Work Order No. _____

Reviewed By: _____

Page 1 of _____

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

Sample Shipment Date:⁸ 6/3/16 ¹² Standard Turnaround Time

Sample Received Date:⁹ _____ # of Business Days (Rush) _____
 (Must be cleared through Env. Lab. Prior to shipment)

Sampled By:¹⁰ R. Hilliard

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

Signature: R Hill

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

HINO3	Ice	PRESERVATIVE ²⁰		ANALYSIS REQUESTED ²¹	Sample Type Key: ²²
		HNO3	N		
N	I	N	N		
Matrix Key: ²³					
O-Oil S-Solid SI-Sludge W-Wipe SW-Surface Water GW-Ground Water WW-Waste Water DW-Drinking Water					
Preservative Key: ²⁴					
H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SB-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate Hice U-Unpreserved					
LAB USE ONLY - COMMENTS					

Sample Type	Matrix	No. of Containers	Sample Description ¹⁶		Collection ¹⁵	Date	Time	Sample Number ¹⁴
			Date	Time				
G	GW	3			6/2/16	10:16	Y4WA-30I	
G	GW	3			6/2/16	13:25	Y6WA-14S	
G	DW	3	Field Blank		6/2/16	13:46	FB-1	
G	GW	3			6/2/16	16:29	Y6WA-4I	
G	GW	3	Field Duplicate		6/2/16	---	PUR-1	

HNO3	Ice	TDS SM2540C	Radium 226 & 228 Ga Tech
N	I	1	1
N	I	1	1
N	I	1	1
N	I	1	1
N	I	1	1

Metals app. III & IV	EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300	GA Tech
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1

LAB USE ONLY - Sample Receipt Information ²⁸	
Relinquished by: ²⁶ <u>Wesley Brown</u>	Date/Time <u>6/3/16 0715</u>
Received by: ²⁷ <u>[Signature]</u>	Date/Time <u>6/3/16 0725</u>
Relinquished by: ²⁹ <u>[Signature]</u>	Date/Time <u>6/3/16 0816</u>
Received by: ³⁰ <u>[Signature]</u>	Date/Time <u>6/3/16 0820</u>
Relinquished by: <u>[Signature]</u> to FedEx. <u>JD 6-4-16</u> <u>ABO</u>	



Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No.
 Reviewed By:

Page 1 of 1


Sample Shipment Date:⁸ 6/3/16
 Sample Received Date:⁹
 Sampled By:¹⁰ Wesley Brown
 Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)







Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶
 Special Instructions:⁷ Yates AP CCR GW


PRESERVATIVE ²⁰		ANALYSIS REQUESTED ²¹		Sample Type Key: 22	
HNO3 N	Ice I	HNO3 N		G-Grab	C-Composite
				O-Oil	S-Solid
				SW-Surface Water	SL-Sludge
				WW-Waste Water	GW-Ground Water
				DW-Drinking Water	
				Preservative Key: 24	
				H-Hydrochloric Acid	N-Nitric Acid
				S-Sulfuric Acid	SH-Sodium Hydroxide
				SP-Sodium Bisulfate	P-Phosphoric Acid
				ST-Sodium Thiosulfate	H ₂ O Unpreserved

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	PRESERVATIVE ²⁰			ANALYSIS REQUESTED ²¹			LAB USE ONLY COMMENTS
		Date	Time					HNO3 N	Ice I	HNO3 N	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Ga Tech	
	YG-WA-3D	6/2/16	1032		G	GW	3	X	X	X	X			
	YG-WA-SI	6/2/16	1415		G	GW	3	X	X	X	X			
	YG-WA-SD	6/2/16	1635		G	GW	3	X	X	X	X			
	EB-01	6/2/16	1520	Equipment Blank	G	DW	3	X	X	X	X			

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

Signature: 

Relinquished by:²⁶  Date/Time 06/3/16 0715
 Received by:²⁷  Date/Time 06/3/16 0715
 Relinquished by:  Date/Time 06/3/16 0816
 Received by:  Date/Time 06/3/16 0816
 Relinquished by:  Date/Time 06/3/16 0816
 Received by:  Date/Time 06/3/16 0816

Relinquished by:  Date/Time 06/3/16 0816

6-4-16 930

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122569-2

SDG Number: AP

Login Number: 122569

List Number: 1

Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	12.6°C, 12.0°C, 0.0°C, 0.0°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16 *
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16 *
Michigan	State Program	5	9912	06-30-16 *
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	08-31-16

Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	07-31-16 *
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16 *
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-16 *
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-16 *
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122569-2
SDG: AP

Laboratory: TestAmerica St. Louis (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-16 *
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16 *
Texas	NELAP	6	T104704193-15-9	07-31-16 *
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16 *
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-16 *
West Virginia DEP	State Program	3	381	08-31-16 *

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122843-1

TestAmerica Sample Delivery Group: AP

Client Project/Site: CCR Plant Yates

For:

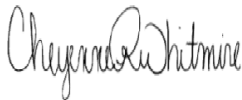
Southern Company

241 Ralph McGill Blvd SE

B10185

Atlanta, Georgia 30308

Attn: Joju Abraham



Authorized for release by:

6/17/2016 3:23:11 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13

14



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	8
Sample Summary	9
Client Sample Results	10
Definitions	21
Chronicle	22
QC Association	26
QC Sample Results	30
Chain of Custody	37
Receipt Checklists	41
Certification Summary	42

Case Narrative

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Job ID: 400-122843-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-122843-1

HPLC/IC

Method(s) 300.0: The following samples was diluted to bring the concentration of target analytes within the calibration range: YGWC-26S (400-122843-4), DUP-3 (400-122843-5), YGWC-26I (400-122843-6), YGWC-34I (400-122843-8), YGWC-33S (400-122843-9), YGWC-32I (400-122843-10) and YGWC-32S (400-122843-11). Elevated reporting limits (RLs) are provided.

Metals

Method(s) 6020: The following sample were diluted to bring the concentration of target analytes within the calibration range: YGWC-27I (400-122843-7), YGWC-34I (400-122843-8), YGWC-33S (400-122843-9), YGWC-32I (400-122843-10) and YGWC-32S (400-122843-11). Elevated reporting limits (RLs) are provided.

Method(s) 7470A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for prep batch 309506 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.



Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-24S

Lab Sample ID: 400-122843-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.9		1.0	0.89	mg/L	1		300.0	Total/NA
Barium	0.020		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0022	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	66		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-03

Lab Sample ID: 400-122843-2

No Detections.

Client Sample ID: YGWC-27S

Lab Sample ID: 400-122843-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.12	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	26		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.12		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	1.3		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	44		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0024	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.0012	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Thallium	0.00012	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	210		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-26S

Lab Sample ID: 400-122843-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	110		5.0	3.5	mg/L	5		300.0	Total/NA
Barium	0.029		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.62		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	13		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0032		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Selenium	0.00030	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	200		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-3

Lab Sample ID: 400-122843-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		1.0	0.89	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: DUP-3 (Continued)

Lab Sample ID: 400-122843-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	110		5.0	3.5	mg/L	5		300.0	Total/NA
Barium	0.028		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.60		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	13		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0029		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Selenium	0.00025	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	200		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-26I

Lab Sample ID: 400-122843-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	19		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.094	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	81		5.0	3.5	mg/L	5		300.0	Total/NA
Barium	0.068		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.97		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	15		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0070		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Selenium	0.0016		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	220		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-27I

Lab Sample ID: 400-122843-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.086	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	3.2		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.0011	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.081		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	25		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0016	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0067		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.0011	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Boron - DL	2.2		0.25	0.11	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	190		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-34I

Lab Sample ID: 400-122843-8

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-34I (Continued)

Lab Sample ID: 400-122843-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	16		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	370		10	7.0	mg/L	10		300.0	Total/NA
Barium	0.027		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00061	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cobalt	0.0043		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Molybdenum	0.026		0.015	0.00085	mg/L	5		6020	Total Recoverable
Selenium	0.060		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Thallium	0.00019	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable
Boron - DL	4.4		1.0	0.42	mg/L	100		6020	Total Recoverable
Calcium - DL	110		5.0	2.5	mg/L	100		6020	Total Recoverable
Total Dissolved Solids	560		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-33S

Lab Sample ID: 400-122843-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.6		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.34		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	910		20	14	mg/L	20		300.0	Total/NA
Arsenic	0.0033		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.029		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.012		0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cadmium	0.00098	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Chromium	0.0014	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.037		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.0012	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Lithium	0.0099		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.00095	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Selenium	0.0011	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Boron - DL	12		2.0	0.84	mg/L	200		6020	Total Recoverable
Calcium - DL	130		10	5.0	mg/L	200		6020	Total Recoverable
Total Dissolved Solids	1200		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-32I

Lab Sample ID: 400-122843-10

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-32I (Continued)

Lab Sample ID: 400-122843-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	500		20	14	mg/L	20		300.0	Total/NA
Barium	0.025		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cadmium	0.00078	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cobalt	0.0017	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0039	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Selenium	0.00094	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Boron - DL	3.9		1.0	0.42	mg/L	100		6020	Total Recoverable
Calcium - DL	100		5.0	2.5	mg/L	100		6020	Total Recoverable
Total Dissolved Solids	750		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-32S

Lab Sample ID: 400-122843-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	15		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	360		10	7.0	mg/L	10		300.0	Total/NA
Barium	0.021		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.0029		0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cadmium	0.00067	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cobalt	0.0040		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Selenium	0.032		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Boron - DL	3.8		2.0	0.84	mg/L	200		6020	Total Recoverable
Calcium - DL	120		10	5.0	mg/L	200		6020	Total Recoverable
Mercury	0.000096	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	500		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122843-1	YGWC-24S	Water	06/08/16 11:25	06/10/16 08:55
400-122843-2	EB-03	Water	06/08/16 12:10	06/10/16 08:55
400-122843-3	YGWC-27S	Water	06/08/16 16:00	06/10/16 08:55
400-122843-4	YGWC-26S	Water	06/08/16 10:05	06/10/16 08:55
400-122843-5	DUP-3	Water	06/08/16 00:00	06/10/16 08:55
400-122843-6	YGWC-26I	Water	06/08/16 13:15	06/10/16 08:55
400-122843-7	YGWC-27I	Water	06/08/16 15:20	06/10/16 08:55
400-122843-8	YGWC-34I	Water	06/08/16 13:15	06/10/16 08:55
400-122843-9	YGWC-33S	Water	06/08/16 17:03	06/10/16 08:55
400-122843-10	YGWC-32I	Water	06/08/16 10:32	06/10/16 08:55
400-122843-11	YGWC-32S	Water	06/08/16 13:43	06/10/16 08:55

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-24S

Lab Sample ID: 400-122843-1

Date Collected: 06/08/16 11:25

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.9		1.0	0.89	mg/L			06/11/16 05:23	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 05:23	1
Sulfate	<0.70		1.0	0.70	mg/L			06/11/16 05:23	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 11:03	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 11:03	5
Barium	0.020		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 11:03	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 11:03	5
Boron	<0.021		0.050	0.021	mg/L		06/10/16 13:05	06/16/16 11:03	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 11:03	5
Calcium	1.9		0.25	0.13	mg/L		06/10/16 13:05	06/16/16 11:03	5
Chromium	0.0022 J		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 11:03	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 11:03	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 11:03	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 11:03	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 11:03	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 11:03	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 11:03	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	66		5.0	3.4	mg/L			06/14/16 09:51	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: EB-03
Date Collected: 06/08/16 12:10
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/11/16 05:45	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 05:45	1
Sulfate	<0.70		1.0	0.70	mg/L			06/11/16 05:45	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 10:50	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 10:50	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 10:50	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 10:50	5
Boron	<0.021		0.050	0.021	mg/L		06/10/16 13:05	06/16/16 10:50	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 10:50	5
Calcium	<0.13		0.25	0.13	mg/L		06/10/16 13:05	06/16/16 10:50	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 10:50	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 10:50	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 10:50	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 10:50	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 10:50	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 10:50	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 10:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/14/16 09:51	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-27S

Lab Sample ID: 400-122843-3

Date Collected: 06/08/16 16:00

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		1.0	0.89	mg/L			06/11/16 06:08	1
Fluoride	0.12	J	0.20	0.082	mg/L			06/11/16 06:08	1
Sulfate	26		1.0	0.70	mg/L			06/11/16 06:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 11:21	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 11:21	5
Barium	0.12		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 11:21	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 11:21	5
Boron	1.3		0.050	0.021	mg/L		06/10/16 13:05	06/16/16 11:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 11:21	5
Calcium	44		0.25	0.13	mg/L		06/10/16 13:05	06/16/16 11:21	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 11:21	5
Cobalt	0.0024	J	0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 11:21	5
Lead	0.0012	J	0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 11:21	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 11:21	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 11:21	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 11:21	5
Thallium	0.00012	J	0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 11:21	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	210		5.0	3.4	mg/L			06/14/16 09:51	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-26S

Lab Sample ID: 400-122843-4

Date Collected: 06/08/16 10:05

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		1.0	0.89	mg/L			06/11/16 06:31	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 06:31	1
Sulfate	110		5.0	3.5	mg/L			06/13/16 22:11	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 11:57	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 11:57	5
Barium	0.029		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 11:57	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 11:57	5
Boron	0.62		0.050	0.021	mg/L		06/10/16 13:05	06/16/16 11:57	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 11:57	5
Calcium	13		0.25	0.13	mg/L		06/10/16 13:05	06/16/16 11:57	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 11:57	5
Cobalt	0.0032		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 11:57	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 11:57	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 11:57	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 11:57	5
Selenium	0.00030	J	0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 11:57	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 11:57	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		5.0	3.4	mg/L			06/14/16 10:33	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: DUP-3
Date Collected: 06/08/16 00:00
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-5
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		1.0	0.89	mg/L			06/11/16 06:54	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 06:54	1
Sulfate	110		5.0	3.5	mg/L			06/13/16 22:34	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 12:02	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 12:02	5
Barium	0.028		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 12:02	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:02	5
Boron	0.60		0.050	0.021	mg/L		06/10/16 13:05	06/16/16 12:02	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:02	5
Calcium	13		0.25	0.13	mg/L		06/10/16 13:05	06/16/16 12:02	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 12:02	5
Cobalt	0.0029		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 12:02	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 12:02	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 12:02	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 12:02	5
Selenium	0.00025	J	0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 12:02	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 12:02	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		5.0	3.4	mg/L			06/14/16 10:33	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-26I

Lab Sample ID: 400-122843-6

Date Collected: 06/08/16 13:15

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		1.0	0.89	mg/L			06/11/16 07:17	1
Fluoride	0.094	J	0.20	0.082	mg/L			06/11/16 07:17	1
Sulfate	81		5.0	3.5	mg/L			06/13/16 22:57	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 12:06	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 12:06	5
Barium	0.068		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 12:06	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:06	5
Boron	0.97		0.050	0.021	mg/L		06/10/16 13:05	06/16/16 12:06	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:06	5
Calcium	15		0.25	0.13	mg/L		06/10/16 13:05	06/16/16 12:06	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 12:06	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 12:06	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 12:06	5
Lithium	0.0070		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 12:06	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 12:06	5
Selenium	0.0016		0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 12:06	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 12:06	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	220		5.0	3.4	mg/L			06/14/16 10:33	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-271

Lab Sample ID: 400-122843-7

Date Collected: 06/08/16 15:20

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		1.0	0.89	mg/L			06/11/16 07:39	1
Fluoride	0.086	J	0.20	0.082	mg/L			06/11/16 07:39	1
Sulfate	3.2		1.0	0.70	mg/L			06/11/16 07:39	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 12:10	5
Arsenic	0.0011	J	0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 12:10	5
Barium	0.081		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 12:10	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:10	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:10	5
Calcium	25		0.25	0.13	mg/L		06/10/16 13:05	06/16/16 12:10	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 12:10	5
Cobalt	0.0016	J	0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 12:10	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 12:10	5
Lithium	0.0067		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 12:10	5
Molybdenum	0.0011	J	0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 12:10	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 12:10	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 12:10	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.2		0.25	0.11	mg/L		06/10/16 13:05	06/16/16 14:04	25

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		5.0	3.4	mg/L			06/14/16 10:33	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-34I

Lab Sample ID: 400-122843-8

Date Collected: 06/08/16 13:15

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16		1.0	0.89	mg/L			06/11/16 08:02	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 08:02	1
Sulfate	370		10	7.0	mg/L			06/13/16 23:20	10

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 12:15	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 12:15	5
Barium	0.027		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 12:15	5
Beryllium	0.00061	J	0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:15	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:15	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 12:15	5
Cobalt	0.0043		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 12:15	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 12:15	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 12:15	5
Molybdenum	0.026		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 12:15	5
Selenium	0.060		0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 12:15	5
Thallium	0.00019	J	0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 12:15	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4.4		1.0	0.42	mg/L		06/10/16 13:05	06/16/16 14:09	100
Calcium	110		5.0	2.5	mg/L		06/10/16 13:05	06/16/16 14:09	100

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	560		5.0	3.4	mg/L			06/14/16 10:33	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-33S

Lab Sample ID: 400-122843-9

Date Collected: 06/08/16 17:03

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.6		1.0	0.89	mg/L			06/13/16 23:43	1
Fluoride	0.34		0.20	0.082	mg/L			06/13/16 23:43	1
Sulfate	910		20	14	mg/L			06/16/16 20:32	20

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 12:19	5
Arsenic	0.0033		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 12:19	5
Barium	0.029		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 12:19	5
Beryllium	0.012		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:19	5
Cadmium	0.00098	J	0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:19	5
Chromium	0.0014	J	0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 12:19	5
Cobalt	0.037		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 12:19	5
Lead	0.0012	J	0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 12:19	5
Lithium	0.0099		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 12:19	5
Molybdenum	0.00095	J	0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 12:19	5
Selenium	0.0011	J	0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 12:19	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 12:19	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	12		2.0	0.84	mg/L		06/10/16 13:05	06/16/16 14:13	200
Calcium	130		10	5.0	mg/L		06/10/16 13:05	06/16/16 14:13	200

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 12:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		5.0	3.4	mg/L			06/14/16 10:33	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-321

Lab Sample ID: 400-122843-10

Date Collected: 06/08/16 10:32

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		1.0	0.89	mg/L			06/14/16 03:08	1
Fluoride	<0.082		0.20	0.082	mg/L			06/14/16 03:08	1
Sulfate	500		20	14	mg/L			06/14/16 03:31	20

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 12:24	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 12:24	5
Barium	0.025		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 12:24	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:24	5
Cadmium	0.00078	J	0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:24	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 12:24	5
Cobalt	0.0017	J	0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 12:24	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 12:24	5
Lithium	0.0039	J	0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 12:24	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 12:24	5
Selenium	0.00094	J	0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 12:24	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 12:24	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.9		1.0	0.42	mg/L		06/10/16 13:05	06/16/16 14:18	100
Calcium	100		5.0	2.5	mg/L		06/10/16 13:05	06/16/16 14:18	100

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	750		5.0	3.4	mg/L			06/14/16 10:33	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-32S

Lab Sample ID: 400-122843-11

Date Collected: 06/08/16 13:43

Matrix: Water

Date Received: 06/10/16 08:55

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		1.0	0.89	mg/L			06/11/16 10:19	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 10:19	1
Sulfate	360		10	7.0	mg/L			06/14/16 03:54	10

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 12:28	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 12:28	5
Barium	0.021		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 12:28	5
Beryllium	0.0029		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:28	5
Cadmium	0.00067	J	0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 12:28	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 12:28	5
Cobalt	0.0040		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 12:28	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 12:28	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 12:28	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 12:28	5
Selenium	0.032		0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 12:28	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 12:28	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.8		2.0	0.84	mg/L		06/10/16 13:05	06/16/16 14:22	200
Calcium	120		10	5.0	mg/L		06/10/16 13:05	06/16/16 14:22	200

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000096	J	0.00020	0.000070	mg/L		06/10/16 12:52	06/13/16 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	500		5.0	3.4	mg/L			06/14/16 10:33	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-24S

Date Collected: 06/08/16 11:25

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 05:23	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 11:03	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:36	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309892	06/14/16 09:51	CAC	TAL PEN

Client Sample ID: EB-03

Date Collected: 06/08/16 12:10

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 05:45	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 10:50	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:37	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309892	06/14/16 09:51	CAC	TAL PEN

Client Sample ID: YGWC-27S

Date Collected: 06/08/16 16:00

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 06:08	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 11:21	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:39	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309892	06/14/16 09:51	CAC	TAL PEN

Client Sample ID: YGWC-26S

Date Collected: 06/08/16 10:05

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 06:31	TAJ	TAL PEN
Total/NA	Analysis	300.0		5	309830	06/13/16 22:11	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 11:57	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:40	JAP	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-26S

Lab Sample ID: 400-122843-4

Date Collected: 06/08/16 10:05

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	309932	06/14/16 10:33	CAC	TAL PEN

Client Sample ID: DUP-3

Lab Sample ID: 400-122843-5

Date Collected: 06/08/16 00:00

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 06:54	TAJ	TAL PEN
Total/NA	Analysis	300.0		5	309830	06/13/16 22:34	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 12:02	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:41	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309932	06/14/16 10:33	CAC	TAL PEN

Client Sample ID: YGWC-26I

Lab Sample ID: 400-122843-6

Date Collected: 06/08/16 13:15

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 07:17	TAJ	TAL PEN
Total/NA	Analysis	300.0		5	309830	06/13/16 22:57	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 12:06	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:42	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309932	06/14/16 10:33	CAC	TAL PEN

Client Sample ID: YGWC-27I

Lab Sample ID: 400-122843-7

Date Collected: 06/08/16 15:20

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 07:39	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 12:10	RJB	TAL PEN
Total Recoverable	Prep	3005A	DL		309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020	DL	25	310197	06/16/16 14:04	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309932	06/14/16 10:33	CAC	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-34I

Lab Sample ID: 400-122843-8

Date Collected: 06/08/16 13:15

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 08:02	TAJ	TAL PEN
Total/NA	Analysis	300.0		10	309830	06/13/16 23:20	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 12:15	RJB	TAL PEN
Total Recoverable	Prep	3005A	DL		309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020	DL	100	310197	06/16/16 14:09	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:58	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309932	06/14/16 10:33	CAC	TAL PEN

Client Sample ID: YGWC-33S

Lab Sample ID: 400-122843-9

Date Collected: 06/08/16 17:03

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309830	06/13/16 23:43	TAJ	TAL PEN
Total/NA	Analysis	300.0		20	310321	06/16/16 20:32	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 12:19	RJB	TAL PEN
Total Recoverable	Prep	3005A	DL		309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020	DL	200	310197	06/16/16 14:13	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 12:59	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309932	06/14/16 10:33	CAC	TAL PEN

Client Sample ID: YGWC-32I

Lab Sample ID: 400-122843-10

Date Collected: 06/08/16 10:32

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309960	06/14/16 03:08	TAJ	TAL PEN
Total/NA	Analysis	300.0		20	309960	06/14/16 03:31	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 12:24	RJB	TAL PEN
Total Recoverable	Prep	3005A	DL		309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020	DL	100	310197	06/16/16 14:18	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 13:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309932	06/14/16 10:33	CAC	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Client Sample ID: YGWC-32S

Lab Sample ID: 400-122843-11

Date Collected: 06/08/16 13:43

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309735	06/11/16 10:19	TAJ	TAL PEN
Total/NA	Analysis	300.0		10	309960	06/14/16 03:54	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	310197	06/16/16 12:28	RJB	TAL PEN
Total Recoverable	Prep	3005A	DL		309505	06/10/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020	DL	200	310197	06/16/16 14:22	RJB	TAL PEN
Total/NA	Prep	7470A			309506	06/10/16 12:52	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309788	06/13/16 13:02	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309932	06/14/16 10:33	CAC	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

HPLC/IC

Analysis Batch: 309735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122759-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
400-122843-1	YGWC-24S	Total/NA	Water	300.0	
400-122843-2	EB-03	Total/NA	Water	300.0	
400-122843-3	YGWC-27S	Total/NA	Water	300.0	
400-122843-4	YGWC-26S	Total/NA	Water	300.0	
400-122843-5	DUP-3	Total/NA	Water	300.0	
400-122843-6	YGWC-26I	Total/NA	Water	300.0	
400-122843-7	YGWC-27I	Total/NA	Water	300.0	
400-122843-8	YGWC-34I	Total/NA	Water	300.0	
400-122843-11	YGWC-32S	Total/NA	Water	300.0	
400-122843-A-10 MS	400-122843-A-10 MS	Total/NA	Water	300.0	
LCS 400-309735/35	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-309735/36	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-309735/34	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 309830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122751-A-6 MS	Matrix Spike	Total/NA	Water	300.0	
400-122843-4	YGWC-26S	Total/NA	Water	300.0	
400-122843-5	DUP-3	Total/NA	Water	300.0	
400-122843-6	YGWC-26I	Total/NA	Water	300.0	
400-122843-8	YGWC-34I	Total/NA	Water	300.0	
400-122843-9	YGWC-33S	Total/NA	Water	300.0	
400-122850-A-9 MS	Matrix Spike	Total/NA	Water	300.0	
400-122850-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 400-309830/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-309830/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-309830/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 309960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-9 MS	YGWC-33S	Total/NA	Water	300.0	
400-122843-9 MSD	YGWC-33S	Total/NA	Water	300.0	
400-122843-10	YGWC-32I	Total/NA	Water	300.0	
400-122843-10	YGWC-32I	Total/NA	Water	300.0	
400-122843-11	YGWC-32S	Total/NA	Water	300.0	
LCS 400-309960/36	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-309960/37	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-309960/35	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 310321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-9	YGWC-33S	Total/NA	Water	300.0	
400-123007-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
400-123105-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 400-310321/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-310321/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-310321/4	Method Blank	Total/NA	Water	300.0	

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Metals

Prep Batch: 309505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-1	YGWC-24S	Total Recoverable	Water	3005A	
400-122843-1 MS	YGWC-24S	Total Recoverable	Water	3005A	
400-122843-1 MSD	YGWC-24S	Total Recoverable	Water	3005A	
400-122843-2	EB-03	Total Recoverable	Water	3005A	
400-122843-3	YGWC-27S	Total Recoverable	Water	3005A	
400-122843-4	YGWC-26S	Total Recoverable	Water	3005A	
400-122843-5	DUP-3	Total Recoverable	Water	3005A	
400-122843-6	YGWC-26I	Total Recoverable	Water	3005A	
400-122843-7	YGWC-27I	Total Recoverable	Water	3005A	
400-122843-7 - DL	YGWC-27I	Total Recoverable	Water	3005A	
400-122843-8	YGWC-34I	Total Recoverable	Water	3005A	
400-122843-8 - DL	YGWC-34I	Total Recoverable	Water	3005A	
400-122843-9	YGWC-33S	Total Recoverable	Water	3005A	
400-122843-9 - DL	YGWC-33S	Total Recoverable	Water	3005A	
400-122843-10	YGWC-32I	Total Recoverable	Water	3005A	
400-122843-10 - DL	YGWC-32I	Total Recoverable	Water	3005A	
400-122843-11 - DL	YGWC-32S	Total Recoverable	Water	3005A	
400-122843-11	YGWC-32S	Total Recoverable	Water	3005A	
LCS 400-309505/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-309505/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 309506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-1	YGWC-24S	Total/NA	Water	7470A	
400-122843-2	EB-03	Total/NA	Water	7470A	
400-122843-3	YGWC-27S	Total/NA	Water	7470A	
400-122843-4	YGWC-26S	Total/NA	Water	7470A	
400-122843-5	DUP-3	Total/NA	Water	7470A	
400-122843-6	YGWC-26I	Total/NA	Water	7470A	
400-122843-7	YGWC-27I	Total/NA	Water	7470A	
400-122843-8	YGWC-34I	Total/NA	Water	7470A	
400-122843-9	YGWC-33S	Total/NA	Water	7470A	
400-122843-10	YGWC-32I	Total/NA	Water	7470A	
400-122843-11	YGWC-32S	Total/NA	Water	7470A	
400-122850-B-1-C MS	Matrix Spike	Total/NA	Water	7470A	
400-122850-B-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
LCS 400-309506/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-309506/14-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 309788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-1	YGWC-24S	Total/NA	Water	7470A	309506
400-122843-2	EB-03	Total/NA	Water	7470A	309506
400-122843-3	YGWC-27S	Total/NA	Water	7470A	309506
400-122843-4	YGWC-26S	Total/NA	Water	7470A	309506
400-122843-5	DUP-3	Total/NA	Water	7470A	309506
400-122843-6	YGWC-26I	Total/NA	Water	7470A	309506
400-122843-7	YGWC-27I	Total/NA	Water	7470A	309506
400-122843-8	YGWC-34I	Total/NA	Water	7470A	309506
400-122843-9	YGWC-33S	Total/NA	Water	7470A	309506
400-122843-10	YGWC-32I	Total/NA	Water	7470A	309506

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Metals (Continued)

Analysis Batch: 309788 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-11	YGWC-32S	Total/NA	Water	7470A	309506
400-122850-B-1-C MS	Matrix Spike	Total/NA	Water	7470A	309506
400-122850-B-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	309506
LCS 400-309506/15-A	Lab Control Sample	Total/NA	Water	7470A	309506
MB 400-309506/14-A	Method Blank	Total/NA	Water	7470A	309506

Analysis Batch: 310197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-1	YGWC-24S	Total Recoverable	Water	6020	309505
400-122843-1 MS	YGWC-24S	Total Recoverable	Water	6020	309505
400-122843-1 MSD	YGWC-24S	Total Recoverable	Water	6020	309505
400-122843-2	EB-03	Total Recoverable	Water	6020	309505
400-122843-3	YGWC-27S	Total Recoverable	Water	6020	309505
400-122843-4	YGWC-26S	Total Recoverable	Water	6020	309505
400-122843-5	DUP-3	Total Recoverable	Water	6020	309505
400-122843-6	YGWC-26I	Total Recoverable	Water	6020	309505
400-122843-7	YGWC-27I	Total Recoverable	Water	6020	309505
400-122843-7 - DL	YGWC-27I	Total Recoverable	Water	6020	309505
400-122843-8	YGWC-34I	Total Recoverable	Water	6020	309505
400-122843-8 - DL	YGWC-34I	Total Recoverable	Water	6020	309505
400-122843-9	YGWC-33S	Total Recoverable	Water	6020	309505
400-122843-9 - DL	YGWC-33S	Total Recoverable	Water	6020	309505
400-122843-10	YGWC-32I	Total Recoverable	Water	6020	309505
400-122843-10 - DL	YGWC-32I	Total Recoverable	Water	6020	309505
400-122843-11	YGWC-32S	Total Recoverable	Water	6020	309505
400-122843-11 - DL	YGWC-32S	Total Recoverable	Water	6020	309505
LCS 400-309505/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	309505
MB 400-309505/1-A ^5	Method Blank	Total Recoverable	Water	6020	309505

General Chemistry

Analysis Batch: 309892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-1	YGWC-24S	Total/NA	Water	SM 2540C	
400-122843-2	EB-03	Total/NA	Water	SM 2540C	
400-122843-3	YGWC-27S	Total/NA	Water	SM 2540C	
400-122891-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 400-309892/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-309892/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 309932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-4	YGWC-26S	Total/NA	Water	SM 2540C	
400-122843-5	DUP-3	Total/NA	Water	SM 2540C	
400-122843-6	YGWC-26I	Total/NA	Water	SM 2540C	
400-122843-7	YGWC-27I	Total/NA	Water	SM 2540C	
400-122843-8	YGWC-34I	Total/NA	Water	SM 2540C	
400-122843-9	YGWC-33S	Total/NA	Water	SM 2540C	
400-122843-10	YGWC-32I	Total/NA	Water	SM 2540C	
400-122843-10 DU	YGWC-32I	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

General Chemistry (Continued)

Analysis Batch: 309932 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-11	YGWC-32S	Total/NA	Water	SM 2540C	
LCS 400-309932/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-309932/1	Method Blank	Total/NA	Water	SM 2540C	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-309735/34
Matrix: Water
Analysis Batch: 309735

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/11/16 02:20	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 02:20	1
Sulfate	<0.70		1.0	0.70	mg/L			06/11/16 02:20	1

Lab Sample ID: LCS 400-309735/35
Matrix: Water
Analysis Batch: 309735

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.44		mg/L		94	90 - 110
Fluoride	10.0	9.77		mg/L		98	90 - 110
Sulfate	10.0	9.15		mg/L		92	90 - 110

Lab Sample ID: LCSD 400-309735/36
Matrix: Water
Analysis Batch: 309735

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.29		mg/L		93	90 - 110	2	15
Fluoride	10.0	9.72		mg/L		97	90 - 110	1	15
Sulfate	10.0	9.04		mg/L		90	90 - 110	1	15

Lab Sample ID: 400-122759-A-9 MSD
Matrix: Water
Analysis Batch: 309735

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2.8		10.0	12.8		mg/L		101	80 - 120	1	20
Fluoride	<0.082		10.0	10.5		mg/L		105	80 - 120	1	20
Sulfate	5.2		10.0	15.9		mg/L		106	80 - 120	3	20

Lab Sample ID: 400-122843-A-10 MS
Matrix: Water
Analysis Batch: 309735

Client Sample ID: 400-122843-A-10 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.89	F1	10.0	23.9		mg/L			
Fluoride	<0.082		10.0	11.2		mg/L			
Sulfate	<0.70	F1	10.0	481	E	mg/L			

Lab Sample ID: MB 400-309830/4
Matrix: Water
Analysis Batch: 309830

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/13/16 11:59	1
Fluoride	<0.082		0.20	0.082	mg/L			06/13/16 11:59	1
Sulfate	<0.70		1.0	0.70	mg/L			06/13/16 11:59	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-309830/5
Matrix: Water
Analysis Batch: 309830

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.91		mg/L		99	90 - 110
Fluoride	10.0	10.2		mg/L		102	90 - 110
Sulfate	10.0	9.37		mg/L		94	90 - 110

Lab Sample ID: LCSD 400-309830/6
Matrix: Water
Analysis Batch: 309830

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.67		mg/L		97	90 - 110	2	15
Fluoride	10.0	10.1		mg/L		101	90 - 110	1	15
Sulfate	10.0	9.30		mg/L		93	90 - 110	1	15

Lab Sample ID: 400-122751-A-6 MS
Matrix: Water
Analysis Batch: 309830

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	19		50.0	70.3		mg/L		102	80 - 120
Fluoride	<0.41		50.0	53.4		mg/L		107	80 - 120
Sulfate	99		50.0	154		mg/L		111	80 - 120

Lab Sample ID: 400-122850-A-9 MS
Matrix: Water
Analysis Batch: 309830

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	130	E	10.0	140	E 4	mg/L		80	80 - 120
Fluoride	0.090	J	10.0	11.6		mg/L		115	80 - 120
Sulfate	530	E	10.0	550	E 4	mg/L		179	80 - 120

Lab Sample ID: 400-122850-A-9 MSD
Matrix: Water
Analysis Batch: 309830

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	130	E	10.0	139	E 4	mg/L		69	80 - 120	1	20
Fluoride	0.090	J	10.0	11.5		mg/L		114	80 - 120	0	20
Sulfate	530	E	10.0	548	E 4	mg/L		160	80 - 120	0	20

Lab Sample ID: MB 400-309960/35
Matrix: Water
Analysis Batch: 309960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/14/16 00:05	1
Fluoride	<0.082		0.20	0.082	mg/L			06/14/16 00:05	1
Sulfate	<0.70		1.0	0.70	mg/L			06/14/16 00:05	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-309960/36
Matrix: Water
Analysis Batch: 309960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.49		mg/L		95	90 - 110
Fluoride	10.0	9.88		mg/L		99	90 - 110
Sulfate	10.0	9.37		mg/L		94	90 - 110

Lab Sample ID: LCSD 400-309960/37
Matrix: Water
Analysis Batch: 309960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.58		mg/L		96	90 - 110	1	15
Fluoride	10.0	10.0		mg/L		100	90 - 110	2	15
Sulfate	10.0	9.38		mg/L		94	90 - 110	0	15

Lab Sample ID: 400-122843-9 MS
Matrix: Water
Analysis Batch: 309960

Client Sample ID: YGWC-33S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<8.9		100	110		mg/L		110	80 - 120
Fluoride	<0.82		100	112		mg/L		112	80 - 120
Sulfate	850	E	100	948	E 4	mg/L		99	80 - 120

Lab Sample ID: 400-122843-9 MSD
Matrix: Water
Analysis Batch: 309960

Client Sample ID: YGWC-33S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<8.9		100	111		mg/L		111	80 - 120	0	20
Fluoride	<0.82		100	111		mg/L		111	80 - 120	1	20
Sulfate	850	E	100	951	E 4	mg/L		102	80 - 120	0	20

Lab Sample ID: MB 400-310321/4
Matrix: Water
Analysis Batch: 310321

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			06/16/16 13:40	1
Sulfate	<0.70		1.0	0.70	mg/L			06/16/16 13:40	1

Lab Sample ID: LCS 400-310321/5
Matrix: Water
Analysis Batch: 310321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	10.7		mg/L		107	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 400-310321/6
Matrix: Water
Analysis Batch: 310321

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.6		mg/L		106	90 - 110	1	15
Sulfate	10.0	10.8		mg/L		108	90 - 110	1	15

Lab Sample ID: 400-123105-A-4 MSD
Matrix: Water
Analysis Batch: 310321

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	E F1	10.0	256	E 4	mg/L		71	80 - 120	1	20
Fluoride	0.21	F1	10.0	17.4	F1	mg/L		171	80 - 120	3	20
Sulfate	610	E F1	10.0	622	E 4	mg/L		79	80 - 120	2	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-309505/1-A ^5
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 309505

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/10/16 13:05	06/16/16 10:41	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 13:05	06/16/16 10:41	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/10/16 13:05	06/16/16 10:41	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 10:41	5
Boron	<0.021		0.050	0.021	mg/L		06/10/16 13:05	06/16/16 10:41	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 13:05	06/16/16 10:41	5
Calcium	<0.13		0.25	0.13	mg/L		06/10/16 13:05	06/16/16 10:41	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 13:05	06/16/16 10:41	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 13:05	06/16/16 10:41	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 13:05	06/16/16 10:41	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 13:05	06/16/16 10:41	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 13:05	06/16/16 10:41	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 13:05	06/16/16 10:41	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 13:05	06/16/16 10:41	5

Lab Sample ID: LCS 400-309505/2-A ^1
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 309505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0560		mg/L		112	80 - 120
Arsenic	0.0500	0.0520		mg/L		104	80 - 120
Barium	0.0500	0.0532		mg/L		106	80 - 120
Beryllium	0.0500	0.0466		mg/L		93	80 - 120
Boron	0.100	0.0961		mg/L		96	80 - 120
Cadmium	0.0500	0.0527		mg/L		105	80 - 120
Calcium	5.00	5.12		mg/L		102	80 - 120
Chromium	0.0500	0.0501		mg/L		100	80 - 120
Cobalt	0.0500	0.0502		mg/L		100	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 400-309505/2-A ^1
Matrix: Water
Analysis Batch: 310197

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 309505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.0500	0.0544		mg/L		109	80 - 120
Lithium	0.0500	0.0482		mg/L		96	80 - 120
Molybdenum	0.0500	0.0492		mg/L		98	80 - 120
Selenium	0.0500	0.0497		mg/L		99	80 - 120
Thallium	0.0100	0.0102		mg/L		102	80 - 120

Lab Sample ID: 400-122843-1 MS
Matrix: Water
Analysis Batch: 310197

Client Sample ID: YGWC-24S
Prep Type: Total Recoverable
Prep Batch: 309505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0570		mg/L		114	75 - 125
Arsenic	<0.00046		0.0500	0.0532		mg/L		106	75 - 125
Barium	0.020		0.0500	0.0739		mg/L		108	75 - 125
Beryllium	<0.00034		0.0500	0.0488		mg/L		98	75 - 125
Boron	<0.021		0.100	0.0790		mg/L		79	75 - 125
Cadmium	<0.00034		0.0500	0.0529		mg/L		106	75 - 125
Calcium	1.9		5.00	6.81		mg/L		98	75 - 125
Chromium	0.0022	J	0.0500	0.0522		mg/L		100	75 - 125
Cobalt	<0.00040		0.0500	0.0508		mg/L		102	75 - 125
Lead	<0.00035		0.0500	0.0513		mg/L		103	75 - 125
Lithium	<0.0032		0.0500	0.0510		mg/L		102	75 - 125
Molybdenum	<0.00085		0.0500	0.0497		mg/L		99	75 - 125
Selenium	<0.00024		0.0500	0.0510		mg/L		102	75 - 125
Thallium	<0.00085		0.0100	0.0102		mg/L		102	75 - 125

Lab Sample ID: 400-122843-1 MSD
Matrix: Water
Analysis Batch: 310197

Client Sample ID: YGWC-24S
Prep Type: Total Recoverable
Prep Batch: 309505

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0560		mg/L		112	75 - 125	2	20
Arsenic	<0.00046		0.0500	0.0525		mg/L		105	75 - 125	1	20
Barium	0.020		0.0500	0.0736		mg/L		107	75 - 125	0	20
Beryllium	<0.00034		0.0500	0.0473		mg/L		95	75 - 125	3	20
Boron	<0.021		0.100	0.0780		mg/L		78	75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0513		mg/L		103	75 - 125	3	20
Calcium	1.9		5.00	6.87		mg/L		99	75 - 125	1	20
Chromium	0.0022	J	0.0500	0.0525		mg/L		101	75 - 125	1	20
Cobalt	<0.00040		0.0500	0.0507		mg/L		101	75 - 125	0	20
Lead	<0.00035		0.0500	0.0504		mg/L		101	75 - 125	2	20
Lithium	<0.0032		0.0500	0.0488		mg/L		98	75 - 125	4	20
Molybdenum	<0.00085		0.0500	0.0509		mg/L		102	75 - 125	2	20
Selenium	<0.00024		0.0500	0.0522		mg/L		104	75 - 125	2	20
Thallium	<0.00085		0.0100	0.0104		mg/L		104	75 - 125	2	20

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-309506/14-A
Matrix: Water
Analysis Batch: 309788

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/10/16 12:49	06/13/16 12:11	1

Lab Sample ID: LCS 400-309506/15-A
Matrix: Water
Analysis Batch: 309788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309506

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000885		mg/L		88	80 - 120

Lab Sample ID: 400-122850-B-1-C MS
Matrix: Water
Analysis Batch: 309788

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 309506

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.000092	J F1	0.00201	0.00151	F1	mg/L		71	80 - 120

Lab Sample ID: 400-122850-B-1-D MSD
Matrix: Water
Analysis Batch: 309788

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 309506

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.000092	J F1	0.00201	0.00155	F1	mg/L		73	80 - 120	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-309892/1
Matrix: Water
Analysis Batch: 309892

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/14/16 09:51	1

Lab Sample ID: LCS 400-309892/2
Matrix: Water
Analysis Batch: 309892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Dissolved Solids	293	264		mg/L		90	78 - 122

Lab Sample ID: 400-122891-A-1 DU
Matrix: Water
Analysis Batch: 309892

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	5200		5110		mg/L		2	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
 Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
 SDG: AP

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 400-309932/1
Matrix: Water
Analysis Batch: 309932

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/14/16 10:33	1

Lab Sample ID: LCS 400-309932/2
Matrix: Water
Analysis Batch: 309932

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	293	278		mg/L		95	78 - 122

Lab Sample ID: 400-122843-10 DU
Matrix: Water
Analysis Batch: 309932

Client Sample ID: YGWC-321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	750		768		mg/L		3	5

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

LAB USE ONLY


Work Order No. _____
 Reviewed By: _____

11 Page 1 of 1

Sample Shipment Date:⁸ 6/9/16 ¹² Standard Turnaround Time
 Sample Received Date:⁹ _____ # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Sampled By:¹⁰ Wesley Bowler

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP_CCR GW

PRESERVATIVE ²⁰	ANALYSIS REQUESTED ²¹	Sample Type Key: 22	
HNO3 N Ice I VA HNO8 HNO3 N Matrix Key: 23	Metals app. III & IV EPA 6020 & EPA 7470 Cl, F, SO4 EPA 300 TDS SM2540C Pattern 226 & 228 -Ga Tech SW-846 9315 and 9320	eGrab O-Other C-Composite Matrix Key: 23 O-Cl S-Solid Sl-Sludge W-Wipe SW-Surface Water GW-Ground Water WW-Waste Water DW-Drinking Water Presentative Key: 24 H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SP-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate L-Ice U-Unpreserved	400-122843 COC 

LAB USE ONLY LAB ID	Sample Number	Collection		Sample Description	Sample Type	Matrix	No. of Containers
		Date	Time				
	YG-WC-245	6/8/16	1125		G	CW	3
	EB-03	6/8/16	1210		O	DW	3
	YG-WC-275	6/8/16	1600		G	CW	3

LAB USE ONLY: Sample Receipt Information			
Relinquished by: ²⁶	Date/Time	Temperature	Comments
<u>[Signature]</u>	6/8/16 0707	11.5°C 10.6°C 20.0°C 23.0°C 12-L	
<u>[Signature]</u>	6/9/16 0707	0.0°C 0.0°C 0.0°C	
<u>[Signature]</u>	6/9/16 0817		
<u>[Signature]</u>	6/9/16 8:17		RCVD from 1P 6/10/16 0855

Relinquished by: [Signature] to [Signature]

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____

Page 1 of 1

Sample Shipment Date:⁸ 6-9-16

Sample Received Date:⁹ _____

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

Sampled By:¹⁰ Michael Hutchinson

Standard Turnaround Time

of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)






 Signature

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE ²⁰		ANALYSIS REQUESTED ²¹		Sample Type Key: ²²
HNO3	Ice	HNO3	Ice	e-Grab C-Other C-Composite
N	-	N	-	Matrix Key: ²³
				O-Cl S-Solid Sl- Sludge W-Wipes SW-Surface Water GW-Ground Water WW-Waste Water DW-Drinking Water
				Preservative Key: ²⁴
				H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SB-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate H-Ice U-Unpreserved

17	18	19
Sample Type	Matrix	No. of Containers
G	GW	3
G	GW	3
G	GW	3
G	GW	3

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	No. of Containers	Sample Type	Matrix	ANALYSIS REQUESTED ²¹	PRESERVATIVE ²⁰	Sample Type Key: ²²	
		Date	Time								
	YGNC-26S	6-8-16	1005		3	G	GW	EPA 6020 & EPA 7470 Metals app. III & IV Cl, F, SO4 EPA 300 TDS SM2540C	N	-	
	DUP-3	6-8-16	-		3	G	GW		N	-	
	YGNC-26E	6-8-16	1315		3	G	GW		N	-	
	YGNC-27I	6-8-16	1520		3	G	GW		N	-	

RELINQUISHED BY: ²⁶	DATE/TIME
	06/09/16 0707
	06/09/16 0707
	06/09/16 0817
	06/09/16 8:17

LAB USE ONLY Sample Receipt Information:²⁸

Relinquished by:²⁶ _____ Date/Time: 06/09/16 0707

Received by:²⁷ _____ Date/Time: 06/09/16 0707

Relinquished by: _____ Date/Time: 06/09/16 0817

Received by: _____ Date/Time: 06/09/16 8:17

Relinquished by: Michael Hutchinson Date/Time: 06/09/16 0855

Received by: Michael Hutchinson Date/Time: 06/09/16 0855

Relinquished by: Michael Hutchinson Date/Time: 06/09/16 0855



Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Sample Shipment Date:⁸ 6/9/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ Rachel Samuels
 # of Business Days (Rush) _____
 (Must be cleared through Env. Lab. Prior to shipment)

X Standard Turnaround Time

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

Rachel Samuels
 Signature
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

LAB USE ONLY LAB ID	Sample Number ¹⁴		Collection ¹⁵		Sample Description ¹⁶		Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰			Sample Type Key: ²²	
	Sample No.	LAB ID	Date	Time	Sample Description	Matrix				HNO3	Ice	HNO3	HNO3	Matrix Key: ²³	Preservative Key: ²⁴		
	YGWL-34I		6/8/16	1315	G	GW	Metals app. III & IV EPA 6020 & EPA 7470 CI, F, SO4 EPA 300 TDS SM2540C	GW	3	N	1	1	1			22	
	YGWL-33S		6/8/16	1703	G	GW	Metals app. III & IV EPA 6020 & EPA 7470 CI, F, SO4 EPA 300 TDS SM2540C	GW	3	N	1	1	1				22

Relinquished by:²⁶ _____ Date/Time 6/9/16 0707
 Received by:²⁷ _____ Date/Time 6/9/16 0707
 Relinquished by: _____ Date/Time 6/9/16 0817
 Received by: _____ Date/Time 6/9/16 8:27

Relinquished by: *Rachel Samuels* to Foster.



Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Plant Yates
 Project Location:⁵ Plant Yates
 Account Number:⁶ Yates AP CCR GW
 Special Instructions:⁷

ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Sample Shipment Date:⁸ 6-9-16 Standard Turnaround Time
 Sample Received Date:⁹ _____ # of Business Days (Rush) _____
 (Must be cleared through Env. Lab. Prior to shipment)

Sampled By:¹⁰ Charles Watson

Charles Watson for Charles Watson

Charles Watson
 Signature
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰			Sample Type Key: 22	
		Date	Time					HNO3	HNO3	HNO3	HNO3	HNO3			
	YG-WC-32I	6/9/16	1032		G	GW	3	X	X	X					
	YG-WC-32S	6/8/16	1343		G	GW	3	X	X	X					
<p>LAB USE ONLY LAB ID</p> <p>Matrix Key: 23 O-Oil S-Solid SL-Sludge W-Wipes SW-Surface Water GW-Ground Water HW-Heat Water DW-Drinking Water</p> <p>Preservative Key: 24 H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SS-Sodium Hydroxide BS-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate H-H2O2 U-Unpreserved</p>															

Relinquished by:²⁶ *[Signature]* Date/Time 06/09/16 0707
 Received by:²⁷ *[Signature]* Date/Time 06/19/16 0707
 Relinquished by: *[Signature]* Date/Time 06/19/16 0817
 Received by: *[Signature]* Date/Time 6/19/16 9:11

Relinquished by: *[Signature]* Date/Time 6/19/16 9:11
 RCVD *[Signature]* TA 10110116 CBS

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122843-1

SDG Number: AP

Login Number: 122843

List Number: 1

Creator: Benforado, Jessica L

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Rads are only samples received in coolers outside of 0.0°C-6.0°C.
Cooler Temperature is recorded.	True	0.0°C, 0.0°C, 0.0°C, 11.5°C, 10.6°C, 20.6°C, 23.0°C IR-5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-1
SDG: AP

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-17 *
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122843-2

TestAmerica Sample Delivery Group: AP

Client Project/Site: CCR Plant Yates

For:

Southern Company

241 Ralph McGill Blvd SE

B10185

Atlanta, Georgia 30308

Attn: Joju Abraham



Authorized for release by:

7/13/2016 5:09:18 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	13
Chronicle	14
QC Association	17
QC Sample Results	18
Chain of Custody	20
Receipt Checklists	24
Certification Summary	25

Case Narrative

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Job ID: 400-122843-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-122843-2

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-256920: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: YGWC-24S (400-122843-1), EB-03 (400-122843-2), YGWC-27S (400-122843-3), YGWC-26S (400-122843-4), DUP-3 (400-122843-5), YGWC-26I (400-122843-6), YGWC-27I (400-122843-7), YGWC-34I (400-122843-8), YGWC-33S (400-122843-9), YGWC-32I (400-122843-10) and YGWC-32S (400-122843-11). A laboratory control sample/ laboratory sample duplicate (LCS/LCSD) were prepared instead.

Method(s) PrecSep-21: Radium-226 Prep Batch 160-256888: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: YGWC-24S (400-122843-1), EB-03 (400-122843-2), YGWC-27S (400-122843-3), YGWC-26S (400-122843-4), DUP-3 (400-122843-5), YGWC-26I (400-122843-6), YGWC-27I (400-122843-7), YGWC-34I (400-122843-8), YGWC-33S (400-122843-9), YGWC-32I (400-122843-10) and YGWC-32S (400-122843-11). A laboratory control sample/ laboratory sample duplicate (LCS/LCSD) were prepared instead.



Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Sample Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122843-1	YGWC-24S	Water	06/08/16 11:25	06/10/16 08:55
400-122843-2	EB-03	Water	06/08/16 12:10	06/10/16 08:55
400-122843-3	YGWC-27S	Water	06/08/16 16:00	06/10/16 08:55
400-122843-4	YGWC-26S	Water	06/08/16 10:05	06/10/16 08:55
400-122843-5	DUP-3	Water	06/08/16 00:00	06/10/16 08:55
400-122843-6	YGWC-26I	Water	06/08/16 13:15	06/10/16 08:55
400-122843-7	YGWC-27I	Water	06/08/16 15:20	06/10/16 08:55
400-122843-8	YGWC-34I	Water	06/08/16 13:15	06/10/16 08:55
400-122843-9	YGWC-33S	Water	06/08/16 17:03	06/10/16 08:55
400-122843-10	YGWC-32I	Water	06/08/16 10:32	06/10/16 08:55
400-122843-11	YGWC-32S	Water	06/08/16 13:43	06/10/16 08:55

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: YGWC-24S

Lab Sample ID: 400-122843-1

Date Collected: 06/08/16 11:25

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0710	U	0.0581	0.0585	1.00	0.0865	pCi/L	06/17/16 11:42	07/11/16 19:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.6		40 - 110					06/17/16 11:42	07/11/16 19:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.986		0.404	0.414	1.00	0.582	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.6		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	87.5		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.06		0.408	0.418	5.00	0.582	pCi/L		07/13/16 12:58	1

Client Sample ID: EB-03

Lab Sample ID: 400-122843-2

Date Collected: 06/08/16 12:10

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0216	U	0.0611	0.0612	1.00	0.109	pCi/L	06/17/16 11:42	07/11/16 19:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					06/17/16 11:42	07/11/16 19:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0310	U	0.209	0.209	1.00	0.372	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	87.5		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: EB-03
Date Collected: 06/08/16 12:10
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-2
Matrix: Water

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0526	U	0.218	0.218	5.00	0.372	pCi/L		07/13/16 12:58	1

Client Sample ID: YGWC-27S
Date Collected: 06/08/16 16:00
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.144		0.0647	0.0660	1.00	0.0766	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.113	U	0.218	0.218	1.00	0.374	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	84.9		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.257	U	0.228	0.228	5.00	0.374	pCi/L		07/13/16 12:58	1

Client Sample ID: YGWC-26S
Date Collected: 06/08/16 10:05
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0741	U	0.0677	0.0680	1.00	0.107	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: YGWC-26S

Lab Sample ID: 400-122843-4

Date Collected: 06/08/16 10:05

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.603		0.267	0.272	1.00	0.379	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	87.9		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.677		0.275	0.281	5.00	0.379	pCi/L		07/13/16 12:58	1

Client Sample ID: DUP-3

Lab Sample ID: 400-122843-5

Date Collected: 06/08/16 00:00

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.150		0.0794	0.0806	1.00	0.112	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.238	U	0.234	0.235	1.00	0.379	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	89.3		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.388		0.247	0.248	5.00	0.379	pCi/L		07/13/16 12:58	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: YGWC-261

Lab Sample ID: 400-122843-6

Date Collected: 06/08/16 13:15

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.165		0.0754	0.0769	1.00	0.0988	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.51		0.552	0.815	1.00	0.342	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	90.8		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.68		0.557	0.818	5.00	0.342	pCi/L		07/13/16 12:58	1

Client Sample ID: YGWC-271

Lab Sample ID: 400-122843-7

Date Collected: 06/08/16 15:20

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.989		0.142	0.168	1.00	0.0884	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.819		0.279	0.289	1.00	0.366	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	86.4		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: YGWC-271

Date Collected: 06/08/16 15:20

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-7

Matrix: Water

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.81		0.313	0.334	5.00	0.366	pCi/L		07/13/16 12:58	1

Client Sample ID: YGWC-34I

Date Collected: 06/08/16 13:15

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-8

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.105	U	0.0730	0.0736	1.00	0.109	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0856	U	0.265	0.266	1.00	0.459	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	86.7		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.191	U	0.275	0.276	5.00	0.459	pCi/L		07/13/16 12:58	1

Client Sample ID: YGWC-33S

Date Collected: 06/08/16 17:03

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.154		0.0683	0.0697	1.00	0.0810	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: YGWC-33S

Lab Sample ID: 400-122843-9

Date Collected: 06/08/16 17:03

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.230	U	0.274	0.275	1.00	0.453	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	87.5		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.384	U	0.283	0.284	5.00	0.453	pCi/L		07/13/16 12:58	1

Client Sample ID: YGWC-32I

Lab Sample ID: 400-122843-10

Date Collected: 06/08/16 10:32

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.203		0.0740	0.0762	1.00	0.0833	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.148	U	0.231	0.231	1.00	0.388	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	90.5		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.351	U	0.243	0.244	5.00	0.388	pCi/L		07/13/16 12:58	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: YGWC-32S

Lab Sample ID: 400-122843-11

Date Collected: 06/08/16 13:43

Matrix: Water

Date Received: 06/10/16 08:55

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0894		0.0503	0.0510	1.00	0.0621	pCi/L	06/17/16 11:42	07/11/16 19:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/17/16 11:42	07/11/16 19:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.122	U	0.233	0.233	1.00	0.397	pCi/L	06/17/16 14:44	07/05/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/17/16 14:44	07/05/16 13:38	1
Y Carrier	86.7		40 - 110					06/17/16 14:44	07/05/16 13:38	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.212	U	0.238	0.238	5.00	0.397	pCi/L		07/13/16 12:58	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: YGWC-24S

Date Collected: 06/08/16 11:25

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: EB-03

Date Collected: 06/08/16 12:10

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-27S

Date Collected: 06/08/16 16:00

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-26S

Date Collected: 06/08/16 10:05

Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: DUP-3

Lab Sample ID: 400-122843-5

Date Collected: 06/08/16 00:00

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-261

Lab Sample ID: 400-122843-6

Date Collected: 06/08/16 13:15

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-271

Lab Sample ID: 400-122843-7

Date Collected: 06/08/16 15:20

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-341

Lab Sample ID: 400-122843-8

Date Collected: 06/08/16 13:15

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Client Sample ID: YGWC-33S

Lab Sample ID: 400-122843-9

Date Collected: 06/08/16 17:03

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-32I

Lab Sample ID: 400-122843-10

Date Collected: 06/08/16 10:32

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Client Sample ID: YGWC-32S

Lab Sample ID: 400-122843-11

Date Collected: 06/08/16 13:43

Matrix: Water

Date Received: 06/10/16 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256888	06/17/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	259958	07/11/16 19:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256920	06/17/16 14:44	MCJ	TAL SL
Total/NA	Analysis	9320		1	259193	07/05/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	260368	07/13/16 12:58	RTM	TAL SL

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Southern Company
 Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
 SDG: AP

Rad

Prep Batch: 256888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-1	YGWC-24S	Total/NA	Water	PrecSep-21	
400-122843-2	EB-03	Total/NA	Water	PrecSep-21	
400-122843-3	YGWC-27S	Total/NA	Water	PrecSep-21	
400-122843-4	YGWC-26S	Total/NA	Water	PrecSep-21	
400-122843-5	DUP-3	Total/NA	Water	PrecSep-21	
400-122843-6	YGWC-26I	Total/NA	Water	PrecSep-21	
400-122843-7	YGWC-27I	Total/NA	Water	PrecSep-21	
400-122843-8	YGWC-34I	Total/NA	Water	PrecSep-21	
400-122843-9	YGWC-33S	Total/NA	Water	PrecSep-21	
400-122843-10	YGWC-32I	Total/NA	Water	PrecSep-21	
400-122843-11	YGWC-32S	Total/NA	Water	PrecSep-21	
LCS 160-256888/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-256888/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
MB 160-256888/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 256920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122843-1	YGWC-24S	Total/NA	Water	PrecSep_0	
400-122843-2	EB-03	Total/NA	Water	PrecSep_0	
400-122843-3	YGWC-27S	Total/NA	Water	PrecSep_0	
400-122843-4	YGWC-26S	Total/NA	Water	PrecSep_0	
400-122843-5	DUP-3	Total/NA	Water	PrecSep_0	
400-122843-6	YGWC-26I	Total/NA	Water	PrecSep_0	
400-122843-7	YGWC-27I	Total/NA	Water	PrecSep_0	
400-122843-8	YGWC-34I	Total/NA	Water	PrecSep_0	
400-122843-9	YGWC-33S	Total/NA	Water	PrecSep_0	
400-122843-10	YGWC-32I	Total/NA	Water	PrecSep_0	
400-122843-11	YGWC-32S	Total/NA	Water	PrecSep_0	
LCS 160-256920/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-256920/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
MB 160-256920/1-A	Method Blank	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-256888/1-A
Matrix: Water
Analysis Batch: 259958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256888

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.05836	U	0.0565	0.0567	1.00	0.0880	pCi/L	06/17/16 11:42	07/11/16 19:02	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	87.7		40 - 110		06/17/16 11:42	07/11/16 19:02	1			

Lab Sample ID: LCS 160-256888/2-A
Matrix: Water
Analysis Batch: 259958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256888

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.2	14.93		1.44	1.00	0.0756	pCi/L	134	68 - 137
Carrier	LCS LCS		Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier	Limits						
Ba Carrier	93.7		40 - 110						

Lab Sample ID: LCSD 160-256888/3-A
Matrix: Water
Analysis Batch: 259958

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 256888

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
				Uncert. (2σ+/-)							
Radium-226	11.2	14.27		1.38	1.00	0.0794	pCi/L	128	68 - 137	0.23	1
Carrier	LCSD LCSD		Limits		Prepared	Analyzed	Dil Fac				
Ba Carrier	%Yield	Qualifier	Limits								
Ba Carrier	93.4		40 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-256920/1-A
Matrix: Water
Analysis Batch: 259193

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256920

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.1639	U	0.248	0.248	1.00	0.416	pCi/L	06/17/16 14:44	07/05/16 13:37	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	87.7		40 - 110		06/17/16 14:44	07/05/16 13:37	1			
Y Carrier	%Yield	Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Y Carrier	89.7		40 - 110					06/17/16 14:44	07/05/16 13:37	1

QC Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-256920/2-A
Matrix: Water
Analysis Batch: 259193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256920

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.9	16.95		1.79	1.00	0.361	pCi/L	114	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.7		40 - 110
Y Carrier	91.2		40 - 110

Lab Sample ID: LCSD 160-256920/3-A
Matrix: Water
Analysis Batch: 259193

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 256920

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	14.9	16.68		1.77	1.00	0.357	pCi/L	112	56 - 140	0.08	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	93.4		40 - 110
Y Carrier	88.6		40 - 110

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____

Page 1 of 1

Sample Shipment Date:⁸ 6/9/16
 Sample Received Date:⁹

Standard Turnaround Time

Sampled By:¹⁰ Wesley Bowler

of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Signature: _____
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP_CCR GW

LAB USE ONLY LAB ID	Sample Number	Collection		Sample Description	Sample Type	Matrix	No. of Containers	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰			Sample Type Key: 22	Comments		
		Date	Time					HNO3 N	Ice I	VA HNO6	HW33 N	Other C-Composite	S-Solid			S-Surface Water	S-Sludge
	YG-WC-245	6/8/16	1125		G-CW		3										
	EB-03	6/8/16	1210		O-DW		3										
	YG-WC-275	6/8/16	1600		G-CW		3										

Relinquished by:²⁶ [Signature] Date/Time 6/8/16 0707 11.5°C 10.0°C 20.0°C 23.0°C 12-L
 Received by:²⁷ [Signature] Date/Time 6/9/16 0707 0.0°C 0.0°C 0.0°C
 Relinquished by:²⁸ [Signature] Date/Time 6/9/16 0817
 Received by:²⁹ [Signature] Date/Time 6/9/16 0817 12-L 10110 0855
 Relinquished by: [Signature] to Test Lab

1
2
3
4
5
6
7
8
9
10
11
12
13

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No.
 Reviewed By:

11 Page 1 of 1

Sample Shipment Date:⁸ 6-9-16

Sample Received Date:⁹

Standard Turnaround Time

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶
 Special Instructions:⁷ Yates AP CCR GW

Sampled By:¹⁰ Michael Hutchinson

of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Signature








Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE ²⁰		ANALYSIS REQUESTED ²¹		Sample Type Key: ²²
HNO3	Ice	HNO3	Ice	e-Grab C-Other C-Composite
N	-	N	-	Matrix Key: ²³
				O-Cl S-Solid Sl- Sludge W-Wipe SW-Surface Water GW-Ground Water WW-Waste Water DW-Drinking Water
				Preservative Key: ²⁴
				H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SB-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate H-Ice U-Unpreserved

17	18	19
Sample Type	Matrix	No. of Containers
G	GW	3
G	GW	3
G	GW	3
G	GW	3

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	No. of Containers	Sample Type	Matrix	EPA 6020 & EPA 7470 Metals app. III & IV	CI, F, SO4 EPA 300 TDS SM2540C	Fechtm 226 & 228 Ga Tech - M	SW-846 9315 + 9380	LAB USE ONLY COMMENTS
		Date	Time									
	YGNC-26S	6-8-16	1005									
	DUP-3	6-8-16	-									
	YGNC-26E	6-8-16	1315									
	YGNC-27I	6-8-16	1520									

Relinquished by: ²⁶	Date/Time
Joju Abraham	06/09/16 0707
Michael Hutchinson	06/09/16 0707
Michael Hutchinson	06/09/16 0817
Michael Hutchinson	06/09/16 0817

Relinquished by:²⁶  Date/Time 06/09/16 0707
 Received by:²⁷  Date/Time 06/09/16 0707
 Relinquished by:²⁸  Date/Time 06/09/16 0817
 Received by:²⁹  Date/Time 06/09/16 0817
 Relinquished by:³⁰  Date/Time 06/09/16 0817
 Received by:³¹  Date/Time 06/09/16 0817



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Georgia Power Environmental Laboratory
NELAP Certification #E57554
2480 Maner Road, BIN 39110
Atlanta, Georgia 30339
Phone: (404) 799-2100
Company: 8-530-2100

LAB USE ONLY
Work Order No. _____
Reviewed By: _____
Page 1 of 1

Sample Shipment Date:⁸ 6/9/16
Sample Received Date:⁹ _____

Company:¹ Southern Company Services
Report To: Joju Abraham
Address:² 241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308
Phone/Fax:³ 404-506-7239
Contact:⁴ Joju Abraham
Project Location:⁵ Plant Yates
Account Number:⁶ _____
Special Instructions:⁷ Yates AP CCR GW

Sampled By:¹⁰ Rachel Samuels

Standard Turnaround Time: X

of Business Days (Rush) _____
(Must be cleared through Env. Lab. Prior to shipment)

Signature: *Rachel Samuels*

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

HNO3	Ice	HNO3	PRESERVATIVE		ANALYSIS REQUESTED	Sample Type	Sample Type Key: 22
			AN	N			
N	I	44	N		Metals app. III & IV Cl, F, SO4 EPA 300 TDS SM2540C EPA 6020 & EPA 7470 Ga Tech SW-846 9315 and 9320	Matrix Key: 23 S-Solid S-Surface Water S-WW-Waste Water O-Oil W-White G-Gravel W-Well DM-Drinking Water C-Composite	
							Preservative Key: 24 H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SB-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate I-Ice U-Unpreserved

LAB USE ONLY	LAB ID	Sample Number	Collection		Sample Description	Sample Type	Matrix	No. of Containers	ANALYSIS REQUESTED	PRESERVATIVE
			Date	Time						
		YGWC-34I	6/8/16	1315	G	GW	3	1		
		YGWC-33S	6/8/16	1703	G	GW	3	1		

Relinquished by:²⁶ _____ Date/Time: 6/9/16 0707
 Received by:²⁷ *[Signature]* Date/Time: 6/9/16 0707
 Relinquished by:²⁸ *[Signature]* Date/Time: 6/9/16 0817
 Received by:²⁹ *[Signature]* Date/Time: 6/9/16 0827

Relinquished by: *[Signature]* to Feiler.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Georgia Power Environmental Laboratory
 NELAP Certification #E57554
 2480 Maner Road, BIN 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Work Order No. _____

Reviewed By: _____

Page 1 of 1

LAB USE ONLY

Sample Shipment Date:⁸ 6-9-16 Standard Turnaround Time

Sample Received Date:⁹ _____

Sampled By:¹⁰ Charles Watson

of Business Days (Rush) _____
 (Must be cleared through Env. Lab. Prior to shipment)

Southern Company Services
 Report To: Joju Abraham
 Address:² 241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 Account Number:⁶ _____
 Special Instructions:⁷ Yates AP CCR GW

Wayley Bowen for Charles Watson

Signature

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰		Sample Type Key: ²² G-Gab O-Other C-Composite
		Date	Time					HNO3 N	Ice I	HNO3 N	Matrix Key: ²³ S-Solid SL-Sludge W-Wipes SW-Surface Water GW-Ground Water HW-Heats Water DW-Drinking Water		
		Matrix Key: ²⁴ H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SS-Sodium Hydroxide SB-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate H-Hex U-Unpreserved											
	YG-WC-32I	6/8/16	1032		G	GW	3	X	X				
	YG-WC-32S	6/8/16	1343		G	GW	3	X	X				

LAB USE ONLY: Sample Receipt Information²³

Relinquished by:²⁶ _____ Date/Time 06/09/16 0707
 Received by:²⁷ _____ Date/Time 06/09/16 0707
 Relinquished by: _____ Date/Time 06/09/16 0817
 Received by: _____ Date/Time 6/9/16 9:17

Relinquished by: *[Signature]* Date/Time _____
 Relinquished by: *[Signature]* Date/Time _____

RCVD [Signature] TA 10/10/16 CBS



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122843-2

SDG Number: AP

Login Number: 122843

List Number: 1

Creator: Benforado, Jessica L

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Rads are only samples received in coolers outside of 0.0°C-6.0°C.
Cooler Temperature is recorded.	True	0.0°C, 0.0°C, 0.0°C, 11.5°C, 10.6°C, 20.6°C, 23.0°C IR-5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16 *
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16 *
Michigan	State Program	5	9912	06-30-16 *
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	08-31-16

Laboratory: TestAmerica St. Louis

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	07-31-16 *
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16 *
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-16 *
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-16 *
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122843-2
SDG: AP

Laboratory: TestAmerica St. Louis (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-16 *
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16 *
Texas	NELAP	6	T104704193-15-9	07-31-16 *
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16 *
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-16 *
West Virginia DEP	State Program	3	381	08-31-16 *

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

Product Name: Low-Flow System

Date: 2016-06-01 13:46:45

Project Information:

Operator Name R. Hilliard
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-1D
Latitude 32° 27' 11.1"
Longitude -84° -54' -33.2"
Sonde SN 440275
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type polyethylene
Tubing Diameter .17 in
Tubing Length 130 ft

Pump placement from TOC 123 ft

Well Information:

Well ID YGWA-1D
Well diameter 2 in
Well Total Depth 128.6 ft
Screen Length 10 ft
Depth to Water 48.26 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.770245 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 25.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:24:02	13203.81	19.46	7.50	164.65	4.84	48.67	0.08	-95.31
Last 5	13:29:02	13503.81	19.90	7.49	164.72	5.33	48.68	0.07	-96.96
Last 5	13:34:02	13803.87	19.86	7.48	162.98	4.65	48.68	0.07	-95.58
Last 5	13:39:02	14103.85	19.98	7.47	163.69	4.80	48.68	0.08	-95.22
Last 5	13:44:02	14403.78	19.77	7.46	161.82	-- 4.72	-- 48.68	0.07	-93.02
Variance 0			-0.05	-0.01	-1.74			-0.00	1.37
Variance 1			0.13	-0.01	0.71			0.00	0.37
Variance 2			-0.21	-0.01	-1.87			-0.01	2.20

Notes

Clear, light breeze, purge start 09:43
Persistent turbidity sample time 13:48

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-01 16:49:18

Project Information:

Operator Name R. Hilliard
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-1I
Latitude 33° 27' 11.2"
Longitude -84° -54' -33.3"
Sonde SN 440275
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type polyethylene
Tubing Diameter 0.17 in
Tubing Length 55 ft

Pump placement from TOC 48 ft

Well Information:

Well ID YGWA-1I
Well diameter 2 in
Well Total Depth 53.85 ft
Screen Length 10 ft
Depth to Water 34.98 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.4354883 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 41 in
Total Volume Pumped 8.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	16:26:33	3300.02	18.55	6.36	67.89	2.17	38.51	2.56	27.01
Last 5	16:31:33	3599.95	18.42	6.35	68.67	1.86	38.47	2.57	25.74
Last 5	16:36:33	3899.95	18.35	6.34	67.23	2.55	38.44	2.83	26.42
Last 5	16:41:33	4199.95	18.44	6.34	69.08	2.85	38.41	2.86	25.82
Last 5	16:46:33	4499.95	18.34	6.33	67.47	2.52	38.40	3.01	28.86
Variance 0			-0.07	-0.01	-1.44			0.26	0.68
Variance 1			0.09	0.00	1.85			0.03	-0.60
Variance 2			-0.09	-0.01	-1.61			0.15	3.04

Notes

Overcast, windy
Sample Time: 16:50

Grab Samples

YGWA-1I
Ash Pond 2, up gradient

Product Name: Low-Flow System

Date: 2016-06-02 10:26:58

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-3D
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 457516
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type sample pro
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 134 ft

Pump placement from TOC 129.45 ft

Well Information:

Well ID YGWA-3D
Well diameter 2 in
Well Total Depth 134.45 ft
Screen Length 10 ft
Depth to Water 29.88 ft

Pumping Information:

Final Pumping Rate 250 mL/min
Total System Volume 0.7880987 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 9.87 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	10:05:52	1200.02	18.75	7.81	220.27	--6.42	--30.01	0.48	-132.64
Last 5	10:10:52	1500.02	18.08	7.83	213.35	--5.08	--30.12	0.47	-130.23
Last 5	10:15:52	1800.02	17.58	7.82	215.82	--4.11	--30.07	0.26	-134.78
Last 5	10:20:52	2100.02	17.47	7.83	216.04	--3.26	--30.12	0.20	-137.13
Last 5	10:25:53	2400.99	17.43	7.84	216.11	--3.42	--30.10	0.17	-137.34
Variance 0			-0.50	-0.01	2.48			-0.21	-4.55
Variance 1			-0.11	0.01	0.22			-0.06	-2.35
Variance 2			-0.03	0.01	0.07			-0.03	-0.21

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-01 17:18:50

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-3I
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 457516
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type sample pro
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 65 ft

Pump placement from TOC 56.65 ft

Well Information:

Well ID YGWA-3I
Well diameter 2 in
Well Total Depth 58.65 ft
Screen Length 10 ft
Depth to Water 49.17 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.4801225 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 25.8 in
Total Volume Pumped 19.26 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10%		+/- 0.3	+/- 10
Last 5	16:54:04	6299.96	17.41	7.71	224.63	--0.93	--50.98	0.13	-115.47
Last 5	16:59:04	6599.96	17.41	7.71	221.99	--0.88	--51.08	0.12	-116.56
Last 5	17:04:04	6899.96	17.37	7.71	220.82	--0.78	--51.16	0.12	-115.57
Last 5	17:09:04	7199.91	17.42	7.72	215.57	--0.82	--51.25	0.10	-118.50
Last 5	17:14:04	7499.99	17.45	7.72	213.77	--0.93	--51.32	0.09	-120.02
Variance 0			-0.04	-0.01	-1.17			0.00	0.98
Variance 1			0.04	0.01	-5.26			-0.02	-2.93
Variance 2			0.04	0.00	-1.80			-0.01	-1.52

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-02 13:25:04

Project Information:

Operator Name R. Hilliard
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-14S
Latitude 33° 27' 46.78"
Longitude -84° -53' -53.27"
Sonde SN 440275
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type peristaltic
Tubing Type polyethylene
Tubing Diameter 0.17 in
Tubing Length 30 ft

Pump placement from TOC 25 ft

Well Information:

Well ID YGWA-14S
Well diameter 2 in
Well Total Depth 35.30 ft
Screen Length 10 ft
Depth to Water 15.03 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.2239027 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3.7 in
Total Volume Pumped 3.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:01:20	900.01	20.98	5.45	58.76	2.10	15.35	5.34	139.09
Last 5	13:06:20	1199.99	21.02	5.44	58.17	0.98	15.35	5.27	138.64
Last 5	13:11:20	1499.99	20.93	5.45	57.44	0.60	15.34	5.28	137.71
Last 5	13:16:20	1799.99	20.66	5.46	57.41	0.32	15.34	5.28	136.50
Last 5	13:21:20	2099.99	20.83	5.46	56.72	--0.53	--15.34	5.24	136.96
Variance 0			-0.09	0.00	-0.73			0.01	-0.92
Variance 1			-0.27	0.01	-0.03			0.00	-1.22
Variance 2			0.16	0.00	-0.69			-0.04	0.46

Notes

Sunny, 85F
Sample Time: 13:25

Grab Samples

YGWA-14S
Up gradient AP-2
FB-1
QC: Field Blank

Product Name: Low-Flow System

Date: 2016-06-02 10:16:11

Project Information:

Operator Name R. Hilliard
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-30I
Latitude 33° 27' 46.78"
Longitude -84° -53' -53.27"
Sonde SN 440275
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type polyethylene
Tubing Diameter 0.17 in
Tubing Length 60 ft

Pump placement from TOC 54 ft

Well Information:

Well ID YGWA-30I
Well diameter 2 in
Well Total Depth 59.63 ft
Screen Length 10 ft
Depth to Water 36.29 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.4578054 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 10.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:50:55	2699.97	18.00	5.72	38.06	1.19	36.30	5.88	104.03
Last 5	09:55:55	2999.97	18.08	5.79	37.99	1.15	36.30	5.83	103.87
Last 5	10:00:55	3299.97	18.10	5.81	38.13	0.86	36.30	5.79	109.07
Last 5	10:05:55	3599.97	18.11	5.79	38.25	0.62	36.30	5.69	106.76
Last 5	10:10:55	3899.97	18.08	5.75	38.33	0.77	36.30	5.67	106.39
Variance 0			0.02	0.02	0.14			-0.05	5.20
Variance 1			0.01	-0.02	0.12			-0.10	-2.31
Variance 2			-0.03	-0.03	0.08			-0.02	-0.37

Notes

Sunny, light breeze, 75F
Sample Time 10:16

Grab Samples

YGWA-30I
Ugradient, AP-2

Product Name: Low-Flow System

Date: 2016-06-08 13:12:12

Project Information:

Operator Name Michael Hutchinson
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-26I
Latitude 33° 27' 45.16"
Longitude -84° -54' -23.79"
Sonde SN 440275
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Bladder
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 75 ft

Pump placement from TOC 64.0 ft

Well Information:

Well ID YGWC-26I
Well diameter 2 in
Well Total Depth 69.95 ft
Screen Length 10 ft
Depth to Water 24.11 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.5247567 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2.76 in
Total Volume Pumped 12.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:48:51	3899.93	21.71	5.85	312.95	6.08	24.34	0.22	60.14
Last 5	12:53:51	4199.97	21.58	5.85	313.35	5.21	24.34	0.21	59.84
Last 5	12:58:51	4499.94	21.71	5.85	311.98	4.88	24.34	0.20	59.38
Last 5	13:03:51	4799.93	21.91	5.85	312.20	4.49	24.34	0.18	59.41
Last 5	13:08:51	5099.92	21.73	5.85	310.87	4.29	24.34	0.18	58.88
Variance 0			0.12	0.00	-1.37			-0.01	-0.46
Variance 1			0.21	-0.00	0.22			-0.02	0.02
Variance 2			-0.18	0.00	-1.34			-0.00	-0.53

Notes

Grab Samples

YGWC-26I
Sample time: 1315

Product Name: Low-Flow System

Date: 2016-06-08 10:11:35

Project Information:

Operator Name Michael Hutchinson
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-26S
Latitude 33° 27' 47.44"
Longitude -84° -53' -52.63"
Sonde SN 440275
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type peristaltic
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 35 ft

Pump placement from TOC 0 ft

Well Information:

Well ID YGWC-26C
Well diameter 2 in
Well Total Depth 40.30 ft
Screen Length 10 ft
Depth to Water 20.60 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.2462198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 19.56 in
Total Volume Pumped 10.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:41:01	2700.01	19.84	5.21	311.76	5.27	22.22	0.54	109.87
Last 5	09:46:01	3000.01	20.04	5.22	312.62	5.87	22.24	0.56	109.09
Last 5	09:51:01	3300.01	20.01	5.21	311.93	4.79	22.23	0.48	108.22
Last 5	09:56:01	3600.01	20.07	5.22	311.10	4.31	22.23	0.57	107.31
Last 5	10:01:01	3900.01	20.12	5.24	312.59	4.18	22.23	0.50	105.13
Variance 0			-0.03	-0.01	-0.69			-0.08	-0.87
Variance 1			0.06	0.01	-0.84			0.09	-0.91
Variance 2			0.06	0.02	1.49			-0.07	-2.18

Notes

Grab Samples

YGWC-26S
Sample time: 1005
DUP-3
N/A

Product Name: Low-Flow System

Date: 2016-06-08 15:16:20

Project Information:

Operator Name Michael Hutchinson
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-271
Latitude 33° 27' 45.16"
Longitude -84° -54' -23.79"
Sonde SN 440275
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Bladder
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 80 ft

Pump placement from TOC 74.5 ft

Well Information:

Well ID YGWC-271
Well diameter 2 in
Well Total Depth 80.20 ft
Screen Length 10 ft
Depth to Water 27.52 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.5470738 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 10.68 in
Total Volume Pumped 8.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:54:29	2100.02	20.78	6.40	351.53	6.29	28.39	0.27	-117.79
Last 5	14:59:29	2400.02	20.80	6.38	346.92	5.61	28.41	0.25	-113.74
Last 5	15:04:29	2700.02	20.87	6.35	342.80	4.88	28.41	0.24	-110.86
Last 5	15:09:29	3000.02	20.81	6.34	339.23	4.46	28.41	0.22	-106.25
Last 5	15:14:29	3299.94	20.93	6.32	336.68	3.87	28.41	0.21	-103.58
Variance 0			0.07	-0.03	-4.12			-0.00	2.88
Variance 1			-0.06	-0.01	-3.57			-0.02	4.61
Variance 2			0.12	-0.01	-2.55			-0.01	2.68

Notes

Grab Samples

YGWC-271
Sample time: 1520

Product Name: Low-Flow System

Date: 2016-06-08 16:01:23

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-27S
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 457516
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type sample pro
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 40 ft

Pump placement from TOC 34.5 ft

Well Information:

Well ID YGWC-27S
Well diameter 2 in
Well Total Depth 39.50 ft
Screen Length 10 ft
Depth to Water 26.85 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.3685369 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 13 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	15:36:15	6308.98	21.46	6.24	434.87	8.52	27.06	0.14	79.97
Last 5	15:41:15	6608.98	21.33	6.24	435.70	6.79	27.06	0.13	79.28
Last 5	15:46:15	6908.98	21.46	6.24	436.03	4.79	27.09	0.12	78.49
Last 5	15:51:15	7208.94	21.62	6.24	436.17	4.10	27.09	0.13	77.99
Last 5	15:56:15	7508.94	21.33	6.24	434.04	--4.00	--27.09	0.11	77.46
Variance 0			0.14	-0.00	0.33			-0.01	-0.78
Variance 1			0.16	0.00	0.14			0.01	-0.51
Variance 2			-0.29	-0.00	-2.14			-0.01	-0.52

Notes

Turbidity took a while to stabilize under 5 NTU. Last reading at 15:56 was at 4.00 NTUs and at 27.09' btoc.

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-09 09:39:18

Project Information:

Operator Name Charles Watson
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-28I
Latitude 33° 27' 43.86"
Longitude -84° -53' -58.78"
Sonde SN 449474
Turbidity Make/Model Lamotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type Poly
Tubing Diameter 0.17 in
Tubing Length 75 ft

Pump placement from TOC 65 ft

Well Information:

Well ID YGWC-28I
Well diameter 2 in
Well Total Depth 70.15 ft
Screen Length 10 ft
Depth to Water 24.66 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.5247567 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8.28 in
Total Volume Pumped 3.58 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	09:11:14	600.03	19.46	6.43	399.83	6.23	25.15	0.85	42.58
Last 5	09:16:14	900.01	19.28	6.42	397.74	5.32	25.30	0.69	22.12
Last 5	09:21:14	1200.00	19.28	6.42	397.68	3.51	25.35	0.60	-14.66
Last 5	09:26:14	1500.01	19.28	6.43	401.37	3.15	25.35	0.51	-26.13
Last 5	09:31:14	1800.01	19.33	6.42	402.04	2.90	25.35	0.45	-32.41
Variance 0			0.00	-0.00	-0.06			-0.09	-36.78
Variance 1			0.00	0.01	3.69			-0.09	-11.47
Variance 2			0.04	-0.00	0.67			-0.06	-6.29

Notes

Sunny 70F. Well site in good condition.
No rate changes. Sampling started at 9:33. Field blank 3 taken at this location.

Grab Samples
SGEC-28I

FB-3
Field blank 3

SGWC-28I



Product Name: Low-Flow System

Date: 2016-06-09 11:35:37

Project Information:

Operator Name Michael Hutchinson
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-28S
Latitude 33° 27' 44.7"
Longitude -84° -53' -57.9"
Sonde SN 440275
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Bladder
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 45 ft

Pump placement from TOC 44.5 ft

Well Information:

Well ID YGWC-28S
Well diameter 2 in
Well Total Depth 44.90 ft
Screen Length 10 ft
Depth to Water 22.35 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.390854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5.52 in
Total Volume Pumped 24.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:13:12	8699.91	20.22	6.39	409.77	5.19	22.81	0.07	-53.93
Last 5	11:18:12	8999.96	20.22	6.40	410.01	5.16	22.81	0.07	-54.18
Last 5	11:23:12	9299.95	20.31	6.39	410.17	4.96	22.81	0.07	-54.18
Last 5	11:28:12	9599.91	20.35	6.39	410.56	4.82	22.81	0.07	-54.28
Last 5	11:33:12	9899.91	20.26	6.39	409.00	--4.75	--22.81	0.07	-54.02
Variance 0			0.09	-0.00	0.16			0.00	0.00
Variance 1			0.05	0.00	0.39			-0.00	-0.10
Variance 2			-0.09	0.00	-1.56			-0.00	0.26

Notes

Grab Samples

YGWC-28I

Sample time: 1135

Product Name: Low-Flow System

Date: 2016-06-09 09:58:47

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-29I
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 457516
Turbidity Make/Model LaMotte 2020 we

Pump Information:

Pump Model/Type sample pro
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 42 ft

Pump placement from TOC 34 ft

Well Information:

Well ID YGWC-29I
Well diameter 2 in
Well Total Depth 39.17 ft
Screen Length 10 ft
Depth to Water 26.38 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.3774638 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 17.28 in
Total Volume Pumped 4.66 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	09:33:01	1200.02	19.53	6.19	259.32	6.85	27.81	0.29	35.16
Last 5	09:38:01	1500.01	19.61	6.19	259.87	5.00	27.81	0.27	27.46
Last 5	09:43:01	1800.01	19.55	6.19	259.72	2.14	27.81	0.25	27.79
Last 5	09:48:01	2100.01	19.70	6.19	260.12	2.16	27.83	0.23	28.21
Last 5	09:53:01	2400.01	19.70	6.19	259.57	1.41	27.82	0.21	28.65
Variance 0			-0.06	0.00	-0.15			-0.02	0.33
Variance 1			0.15	0.00	0.40			-0.02	0.42
Variance 2			0.00	-0.00	-0.55			-0.02	0.43

Notes

At 09:18 reduced pumping rate to 100 mL/min to stabilize drawdown. pH check is ~2.0.

Grab Samples



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZG0693

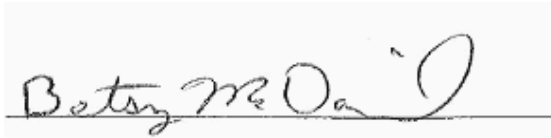
August 02, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-1I	AZG0693-01	Ground Water	07/25/16 12:30	07/26/16 08:35
Dup-2	AZG0693-02	Ground Water	07/25/16 00:00	07/26/16 08:35
YGWA-30I	AZG0693-03	Ground Water	07/25/16 12:42	07/26/16 08:35
YGWA-3I	AZG0693-04	Ground Water	07/25/16 12:57	07/26/16 08:35



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Project: CCR Event

Client ID: YGWA-11

Lab Number ID: AZG0693-01

Date/Time Sampled: 7/25/2016 12:30:00PM

Date/Time Received: 7/26/2016 8:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	48	25	10	mg/L	SM 2540 C		1	07/27/16 10:15	07/27/16 10:15	6070600	JPT
Inorganic Anions											
Chloride	1.4	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 17:32	6070647	RNB
Fluoride	0.06	0.30	0.02	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/28/16 17:32	6070647	RNB
Sulfate	3.7	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 17:32	6070647	RNB
Metals, Total											
Antimony	0.0010	0.0030	0.0002	mg/L	EPA 6020B	B-01, J	1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Barium	0.0091	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Calcium	2.16	0.500	0.0126	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Chromium	0.0007	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Cobalt	0.0008	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Molybdenum	0.0098	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Lithium	0.0020	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:41	6070557	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	07/27/16 13:40	07/28/16 15:47	6070595	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Project: CCR Event

Client ID: Dup-2

Lab Number ID: AZG0693-02

Date/Time Sampled: 7/25/2016 12:00:00AM

Date/Time Received: 7/26/2016 8:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	49	25	10	mg/L	SM 2540 C		1	07/27/16 10:15	07/27/16 10:15	6070600	JPT
Inorganic Anions											
Chloride	1.4	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 17:53	6070647	RNB
Fluoride	0.06	0.30	0.02	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/28/16 17:53	6070647	RNB
Sulfate	3.8	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 17:53	6070647	RNB
Metals, Total											
Antimony	0.0007	0.0030	0.0002	mg/L	EPA 6020B	B-01, J	1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Barium	0.0086	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Calcium	2.06	0.500	0.0126	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Chromium	0.0005	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Cobalt	0.0007	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Molybdenum	0.0092	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Lithium	0.0020	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 16:47	6070557	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	07/27/16 13:40	07/28/16 15:49	6070595	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Project: CCR Event

Client ID: YGWA-30I

Lab Number ID: AZG0693-03

Date/Time Sampled: 7/25/2016 12:42:00PM

Date/Time Received: 7/26/2016 8:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	50	25	10	mg/L	SM 2540 C		1	07/27/16 10:15	07/27/16 10:15	6070600	JPT
Inorganic Anions											
Chloride	1.7	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 18:13	6070647	RNB
Fluoride	0.06	0.30	0.02	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/28/16 18:13	6070647	RNB
Sulfate	1.2	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 18:13	6070647	RNB
Metals, Total											
Antimony	0.0007	0.0030	0.0002	mg/L	EPA 6020B	B-01, J	1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Barium	0.0071	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Calcium	1.17	0.500	0.0126	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Cobalt	0.0312	0.0100	0.0003	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:04	6070557	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	07/27/16 13:40	07/28/16 15:51	6070595	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Project: CCR Event

Client ID: YGWA-3I

Lab Number ID: AZG0693-04

Date/Time Sampled: 7/25/2016 12:57:00PM

Date/Time Received: 7/26/2016 8:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	135	25	10	mg/L	SM 2540 C		1	07/27/16 10:15	07/27/16 10:15	6070600	JPT
Inorganic Anions											
Chloride	1.3	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 18:34	6070647	RNB
Fluoride	0.14	0.30	0.02	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/28/16 18:34	6070647	RNB
Sulfate	8.4	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 18:34	6070647	RNB
Metals, Total											
Antimony	0.0002	0.0030	0.0002	mg/L	EPA 6020B	B-01, J	1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Barium	0.0031	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Calcium	20.3	2.50	0.0628	mg/L	EPA 6020B		5	07/27/16 09:30	07/28/16 12:31	6070557	KLH
Chromium	0.0007	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Molybdenum	0.0037	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Lithium	0.0132	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/27/16 09:30	07/27/16 17:10	6070557	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	07/27/16 13:40	07/28/16 16:00	6070595	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070600 - SM 2540 C											
Blank (6070600-BLK1)						Prepared & Analyzed: 07/27/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6070600-BS1)						Prepared & Analyzed: 07/27/16					
Total Dissolved Solids	400	25	10	mg/L	400.00		100	84-108			
Duplicate (6070600-DUP1)						Prepared & Analyzed: 07/27/16					
Source: AZG0693-03											
Total Dissolved Solids	55	25	10	mg/L		50			10	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070647 - EPA 300.0											
Blank (6070647-BLK1)						Prepared & Analyzed: 07/28/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6070647-BS1)						Prepared & Analyzed: 07/28/16					
Chloride	9.76	0.25	0.01	mg/L	10.010		97	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010		106	90-110			
Sulfate	9.86	1.0	0.05	mg/L	10.010		99	90-110			
Matrix Spike (6070647-MS1)						Source: AZG0694-01 Prepared & Analyzed: 07/28/16					
Chloride	11.6	0.25	0.01	mg/L	10.010	1.25	103	90-110			
Fluoride	10.2	0.30	0.02	mg/L	10.010	0.14	101	90-110			
Sulfate	12.5	1.0	0.05	mg/L	10.010	8.39	41	90-110			QM-05
Matrix Spike (6070647-MS2)						Source: AZG0757-01 Prepared: 07/28/16 Analyzed: 07/29/16					
Chloride	11.5	0.25	0.01	mg/L	10.010	2.36	92	90-110			
Fluoride	10.2	0.30	0.02	mg/L	10.010	ND	102	90-110			
Sulfate	15.5	1.0	0.05	mg/L	10.010	6.61	89	90-110			QM-05
Matrix Spike Dup (6070647-MSD1)						Source: AZG0694-01 Prepared & Analyzed: 07/28/16					
Chloride	11.9	0.25	0.01	mg/L	10.010	1.25	107	90-110	3	15	
Fluoride	11.0	0.30	0.02	mg/L	10.010	0.14	108	90-110	7	15	
Sulfate	12.8	1.0	0.05	mg/L	10.010	8.39	44	90-110	3	15	QM-05



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070557 - EPA 3005A											
Blank (6070557-BLK1)						Prepared & Analyzed: 07/27/16					
Antimony	0.0002	0.0030	0.0002	mg/L							J
Arsenic	ND	0.0050	0.0007	mg/L							
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.100	0.0044	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0126	mg/L							
Chromium	ND	0.0100	0.0004	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0004	mg/L							
Lead	ND	0.0050	0.00008	mg/L							
Molybdenum	ND	0.0100	0.0005	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0009	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00006	mg/L							
Vanadium	ND	0.0100	0.0016	mg/L							
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0012	mg/L							
LCS (6070557-BS1)						Prepared & Analyzed: 07/27/16					
Antimony	0.109	0.0030	0.0002	mg/L	0.10000		109	80-120			
Arsenic	0.102	0.0050	0.0007	mg/L	0.10000		102	80-120			
Barium	0.0993	0.0100	0.0003	mg/L	0.10000		99	80-120			
Beryllium	0.0913	0.0030	0.00009	mg/L	0.10000		91	80-120			
Boron	0.902	0.100	0.0044	mg/L	1.0000		90	80-120			
Cadmium	0.101	0.0010	0.0001	mg/L	0.10000		101	80-120			
Calcium	1.01	0.500	0.0126	mg/L	1.0000		101	80-120			
Chromium	0.105	0.0100	0.0004	mg/L	0.10000		105	80-120			
Cobalt	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Copper	0.0995	0.0250	0.0004	mg/L	0.10000		100	80-120			
Lead	0.104	0.0050	0.00008	mg/L	0.10000		104	80-120			
Molybdenum	0.0986	0.0100	0.0005	mg/L	0.10000		99	80-120			
Nickel	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Selenium	0.102	0.0100	0.0009	mg/L	0.10000		102	80-120			
Silver	0.100	0.0100	0.0002	mg/L	0.10000		100	80-120			
Thallium	0.103	0.0010	0.00006	mg/L	0.10000		103	80-120			
Vanadium	0.103	0.0100	0.0016	mg/L	0.10000		103	80-120			
Zinc	0.108	0.0100	0.0013	mg/L	0.10000		108	80-120			
Lithium	0.100	0.0500	0.0012	mg/L	0.10000		100	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070557 - EPA 3005A											
Matrix Spike (6070557-MS1)			Source: AZG0694-01			Prepared & Analyzed: 07/27/16					
Antimony	0.111	0.0030	0.0002	mg/L	0.10000	0.0004	111	75-125			
Arsenic	0.102	0.0050	0.0007	mg/L	0.10000	ND	102	75-125			
Barium	0.119	0.0100	0.0003	mg/L	0.10000	0.0179	101	75-125			
Beryllium	0.0912	0.0030	0.00009	mg/L	0.10000	ND	91	75-125			
Boron	0.958	0.100	0.0044	mg/L	1.0000	ND	96	75-125			
Cadmium	0.103	0.0010	0.0001	mg/L	0.10000	ND	103	75-125			
Calcium	2.47	0.500	0.0126	mg/L	1.0000	1.41	106	75-125			
Chromium	0.106	0.0100	0.0004	mg/L	0.10000	ND	106	75-125			
Cobalt	0.106	0.0100	0.0003	mg/L	0.10000	0.0015	105	75-125			
Copper	0.104	0.0250	0.0004	mg/L	0.10000	0.0005	103	75-125			
Lead	0.100	0.0050	0.00008	mg/L	0.10000	0.0003	100	75-125			
Molybdenum	0.0992	0.0100	0.0005	mg/L	0.10000	ND	99	75-125			
Nickel	0.104	0.0100	0.0005	mg/L	0.10000	0.0006	103	75-125			
Selenium	0.101	0.0100	0.0009	mg/L	0.10000	ND	101	75-125			
Silver	0.103	0.0100	0.0002	mg/L	0.10000	ND	103	75-125			
Thallium	0.101	0.0010	0.00006	mg/L	0.10000	ND	101	75-125			
Vanadium	0.107	0.0100	0.0016	mg/L	0.10000	ND	107	75-125			
Zinc	0.113	0.0100	0.0013	mg/L	0.10000	0.0028	110	75-125			
Lithium	0.101	0.0500	0.0012	mg/L	0.10000	ND	101	75-125			
Matrix Spike Dup (6070557-MSD1)			Source: AZG0694-01			Prepared & Analyzed: 07/27/16					
Antimony	0.112	0.0030	0.0002	mg/L	0.10000	0.0004	112	75-125	0.9	20	
Arsenic	0.103	0.0050	0.0007	mg/L	0.10000	ND	103	75-125	0.5	20	
Barium	0.123	0.0100	0.0003	mg/L	0.10000	0.0179	105	75-125	3	20	
Beryllium	0.0946	0.0030	0.00009	mg/L	0.10000	ND	95	75-125	4	20	
Boron	0.978	0.100	0.0044	mg/L	1.0000	ND	98	75-125	2	20	
Cadmium	0.103	0.0010	0.0001	mg/L	0.10000	ND	103	75-125	0.3	20	
Calcium	2.48	0.500	0.0126	mg/L	1.0000	1.41	107	75-125	0.6	20	
Chromium	0.106	0.0100	0.0004	mg/L	0.10000	ND	106	75-125	0.6	20	
Cobalt	0.108	0.0100	0.0003	mg/L	0.10000	0.0015	106	75-125	1	20	
Copper	0.103	0.0250	0.0004	mg/L	0.10000	0.0005	102	75-125	0.9	20	
Lead	0.101	0.0050	0.00008	mg/L	0.10000	0.0003	101	75-125	0.6	20	
Molybdenum	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125	2	20	
Nickel	0.111	0.0100	0.0005	mg/L	0.10000	0.0006	111	75-125	7	20	
Selenium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125	0.4	20	
Silver	0.105	0.0100	0.0002	mg/L	0.10000	ND	105	75-125	2	20	
Thallium	0.101	0.0010	0.00006	mg/L	0.10000	ND	101	75-125	0.1	20	
Vanadium	0.109	0.0100	0.0016	mg/L	0.10000	ND	109	75-125	2	20	
Zinc	0.113	0.0100	0.0013	mg/L	0.10000	0.0028	110	75-125	0.3	20	
Lithium	0.103	0.0500	0.0012	mg/L	0.10000	ND	103	75-125	1	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070557 - EPA 3005A											
Post Spike (6070557-PS1)				Source: AZG0694-01			Prepared & Analyzed: 07/27/16				
Antimony	98.3			ug/L	100.00	0.360	98	80-120			
Arsenic	100			ug/L	100.00	0.361	100	80-120			
Barium	119			ug/L	100.00	17.9	102	80-120			
Beryllium	92.6			ug/L	100.00	0.0626	93	80-120			
Boron	923			ug/L	1000.0	4.10	92	80-120			
Cadmium	103			ug/L	100.00	0.0095	103	80-120			
Calcium	2470			ug/L	1000.0	1410	106	80-120			
Chromium	102			ug/L	100.00	0.129	102	80-120			
Cobalt	100			ug/L	100.00	1.46	99	80-120			
Copper	96.0			ug/L	100.00	0.487	96	80-120			
Lead	102			ug/L	100.00	0.285	101	80-120			
Molybdenum	96.5			ug/L	100.00	0.0113	96	80-120			
Nickel	101			ug/L	100.00	0.630	100	80-120			
Selenium	100			ug/L	100.00	0.396	100	80-120			
Silver	99.0			ug/L	100.00	0.0026	99	80-120			
Thallium	101			ug/L	100.00	0.0308	101	80-120			
Vanadium	102			ug/L	100.00	1.51	101	80-120			
Zinc	108			ug/L	100.00	2.82	106	80-120			
Lithium	101			ug/L	100.00	0.649	100	80-120			

Batch 6070595 - EPA 7470A

Blank (6070595-BLK1)				Prepared: 07/27/16 Analyzed: 07/28/16							
Mercury	ND	0.00050	0.00013	mg/L							
LCS (6070595-BS1)				Prepared: 07/27/16 Analyzed: 07/28/16							
Mercury	0.00232	0.00050	0.00013	mg/L	2.5000E-3		93	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Report No.: AZG0693

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070595 - EPA 7470A											
Matrix Spike (6070595-MS1)			Source: AZG0694-03			Prepared: 07/27/16 Analyzed: 07/28/16					
Mercury	0.00245	0.00050	0.00013	mg/L	2.5000E-3	ND	98	75-125			
Matrix Spike Dup (6070595-MSD1)			Source: AZG0694-03			Prepared: 07/27/16 Analyzed: 07/28/16					
Mercury	0.00236	0.00050	0.00013	mg/L	2.5000E-3	ND	94	75-125	4	20	
Post Spike (6070595-PS1)			Source: AZG0694-03			Prepared: 07/27/16 Analyzed: 07/28/16					
Mercury	1.50			ug/L	1.6667	0.0106	89	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 02, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Pace Analytical
 110 Technology Pkwy,
 Peachtree Corners, GA 30092

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Email: JABRAHAM@SOUTHERNCO.COM
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Copy To: MRPADILL@SOUTHERNCO.COM
CHMCCORK@southernco.com

Sample Shipment Date:⁸ 7/26/16

Sample Received Date:⁹ _____

Sampled By:¹⁰ Wisley Bawa

Matrix: GW

Signature: _____

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

17	18	19
Sample Type	Matrix	No. of Containers
<u>GW</u>	<u>GW</u>	<u>3</u>
<u>GW</u>	<u>GW</u>	<u>3</u>

Preservative Key: ²⁴

W-Hydrochloric Acid	H-Nitric Acid
S-Sulfuric Acid	SH-Sodium Hydroxide
SB-Sodium Borate	P-Phosphoric Acid
ST-Sodium Thiosulfate	H-Ox U-Urethane

LAB USE ONLY ¹³ LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶
		Date	Time	
	<u>VGWA-1I</u>	<u>7/25/16</u>	<u>1230</u>	
	<u>DUP-2</u>	<u>7/25/16</u>	<u>-</u>	

HNO3	be	I	N
ANALYSIS REQUESTED ²¹			
PRESERVATIVE ²⁰			
HNO3	be	I	N

Sample Type Key: ²²

G-Grab	O-Other	C-Composite
--------	---------	-------------

Matrix Key: ²³

O-G	S-Sol	SL-Sludge	W-
Mix	SH-Surface Water	GW-	
Ground Water	WV-Vegetable Water	DW-Distilled Water	

Preservative Key: ²⁴

H-Hydrochloric Acid	H-Nitric Acid
S-Sulfuric Acid	SH-Sodium Hydroxide
SB-Sodium Borate	P-Phosphoric Acid
ST-Sodium Thiosulfate	H-Ox U-Urethane

LAB USE ONLY²⁵

Comments

1

2

LAB USE ONLY: Sample Receipt Information ²⁵

Relinquished by: ²⁶	Date/Time <u>7/26/16 0858</u>	<p><u>Madalman, 07/26/16, 0858, 1ce, 1c</u></p> <p><u>intact, yep, courier.</u></p>
Received by: ²⁷	Date/Time <u>7/26/16 0938</u>	
Relinquished by:	Date/Time <u>7/26/16 0938</u>	
Received by:	Date/Time	

FACE Analytical
 110 Technology Pkwy,
 Peachtree Corners, GA 30092

LAB
 USE
 ONLY

Work Order No. 471000
 Reviewed By: _____

Page 1 of 1

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Email: JABRAHAM@SOUTHERNCO.COM
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Copy To: MRPADJILL@SOUTHERNCO.COM
CHMCCORK@southernco.com

Sample Shipment Date:⁸ 7/26/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ Charles Watson
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

X

Standard Turnaround Time

Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 PO Number:⁶ LLMILLET@southernco.com
 Special Instructions:⁷ Yates AP CCR GW

Signature

AUTHORIZATION TO SUBTRACT ANALYSIS AND/OR ASSURANCE ACCEPTABLE BY CUSTOMER UNLESS NOTED OTHERWISE.

LAB USE ONLY ¹² LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			Sample Type Key: ²² 0-One 0-Other 0-Composite Metric Key: ²³ S-Soil S-Sludge W-Water SW-Surface Water WU-Under Water DIS-Distilled Water
		HNO3 N	Ice I					HNO3 N			
	YGWA-30I	7/25/16	1242	Metals app. III & IV EPA 6020 & EPA 7470 Cl, F, SO4 EPA 300 TDS SM2540C SW 846 9315 & 9320	GW	3		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0-02 W-04 S-01 WU-01 DIS-01

LAB USE ONLY: Sample Receipt Information ²⁸

Relinquished by: ²⁶ <u>Charles Watson</u>	Date/Time <u>7/26/16 0658</u>
Received by: ²⁷ <u>Joju Abraham</u>	Date/Time <u>7/26/16 0658</u>
Relinquished by: <u>Charles Watson</u>	Date/Time <u>7/26/16 0828</u>
Received by:	Date/Time

*Mr. Adams, 07/26/16, 08:35, 10:10
 Intact. 1 sp. Container.*

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
 Work Order No. AF10693
 Reviewed By: _____

Page 1 of 1

¹² Standard Turnaround Time
 # of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Fast Analytical
110 Technology Pkwy,
Peachtree Corners, GA 30092
 Company¹ Southern Company Services
 Report To Joju Abraham
 Email: JABRAHAM@SOUTHERNCO.COM
 Address:² 241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308
 Phone/Fax³ 404-506-7239
 Copy To: MRPADILL@SOUTHERNCO.COM
CHIMCORK@southernco.com
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 PO Number:⁶ 11MILLET@southernco.com
 Special Yates AP CCR GW
 Instructions:⁷

Sample Shipment Date:⁸ 7/26/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ John Corbin


 Signature
Authorization to subcontract analyses will be assumed acceptable by customer unless stated otherwise.

LAB USE ONLY ¹³ LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type	Matrix	No. of Containers	ANALYSIS REQUESTED ²¹				PRESERVATIVE ²⁰	Sample Type Key: ²² S-one C-Other C-Compsite Matrix Key: ²³ S-Solid S-Liquid W WPE SW/Surface Water GW Ground Water W/Wastes Water DWC/Drain Water Preservative Key: ²⁴ H-Hydrochloric Acid W-Weak Acid S-Sulfuric Acid B-B Sodium Hydroxide SS-Sodium Sulfate P-Phosphoric Acid BT-Sodium Borate I-Iso U-Unpreserved	LAB USE ONLY ²⁵ Comments	
		Date	Time					HNO3	Ice	HNO3	N				
	Yates-3I	7/25/16	1257	Metals app. III & IV EPA 6020 & EPA 7470 CL F, SO4 EPA 300 TDS SM2540C SW-846 9315 & 9320	Gr	GW	3	1	1	1				4	

Relinquished by:²⁶  Date/Time 7/26/16 0658
 Received by:²⁷  Date/Time 7/26/16 0658
 Relinquished by:²⁸  Date/Time 7/26/16 0658
 Received by:²⁹  Date/Time _____

LAB USE ONLY: Sample Receipt Information²⁴
Abraham, 07/26/16, 0835, ICE, 1C
Intact, L.P. Corbin.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 8/2/2016 4:40:48PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 07/26/16 08:35

Work Order: AZG0693

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 4

#Containers: 12

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 24, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30191177

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on July 27, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191177

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191177

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191177001	YGWA-1I	Water	07/25/16 12:30	07/27/16 10:00
30191177002	DUP-2	Water	07/25/16 00:01	07/27/16 10:00

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30191177

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191177001	YGWA-1I	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191177002	DUP-2	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191177

Sample: YGWA-1I		Lab ID: 30191177001	Collected: 07/25/16 12:30	Received: 07/27/16 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0311 ± 0.103 (0.252)		pCi/L	08/18/16 10:36	13982-63-3	
		C:93% T:NA					
Radium-228	EPA 9320	1.80 ± 0.517 (0.590)		pCi/L	08/19/16 01:18	15262-20-1	
		C:77% T:76%					
Total Radium	Total Radium Calculation	1.83 ± 0.620 (0.842)		pCi/L	08/23/16 15:19	7440-14-4	

Sample: DUP-2		Lab ID: 30191177002	Collected: 07/25/16 00:01	Received: 07/27/16 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.114 ± 0.114 (0.214)		pCi/L	08/18/16 10:36	13982-63-3	
		C:98% T:NA					
Radium-228	EPA 9320	1.39 ± 0.440 (0.533)		pCi/L	08/19/16 01:18	15262-20-1	
		C:74% T:78%					
Total Radium	Total Radium Calculation	1.50 ± 0.554 (0.747)		pCi/L	08/23/16 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191177

QC Batch: 229519 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30191177001, 30191177002

METHOD BLANK: 1124725 Matrix: Water
 Associated Lab Samples: 30191177001, 30191177002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	1.03 ± 0.388 (0.599) C:87% T:83%	pCi/L	08/19/16 01:16	1c

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191177

QC Batch:	229660	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30191177001, 30191177002		

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

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



QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191177

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Act - Activity
Unc - Uncertainty: 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.

ANALYTE QUALIFIERS

1c Ra-228 detected in the MB above the associated MDC but below the RL of 3.0 pCi/L. Results are reportable without further qualification if the sample activity is below the RL of 3.0 pCi/L.

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical
 110 Technology Pkwy,
 Peachtree Corners, GA 30092

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Email: JABRAHAM@SOUTHERNCO.COM
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Copy To: MRPADILL@SOUTHERNCO.COM
 CHIMCORK@southernco.com
 Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 PO Number:⁶ LLMILLET@southernco.com
 Special Instructions:⁷ Yates AP CCR GW

**ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD**

LAB USE ONLY
 Work Order No. _____
 Reviewed By: _____

¹¹ Page 1 of 1
 ¹² Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

Sample Shipment Date:⁸ 7/26/16
 Sample Received Date:⁹ _____
 Sampled By:¹⁰ Wesley Brown

(Signature)
 Signature
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type	Matrix	No. of Containers	ANALYSIS REQUESTED ²¹				PRESERVATIVE ²⁰			Sample Type Key: ²² G-Gab C-Other C-Composite	
		Date	Time					HNO3	Ice	HNO3	N	N	Matrix Key: ²³ C-Cr S-Solid SW-Surface Water W-Water Ground Water WW-Waste Water DMS-Dioxin Water	H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SB-Sodium Bisulfite P-Phosphoric Acid ST-Sodium Thiosulfate U-Ultrapresve		Preservative Key: ²⁴ H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SB-Sodium Bisulfite P-Phosphoric Acid ST-Sodium Thiosulfate U-Ultrapresve
	YG-WA-11	7/25/16	1230		G	GW	3	Metals app. III & IV EPA 6020 & EPA 7470								001
	DUP-2	7/25/16	-		G	GW	3	Cl, F, SO4 EPA 300 TDS SM2540C SW-846 9315 & 9320								002

WO#: 30191177
 30191177

LAB USE ONLY: Sample Receipt Information ²⁸

Relinquished by: ²⁶ <i>(Signature)</i>	Date/Time: 7/26/16 0158
Received by: ²⁷ <i>(Signature)</i>	Date/Time: 7/26/16 0630
Relinquished by: ²⁶ <i>(Signature)</i>	Date/Time: 7/27/16 0828
Received by: ²⁷ <i>(Signature)</i>	Date/Time: 7-27-16 1000

Sample Condition Upon Receipt Pittsburgh



Client Name: GA Power Project # 30191177

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250979627

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

Thermometer Used NIA Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: NJV
7-27-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PH-2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>NJV</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>NJV</u> Date: <u>7-27-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226
Analyst: WRR
Date: 8/15/2016
Worklist: 30875
Matrix: DW

Method Blank Assessment

MB Sample ID: 1125793
MB Concentration: -0.001
MB Counting Uncertainty: 0.106
MB MDC: 0.279
MB Numerical Performance Indicator: -0.01
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Pass

Laboratory Control Sample Assessment

LCS (Y or N) or N: N
LCS: 30875
LCS: 30875

Count Date: 8/18/2016
Spike I.D.: 16-026
Spike Concentration (pCi/mL): 44.679
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.497
Target Conc. (pCi/L, g, F): 8.997
Uncertainty (Calculated): 0.423
Result (pCi/L, g, F): 7.793
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.677
Numerical Performance Indicator: 86.62%
Percent Recovery: -2.96
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Sample Matrix Spike Control Assessment

Sample Collection Date:
Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:

MS/MSD Decay Corrected Spike Concentration (pCi/mL):
Spike I.D.:
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):
Spike uncertainty (calculated):

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

Duplicate Sample Assessment

Sample I.D.: 30191359001
Duplicate Sample I.D.: 30191359001 dup
Sample Result (pCi/L, g, F): 0.164
Sample Result Counting Uncertainty (pCi/L, g, F): 0.153
Sample Duplicate Result (pCi/L, g, F): 0.148
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.165
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: 0.134
Duplicate RPD: 9.84%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30191359001
30191359001dup

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:

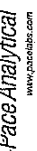
Sample Matrix Spike Result:
Sample Matrix Spike Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result:
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

28/24/16

Quality Control Sample Performance Assessment



Analyst: Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 8/16/2016
Worklist: 30870
Matrix: DW

Method Blank Assessment

MB Sample ID: 1124725
MB concentration: 1.032
MB Counting Uncertainty: 0.342
MB MDC: 0.599
MB Numerical Performance Indicator: 5.92
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Fail

Laboratory Control Sample Assessment

LCS#	Y or N?	N
LCS30870		LCS030870
Count Date:	8/19/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.900	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.800	
Target Conc. (pCi/L, g, F):	6.475	
Uncertainty (Calculated):	0.466	
Result (pCi/L, g, F):	8.589	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.714	
Numerical Performance Indicator:	4.88	
Percent Recovery:	132.81%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment

Sample I.D.: 30191359001
Duplicate Sample I.D.: 30191359001DUP
Sample Result (pCi/L, g, F): 0.483
Sample Result Counting Uncertainty (pCi/L, g, F): 0.330
Sample Duplicate Result (pCi/L, g, F): 0.948
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.369
Are sample and/or duplicate results below MDC? See Below #
Duplicate Numerical Performance Indicator: -1.840
Duplicate RPD: 65.00%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail

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):
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:
Sample Matrix Spike Duplicate 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:

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:
Sample Matrix Spike Duplicate 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:

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30191359001
30191359001DUP

*** Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.
Comments: *Numerical Indicator is acceptable.
** If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.
*** Batch must be re-prepped due to unacceptable precision.

8/24/16
*My report results with client approval.



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 24, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30191178

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on July 27, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191178

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191178

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191178001	YGWA-30I	Water	07/25/16 12:42	07/27/16 10:00

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30191178

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191178001	YGWA-30I	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191178

Sample: **YGWA-30I** Lab ID: **30191178001** Collected: 07/25/16 12:42 Received: 07/27/16 10:00 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0322 ± 0.110 (0.269) C:98% T:NA	pCi/L	08/18/16 10:36	13982-63-3	
Radium-228	EPA 9320	2.98 ± 0.726 (0.634) C:73% T:80%	pCi/L	08/19/16 01:18	15262-20-1	
Total Radium	Total Radium Calculation	3.01 ± 0.836 (0.903)	pCi/L	08/23/16 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191178

QC Batch: 229519 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30191178001

METHOD BLANK: 1124725 Matrix: Water
 Associated Lab Samples: 30191178001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	1.03 ± 0.388 (0.599) C:87% T:83%	pCi/L	08/19/16 01:16	1c

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191178

QC Batch:	229660	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30191178001		

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

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



QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191178

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Act - Activity
Unc - Uncertainty: 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.

ANALYTE QUALIFIERS

1c Ra-228 detected in the MB above the associated MDC but below the RL of 3.0 pCi/L. Results are reportable without further qualification if the sample activity is below the RL of 3.0 pCi/L.

REPORT OF LABORATORY ANALYSIS

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

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. _____
 Reviewed By: _____
 Page 1 of 1

Pace Analytical
 110 Technology Pkwy,
 Peachtree Corners, GA 30092

Company: Southern Company Services
 Report To: Joju Abraham
 Email: JABRAHAM@SOUTHERNCO.COM
 Address: 241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308
 Phone/Fax: 404-506-7239
 Copy To: MRPADILL@SOUTHERNCO.COM
CHIMCORK@southernco.com

Contact: Joju Abraham
 Project Location: Plant Yates
 PO Number: LLMILLETT@southernco.com
 Special: _____
 Instructions: Yates AP CCR GW

Sample Shipment Date: 7/26/16
 Sample Received Date: _____
 Sampled By: Charles Watson
 # of Business Days (Rush) (Must be cleared through Env. Lab. Prior to shipment): _____

Standard Turnaround Time

LAB USE ONLY	LABID	Sample Number ¹⁴	Collection ¹⁵	Sample Description ¹⁶	Sample Type	No. of Containers	Matrix	ANALYSIS REQUESTED ²¹	PRESERVATIVE ²⁰	Sample Type Key : 22
		<u>YGWA-30I</u>	<u>7/25/16 12:42</u>		<u>GW</u>	<u>3</u>		<u>Metals app. III & IV EPA 6020 & EPA 7470 Cl, F, SO4 EPA 300 TDS SM2540C SW-846 9315 & 9320</u>	<u>N</u>	<u>Composite</u>
								<u>Ice</u>	<u>N</u>	<u>Other</u>
								<u>HNO3</u>	<u>N</u>	<u>Matrix Key: 23</u>
								<u>N</u>	<u>N</u>	<u>S-Salt</u>
										<u>S/S-Sludge</u>
										<u>SV-Surface Water</u>
										<u>Ground Water</u>
										<u>WW/Waste Water</u>
										<u>DAL/Drinking Water</u>
										<u>Preservative Key: 24</u>
										<u>H-Hydrochloric Acid</u>
										<u>N-Nitric Acid</u>
										<u>S-Sulfuric Acid</u>
										<u>SH-Sodium Hydroxide</u>
										<u>SS-Sodium Sulfate</u>
										<u>P-Phosphoric Acid</u>
										<u>ST-Sodium Thiosulfate</u>
										<u>L-Ice</u>
										<u>U-Unpreserved</u>

Signature: _____
 Authorization to subcontract analysis will be assumed acceptable by customer, unless stated otherwise.

WO#: 30191178



30101178

LAB USE ONLY: Sample Receipt Information ²⁸	
Relinquished by: <u>Chm Cork</u>	Date/Time: <u>6/26/16 0658</u>
Received by: <u>[Signature]</u>	Date/Time: <u>7/26/16 0658</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>7/26/16 0823</u>
Received by: <u>[Signature]</u>	Date/Time: <u>7-27-16 1000</u>

Sample Condition Upon Receipt Pittsburgh



Client Name: GA Power Project # 30191178

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250979627

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

Thermometer Used NIA Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and initials of person examining contents: NJV
7-27-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>pH=2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>NJV</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>NJV</u> Date: <u>7-27-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: WRR
Date: 8/15/2016
Worklist: 30875
Matrix: DW

Method Blank Assessment

MB Sample ID: 1125793
MB concentration: -0.001
M/B Counting Uncertainty: 0.106
MB MDC: 0.279
MB Numerical Performance Indicator: -0.01
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Pass

Laboratory Control Sample Assessment

LCSD (Y or N)?	N
LCS30875	LCS0875
Count Date:	8/15/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.679
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	8.997
Target Conc. (pCi/L, g, F):	0.423
Uncertainty (Calculated):	7.793
Result (pCi/L, g, F):	0.577
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	-2.96
Numerical Performance Indicator:	86.62%
Percent Recovery:	N/A
Status vs Numerical Indicator:	Pass

Duplicate Sample Assessment

Sample I.D.: 30191359001
Duplicate Sample I.D.: 30191359001dup
Duplicate Result (pCi/L, g, F): 0.164
Sample Result Counting Uncertainty (pCi/L, g, F): 0.153
Sample Duplicate Result (pCi/L, g, F): 0.148
Sample Duplicate Counting Uncertainty (pCi/L, g, F): 0.165
Are sample and/or duplicate results below MDC? See Below #
Duplicate Numerical Performance Indicator: 0.134
Duplicate RPD: 9.84%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

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

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:
Sample Matrix Spike Duplicate Result:
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

28/24/16

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 8/16/2016
Worklist: 30870
Matrix: DW

Method Blank Assessment

MB Sample ID: 1124725
MB Concentration: 1.032
MB Counting Uncertainty: 0.342
MB MDC: 0.999
MB Numerical Performance Indicator: 5.92
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Fail

Laboratory Control Sample Assessment

LCSID (Y or N): N
LCSID: LCS030870

Count Date: 8/19/2016
Spike I.D.: 18-025
Spike Concentration (pCi/mL): 25.900
Volume Used (mL): 0.20
Aliquot Volume (L, g, F): 0.800
Target Conc. (pCi/L, g, F): 6.475
Uncertainty (Calculated): 0.466
Result (pCi/L, g, F): 8.599
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.714
Numerical Performance Indicator: 4.88
Percent Recovery: 132.81%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30191359001
Duplicate Sample I.D.: 30191359001DUP
Sample Result (pCi/L, g, F): 0.483
Sample Duplicate Result (pCi/L, g, F): 0.330
Sample Result Counting Uncertainty (pCi/L, g, F): 0.948
Sample Duplicate Counting Uncertainty (pCi/L, g, F): 0.369
Are sample and/or duplicate results below MDC? See Below #
Duplicate Numerical Performance Indicator: -1.840
Duplicate RPD: 85.00%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail

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):
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:

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:

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30191359001
30191359001DUP

*** Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.
* Numerical Indicator is acceptable; otherwise this batch must be re-prepped.
** Batch must be re-prepped due to unacceptable precision.

Comments:
* If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.
*** Batch must be re-prepped due to unacceptable precision.

8/24/16
Mary report results with client approval.



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 24, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30191179

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on July 27, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191179

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191179

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191179001	YGWA-3I	Water	07/25/16 12:57	07/27/16 10:00

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30191179

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191179001	YGWA-3I	EPA 9315	JAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191179

Sample: YGWA-3I Lab ID: 30191179001 Collected: 07/25/16 12:57 Received: 07/27/16 10:00 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.437 ± 0.249 (0.404) C:98% T:NA	pCi/L	08/15/16 08:07	13982-63-3	
Radium-228	EPA 9320	1.84 ± 0.560 (0.716) C:72% T:77%	pCi/L	08/19/16 01:18	15262-20-1	
Total Radium	Total Radium Calculation	2.28 ± 0.809 (1.12)	pCi/L	08/23/16 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191179

QC Batch: 229519 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30191179001

METHOD BLANK: 1124725 Matrix: Water
 Associated Lab Samples: 30191179001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	1.03 ± 0.388 (0.599) C:87% T:83%	pCi/L	08/19/16 01:16	1c

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191179

QC Batch: 229356 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30191179001

METHOD BLANK: 1123845 Matrix: Water
Associated Lab Samples: 30191179001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0258 ± 0.144 (0.395) C:97% T:NA	pCi/L	08/15/16 08:05	

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

REPORT OF LABORATORY ANALYSIS

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



QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191179

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Act - Activity
Unc - Uncertainty: 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.

ANALYTE QUALIFIERS

1c Ra-228 detected in the MB above the associated MDC but below the RL of 3.0 pCi/L. Results are reportable without further qualification if the sample activity is below the RL of 3.0 pCi/L.

REPORT OF LABORATORY ANALYSIS

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

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Pace Analytical
 110 Technology Pkwy,
 Peachtree Corners, GA 30092

Company:¹ Southern Company Services
 Report To: Joju Abraham
 Email: JABRAHAM@SOUTHERNCO.COM
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Copy To: MRPADILL@SOUTHERNCO.COM
CHMCCORK@southernco.com

Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 PO Number:⁶ LLMILLET@southernco.com
 Special Instructions:⁷ Yates AP CCR GW

Sample Shipment Date:⁸ 7/26/16
 Sample Received Date:⁹
 Sampled By:¹⁰ *Joju Abraham*
 # of Business Days (Rush):
 (Must be cleared through Env. Lab. Prior to shipment)


¹² Standard Turnaround Time

LAB USE ONLY

Work Order No. _____
 Reviewed By: _____
 11 Page 1 of 1

LAB USE ONLY LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type ¹⁷	Matrix ¹⁸	No. of Containers ¹⁹	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰			Sample Type Key: ²²
		Date	Time					HNO3	Ice	HNO3	N	N	C-Grab	
	YOWA-3I	7/25/16	1257		G	GW	3	Metals app. III & IV EPA 6020 & EPA 7470 Cl, F, SO4 EPA 300 TDS SM2540C SW-846 9315 & 9320						Ground Water S-Solid S-Sludge W- W-Waste Water C-Composite C-Other C-Composite
														Preservative Key: ²⁴ H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide SB-Sodium Bisulfate P-Phosphoric Acid ST-Sodium Thiosulfate H-Hex U-Urethane
LAB USE ONLY - COMMENTS														

WO#: 30191179



30191179

LAB USE ONLY - Sample Receipt Information ²⁸	
Relinquished by: ²⁸ <i>Joju Abraham</i>	Date/Time: 6/23/16 0658
Received by: ²⁷ <i>Joju Abraham</i>	Date/Time: 7/26/16 0658
Relinquished by: <i>Joju Abraham</i>	Date/Time: 7/26/16 0658
Received by: <i>Joju Abraham</i>	Date/Time: 7-27-16 0000

Sample Condition Upon Receipt Pittsburgh



Client Name: GA Power Project # 30191179

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250979627

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

Thermometer Used NIA Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: NJV
7-27-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>pH=2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed <u>NJV</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>NJV</u> Date: <u>7-27-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



www.face-labs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JAL
Date: 8/12/2016
Worklist: 30831
Matrix: DW

Method Blank Assessment

MB Sample ID: 1123845
MB Concentration: -0.026
M/B Counting Uncertainty: 0.144
MB MDC: 0.395
MB Numerical Performance Indicator: -0.35
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: **Pass**

Laboratory Control Sample Assessment

LCSID (Y or N)? N
LCS30831
LCS30831

Count Date: 8/15/2016
Spike I.D.: 16-026
Spike Concentration (pCi/mL): 44.679
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.517
Target Conc. (pCi/L, g, F): 8.647
Result (pCi/L, g, F): 0.407
Uncertainty (Calculated): 8.364
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.813
Numerical Performance Indicator: -0.61
Percent Recovery: 96.73%
Status vs Numerical Indicator: N/A
Status vs Recovery: **Pass**

Duplicate Sample Assessment

Sample I.D.: 30190190001
Duplicate Sample I.D.: 30190190001DUP
Sample Result (pCi/L, g, F): 0.080
Sample Result Counting Uncertainty (pCi/L, g, F): 0.139
Sample Duplicate Result (pCi/L, g, F): 0.067
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.126
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: 0.138
Duplicate RPD: 17.95%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: **Pass**

Enter Duplicate sample IDs if other than LCS/LCSD in the space below:
30190190001
30190190001DUP

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):
IMS Aliquot (L, g, F):
MS Target Conc. (pCi/L, g, F):
MSD Aliquot (L, g, F):
MSD Target Conc. (pCi/L, g, F):
Spike uncertainty (calculated):
Sample Result:
Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
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:

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:
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

8/24/16

Quality Control Sample Performance Assessment



Test: Ra-228
Analyst: JLW
Date: 8/16/2016
Worklist: 30870
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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):
Spike uncertainty (calculated):

Sample Result:
Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:
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:
MS Status vs Recovery:
MSD Status vs Recovery:

Method Blank Assessment

MB Sample ID: 1124725
MB concentration: 1.032
M/B Counting Uncertainty: 0.342
MB MDC: 0.599
MB Numerical Performance Indicator: 5.92
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Fail

Laboratory Control Sample Assessment

LCS#30870 N
LCS#30870

Count Date: 8/19/2016
Spike I.D.: 16-025
Spike Concentration (pCi/ml): 25-900
Volume Used (mL): 0.20
Aliquot Volume (L, g, F): 0.800
Target Conc. (pCi/L, g, F): 6.475
Uncertainty (Calculated): 0.466
Result (pCi/L, g, F): 8.599
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.714
Numerical Performance Indicator: 4.88
Percent Recovery: 132.81%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

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:

Duplicate Sample Assessment

Sample I.D.: 30191359001
Duplicate Sample I.D.: 30191359001DUP
Duplicate Result (pCi/L, g, F): 0.483
Sample Result Counting Uncertainty (pCi/L, g, F): 0.330
Sample Duplicate Result (pCi/L, g, F): 0.948
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.369
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -1.840
Duplicate RPD: 65.00%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30191359001
30191359001DUP

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.
*Numerical Indicator is acceptable.
*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.
***Batch must be re-prepped due to unacceptable precision.

Comments:
***May report results with approval.

JLW



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 01, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Yates AP CCR GW
Pace Project No.: 30192096

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on August 04, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Yates AP CCR GW
Pace Project No.: 30192096

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Yates AP CCR GW
Pace Project No.: 30192096

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30192096001	YGWC-28S	Water	08/02/16 09:22	08/04/16 09:40
30192096002	YGWC-29I	Water	08/02/16 13:50	08/04/16 09:40
30192096003	DUP-5	Water	08/02/16 00:01	08/04/16 09:40
30192096004	FB-5	Water	08/02/16 09:50	08/04/16 09:40

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Yates AP CCR GW
 Pace Project No.: 30192096

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30192096001	YGWC-28S	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30192096002	YGWC-29I	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30192096003	DUP-5	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30192096004	FB-5	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30192096

Sample: YGWC-28S		Lab ID: 30192096001	Collected: 08/02/16 09:22	Received: 08/04/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.135 ± 0.123	(0.221)	pCi/L	08/22/16 09:29	13982-63-3	
		C:90% T:NA					
Radium-228	EPA 9320	0.391 ± 0.403	(0.836)	pCi/L	08/25/16 12:21	15262-20-1	
		C:70% T:83%					
Total Radium	Total Radium Calculation	0.526 ± 0.526	(1.06)	pCi/L	08/31/16 14:19	7440-14-4	

Sample: YGWC-29I		Lab ID: 30192096002	Collected: 08/02/16 13:50	Received: 08/04/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.417 ± 0.208	(0.269)	pCi/L	08/22/16 09:29	13982-63-3	
		C:82% T:NA					
Radium-228	EPA 9320	0.837 ± 0.444	(0.794)	pCi/L	08/25/16 12:21	15262-20-1	
		C:75% T:81%					
Total Radium	Total Radium Calculation	1.25 ± 0.652	(1.06)	pCi/L	08/31/16 14:19	7440-14-4	

Sample: DUP-5		Lab ID: 30192096003	Collected: 08/02/16 00:01	Received: 08/04/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0910 ± 0.115	(0.234)	pCi/L	08/22/16 09:29	13982-63-3	
		C:88% T:NA					
Radium-228	EPA 9320	0.603 ± 0.426	(0.830)	pCi/L	08/25/16 12:21	15262-20-1	
		C:80% T:77%					
Total Radium	Total Radium Calculation	0.694 ± 0.541	(1.06)	pCi/L	08/31/16 14:19	7440-14-4	

Sample: FB-5		Lab ID: 30192096004	Collected: 08/02/16 09:50	Received: 08/04/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.54 ± 0.408	(0.256)	pCi/L	08/22/16 09:29	13982-63-3	
		C:82% T:NA					
Radium-228	EPA 9320	0.380 ± 0.396	(0.824)	pCi/L	08/25/16 12:21	15262-20-1	
		C:76% T:82%					
Total Radium	Total Radium Calculation	1.92 ± 0.804	(1.08)	pCi/L	08/31/16 14:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30192096

QC Batch: 229718 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30192096001, 30192096002, 30192096003, 30192096004

METHOD BLANK: 1125956 Matrix: Water
Associated Lab Samples: 30192096001, 30192096002, 30192096003, 30192096004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.926 ± 0.490 (0.878) C:75% T:74%	pCi/L	08/25/16 12:20	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30192096

QC Batch: 229663 Analysis Method: EPA 9315
 QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
 Associated Lab Samples: 30192096001, 30192096002, 30192096003, 30192096004

METHOD BLANK: 1125796 Matrix: Water
 Associated Lab Samples: 30192096001, 30192096002, 30192096003, 30192096004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0883 ± 0.117 (0.375) C:79% T:NA	pCi/L	08/22/16 08:02	

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

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



QUALIFIERS

Project: Yates AP CCR GW
Pace Project No.: 30192096

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

3418

WO#: 30192096



Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CO
(770) 734-4200 : FAX (770) 734-4201

CHAIN OF CUSTODY RECORD



30192096

CLIENT NAME: Southern Company Services
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE B10185 Atlanta, GA 30308
 REPORT TO: Jojo Abraham
 REQUESTED COMPLETION DATE: Standard
 PROJECT NAME/STATE: Yates APCCR GW

CONTAINER TYPE: P 3 PRESERVATION: 3 7 3
 # of CONTAINERS: 3

ANALYSIS REQUESTED: EPA 6020 & EPA 7170 METALS spp III & IV
 CI, F, SO₄, EPA 300
 TDS SM2540C
 RAD: um 226 + 228 SW-846 9315 + 9320

CONTAINER TYPE: P - PLASTIC A - AMBER GLASS B - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER
 PRESERVATION: 1 - HCl, 56°C 2 - H₂SO₄, 56°C 3 - HNO₃ 4 - NaOH, 56°C 5 - NaOH/ZnAc, 56°C 6 - Na₂S₂O₃, 56°C 7 - 56°C not frozen

MATRIX CODES:
 DW - DRINKING WATER S - SOIL
 MW - WASTEWATER SL - SLUDGE
 GW - GROUNDWATER SD - SOLID
 SW - SURFACE WATER A - AIR
 ST - STORM WATER L - LIQUID
 W - WATER P - PRODUCT

REMARKS/ADDITIONAL INFORMATION:
 001
 002
 003
 004
 8/16/16

Collection DATE	Collection TIME	MATRIX CODE*	C O M P	SAMPLE IDENTIFICATION
8/2/16	0922	GW	X	YGWC-28S
8/2/16	1350	GW	X	YGWC-29I
8/2/16	-	GW	X	DUP-5
8/2/16	0950	W	X	FB-5

RELINQUISHED BY: DATE/TIME: 8/3/16 0753
 RELINQUISHED BY: DATE/TIME:

SAMPLE SHIPPED VIA: UPS, FED-EX, USPS, COURIER, CLIENT, OTHER FS
 Custody Seal: Intact, Broken, Not Present
 # of Coolers: 0

RECEIVED BY AND TITLE: Wesley Brown
 DATE/TIME: 8/2/16 1546
 RECEIVED BY: DATE/TIME: 8/2/16

RECEIVED BY LAB: Allen Ross
 pH checked: Yes, No, NA, Ice: Yes, No, NA, Temperature: Min., Max.

FOR LAB USE ONLY: LAB #, Entered into LIMS, Tracking #

Wesley Brown Pace 8/4/16 0940

Sample Condition Upon Receipt Pittsburgh

30192096



Client Name: Pace GA Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5098 1432

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: RTB 8/4/16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PH<2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>8/4/16 RTB</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>RTB</u> Date: <u>8/4/16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Test: Ra-228
Analyst: JLW
Date: 8/18/2016
Worklist: 30905
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1125956
MB concentration:	0.926
M/B Counting Uncertainty:	0.461
MB MDC:	0.878
MB Numerical Performance Indicator:	3.94
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment		Y
Count Date:	LCS30905	8/25/2016
Spike I.D.:	LCS30905	16-025
Spike Concentration (pCi/mL):	25.845	25.845
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.803	0.811
Target Conc. (pCi/L, g, F):	6.441	6.375
Result (pCi/L, g, F):	0.464	0.459
Uncertainty (Calculated):	8.504	7.676
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.778	0.762
Numerical Performance Indicator:	4.47	2.87
Percent Recovery:	132.03%	120.42%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

Duplicate Sample Assessment		Y
Sample I.D.:	LCS30905	
Duplicate Sample I.D.:	LCS30905	
Sample Result (pCi/L, g, F):	8.504	
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.778	
Sample Duplicate Result (pCi/L, g, F):	7.676	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.762	
Are sample and/or duplicate results below MDC?	NO	
Duplicate Numerical Performance Indicator:	1.490	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	9.20%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result	
Sample Duplicate 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:	

James Walker

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.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: WRR
Date: 8/19/2016
Worklist: 30878
Matrix: DW

Method Blank Assessment

MB Sample ID: 1125796
MB concentration: -0.088
MB Counting Uncertainty: 0.116
MB MDC: 0.375
MB Numerical Performance Indicator: -1.49
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Pass

Laboratory Control Sample Assessment

LCS# 30878 LCS# 30878 N
LCS# 30878 LCS# 30878

Count Date: 8/22/2016

Spike I.D.: 16-026

Spike Concentration (pCi/mL): 44.679

Volume Used (mL): 0.10

Aliquot Volume (L, g, F): 0.500

Target Conc. (pCi/L, g, F): 8.944

Uncertainty (Calculated): 0.421

Result (pCi/L, g, F): 7.927

LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.747

Numerical Performance Indicator: -2.32

Percent Recovery: 88.63%

Status vs Numerical Indicator: N/A

Status vs Recovery: Pass

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 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):
MSD Target Conc. (calculated):
Spike uncertainty (calculated):
Sample Result:
Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:
Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
MS Numerical Performance Indicator:
MS 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:

Duplicate Sample Assessment

Sample I.D.: 30192096002

Duplicate Sample I.D.: 30192096002DUP

Sample Result (pCi/L, g, F): 0.417

Sample Result Counting Uncertainty (pCi/L, g, F): 0.199

Sample Duplicate Result (pCi/L, g, F): 0.352

Sample Duplicate Counting Uncertainty (pCi/L, g, F): 0.177

Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): See Below ##

Are sample and/or duplicate results below MDC? 0.476

Duplicate Numerical Performance Indicator: 16.84%

Duplicate RPD: N/A

Duplicate Status vs Numerical Indicator: Pass

Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30192096002
30192096002DUP

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 01, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Yates AP CCR GW
Pace Project No.: 30192097

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on August 04, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Yates AP CCR GW
Pace Project No.: 30192097

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Yates AP CCR GW
Pace Project No.: 30192097

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30192097001	YGWC-28I	Water	08/02/16 09:27	08/04/16 09:40

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Yates AP CCR GW
Pace Project No.: 30192097

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30192097001	YGWC-28I	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30192097

Sample: **YGWC-28I** Lab ID: **30192097001** Collected: 08/02/16 09:27 Received: 08/04/16 09:40 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0830 ± 0.138 (0.310) C:91% T:NA	pCi/L	08/22/16 09:29	13982-63-3	
Radium-228	EPA 9320	0.248 ± 0.329 (0.701) C:76% T:92%	pCi/L	08/25/16 12:21	15262-20-1	
Total Radium	Total Radium Calculation	0.331 ± 0.467 (1.01)	pCi/L	08/31/16 14:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30192097

QC Batch: 229718 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30192097001

METHOD BLANK: 1125956 Matrix: Water
 Associated Lab Samples: 30192097001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.926 ± 0.490 (0.878) C:75% T:74%	pCi/L	08/25/16 12:20	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30192097

QC Batch: 229663 Analysis Method: EPA 9315
 QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
 Associated Lab Samples: 30192097001

METHOD BLANK: 1125796 Matrix: Water
 Associated Lab Samples: 30192097001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0883 ± 0.117 (0.375) C:79% T:NA	pCi/L	08/22/16 08:02	

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

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



QUALIFIERS

Project: Yates AP CCR GW
Pace Project No.: 30192097

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30192097

3409



30192097

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS,
(770) 734-4200 : FAX (770) 734-4201



CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services		ANALYSIS REQUESTED									
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308		<table border="1"> <tr> <th>CONTAINER TYPE</th> <th>P</th> <th>P</th> <th>P</th> </tr> <tr> <td># of</td> <td>3</td> <td>7</td> <td>3</td> </tr> </table>		CONTAINER TYPE	P	P	P	# of	3	7	3
CONTAINER TYPE	P	P	P								
# of	3	7	3								
REPORT TO: Jcju Abraham	CC: MIRPADI@southern.com	<p>Metals spp III + IV EPA 6020 + EPA 7470 GI, F, SO₄, EPA 300 TDS, SM, 0540C ROD: cm 226 + 228 SW-846 4315 + 9320</p>									
REQUESTED COMPLETION DATE: Standard	PO #: LLMILLET@Southern.com										
PROJECT NAME/STATE: Yates AP CCR GW	CONTAINER TYPE: C										
PROJECT #:	PRESERVATION:										
Collection DATE	Collection TIME	MATRIX CODE*	COMB	SAMPLE IDENTIFICATION							
8/2/16	927	GW	X	YG-WC-28I							
SAMPLED BY AND TITLE: CHARLES WATSON		DATE/TIME:	RELINQUISHED BY: <i>[Signature]</i>								
RECEIVED BY: Walter Bowen		DATE/TIME:	DATE/TIME: 8/2/16 1546								
RECEIVED BY LAB: [Signature]		DATE/TIME:	DATE/TIME: 8/2/16 1546								
Checked: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ice: Yes <input type="checkbox"/> No <input type="checkbox"/>	Temperature: Min. N/A Max. N/A	UPS: <input checked="" type="checkbox"/> FED-EX <input type="checkbox"/>	USPS <input type="checkbox"/>	COURIER <input type="checkbox"/>						
Custody Seal: Intact <input checked="" type="checkbox"/> Broken <input type="checkbox"/> Not Present <input type="checkbox"/>		Client ID: 0783	Other FS: FS	Tracking #: 0783							

COC Revised 2016-05-17.xlsx

Sample Condition Upon Receipt Pittsburgh

30192097



Client Name: Pace GA Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #., 6812 5098 1432

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: RTB 8/4/16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PH<2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed <u>8/4/16</u> <u>RTB</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>RTB</u> Date: <u>8/4/16</u>

Client Notification/ Resolution:
Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Test: Ra-228
 Analyst: JLW
 Date: 8/18/2016
 Worklist: 30905
 Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1125956
MB Concentration:	0.926
M/B Counting Uncertainty:	0.461
MB MDC:	0.878
MB Numerical Performance Indicator:	3.94
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment		Y
Count Date:	LCS30905	
Spike I.D.:	8/25/2016	
Spike Concentration (pCi/mL):	16-025	
Volume Used (mL):	25.845	
Aliquot Volume (L, g, F):	0.20	
Target Conc. (pCi/L, g, F):	0.811	
Uncertainty (Calculated):	6.375	
Result (pCi/L, g, F):	0.464	
Numerical Performance Indicator:	8.504	
Percent Recovery:	0.778	
Status vs Numerical Indicator:	132.03%	
Status vs Recovery:	N/A	
	Pass	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	LCS30905	
Duplicate Sample I.D.:	LCS30905	
Sample Result Counting Uncertainty (pCi/L, g, F):	8.504	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.778	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	7.676	
Are sample and/or duplicate results below MDC?	0.762	
Duplicate Numerical Performance Indicator:	NO	
Duplicate Percent Recoveries): Duplicate RPD:	1.490	
Duplicate Status vs Numerical Indicator:	9.20%	
Duplicate Status vs RPD:	N/A	
	Pass	

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

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:
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:

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.

James Allen

Quality Control Sample Performance Assessment



Test: Ra-226
 Analyst: WRR
 Date: 8/19/2016
 Worklist: 30878
 Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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):
 MS Aliquot (L, g, F):
 MS Target Conc.(pCi/L, g, F):
 MSD Aliquot (L, g, F):
 MSD Target Conc. (pCi/L, g, F):
 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:

Method Blank Assessment

MB Sample ID: 1125796
 MB concentration: -0.088
 MB Counting Uncertainty: 0.116
 MB MDC: 0.375
 MB Numerical Performance Indicator: -1.49
 MB Status vs Numerical Indicator: N/A
 MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCS ID: N
 LCS#0878
 Count Date: 8/22/2016
 Spike I.D.: 16-026
 Spike Concentration (pCi/mL): 44.679
 Volume Used (mL): 0.10
 Aliquot Volume (L, g, F): 0.500
 Target Conc. (pCi/L, g, F): 8.944
 Uncertainty (Calculated): 0.421
 Result (pCi/L, g, F): 7.927
 LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.747
 Numerical Performance Indicator: -2.32
 Percent Recovery: 88.63%
 Status vs Numerical Indicator: N/A
 Status vs Recovery: Pass

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:
 MS/MSD Duplicate RPD:
 MS/MSD Duplicate Status vs Numerical Indicator:
 MS/MSD Duplicate Status vs RPD:

Duplicate Sample Assessment

Sample I.D.: 30192096002
 Duplicate Sample I.D.: 30192096002DUP
 Sample Result (pCi/L, g, F): 0.417
 Sample Result Counting Uncertainty (pCi/L, g, F): 0.199
 Sample Duplicate Result (pCi/L, g, F): 0.352
 Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.177
 Are sample and/or duplicate results below MDC? See Below ##
 Duplicate Numerical Performance Indicator: 0.476
 Duplicate RPD: 16.84%
 Duplicate Status vs Numerical Indicator: N/A
 Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
 30192096002
 30192096002DUP

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

Comments:



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZH0073

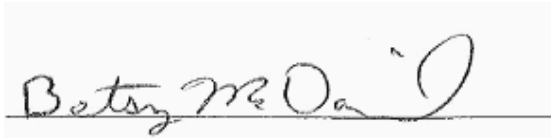
August 10, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-28S	AZH0073-01	Ground Water	08/02/16 09:22	08/03/16 07:55
YGWC-29I	AZH0073-02	Ground Water	08/02/16 13:50	08/03/16 07:55
Dup-5	AZH0073-03	Ground Water	08/02/16 00:00	08/03/16 07:55
FB-5	AZH0073-04	DI Water	08/02/16 09:50	08/03/16 07:55
YGWC-28I	AZH0073-05	Ground Water	08/02/16 09:27	08/03/16 07:55



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Project: CCR Event

Client ID: YGWC-28S

Lab Number ID: AZH0073-01

Date/Time Sampled: 8/2/2016 9:22:00AM

Date/Time Received: 8/3/2016 7:55:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	202	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 19:18	6080082	RLC
Fluoride	0.50	0.30	0.02	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 19:18	6080082	RLC
Sulfate	4.5	1.0	0.05	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 19:18	6080082	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Barium	0.212	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Boron	2.21	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Calcium	25.8	2.50	0.0628	mg/L	EPA 6020B	B-01	5	08/04/16 09:05	08/08/16 13:20	6080104	KLH
Chromium	0.0005	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Cobalt	0.0008	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Molybdenum	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:54	6080104	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 13:20	08/09/16 15:01	6080181	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Project: CCR Event

Client ID: YGWC-29I

Lab Number ID: AZH0073-02

Date/Time Sampled: 8/2/2016 1:50:00PM

Date/Time Received: 8/3/2016 7:55:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	155	25	10	mg/L	SM 2540 C		1	08/05/16 13:35	08/05/16 13:35	6080162	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 19:38	6080082	RLC
Fluoride	0.09	0.30	0.02	mg/L	EPA 300.0	J	1	08/03/16 10:26	08/04/16 19:38	6080082	RLC
Sulfate	32	1.0	0.05	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 19:38	6080082	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Barium	0.0781	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Boron	0.872	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Cadmium	0.0001	0.0010	0.0001	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Calcium	11.7	2.50	0.0628	mg/L	EPA 6020B	B-01	5	08/04/16 09:05	08/08/16 13:26	6080104	KLH
Chromium	0.0005	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Cobalt	0.0006	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Lithium	0.0078	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:59	6080104	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 13:20	08/09/16 15:04	6080181	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Project: CCR Event

Client ID: Dup-5

Lab Number ID: AZH0073-03

Date/Time Sampled: 8/2/2016 12:00:00AM

Date/Time Received: 8/3/2016 7:55:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	129	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 21:22	6080082	RLC
Fluoride	0.31	0.30	0.02	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 21:22	6080082	RLC
Sulfate	32	1.0	0.05	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 21:22	6080082	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Barium	0.0740	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Boron	0.859	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Cadmium	0.0001	0.0010	0.0001	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Calcium	11.6	2.50	0.0628	mg/L	EPA 6020B	B-01	5	08/04/16 09:05	08/08/16 13:31	6080104	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Cobalt	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Lithium	0.0074	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 16:05	6080104	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 13:20	08/09/16 15:06	6080181	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Project: CCR Event

Client ID: FB-5

Lab Number ID: AZH0073-04

Date/Time Sampled: 8/2/2016 9:50:00AM

Date/Time Received: 8/3/2016 7:55:00AM

Matrix: DI Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	08/05/16 13:35	08/05/16 13:35	6080162	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 21:42	6080082	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 21:42	6080082	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 21:42	6080082	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Boron	0.0067	0.100	0.0044	mg/L	EPA 6020B	B-01, J	1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Calcium	ND	0.500	0.0126	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:11	6080104	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 13:20	08/09/16 15:08	6080181	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Project: CCR Event

Client ID: YGWC-28I

Lab Number ID: AZH0073-05

Date/Time Sampled: 8/2/2016 9:27:00AM

Date/Time Received: 8/3/2016 7:55:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	226	25	10	mg/L	SM 2540 C		1	08/05/16 13:35	08/05/16 13:35	6080162	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 22:03	6080082	RLC
Fluoride	0.38	0.30	0.02	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 22:03	6080082	RLC
Sulfate	7.5	1.0	0.05	mg/L	EPA 300.0		1	08/03/16 10:26	08/04/16 22:03	6080082	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Barium	0.0836	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Boron	2.22	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Cadmium	0.0001	0.0010	0.0001	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Calcium	35.5	2.50	0.0628	mg/L	EPA 6020B	B-01	5	08/04/16 09:05	08/08/16 13:36	6080104	KLH
Chromium	0.0005	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Molybdenum	0.0014	0.0100	0.0005	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Lithium	0.0073	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 16:17	6080104	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 13:20	08/09/16 15:11	6080181	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080125 - SM 2540 C											
Blank (6080125-BLK1)						Prepared & Analyzed: 08/04/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6080125-BS1)						Prepared & Analyzed: 08/04/16					
Total Dissolved Solids	385	25	10	mg/L	400.00		96	84-108			
Duplicate (6080125-DUP1)						Source: AZH0030-04 Prepared & Analyzed: 08/04/16					
Total Dissolved Solids	33	25	10	mg/L		54			48	10	QR-03
Duplicate (6080125-DUP2)						Source: AZH0073-01 Prepared & Analyzed: 08/04/16					
Total Dissolved Solids	197	25	10	mg/L		202			3	10	
Batch 6080162 - SM 2540 C											
Blank (6080162-BLK1)						Prepared & Analyzed: 08/05/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6080162-BS1)						Prepared & Analyzed: 08/05/16					
Total Dissolved Solids	393	25	10	mg/L	400.00		98	84-108			
Duplicate (6080162-DUP1)						Source: AZH0077-05 Prepared & Analyzed: 08/05/16					
Total Dissolved Solids	102	25	10	mg/L		100			2	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080082 - EPA 300.0											
Blank (6080082-BLK1)						Prepared: 08/03/16 Analyzed: 08/04/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6080082-BS1)						Prepared: 08/03/16 Analyzed: 08/04/16					
Chloride	10.0	0.25	0.01	mg/L	10.010		100	90-110			
Fluoride	10.7	0.30	0.02	mg/L	10.010		107	90-110			
Sulfate	10.0	1.0	0.05	mg/L	10.010		100	90-110			
Matrix Spike (6080082-MS1)						Source: AZH0030-02 Prepared: 08/03/16 Analyzed: 08/04/16					
Chloride	9.98	0.25	0.01	mg/L	10.010	1.16	88	90-110			QM-05
Fluoride	9.64	0.30	0.02	mg/L	10.010	ND	96	90-110			
Sulfate	9.91	1.0	0.05	mg/L	10.010	0.78	91	90-110			
Matrix Spike (6080082-MS2)						Source: AZH0073-05 Prepared: 08/03/16 Analyzed: 08/04/16					
Chloride	26.5	0.25	0.01	mg/L	10.010	17.5	89	90-110			QM-05
Fluoride	10.9	0.30	0.02	mg/L	10.010	0.38	105	90-110			
Sulfate	17.5	1.0	0.05	mg/L	10.010	7.53	99	90-110			
Matrix Spike Dup (6080082-MSD1)						Source: AZH0030-02 Prepared: 08/03/16 Analyzed: 08/04/16					
Chloride	10.7	0.25	0.01	mg/L	10.010	1.16	95	90-110	7	15	
Fluoride	10.3	0.30	0.02	mg/L	10.010	ND	103	90-110	6	15	
Sulfate	10.7	1.0	0.05	mg/L	10.010	0.78	99	90-110	8	15	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080104 - EPA 3005A											
Blank (6080104-BLK1)						Prepared & Analyzed: 08/04/16					
Antimony	0.0003	0.0030	0.0002	mg/L							J
Arsenic	ND	0.0050	0.0007	mg/L							
Barium	ND	0.0050	0.0003	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	0.0064	0.100	0.0044	mg/L							J
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	0.0721	0.500	0.0126	mg/L							J
Chromium	ND	0.0100	0.0004	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0004	mg/L							
Lead	ND	0.0050	0.00008	mg/L							
Molybdenum	ND	0.0100	0.0005	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0009	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00006	mg/L							
Vanadium	ND	0.0100	0.0016	mg/L							
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0012	mg/L							
LCS (6080104-BS1)						Prepared & Analyzed: 08/04/16					
Antimony	0.107	0.0050	0.0008	mg/L	0.10000		107	80-120			
Arsenic	0.104	0.0050	0.0016	mg/L	0.10000		104	80-120			
Barium	0.100	0.0050	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.107	0.0030	0.00008	mg/L	0.10000		107	80-120			
Boron	1.09	0.100	0.0064	mg/L	1.0000		109	80-120			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000		101	80-120			
Calcium	1.12	0.500	0.0311	mg/L	1.0000		112	80-120			
Chromium	0.103	0.0100	0.0009	mg/L	0.10000		103	80-120			
Cobalt	0.0992	0.0100	0.0005	mg/L	0.10000		99	80-120			
Copper	0.0997	0.0250	0.0005	mg/L	0.10000		100	80-120			
Lead	0.101	0.0050	0.0001	mg/L	0.10000		101	80-120			
Molybdenum	0.107	0.0100	0.0017	mg/L	0.10000		107	80-120			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000		101	80-120			
Selenium	0.106	0.0100	0.0010	mg/L	0.10000		106	80-120			
Silver	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.107	0.0100	0.0071	mg/L	0.10000		107	80-120			
Zinc	0.108	0.0100	0.0021	mg/L	0.10000		108	80-120			
Lithium	0.110	0.0500	0.0012	mg/L	0.10000		110	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080104 - EPA 3005A											
Matrix Spike (6080104-MS1)			Source: AZH0029-01			Prepared & Analyzed: 08/04/16					
Antimony	0.111	0.0050	0.0008	mg/L	0.10000	0.0004	111	75-125			
Arsenic	0.109	0.0050	0.0016	mg/L	0.10000	0.0070	102	75-125			
Barium	0.121	0.0050	0.0004	mg/L	0.10000	0.0200	101	75-125			
Beryllium	0.0958	0.0030	0.00008	mg/L	0.10000	0.0146	81	75-125			
Boron	15.6	2.00	0.128	mg/L	1.0000	9.89	567	75-125			QM-02
Cadmium	0.105	0.0010	0.00007	mg/L	0.10000	0.0014	103	75-125			
Calcium	139	10.0	0.621	mg/L	1.0000	136	296	75-125			QM-02
Chromium	0.101	0.0100	0.0009	mg/L	0.10000	0.0021	99	75-125			
Cobalt	0.126	0.0100	0.0005	mg/L	0.10000	0.0297	96	75-125			
Copper	0.0922	0.0250	0.0005	mg/L	0.10000	0.0007	91	75-125			
Lead	0.0890	0.0050	0.0001	mg/L	0.10000	0.0005	89	75-125			
Molybdenum	0.113	0.0100	0.0017	mg/L	0.10000	0.0005	112	75-125			
Nickel	0.138	0.0100	0.0006	mg/L	0.10000	0.0397	98	75-125			
Selenium	0.118	0.0100	0.0010	mg/L	0.10000	0.0192	98	75-125			
Silver	0.0984	0.0100	0.0005	mg/L	0.10000	ND	98	75-125			
Thallium	0.0910	0.0010	0.0002	mg/L	0.10000	0.00006	91	75-125			
Vanadium	0.105	0.0100	0.0071	mg/L	0.10000	ND	105	75-125			
Zinc	0.232	0.0100	0.0021	mg/L	0.10000	0.130	103	75-125			
Lithium	0.102	0.0500	0.0012	mg/L	0.10000	0.0142	88	75-125			
Matrix Spike Dup (6080104-MSD1)			Source: AZH0029-01			Prepared & Analyzed: 08/04/16					
Antimony	0.107	0.0050	0.0008	mg/L	0.10000	0.0004	106	75-125	4	20	
Arsenic	0.109	0.0050	0.0016	mg/L	0.10000	0.0070	102	75-125	0.8	20	
Barium	0.115	0.0050	0.0004	mg/L	0.10000	0.0200	95	75-125	5	20	
Beryllium	0.0918	0.0030	0.00008	mg/L	0.10000	0.0146	77	75-125	4	20	
Boron	15.7	2.00	0.128	mg/L	1.0000	9.89	581	75-125	0.9	20	QM-02
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000	0.0014	101	75-125	2	20	
Calcium	136	10.0	0.621	mg/L	1.0000	136	NR	75-125	2	20	QM-02
Chromium	0.101	0.0100	0.0009	mg/L	0.10000	0.0021	99	75-125	0.2	20	
Cobalt	0.130	0.0100	0.0005	mg/L	0.10000	0.0297	100	75-125	3	20	
Copper	0.0921	0.0250	0.0005	mg/L	0.10000	0.0007	91	75-125	0.1	20	
Lead	0.0858	0.0050	0.0001	mg/L	0.10000	0.0005	85	75-125	4	20	
Molybdenum	0.112	0.0100	0.0017	mg/L	0.10000	0.0005	111	75-125	0.7	20	
Nickel	0.135	0.0100	0.0006	mg/L	0.10000	0.0397	95	75-125	2	20	
Selenium	0.113	0.0100	0.0010	mg/L	0.10000	0.0192	94	75-125	4	20	
Silver	0.0980	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	0.4	20	
Thallium	0.0865	0.0010	0.0002	mg/L	0.10000	0.00006	86	75-125	5	20	
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000	ND	106	75-125	1	20	
Zinc	0.225	0.0100	0.0021	mg/L	0.10000	0.130	96	75-125	3	20	
Lithium	0.0952	0.0500	0.0012	mg/L	0.10000	0.0142	81	75-125	7	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080104 - EPA 3005A											
Post Spike (6080104-PS1)				Source: AZH0029-01			Prepared & Analyzed: 08/04/16				
Antimony	99.6			ug/L	100.00	0.447	99	80-120			
Arsenic	110			ug/L	100.00	6.96	103	80-120			
Barium	119			ug/L	100.00	20.0	99	80-120			
Beryllium	95.1			ug/L	100.00	14.6	81	80-120			
Boron	15900			ug/L	1000.0	9890	605	80-120			QM-02
Cadmium	103			ug/L	100.00	1.42	101	80-120			
Calcium	137000			ug/L	1000.0	136000	51	80-120			QM-02
Chromium	96.8			ug/L	100.00	2.08	95	80-120			
Cobalt	124			ug/L	100.00	29.7	94	80-120			
Copper	90.4			ug/L	100.00	0.733	90	80-120			
Lead	86.7			ug/L	100.00	0.479	86	80-120			
Molybdenum	110			ug/L	100.00	0.519	109	80-120			
Nickel	133			ug/L	100.00	39.7	93	80-120			
Selenium	121			ug/L	100.00	19.2	102	80-120			
Silver	96.6			ug/L	100.00	0.0128	97	80-120			
Thallium	88.8			ug/L	100.00	0.0583	89	80-120			
Vanadium	106			ug/L	100.00	-0.203	106	80-120			
Zinc	226			ug/L	100.00	130	97	80-120			
Lithium	104			ug/L	100.00	14.2	89	80-120			

Batch 6080181 - EPA 7470A

Blank (6080181-BLK1)				Prepared: 08/08/16 Analyzed: 08/09/16							
Mercury	ND	0.00050	0.00013	mg/L							
LCS (6080181-BS1)				Prepared: 08/08/16 Analyzed: 08/09/16							
Mercury	0.00240	0.00050	0.00013	mg/L	2.5000E-3		96	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Report No.: AZH0073

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080181 - EPA 7470A											
Matrix Spike (6080181-MS1)		Source: AZH0073-01				Prepared: 08/08/16 Analyzed: 08/09/16					
Mercury	0.00202	0.00050	0.00013	mg/L	2.5000E-3	ND	81	75-125			
Matrix Spike Dup (6080181-MSD1)		Source: AZH0073-01				Prepared: 08/08/16 Analyzed: 08/09/16					
Mercury	0.00213	0.00050	0.00013	mg/L	2.5000E-3	ND	85	75-125	5	20	
Post Spike (6080181-PS1)		Source: AZH0073-01				Prepared: 08/08/16 Analyzed: 08/09/16					
Mercury	1.38			ug/L	1.6667	0.00286	83	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 10, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1



CLIENT NAME: Southern Company Services
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd. SE B10185
Atlanta, GA 30308
 REPORT TO: Jojo Abraham
Standord
 REQUESTED COMPLETION DATE:
Yates APCCR GW
 PROJECT NAME/STATE:
 PROJECT #:

CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESERVATION	L	A	B	I	D	N	U	M	B	E	R	CONTAINER TYPE	PRESERVATION	REMARKS/ADDITIONAL INFORMATION
# of	3	3	7	3													
C	Metals spp III + IV EPA 6020 + EPA 7170 CI, F, SC4, EPA 300 TDS SM 2540 C Radium 226 + 228 SW-846 9315 + 9320																
3	1	1	1	1													
4	2																
3	1	1	1	1													
3	1	1	1	1													

CONTAINER TYPE	PRESERVATION	LAB #	DATE/TIME	RELINQUISHED BY	DATE/TIME	CLIENT	COURIER	OTHER	FS
P - PLASTIC	1 - HCl, ≤6°C	AZ140073	8/16 0753						
A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C								
G - CLEAR GLASS	3 - HNO ₃								
V - VOA VIAL	4 - NaOH, ≤6°C								
S - STERILE	5 - NaOH/ZnAc, ≤6°C								
O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C								
	7 - ≤6°C not frozen								
	*MATRIX CODES:								
DW - DRINKING WATER	S - SOIL								
WW - WASTEWATER	SL - SLUDGE								
GW - GROUNDWATER	SD - SOLID								
SW - SURFACE WATER	A - AIR								
ST - STORM WATER	L - LIQUID								
W - WATER	P - PRODUCT								

SAMPLED BY AND TITLE:
Misty Bowen
 RECEIVED BY:
 DATE/TIME: 8/12/16 1546
 DATE/TIME:
 RELINQUISHED BY:
 DATE/TIME:
 RELINQUISHED BY:
 SAMPLE SHIPPED VIA:
 UPS # 9316 0755
 FED-EX #
 USPS #
 Temperature: 16 Min. 16 Max.
 Broken Not Present
 Custody Seal: 16
 Broken Not Present
 CLIENT: CL
 Courier ID:
 COC Revised 2016-05-17.xlsx



Pace Analytical
www.pacelabs.com

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

3409

PAGE: 1 OF 1

CLIENT NAME: Southern Company Services CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 211 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 REPORT TO: Jojo Abraham REQUESTED COMPLETION DATE: Standard PROJECT NAME/STATE: Yates AP CCR GW PROJECT #:		CONTAINER TYPE: P PRESERVATION: 3 # of		ANALYSIS REQUESTED Metals spp III + IV EPA 6020 4 EPA 7470 CE, F, SO ₄ , EPA 300 TDS, SM 0540C Rod: cm 226+228 SW-846 9315 + 9320		CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION: 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
CC: MR.PATRIEL@southern.com PO #: CHMCEP&LS@southern.com LLMILLET@southern.com		CONTAINER TYPE: DW - DRINKING WATER WW - WASTEWATER GW - GROUNDWATER SW - SURFACE WATER ST - STORM WATER W - WATER S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT		*MATRIX CODES: REMARKS/ADDITIONAL INFORMATION		LAB #: A240073 Entered into LIMS: (date) Tracking #:	
COLLECTION INFORMATION Collection DATE: 8/2/16 9:27 MATRIX CODE*: GW SAMPLE IDENTIFICATION: X YG-WC-281		RELINQUISHED BY: Cam DATE/TIME: 8/2/16 15:46		RELINQUISHED BY: DATE/TIME: 8/13/16 07:53		CLIENT: OTHER FS COURIER: # of Coolers	
SAMPLED BY AND TITLE: CHARLES WATSON		DATE/TIME: 8/2/16 15:46		DATE/TIME: 8/13/16 07:53		UPS: Broken Not Present FED-EX: Broken Not Present USPS: Broken Not Present	
RECEIVED BY: Charles Brown		DATE/TIME: 8/2/16 15:46		DATE/TIME: 8/13/16 07:53		CLIENT ID:	
RECEIVED BY LAB: Jojo Abraham		DATE/TIME: 08/03/16 07:55		DATE/TIME: 8/13/16 07:53		CLIENT ID:	
pH requested:		Temperature:		Temperature:		CLIENT ID:	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 8/10/2016 2:52:51PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 08/03/16 07:55

Work Order: AZH0073

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 5

#Containers: 17

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZG0756

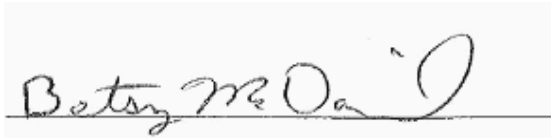
August 04, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-3D	AZG0756-01	Ground Water	07/26/16 09:31	07/27/16 08:50
YGWA-14S	AZG0756-02	Ground Water	07/26/16 11:48	07/27/16 08:50
YGWA-4I	AZG0756-03	Ground Water	07/26/16 14:37	07/27/16 08:50
YGWA-1D	AZG0756-04	Ground Water	07/26/16 11:20	07/27/16 08:50
FB-2	AZG0756-05	DI Water	07/26/16 12:00	07/27/16 08:50
YGWA-5I	AZG0756-06	Ground Water	07/26/16 14:05	07/27/16 08:50
EQB-2	AZG0756-07	DI Water	07/26/16 14:36	07/27/16 08:50
YGWA-5D	AZG0756-08	Ground Water	07/26/16 15:29	07/27/16 08:50



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Project: CCR Event

Client ID: YGWA-3D

Lab Number ID: AZG0756-01

Date/Time Sampled: 7/26/2016 9:31:00AM

Date/Time Received: 7/27/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	141	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	1.6	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 20:38	6070647	RNB
Fluoride	0.49	0.30	0.02	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 20:38	6070647	RNB
Sulfate	6.7	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 20:38	6070647	RNB
Metals, Total											
Antimony	0.0020	0.0030	0.0002	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Barium	0.0088	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Boron	0.0097	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Calcium	24.5	2.50	0.0628	mg/L	EPA 6020B		5	07/29/16 08:40	08/01/16 14:12	6070653	KLH
Chromium	0.0006	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Lead	0.0001	0.0050	0.00008	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Molybdenum	0.0113	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Thallium	0.0001	0.0010	0.00006	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Lithium	0.0221	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:11	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:14	6070699	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Project: CCR Event

Client ID: YGWA-14S

Lab Number ID: AZG0756-02

Date/Time Sampled: 7/26/2016 11:48:00AM

Date/Time Received: 7/27/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	54	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	4.0	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 22:21	6070647	RNB
Fluoride	0.02	0.30	0.02	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/28/16 22:21	6070647	RNB
Sulfate	6.1	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 22:21	6070647	RNB
Metals, Total											
Antimony	0.0005	0.0030	0.0002	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Barium	0.0082	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Beryllium	0.0002	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Boron	0.0177	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Calcium	1.24	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Selenium	0.0016	0.0100	0.0009	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:17	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:16	6070699	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Project: CCR Event

Client ID: YGWA-4I

Lab Number ID: AZG0756-03

Date/Time Sampled: 7/26/2016 2:37:00PM

Date/Time Received: 7/27/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	92	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	3.6	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 22:42	6070647	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 22:42	6070647	RNB
Sulfate	7.7	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 22:42	6070647	RNB
Metals, Total											
Antimony	0.0003	0.0030	0.0002	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Barium	0.0158	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Boron	0.0047	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Calcium	7.69	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Cobalt	0.0012	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Selenium	0.0009	0.0100	0.0009	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Lithium	0.0123	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:23	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:19	6070699	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Project: CCR Event

Client ID: YGWA-1D

Lab Number ID: AZG0756-04

Date/Time Sampled: 7/26/2016 11:20:00AM

Date/Time Received: 7/27/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	94	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 23:03	6070647	RNB
Fluoride	0.08	0.30	0.02	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/28/16 23:03	6070647	RNB
Sulfate	5.4	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 23:03	6070647	RNB
Metals, Total											
Antimony	0.0010	0.0030	0.0002	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Arsenic	0.0016	0.0050	0.0007	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Barium	0.0060	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Boron	0.0055	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Calcium	11.0	2.50	0.0628	mg/L	EPA 6020B		5	07/29/16 08:40	08/01/16 14:17	6070653	KLH
Chromium	0.0009	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Molybdenum	0.0132	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Lithium	0.0135	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:29	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:21	6070699	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Project: CCR Event

Client ID: FB-2

Lab Number ID: AZG0756-05

Date/Time Sampled: 7/26/2016 12:00:00PM

Date/Time Received: 7/27/2016 8:50:00AM

Matrix: DI Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	0.02	0.25	0.01	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/28/16 23:23	6070647	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 23:23	6070647	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 23:23	6070647	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Calcium	0.0238	0.500	0.0126	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Chromium	0.0006	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:34	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:23	6070699	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Project: CCR Event

Client ID: YGWA-5I

Lab Number ID: AZG0756-06

Date/Time Sampled: 7/26/2016 2:05:00PM

Date/Time Received: 7/27/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	78	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	4.4	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 23:44	6070647	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 23:44	6070647	RNB
Sulfate	1.8	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/28/16 23:44	6070647	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Barium	0.0179	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Calcium	2.12	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Chromium	0.0006	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Selenium	0.0009	0.0100	0.0009	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Lithium	0.0027	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 14:58	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:33	6070699	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Project: CCR Event

Client ID: EQB-2

Lab Number ID: AZG0756-07

Date/Time Sampled: 7/26/2016 2:36:00PM

Date/Time Received: 7/27/2016 8:50:00AM

Matrix: DI Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	0.05	0.25	0.01	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/29/16 00:05	6070647	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/28/16 13:44	07/29/16 00:05	6070647	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/29/16 00:05	6070647	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Calcium	ND	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:04	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:35	6070699	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Project: CCR Event

Client ID: YGWA-5D

Lab Number ID: AZG0756-08

Date/Time Sampled: 7/26/2016 3:29:00PM

Date/Time Received: 7/27/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	177	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	6.6	0.25	0.01	mg/L	EPA 300.0		1	07/28/16 13:44	07/29/16 00:25	6070647	RNB
Fluoride	0.05	0.30	0.02	mg/L	EPA 300.0	J	1	07/28/16 13:44	07/29/16 00:25	6070647	RNB
Sulfate	20	1.0	0.05	mg/L	EPA 300.0		1	07/28/16 13:44	07/29/16 00:25	6070647	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Arsenic	0.0010	0.0050	0.0007	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Barium	0.0100	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Boron	0.0052	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Calcium	32.3	2.50	0.0628	mg/L	EPA 6020B		5	07/29/16 08:40	08/01/16 15:08	6070653	KLH
Chromium	0.0006	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Molybdenum	0.0042	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Lithium	0.0063	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:10	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:37	6070699	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070639 - SM 2540 C											
Blank (6070639-BLK1)						Prepared & Analyzed: 07/28/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6070639-BS1)						Prepared & Analyzed: 07/28/16					
Total Dissolved Solids	419	25	10	mg/L	400.00		105	84-108			
Duplicate (6070639-DUP1)						Source: AZG0756-03 Prepared & Analyzed: 07/28/16					
Total Dissolved Solids	79	25	10	mg/L		92			15	10	QR-03
Duplicate (6070639-DUP2)						Source: AZG0756-08 Prepared & Analyzed: 07/28/16					
Total Dissolved Solids	182	25	10	mg/L		177			3	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070647 - EPA 300.0											
Blank (6070647-BLK1)						Prepared & Analyzed: 07/28/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6070647-BS1)						Prepared & Analyzed: 07/28/16					
Chloride	9.76	0.25	0.01	mg/L	10.010		97	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010		106	90-110			
Sulfate	9.86	1.0	0.05	mg/L	10.010		99	90-110			
Matrix Spike (6070647-MS1)						Source: AZG0694-01 Prepared & Analyzed: 07/28/16					
Chloride	11.6	0.25	0.01	mg/L	10.010	1.25	103	90-110			
Fluoride	10.2	0.30	0.02	mg/L	10.010	0.14	101	90-110			
Sulfate	12.5	1.0	0.05	mg/L	10.010	8.39	41	90-110			QM-05
Matrix Spike (6070647-MS2)						Source: AZG0757-01 Prepared: 07/28/16 Analyzed: 07/29/16					
Chloride	11.5	0.25	0.01	mg/L	10.010	2.36	92	90-110			
Fluoride	10.2	0.30	0.02	mg/L	10.010	ND	102	90-110			
Sulfate	15.5	1.0	0.05	mg/L	10.010	6.61	89	90-110			QM-05
Matrix Spike Dup (6070647-MSD1)						Source: AZG0694-01 Prepared & Analyzed: 07/28/16					
Chloride	11.9	0.25	0.01	mg/L	10.010	1.25	107	90-110	3	15	
Fluoride	11.0	0.30	0.02	mg/L	10.010	0.14	108	90-110	7	15	
Sulfate	12.8	1.0	0.05	mg/L	10.010	8.39	44	90-110	3	15	QM-05



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070653 - EPA 3005A											
Blank (6070653-BLK1)						Prepared & Analyzed: 07/29/16					
Antimony	ND	0.0030	0.0002	mg/L							
Arsenic	ND	0.0050	0.0007	mg/L							
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.100	0.0044	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0126	mg/L							
Chromium	ND	0.0100	0.0004	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0004	mg/L							
Lead	ND	0.0050	0.00008	mg/L							
Molybdenum	ND	0.0100	0.0005	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0009	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00006	mg/L							
Vanadium	ND	0.0100	0.0016	mg/L							
Lithium	ND	0.0500	0.0012	mg/L							
LCS (6070653-BS1)						Prepared & Analyzed: 07/29/16					
Antimony	0.110	0.0030	0.0002	mg/L	0.10000		110	80-120			
Arsenic	0.100	0.0050	0.0007	mg/L	0.10000		100	80-120			
Barium	0.106	0.0100	0.0003	mg/L	0.10000		106	80-120			
Beryllium	0.105	0.0030	0.00009	mg/L	0.10000		105	80-120			
Boron	1.01	0.100	0.0044	mg/L	1.0000		101	80-120			
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000		102	80-120			
Calcium	1.03	0.500	0.0126	mg/L	1.0000		103	80-120			
Chromium	0.107	0.0100	0.0004	mg/L	0.10000		107	80-120			
Cobalt	0.101	0.0100	0.0003	mg/L	0.10000		101	80-120			
Copper	0.105	0.0250	0.0004	mg/L	0.10000		105	80-120			
Lead	0.105	0.0050	0.00008	mg/L	0.10000		105	80-120			
Molybdenum	0.108	0.0100	0.0005	mg/L	0.10000		108	80-120			
Nickel	0.104	0.0100	0.0005	mg/L	0.10000		104	80-120			
Selenium	0.0976	0.0100	0.0009	mg/L	0.10000		98	80-120			
Silver	0.105	0.0100	0.0002	mg/L	0.10000		105	80-120			
Thallium	0.103	0.0010	0.00006	mg/L	0.10000		103	80-120			
Vanadium	0.101	0.0100	0.0016	mg/L	0.10000		101	80-120			
Lithium	0.111	0.0500	0.0012	mg/L	0.10000		111	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070653 - EPA 3005A											
Matrix Spike (6070653-MS1)			Source: AZG0756-01			Prepared & Analyzed: 07/29/16					
Antimony	0.104	0.0030	0.0002	mg/L	0.10000	0.0020	102	75-125			
Arsenic	0.105	0.0050	0.0007	mg/L	0.10000	ND	105	75-125			
Barium	0.114	0.0100	0.0003	mg/L	0.10000	0.0088	105	75-125			
Beryllium	0.0948	0.0030	0.00009	mg/L	0.10000	ND	95	75-125			
Boron	0.942	0.100	0.0044	mg/L	1.0000	0.0097	93	75-125			
Cadmium	0.103	0.0010	0.0001	mg/L	0.10000	ND	103	75-125			
Calcium	26.6	2.50	0.0628	mg/L	1.0000	24.5	212	75-125			QM-02
Chromium	0.109	0.0100	0.0004	mg/L	0.10000	0.0006	108	75-125			
Cobalt	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125			
Copper	0.102	0.0250	0.0004	mg/L	0.10000	ND	102	75-125			
Lead	0.103	0.0050	0.00008	mg/L	0.10000	0.0001	103	75-125			
Molybdenum	0.115	0.0100	0.0005	mg/L	0.10000	0.0113	104	75-125			
Nickel	0.104	0.0100	0.0005	mg/L	0.10000	0.0005	103	75-125			
Selenium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125			
Silver	0.100	0.0100	0.0002	mg/L	0.10000	ND	100	75-125			
Thallium	0.104	0.0010	0.00006	mg/L	0.10000	0.0001	104	75-125			
Vanadium	0.108	0.0100	0.0016	mg/L	0.10000	ND	108	75-125			
Lithium	0.121	0.0500	0.0012	mg/L	0.10000	0.0221	99	75-125			
Matrix Spike Dup (6070653-MSD1)			Source: AZG0756-01			Prepared & Analyzed: 07/29/16					
Antimony	0.104	0.0030	0.0002	mg/L	0.10000	0.0020	102	75-125	0.2	20	
Arsenic	0.102	0.0050	0.0007	mg/L	0.10000	ND	102	75-125	3	20	
Barium	0.110	0.0100	0.0003	mg/L	0.10000	0.0088	101	75-125	4	20	
Beryllium	0.100	0.0030	0.00009	mg/L	0.10000	ND	100	75-125	6	20	
Boron	0.983	0.100	0.0044	mg/L	1.0000	0.0097	97	75-125	4	20	
Cadmium	0.101	0.0010	0.0001	mg/L	0.10000	ND	101	75-125	2	20	
Calcium	25.2	2.50	0.0628	mg/L	1.0000	24.5	78	75-125	5	20	
Chromium	0.107	0.0100	0.0004	mg/L	0.10000	0.0006	106	75-125	2	20	
Cobalt	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125	0.4	20	
Copper	0.101	0.0250	0.0004	mg/L	0.10000	ND	101	75-125	1	20	
Lead	0.103	0.0050	0.00008	mg/L	0.10000	0.0001	103	75-125	0.08	20	
Molybdenum	0.114	0.0100	0.0005	mg/L	0.10000	0.0113	103	75-125	1	20	
Nickel	0.105	0.0100	0.0005	mg/L	0.10000	0.0005	104	75-125	1	20	
Selenium	0.101	0.0100	0.0009	mg/L	0.10000	ND	101	75-125	1	20	
Silver	0.0969	0.0100	0.0002	mg/L	0.10000	ND	97	75-125	3	20	
Thallium	0.103	0.0010	0.00006	mg/L	0.10000	0.0001	103	75-125	1	20	
Vanadium	0.105	0.0100	0.0016	mg/L	0.10000	ND	105	75-125	3	20	
Lithium	0.125	0.0500	0.0012	mg/L	0.10000	0.0221	103	75-125	3	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070653 - EPA 3005A											
Post Spike (6070653-PS1)				Source: AZG0756-01			Prepared & Analyzed: 07/29/16				
Antimony	91.3			ug/L	100.00	2.04	89	80-120			
Arsenic	102			ug/L	100.00	0.580	101	80-120			
Barium	108			ug/L	100.00	8.82	99	80-120			
Beryllium	93.3			ug/L	100.00	0.0431	93	80-120			
Boron	905			ug/L	1000.0	9.73	90	80-120			
Cadmium	100			ug/L	100.00	0.0025	100	80-120			
Calcium	24800			ug/L	1000.0	24500	39	80-120			QM-02
Chromium	106			ug/L	100.00	0.579	106	80-120			
Cobalt	98.2			ug/L	100.00	0.0972	98	80-120			
Copper	98.5			ug/L	100.00	0.289	98	80-120			
Lead	102			ug/L	100.00	0.126	101	80-120			
Molybdenum	113			ug/L	100.00	11.3	102	80-120			
Nickel	103			ug/L	100.00	0.519	103	80-120			
Selenium	101			ug/L	100.00	0.112	101	80-120			
Silver	98.5			ug/L	100.00	0.0411	98	80-120			
Thallium	102			ug/L	100.00	0.129	102	80-120			
Vanadium	105			ug/L	100.00	0.502	104	80-120			
Lithium	116			ug/L	100.00	22.1	94	80-120			

Batch 6070699 - EPA 7470A

Blank (6070699-BLK1)				Prepared & Analyzed: 08/01/16							
Mercury	ND	0.00050	0.00013	mg/L							
LCS (6070699-BS1)				Prepared & Analyzed: 08/01/16							
Mercury	0.00224	0.00050	0.00013	mg/L	2.5000E-3		90	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Report No.: AZG0756

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070699 - EPA 7470A											
Matrix Spike (6070699-MS1)			Source: AZG0756-02			Prepared & Analyzed: 08/01/16					
Mercury	0.00248	0.00050	0.00013	mg/L	2.5000E-3	ND	99	75-125			
Matrix Spike Dup (6070699-MSD1)			Source: AZG0756-02			Prepared & Analyzed: 08/01/16					
Mercury	0.00230	0.00050	0.00013	mg/L	2.5000E-3	ND	92	75-125	8	20	
Post Spike (6070699-PS1)			Source: AZG0756-02			Prepared & Analyzed: 08/01/16					
Mercury	1.69			ug/L	1.6667	-0.0122	102	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 04, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.

Pace Analytical
110 Technology Pkwy,
Peachtree Corners, GA 30092

Company:¹ Southern Company Services
Report To: Joju Abraham
Email: JABRAHAM@SOUTHERNCO.COM
Address:² 241 Ralph McGill Blvd SE B10165
Atlanta, GA 30308
Phone/Fax:³ 404-506-7239
Copy To: MRPADILL@SOUTHERNCO.COM
CHMcCORK@southernco.com

Contact:⁴ Joju Abraham
Project Location:⁵ Plant Yates
PO Number:⁶ LLMILLET@southernco.com
Special Instructions:⁷ Yates AP CCR GW

Sample Shipment Date:⁸ 7/27/16
Sample Received Date:⁹
Sampled By:¹⁰ John Corbin
Signature: *[Signature]*
of Business Days (Rush):
(Must be cleared through Env. Lab. Prior to shipment)

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. AZG-0756
Reviewed By:
Page 1 of 1

Standard Turnaround Time

LAB USE ONLY ¹³ LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type	Matrix	No. of Containers	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰			Sample Type Key: ²² G-Gas O-Oiler C-Comps M-Matrix Key: ²³ S-Solid SL-Sludge W-Water SW-Surface Water GW-Ground Water WH-White Water COL-Composite	Preservative Key: ²⁴ H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid H-Hydrogen Peroxide B-Boric Acid P-Phosphoric Acid T-Titanium Tetrachloride H-Ha Unpreserved	LAB USE ONLY ²⁵ Comments
		Date	Time					HNO3	Ice	HNO3	N	I	N			
	Y6-WA-3D	7/26/16	0931		G	GW	3	X	X	X	X	X				1
	Y6-WA-14S	7/26/16	1148		G	GW	3	X	X	X	X	X				2
	Y6-WA-4T	7/26/16	1437		G	GW	3	X	X	X	X	X				3

LAB USE ONLY: Sample/Receipt information ²⁶			
Relinquished by: ²⁵	<i>[Signature]</i>	Date/Time	7/27/16 08:54
Received by: ²⁷	<i>[Signature]</i>	Date/Time	7/27/16 08:54
Relinquished by:		Date/Time	
Received by:		Date/Time	

LAB USE ONLY: Sample/Receipt information²⁶
Charles Abrams 7/27/16 08:50 T 2°C
Ice Present Seal Intact

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Work Order No. A260758
 Reviewed By: _____
 Page 1 of 1

LAB USE ONLY

Pace Analytical
 110 Technology Pkwy,
 Peachtree Corners, GA 30092

Company¹ Southern Company Services
 Report To Joju Abraham
 Email: JABRAHAM@SOUTHERNCO.COM
 Address:² 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 Phone/Fax:³ 404-506-7239
 Copy To: MIRPADILL@SOUTHERNCO.COM
CHMCCORK@southernco.com

Sample Shipment Date:⁸ 7/27/16
 Sample Received Date:⁹ _____
 Standard Turnaround Time X

Sampled By:¹⁰ LB Anthony Basier
 # of Business Days (Rush) 0
 (Must be cleared through Env. Lab. Prior to shipment)

Contact:⁴ Joju Abraham
 Project Location:⁵ Plant Yates
 PO Number:⁶ LLMILLET@southernco.com
 Special Instructions:⁷ Yates AP CCR GW

LAB USE ONLY ¹³ LAB ID	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁸	Matrix	No. of Containers	ANALYSIS REQUESTED ²¹				PRESERVATIVE ²⁰			Sample Type Key: ²² S-Slab O-Other C-Composite		
		Date	Time				HNO3 N	Ice I	HNO3 N	N	S-Slab	O-Other	C-Composite			
	Y6-WA-1D	7/26/16	1120	G-GW	3	Metals app. III & IV EPA 6020 & EPA 7470 Cl, F, SO4 EPA 300 TDS SM2540C SW-846 9315 & 9320	X	X	X	X	X	X			4	
	FB-2	7/26/16	1200	G-PW	3		X	X	X							5
	Y6-WA-5I	7/26/16	1405	G-GW	3		X	X	X							6
	EQB-2	7/26/16	1436	G-DW	3		X	X	X							7
	Y6-WA-5D	7/26/16	1529	G-GW	3		X	X	X							8

Signature: _____
 (Must be cleared through Env. Lab. Prior to shipment)
 Matrix Key:²³ S-Slab O-Other C-Composite
 Preservative Key:²⁴ H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid B-Bismuth Hydroxide SS-Sodium Sulfate P-Phosphoric Acid T-Tetrahydrofuran U-Ultrasonication
 LAB USE ONLY²⁵
 Comments

LAB USE ONLY: Sample Receipt Information²⁶

Relinquished by:²⁸ LB Date/Time 7/27/16 0850
 Received by:²⁷ Anthony Basier Date/Time 7/27/16 0654
 Relinquished by: _____ Date/Time _____
 Received by: _____ Date/Time _____

Seal Intact!



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 8/4/2016 9:04:54AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 07/27/16 08:50

Work Order: AZG0756

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 8

#Containers: 24

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 25, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30191354

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on July 28, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191354

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191354

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191354001	YGWA-3D	Water	07/26/16 09:31	07/28/16 09:40
30191354002	YGWA-14S	Water	07/26/16 11:48	07/28/16 09:40
30191354003	YGWA-4I	Water	07/26/16 14:37	07/28/16 09:40

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30191354

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191354001	YGWA-3D	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191354002	YGWA-14S	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191354003	YGWA-4I	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191354

Sample: YGWA-3D **Lab ID: 30191354001** Collected: 07/26/16 09:31 Received: 07/28/16 09:40 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.21 ± 0.341 (0.254) C:94% T:NA	pCi/L	08/18/16 10:36	13982-63-3	
Radium-228	EPA 9320	2.61 ± 0.655 (0.626) C:77% T:80%	pCi/L	08/19/16 01:18	15262-20-1	
Total Radium	Total Radium Calculation	3.82 ± 0.996 (0.880)	pCi/L	08/23/16 15:19	7440-14-4	

Sample: YGWA-14S **Lab ID: 30191354002** Collected: 07/26/16 11:48 Received: 07/28/16 09:40 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.136 ± 0.128 (0.241) C:96% T:NA	pCi/L	08/18/16 10:36	13982-63-3	
Radium-228	EPA 9320	1.37 ± 0.436 (0.529) C:73% T:78%	pCi/L	08/19/16 01:18	15262-20-1	
Total Radium	Total Radium Calculation	1.51 ± 0.564 (0.770)	pCi/L	08/23/16 15:19	7440-14-4	

Sample: YGWA-4I **Lab ID: 30191354003** Collected: 07/26/16 14:37 Received: 07/28/16 09:40 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.592 ± 0.225 (0.263) C:96% T:NA	pCi/L	08/18/16 10:36	13982-63-3	
Radium-228	EPA 9320	0.668 ± 0.336 (0.572) C:74% T:83%	pCi/L	08/19/16 01:18	15262-20-1	
Total Radium	Total Radium Calculation	1.26 ± 0.561 (0.835)	pCi/L	08/23/16 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191354

QC Batch: 229519 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30191354001, 30191354002, 30191354003

METHOD BLANK: 1124725 Matrix: Water
 Associated Lab Samples: 30191354001, 30191354002, 30191354003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	1.03 ± 0.388 (0.599) C:87% T:83%	pCi/L	08/19/16 01:16	1c

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191354

QC Batch:	229660	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30191354001, 30191354002, 30191354003		

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

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



QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191354

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Act - Activity
Unc - Uncertainty: 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.

ANALYTE QUALIFIERS

1c Ra-228 detected in the MB above the associated MDC but below the RL of 3.0 pCi/L. Results are reportable without further qualification if the sample activity is below the RL of 3.0 pCi/L.

REPORT OF LABORATORY ANALYSIS

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

Sample Condition Upon Receipt Pittsburgh



Client Name: GA Paver Project # 30191354

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250979719

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: NJV
7-28-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PHCZ</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>NJV</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>NJV</u> Date: <u>7-28-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.



Test: Ra-226
Analyst: WRR
Date: 8/15/2016
Worklist: 30875
Matrix: DW

Method Blank Assessment	
MB Sample ID	1125793
MB concentration:	-0.001
M/B Counting Uncertainty:	0.106
MB MDC:	0.279
MB Numerical Performance Indicator:	-0.01
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	8/18/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.679
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.497
Target Conc. (pCi/L, g, F):	8.997
Uncertainty (Calculated):	0.423
Result (pCi/L, g, F):	7.793
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.677
Numerical Performance Indicator:	-2.96
Percent Recovery:	86.62%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30191359001
Duplicate Sample I.D.:	30191359001dup
Sample Result (pCi/L, g, F):	0.164
Sample Result Counting Uncertainty (pCi/L, g, F):	0.153
Sample Duplicate Result (pCi/L, g, F):	0.148
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.165
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.134
Duplicate RPD:	9.84%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30191359001
30191359001dup

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

Comments:

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.



Test: Ra-228
Analyst: JLW
Date: 8/16/2016
Worklist: 30870
Matrix: DW

MB Sample ID	1124725
MB Concentration:	1.032
MB Counting Uncertainty:	0.342
MB MDC:	0.599
MB Numerical Performance Indicator:	5.92
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Fail*

Laboratory Control Sample Assessment	
Count Date:	8/19/2016
Spike I.D.:	16-025
Spike Concentration (pCi/mL):	25.900
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.800
Target Conc. (pCi/L, g, F):	8.475
Uncertainty (Calculated):	0.466
Result (pCi/L, g, F):	8.599
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.714
Numerical Performance Indicator:	4.88
Percent Recovery:	132.81%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30191359001
Duplicate Sample I.D.:	30191359001DUP
Sample Result (pCi/L, g, F):	0.483
Sample Duplicate Result (pCi/L, g, F):	0.330
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.948
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.369
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.840
Duplicate RPD:	65.00%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

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

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30191359001
30191359001DUP

Comments:
*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.
***Batch must be re-prepped due to unacceptable precision.

JLW



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 25, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30191358

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on July 28, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191358

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191358

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191358001	YGWA-1D	Water	07/26/16 11:20	07/28/16 09:40
30191358002	FB-2	Water	07/26/16 12:00	07/28/16 09:40
30191358003	YGWA-5I	Water	07/26/16 14:05	07/28/16 09:40
30191358004	EQB-2	Water	07/26/16 14:36	07/28/16 09:40
30191358005	YGWA-5D	Water	07/26/16 15:29	07/28/16 09:40

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Plant Yates
 Pace Project No.: 30191358

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191358001	YGWA-1D	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191358002	FB-2	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191358003	YGWA-5I	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191358004	EQB-2	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191358005	YGWA-5D	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191358

Sample: YGWA-1D		Lab ID: 30191358001	Collected: 07/26/16 11:20	Received: 07/28/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.175 ± 0.160 (0.309)		pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	0.532 ± 0.354 (0.662)		pCi/L	08/19/16 01:18	15262-20-1	
Total Radium	Total Radium Calculation	0.707 ± 0.514 (0.971)		pCi/L	08/25/16 15:59	7440-14-4	

Sample: FB-2		Lab ID: 30191358002	Collected: 07/26/16 12:00	Received: 07/28/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0267 ± 0.111 (0.276)		pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	0.732 ± 0.393 (0.696)		pCi/L	08/19/16 01:18	15262-20-1	
Total Radium	Total Radium Calculation	0.759 ± 0.504 (0.972)		pCi/L	08/25/16 15:59	7440-14-4	

Sample: YGWA-5I		Lab ID: 30191358003	Collected: 07/26/16 14:05	Received: 07/28/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.146 ± 0.144 (0.281)		pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	1.32 ± 0.459 (0.658)		pCi/L	08/19/16 01:19	15262-20-1	
Total Radium	Total Radium Calculation	1.47 ± 0.603 (0.939)		pCi/L	08/25/16 15:59	7440-14-4	

Sample: EQB-2		Lab ID: 30191358004	Collected: 07/26/16 14:36	Received: 07/28/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0936 ± 0.120 (0.247)		pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	0.952 ± 0.377 (0.568)		pCi/L	08/19/16 01:19	15262-20-1	
Total Radium	Total Radium Calculation	1.05 ± 0.497 (0.815)		pCi/L	08/25/16 15:59	7440-14-4	

Sample: YGWA-5D		Lab ID: 30191358005	Collected: 07/26/16 15:29	Received: 07/28/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	4.95 ± 0.897 (0.241)		pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	1.97 ± 0.560 (0.664)		pCi/L	08/19/16 01:19	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191358

Sample: YGWA-5D Lab ID: 30191358005 Collected: 07/26/16 15:29 Received: 07/28/16 09:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	6.92 ± 1.46 (0.905)	pCi/L	08/25/16 15:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
 Pace Project No.: 30191358

QC Batch: 229519 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30191358001, 30191358002, 30191358003, 30191358004, 30191358005

METHOD BLANK: 1124725 Matrix: Water
 Associated Lab Samples: 30191358001, 30191358002, 30191358003, 30191358004, 30191358005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	1.03 ± 0.388 (0.599) C:87% T:83%	pCi/L	08/19/16 01:16	1c

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191358

QC Batch:	229660	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30191358001, 30191358002, 30191358003, 30191358004, 30191358005		

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

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



QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191358

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Act - Activity
Unc - Uncertainty: 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.

ANALYTE QUALIFIERS

1c Ra-228 detected in the MB above the associated MDC but below the RL of 3.0 pCi/L. Results are reportable without further qualification if the sample activity is below the RL of 3.0 pCi/L.

REPORT OF LABORATORY ANALYSIS

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

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Pace Analytical
 110 Technology Pkwy,
 Peachtree Corners, GA 30092

Company:¹ Southern Company Services

Report To: Joju Abraham

Email: JABRAHAM@SOUTHERNCO.COM

Address:² 241 Ralph McGill Blvd SE B10185

Atlanta, GA 30308

Phone/Fax:³ 404-506-7239

Copy To: MRPADILL@SOUTHERNCO.COM

CHMCCORK@southernco.com

Contact:⁴ Joju Abraham

Project Location:⁵ Plant Yates

PO Number:⁶ LLMILLET@southernco.com

Special

Instructions:⁷ Yates AP CCR GW

LAB USE ONLY

Work Order No. _____

Reviewed By: _____

11 Page 1 of 1

Sample Shipment Date:⁸ 7/27/16

Sample Received Date:⁹ _____

Sampled By:¹⁰ *Joju Abraham*

of Business Days (Rush)
 (Must be cleared through Env. Lab. Prior to shipment)

X

¹² Standard Turnaround Time

LAB USE ONLY (LAB ID)	Sample Number ¹⁴	Collection ¹⁵		Sample Description ¹⁶	Sample Type	Matrix			No. of Containers	ANALYSIS REQUESTED ²¹			PRESERVATIVE ²⁰			Sample Type Key: 22	
		Date	Time			17	18	19		HNO3	Ice	HNO3	N	N	C-Grab		O-Other
	Y6-WA-1D	7/26/16	1120		G	GW	3	X	X	X	EPA 6020 & EPA 7470	Metals app. III & IV	CI, F, SO4 EPA 300	TDS SM2540C	SW-846	9315 & 9320	
	F13-2	7/26/16	1200		G	PW	3	X	X	X							
	Y6-WA-5J	7/26/16	1405		G	GW	3	X	X	X							
	F03-2	7/26/16	1436		G	DW	3	X	X	X							
	Y6-WA-5D	7/26/16	1529		G	GW	3	X	X	X							

Matrix Key: 23	Preservative Key: 24
C-Cl S-Solid N-Yes Ground Water W-Sludge S/S-Surface Water W/H-Hazard Water D/D-Distilled Water	H-Hydrochloric Acid S-Sulfuric Acid S/S-Sodium Hydroxide S/S-Sodium Bisulfate P-Phosphoric Acid S/S-Sodium Thiosulfate I-Ice U-Unpreserved

WO#: 30191358

30191358

LAB USE ONLY - Sample Receipt Information	
Relinquished by: ²⁵ <i>Joju Abraham</i>	Date/Time 7/27/16 06:57
Received by: ²⁷ <i>Joju Abraham</i>	Date/Time 7/27/16 06:57
Relinquished by: ²⁸ <i>Joju Abraham</i>	Date/Time 7/28/16 09:16
Received by: ²⁹ _____	Date/Time _____

Sample Condition Upon Receipt Pittsburgh



Client Name: GA Power Project # 30191358

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250979719

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and initials of person examining contents: NJV
7-28-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PHLZ</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed <u>NJV</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>NJV</u> Date: <u>7-28-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: WRR
Date: 8/15/2016
Worklist: 30875
Matrix: DW



Method Blank Assessment	
MB Sample ID	1125793
MB concentration:	-0.001
MB Counting Uncertainty:	0.106
MB MDC:	0.279
MB Numerical Performance Indicator:	N/A
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSD (Y or N)?	N
LCS30875	LCSD30875
Count Date:	8/18/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.679
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.497
Target Conc. (pCi/L, g, F):	8.997
Uncertainty (Calculated):	0.423
Result (pCi/L, g, F):	7.793
Numerical Performance Indicator:	0.677
Percent Recovery:	-2.96
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30191359001
Duplicate Sample I.D.:	30191359001dup
Sample Result (pCi/L, g, F):	0.164
Sample Result Counting Uncertainty (pCi/L, g, F):	0.153
Sample Duplicate Result (pCi/L, g, F):	0.148
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.165
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.134
Duplicate RPD:	9.84%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

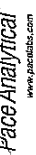
Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

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

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:	
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 8/16/2016
Worklist: 30870
Matrix: DW

Method Blank Assessment	
MB Sample ID	1124725
MB concentration:	1.032
MB Counting Uncertainty:	0.342
MB MDC:	0.599
MB Numerical Performance Indicator:	5.92
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Fail*

Laboratory Control Sample Assessment	
Count Date:	8/19/2016
Spike I.D.:	16-025
Spike Concentration (pCi/mL):	25,900
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.800
Target Conc. (pCi/L, g, F):	6.475
Uncertainty (Calculated):	0.466
Result (pCi/L, g, F):	8.599
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.714
Numerical Performance Indicator:	4.88
Percent Recovery:	132.81%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30191359001
Duplicate Sample I.D.:	30191359001DUP
Sample Result (pCi/L, g, F):	0.483
Sample Result Counting Uncertainty (pCi/L, g, F):	0.330
Sample Duplicate Result (pCi/L, g, F):	0.948
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.369
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.840
Duplicate RPD:	65.00%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.

***Batch must be re-prepped due to unacceptable precision.

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 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):	
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:	
Sample Matrix Spike Duplicate 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:	

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:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
Matrix Spike Duplicate Result (Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 30, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Yates AP CCR GW
Pace Project No.: 30191939

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on August 03, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Yates AP CCR GW
Pace Project No.: 30191939

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Yates AP CCR GW
Pace Project No.: 30191939

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191939001	YGWC-33S	Water	08/01/16 09:11	08/03/16 10:00
30191939002	DUP-4	Water	08/01/16 00:01	08/03/16 10:00
30191939003	YGWC-27S	Water	08/01/16 13:35	08/03/16 10:00
30191939004	EQB-5	Water	08/01/16 14:30	08/03/16 10:00
30191939005	YGWC-24S	Water	08/01/16 11:12	08/03/16 10:00

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Yates AP CCR GW
 Pace Project No.: 30191939

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191939001	YGWC-33S	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191939002	DUP-4	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191939003	YGWC-27S	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191939004	EQB-5	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191939005	YGWC-24S	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30191939

Sample: YGWC-33S		Lab ID: 30191939001	Collected: 08/01/16 09:11	Received: 08/03/16 10:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.264 ± 0.192 (0.348) C:87% T:NA	pCi/L	08/22/16 07:59	13982-63-3	
Radium-228	EPA 9320	1.29 ± 0.424 (0.601) C:79% T:91%	pCi/L	08/24/16 01:53	15262-20-1	
Total Radium	Total Radium Calculation	1.55 ± 0.616 (0.949)	pCi/L	08/29/16 15:34	7440-14-4	

Sample: DUP-4		Lab ID: 30191939002	Collected: 08/01/16 00:01	Received: 08/03/16 10:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.163 ± 0.151 (0.283) C:80% T:NA	pCi/L	08/22/16 07:59	13982-63-3	
Radium-228	EPA 9320	0.667 ± 0.399 (0.734) C:77% T:73%	pCi/L	08/24/16 01:53	15262-20-1	
Total Radium	Total Radium Calculation	0.830 ± 0.550 (1.02)	pCi/L	08/29/16 15:34	7440-14-4	

Sample: YGWC-27S		Lab ID: 30191939003	Collected: 08/01/16 13:35	Received: 08/03/16 10:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.233 ± 0.167 (0.263) C:77% T:NA	pCi/L	08/22/16 07:59	13982-63-3	
Radium-228	EPA 9320	0.220 ± 0.385 (0.840) C:76% T:82%	pCi/L	08/25/16 12:20	15262-20-1	
Total Radium	Total Radium Calculation	0.453 ± 0.552 (1.10)	pCi/L	08/29/16 15:34	7440-14-4	

Sample: EQB-5		Lab ID: 30191939004	Collected: 08/01/16 14:30	Received: 08/03/16 10:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0157 ± 0.100 (0.268) C:80% T:NA	pCi/L	08/22/16 08:00	13982-63-3	
Radium-228	EPA 9320	0.161 ± 0.361 (0.801) C:75% T:81%	pCi/L	08/25/16 12:20	15262-20-1	
Total Radium	Total Radium Calculation	0.177 ± 0.461 (1.07)	pCi/L	08/29/16 15:34	7440-14-4	

Sample: YGWC-24S		Lab ID: 30191939005	Collected: 08/01/16 11:12	Received: 08/03/16 10:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0911 ± 0.159 (0.360) C:78% T:NA	pCi/L	08/22/16 08:00	13982-63-3	
Radium-228	EPA 9320	0.376 ± 0.452 (0.959) C:77% T:77%	pCi/L	08/25/16 12:21	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30191939

Sample: **YGWC-24S** Lab ID: **30191939005** Collected: 08/01/16 11:12 Received: 08/03/16 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.467 ± 0.611 (1.32)	pCi/L	08/29/16 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30191939

QC Batch: 229718 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30191939003, 30191939004, 30191939005

METHOD BLANK: 1125956 Matrix: Water
 Associated Lab Samples: 30191939003, 30191939004, 30191939005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.926 ± 0.490 (0.878) C:75% T:74%	pCi/L	08/25/16 12:20	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30191939

QC Batch: 229716 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30191939001, 30191939002

METHOD BLANK: 1125954 Matrix: Water
 Associated Lab Samples: 30191939001, 30191939002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	1.18 ± 0.469 (0.734) C:80% T:82%	pCi/L	08/23/16 22:19	

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30191939

QC Batch: 229662 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30191939001, 30191939002, 30191939003, 30191939004, 30191939005

METHOD BLANK: 1125795 Matrix: Water
Associated Lab Samples: 30191939001, 30191939002, 30191939003, 30191939004, 30191939005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0570 ± 0.107 (0.243) C:85% T:NA	pCi/L	08/22/16 07:56	

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

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



QUALIFIERS

Project: Yates AP CCR GW
Pace Project No.: 30191939

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, Inc
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNEF
 (770) 734-4200 : FAX (770) 734-4201

Pace Analytical
 www.pacelabs.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE B10185 Atlanta, GA 30308		REPORT TO: Jesse Abraham Requested Completion Date:		PROJECT NAME/STATE: Yates AP CCR G-W		
Collection DATE	Collection TIME	MATRIX CODE*	SAMPLE IDENTIFICATION	CONTAINER TYPE	ANALYSIS REQUESTED	RELINQUISHED BY	DATE/TIME	
8/1/16	0911	G-W	YGWC-335	P	Metals APP III + IV EPA GS20 + EPA 7470 GT, T, SC, EPA 300 TDS, SWS/C, C Medium 226 + 228: SW-846 9315 + 9320	JPB	8/1/16 @ 1510	
8/1/16	1112	G-W	YGWC-245	P		JPB	8/1/16 @ 0655	
8/1/16	-	G-W	DUP-4	P		JPB	8-3-16 1000	
8/1/16	1335	G-W	YGWC-275	P		JPB		
8/1/16	1430	W	EQB-5	P		JPB		
PROJECT #:				RELINQUISHED BY:				DATE/TIME:
				RELINQUISHED BY:				DATE/TIME:
				SAMPLE SHIPPED VIA:				DATE/TIME:
				USPS _____				DATE/TIME:
				FED-EX _____				DATE/TIME:
				USPS _____				DATE/TIME:
				COURIER _____				DATE/TIME:
				# of Coolers _____				DATE/TIME:
				Client _____				DATE/TIME:
				Cooler ID _____				DATE/TIME:
				Other FS _____				DATE/TIME:
				Tracking # _____				DATE/TIME:

L A B I D N U M B E R	CONTAINER TYPE	PRESERVATION	ANALYSIS REQUESTED	RELINQUISHED BY:		DATE/TIME:	
				USPS	FED-EX	USPS	COURIER
001	P - PLASTIC	1 - HCl, 56°C					
002	A - AMBER GLASS	2 - H ₂ SO ₄ , 56°C					
003	G - CLEAR GLASS	3 - HNO ₃					
004	V - VOA VIAL	4 - NaOH, 56°C					
005	S - STERILE	5 - NaOH/ZnAc, 56°C					
006	O - OTHER	6 - Na ₂ S ₂ O ₃ , 56°C					
		7 - 56°C not frozen					

CONTAINER TYPE		PRESERVATION		ANALYSIS REQUESTED		RELINQUISHED BY:		DATE/TIME:	
DW - DRINKING WATER	WW - WASTEWATER	GW - GROUNDWATER	SW - SURFACE WATER	ST - STORM WATER	W - WATER	S - SOIL	SL - SLUDGE	SD - SOLID	A - AIR

Sample Condition Upon Receipt Pittsburgh

30191939



Client Name: GA Power Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250981156

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: MTV 8-3-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>MTV</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>MTV</u> Date: <u>8-3-16</u>

Client Notification/ Resolution:
 Person Contacted: _____ Date/Time: _____ Contacted By: _____
 Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JILW
Date: 8/18/2016
Worklist: 30904
Matrix: DW



Method Blank Assessment	
MB Sample ID	1125954
MB concentration:	1.179
MB Counting Uncertainty:	0.419
MB MDC:	0.734
MB Numerical Performance Indicator:	5.52
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Fail*

Laboratory Control Sample Assessment		LCS (Y or N)?	
Count Date:	8/23/2016	LCS30904	Y
Spike I.D.:	16-025	LCS30904	Y
Spike Concentration (pCi/mL):	25.859	8/23/2016	16-025
Volume Used (mL):	0.20	16-025	16-025
Aliquot Volume (L, g, F):	0.802	25.859	25.859
Target Conc. (pCi/L, g, F):	6.446	0.20	0.20
Uncertainty (Calculated):	0.464	0.813	0.813
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	6.102	6.363	6.363
Numerical Performance Indicator:	0.743	0.468	0.468
Percent Recovery:	-0.77	6.190	6.190
Status vs Numerical Indicator:	94.66%	0.701	0.701
Duplicate Status vs Recovery:	N/A	-0.41	-0.41
	Pass	97.27%	97.27%
	Pass	N/A	N/A

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.	
Sample I.D.:	LCS30904		
Duplicate Sample I.D.:	LCS30904		
Sample Result (pCi/L, g, F):	6.102		
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.743		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	6.190		
Are sample and/or duplicate results below MDC?	NO		
Duplicate Numerical Performance Indicator:	-0.169		
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.72%		
Duplicate Status vs Numerical Indicator:	N/A		
Duplicate Status vs RPD:	Pass		

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

Comments:

*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.
Sample MS I.D.:	Sample MS I.D.
Sample MSD I.D.:	Sample MSD I.D.
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	Spike I.D.:
Spike Volume Used in MS (mL):	MS/MSD Target Conc. (pCi/L, g, F):
MS Aliquot (L, g, F):	MSD Aliquot (L, g, F):
MS Target Conc. (pCi/L, g, F):	MSD Target Conc. (pCi/L, g, F):
MSD Aliquot (L, g, F):	Spike uncertainty (calculated):
MSD Target Conc. (pCi/L, g, F):	Sample Result Counting Uncertainty (pCi/L, g, F):
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:
MS Numerical Performance Indicator:	MSD Numerical Performance Indicator:
MS Percent Recovery:	MS Percent Recovery:
MSD Percent Recovery:	MS Status vs Numerical Indicator:
MS Status vs Numerical Indicator:	MS Status vs Recovery:
MSD Status vs Numerical Indicator:	MSD Status vs Recovery:
MSD Status vs Recovery:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample I.D.
Sample MS I.D.:	Sample MS I.D.
Sample MSD I.D.:	Sample MSD I.D.
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Result
Sample Matrix Spike Duplicate Result	Sample Matrix Spike Duplicate Result
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	Duplicate Numerical Performance Indicator:
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:
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: WRR
Date: 8/19/2016
Worklist: 30877
Matrix: DW

Method Blank Assessment

MB Sample ID: 1125795
MB Concentration: 0.057
M/B Counting Uncertainty: 0.106
MB MDC: 0.243
MB Numerical Performance Indicator: 1.06
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCSD (Y or N)? N
LCSD30877

Count Date: 8/22/2016
Spike I.D.: 16-026
Spike Concentration (pCi/mL): 44.679
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.517
Target Conc. (pCi/L, g, F): 8.638
Uncertainty (Calculated): 0.406
Result (pCi/L, g, F): 10.235
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.878
Numerical Performance Indicator: 3.23
Percent Recovery: 118.48%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30191936005
Duplicate Sample I.D.: 30191936005Dup
Duplicate Result (pCi/L, g, F): 0.030
Sample Result Counting Uncertainty (pCi/L, g, F): 0.157
Sample Duplicate Result (pCi/L, g, F): 0.066
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.121
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -0.263
Duplicate RPD: 61.69%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30191936005
30191936005Dup

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

WRR
WRR

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):
MS Aliquot (L, g, F):
MS Target Conc. (pCi/L, g, F):
MSD Aliquot (L, g, F):
MSD Target Conc. (pCi/L, g, F):
Spike uncertainty (calculated):
Sample Result:
Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:
Sample Matrix Spike 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:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):
Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 30, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Yates AP CCR GW
Pace Project No.: 30191938

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on August 03, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Yates AP CCR GW
Pace Project No.: 30191938

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: Yates AP CCR GW
Pace Project No.: 30191938

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191938001	YGWC-26I	Water	08/01/16 09:49	08/03/16 10:00
30191938002	YGWC-26S	Water	08/01/16 11:33	08/03/16 10:00
30191938003	YGWC-27I	Water	08/01/16 13:25	08/03/16 10:00

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Yates AP CCR GW
 Pace Project No.: 30191938

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191938001	YGWC-26I	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191938002	YGWC-26S	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191938003	YGWC-27I	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30191938

Sample: YGWC-26I		Lab ID: 30191938001	Collected: 08/01/16 09:49	Received: 08/03/16 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.140 ± 0.146	(0.285)	pCi/L	08/22/16 07:59	13982-63-3	
		C:81% T:NA					
Radium-228	EPA 9320	0.466 ± 0.393	(0.774)	pCi/L	08/24/16 01:52	15262-20-1	
		C:78% T:72%					
Total Radium	Total Radium Calculation	0.606 ± 0.539	(1.06)	pCi/L	08/29/16 15:34	7440-14-4	

Sample: YGWC-26S		Lab ID: 30191938002	Collected: 08/01/16 11:33	Received: 08/03/16 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0930 ± 0.138	(0.303)	pCi/L	08/22/16 07:59	13982-63-3	
		C:95% T:NA					
Radium-228	EPA 9320	0.364 ± 0.318	(0.628)	pCi/L	08/24/16 01:53	15262-20-1	
		C:81% T:80%					
Total Radium	Total Radium Calculation	0.457 ± 0.456	(0.931)	pCi/L	08/29/16 15:34	7440-14-4	

Sample: YGWC-27I		Lab ID: 30191938003	Collected: 08/01/16 13:25	Received: 08/03/16 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.92 ± 0.475	(0.234)	pCi/L	08/22/16 07:59	13982-63-3	
		C:83% T:NA					
Radium-228	EPA 9320	1.87 ± 0.516	(0.599)	pCi/L	08/24/16 01:53	15262-20-1	
		C:81% T:83%					
Total Radium	Total Radium Calculation	3.79 ± 0.991	(0.833)	pCi/L	08/29/16 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30191938

QC Batch: 229716 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30191938001, 30191938002, 30191938003

METHOD BLANK: 1125954 Matrix: Water
 Associated Lab Samples: 30191938001, 30191938002, 30191938003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	1.18 ± 0.469 (0.734) C:80% T:82%	pCi/L	08/23/16 22:19	

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
 Pace Project No.: 30191938

QC Batch: 229662 Analysis Method: EPA 9315
 QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
 Associated Lab Samples: 30191938001, 30191938002, 30191938003

METHOD BLANK: 1125795 Matrix: Water
 Associated Lab Samples: 30191938001, 30191938002, 30191938003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0570 ± 0.107 (0.243) C:85% T:NA	pCi/L	08/22/16 07:56	

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

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



QUALIFIERS

Project: Yates AP CCR GW
Pace Project No.: 30191938

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30191938

0607

Pace Analytical Services, Inc
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNE
 (770) 734-4200 : FAX (770) 734-4201



CHAIN OF CUSTODY RECORD

30101028

CLIENT NAME: Southern Company Services
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE 310185 Atlanta, GA 30308
 REPORT TO: Johi Abraham (CC: MRPADILL@SouthernCo.com)
Shanell (CHAUCKOZKE@SouthernCo.com)
 REQUESTED COMPLETION DATE: 8/11/16 PO #: LLMILLET@SouthernCo.com
 PROJECT NAME/STATE: Yates AP CUR GW
 PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	COMPA				SAMPLE IDENTIFICATION	CONTAINER TYPE	PRESERVATION	# of	ANALYSIS REQUESTED			CONTAINER TYPE	PRESERVATION
			C	G	R	A					P	P	P		
8/11/16	0949	GW	X				Y6-WC-26I			3	7	3	P-PLASTIC	1-HCl, 56°C	
8/11/16	1133	GW	X				Y6-WC-26S			3	7	3	A-AMBER GLASS	2-H ₂ SO ₄ , 56°C	
8/11/16	1325	GW	X				Y6-WC-27I			3	7	3	G-CLEAR GLASS	3-HNO ₃	

RELINQUISHED BY: [Signature] DATE/TIME: 8/11/16 0810
 RELINQUISHED BY: [Signature] DATE/TIME: 8/12/16 0655
 SAMPLE SHIPPED VIA: [Signature] DATE/TIME: 8-16 1000
 UPS Intact: Broken: FED-EX: USPS: COURIER: CLIENT: OTHER: FS:
 # of Coolers: Cooler ID:

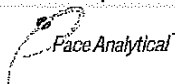
ENTERED INTO LIMS: 8-16 1000 Tracking #: 8516 1000

LAB #:

COC Revised 2016-05-17.xlsx

Sample Condition Upon Receipt Pittsburgh

30191938



Client Name: GA Power Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250981156

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: NJV
8-3-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				
				Initial when completed: <u>NJV</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>NJV</u> Date: <u>8-3-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst *Must Manually Enter All Fields Highlighted in Yellow.*



Test: Ra-228
Analyst: J.L.W.
Date: 8/18/2016
Worklist: 30904
Matrix: DW

Method Blank Assessment	
MB Sample ID	1125954
MB concentration:	1.179
M/B Counting Uncertainty:	0.419
MB MDC:	0.734
MB Numerical Performance Indicator:	N/A
MB Status vs Numerical Indicator:	Fail*

Laboratory Control Sample Assessment	
Count Date:	LCS (Y or N)?
8/23/2016	Y
16-025	LCS030904
Spike Concentration (pCi/mL):	25.859
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.813
Target Conc. (pCi/L, g, F):	6.363
Uncertainty (Calculated):	0.458
Result (pCi/L, g, F):	6.190
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.743
Numerical Performance Indicator:	-0.77
Percent Recovery:	94.66%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	LCS030904
Duplicate Sample I.D.:	LCS030904
Sample Result (pCi/L, g, F):	6.102
Sample Duplicate Result (pCi/L, g, F):	0.743
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	6.190
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.701
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	-0.169
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.72%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

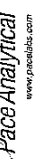
Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs Recovery:	

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

Comments:

*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable, otherwise this batch must be re-prepped.

Quality Control Sample Performance Assessment



Test: Ra-226
Analyst: WRR
Date: 8/19/2016
Worklist: 30877
Matrix: DW

Method Blank Assessment	
MB Sample ID	1125795
MB concentration:	0.057
MB Counting Uncertainty:	0.106
MB MDC:	0.243
MB Numerical Performance Indicator:	1.05
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
LCSID (Y or N)?	N
LCS30877	LCS30877
Count Date:	8/22/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.679
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.517
Target Conc. (pCi/L, g, F):	8.638
Uncertainty (Calculated):	0.406
Result (pCi/L, g, F):	10.235
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.878
Numerical Performance Indicator:	3.23
Percent Recovery:	118.48%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30191936005
Duplicate Sample I.D.:	30191936005Dup
Sample Result (pCi/L, g, F):	0.030
Sample Result Counting Uncertainty (pCi/L, g, F):	0.157
Sample Duplicate Result (pCi/L, g, F):	0.056
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.121
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.263
Duplicate RPD:	61.69%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Handwritten signature: J. J. J.

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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):	
Spike uncertainty (calculated):	
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:	

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:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZH0029

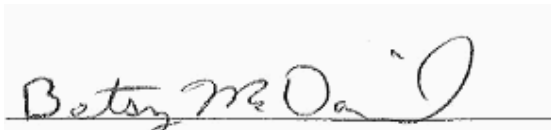
August 09, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-33S	AZH0029-01	Ground Water	08/01/16 09:11	08/02/16 08:40
YGWC-24S	AZH0029-02	Ground Water	08/01/16 11:12	08/02/16 08:40
Dup-4	AZH0029-03	Ground Water	08/01/16 00:00	08/02/16 08:40
YGWC-27S	AZH0029-04	Ground Water	08/01/16 13:35	08/02/16 08:40
EQB-5	AZH0029-05	DI Water	08/01/16 14:30	08/02/16 08:40
YGWC-26I	AZH0029-06	Ground Water	08/01/16 09:49	08/02/16 08:40
YGWC-26S	AZH0029-07	Ground Water	08/01/16 11:33	08/02/16 08:40
YGWC-27I	AZH0029-08	Ground Water	08/01/16 13:25	08/02/16 08:40



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Project: CCR Event

Client ID: YGWC-33S

Lab Number ID: AZH0029-01

Date/Time Sampled: 8/1/2016 9:11:00AM

Date/Time Received: 8/2/2016 8:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1300	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	5.7	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 10:45	6080044	RLC
Fluoride	0.24	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 10:45	6080044	RLC
Sulfate	830	50	2.6	mg/L	EPA 300.0		50	08/02/16 09:48	08/03/16 20:18	6080044	RLC
Metals, Total											
Antimony	0.0004	0.0030	0.0002	mg/L	EPA 6020B	B-01, J	1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Arsenic	0.0070	0.0050	0.0007	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Barium	0.0200	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Beryllium	0.0146	0.0030	0.00009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Boron	9.89	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Cadmium	0.0014	0.0010	0.0001	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Calcium	136	10.0	0.251	mg/L	EPA 6020B	B-01	20	08/04/16 09:05	08/08/16 13:15	6080104	KLH
Chromium	0.0021	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Cobalt	0.0297	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Lead	0.0005	0.0050	0.00008	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Molybdenum	0.0005	0.0100	0.0005	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Selenium	0.0192	0.0100	0.0009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Thallium	0.00006	0.0010	0.00006	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Lithium	0.0142	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 14:19	6080104	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 10:10	08/08/16 15:12	6080106	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Project: CCR Event

Client ID: YGWC-24S

Lab Number ID: AZH0029-02

Date/Time Sampled: 8/1/2016 11:12:00AM

Date/Time Received: 8/2/2016 8:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	56	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	5.3	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 11:07	6080044	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 11:07	6080044	RLC
Sulfate	1.1	1.0	0.05	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 11:07	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Barium	0.0200	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Beryllium	0.0001	0.0030	0.00009	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Boron	0.0054	0.100	0.0044	mg/L	EPA 6020B	B-01, J	1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Calcium	1.83	0.500	0.0126	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:42	6080104	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 10:10	08/08/16 15:14	6080106	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Project: CCR Event

Client ID: Dup-4

Lab Number ID: AZH0029-03

Date/Time Sampled: 8/1/2016 12:00:00AM

Date/Time Received: 8/2/2016 8:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	49	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	5.3	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 11:28	6080044	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 11:28	6080044	RLC
Sulfate	0.48	1.0	0.05	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 11:28	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Barium	0.0191	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Beryllium	0.0001	0.0030	0.00009	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Boron	0.0062	0.100	0.0044	mg/L	EPA 6020B	B-01, J	1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Calcium	1.79	0.500	0.0126	mg/L	EPA 6020B	B-01	1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Chromium	0.0005	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/04/16 09:05	08/04/16 15:48	6080104	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 10:10	08/08/16 15:17	6080106	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Project: CCR Event

Client ID: YGWC-27S

Lab Number ID: AZH0029-04

Date/Time Sampled: 8/1/2016 1:35:00PM

Date/Time Received: 8/2/2016 8:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	209	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	21	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 11:49	6080044	RLC
Fluoride	0.22	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 11:49	6080044	RLC
Sulfate	27	1.0	0.05	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 11:49	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Barium	0.115	0.0100	0.0003	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Boron	1.36	0.100	0.0044	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Calcium	36.3	2.50	0.0628	mg/L	EPA 6020B		5	08/03/16 09:10	08/08/16 14:06	6080064	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Cobalt	0.0026	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Thallium	0.0001	0.0010	0.00006	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 20:55	6080064	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 10:10	08/08/16 15:19	6080106	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Project: CCR Event

Client ID: EQB-5

Lab Number ID: AZH0029-05

Date/Time Sampled: 8/1/2016 2:30:00PM

Date/Time Received: 8/2/2016 8:40:00AM

Matrix: DI Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	0.02	0.25	0.01	mg/L	EPA 300.0	B-01, J	1	08/02/16 09:48	08/03/16 12:10	6080044	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 12:10	6080044	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 12:10	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Boron	0.0387	0.100	0.0044	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Calcium	ND	0.500	0.0126	mg/L	EPA 6020B		1	08/03/16 09:10	08/08/16 14:12	6080064	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:00	6080064	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 10:10	08/08/16 15:21	6080106	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Project: CCR Event

Client ID: YGWC-26I

Lab Number ID: AZH0029-06

Date/Time Sampled: 8/1/2016 9:49:00AM

Date/Time Received: 8/2/2016 8:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	211	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	17	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 12:31	6080044	RLC
Fluoride	0.08	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 12:31	6080044	RLC
Sulfate	75	5.0	0.26	mg/L	EPA 300.0		5	08/02/16 09:48	08/03/16 22:06	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Barium	0.0688	0.0100	0.0003	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Boron	0.932	0.100	0.0044	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Calcium	14.5	2.50	0.0628	mg/L	EPA 6020B		5	08/03/16 09:10	08/08/16 14:17	6080064	KLH
Chromium	0.0008	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Selenium	0.0023	0.0100	0.0009	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Lithium	0.0068	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:06	6080064	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 10:10	08/08/16 15:24	6080106	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Project: CCR Event

Client ID: YGWC-26S

Lab Number ID: AZH0029-07

Date/Time Sampled: 8/1/2016 11:33:00AM

Date/Time Received: 8/2/2016 8:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	191	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	16	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 14:39	6080044	RLC
Fluoride	0.24	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 14:39	6080044	RLC
Sulfate	96	5.0	0.26	mg/L	EPA 300.0		5	08/02/16 09:48	08/03/16 22:27	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Barium	0.0316	0.0100	0.0003	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Beryllium	0.0002	0.0030	0.00009	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Boron	0.643	0.100	0.0044	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Calcium	12.2	2.50	0.0628	mg/L	EPA 6020B		5	08/03/16 09:10	08/08/16 14:23	6080064	KLH
Chromium	0.0026	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Cobalt	0.0030	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Selenium	0.0014	0.0100	0.0009	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:12	6080064	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 10:10	08/08/16 15:26	6080106	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Project: CCR Event

Client ID: YGWC-271

Lab Number ID: AZH0029-08

Date/Time Sampled: 8/1/2016 1:25:00PM

Date/Time Received: 8/2/2016 8:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	191	25	10	mg/L	SM 2540 C		1	08/04/16 18:25	08/04/16 18:25	6080125	JPT
Inorganic Anions											
Chloride	13	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 15:00	6080044	RLC
Fluoride	0.14	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 15:00	6080044	RLC
Sulfate	3.6	1.0	0.05	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 15:00	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Arsenic	0.0009	0.0050	0.0007	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Barium	0.0838	0.0100	0.0003	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Boron	2.00	0.100	0.0044	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Calcium	21.4	2.50	0.0628	mg/L	EPA 6020B		5	08/03/16 09:10	08/08/16 14:29	6080064	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Cobalt	0.0014	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Molybdenum	0.0018	0.0100	0.0005	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Lithium	0.0080	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/03/16 09:10	08/04/16 21:17	6080064	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/08/16 10:10	08/08/16 15:28	6080106	CSW



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080125 - SM 2540 C											
Blank (6080125-BLK1)						Prepared & Analyzed: 08/04/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6080125-BS1)						Prepared & Analyzed: 08/04/16					
Total Dissolved Solids	385	25	10	mg/L	400.00		96	84-108			
Duplicate (6080125-DUP1)						Source: AZH0030-04 Prepared & Analyzed: 08/04/16					
Total Dissolved Solids	33	25	10	mg/L		54			48	10	QR-03
Duplicate (6080125-DUP2)						Source: AZH0073-01 Prepared & Analyzed: 08/04/16					
Total Dissolved Solids	197	25	10	mg/L		202			3	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080044 - EPA 300.0											
Blank (6080044-BLK1)						Prepared: 08/02/16 Analyzed: 08/03/16					
Chloride	0.02	0.25	0.01	mg/L							J
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6080044-BS1)						Prepared: 08/02/16 Analyzed: 08/03/16					
Chloride	9.90	0.25	0.01	mg/L	10.010		99	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010		106	90-110			
Sulfate	10.0	1.0	0.05	mg/L	10.010		100	90-110			
Matrix Spike (6080044-MS1)						Source: AZG0867-06 Prepared: 08/02/16 Analyzed: 08/03/16					
Chloride	11.7	0.25	0.01	mg/L	10.010	3.46	82	90-110			QM-05
Fluoride	10.0	0.30	0.02	mg/L	10.010	0.03	100	90-110			
Sulfate	61.3	1.0	0.05	mg/L	10.010	57.0	43	90-110			QM-05
Matrix Spike (6080044-MS2)						Source: AZH0029-06 Prepared: 08/02/16 Analyzed: 08/03/16					
Chloride	26.0	0.25	0.01	mg/L	10.010	17.5	85	90-110			QM-05
Fluoride	10.4	0.30	0.02	mg/L	10.010	0.08	103	90-110			
Sulfate	79.1	1.0	0.05	mg/L	10.010	76.7	24	90-110			QM-05
Matrix Spike Dup (6080044-MSD1)						Source: AZG0867-06 Prepared: 08/02/16 Analyzed: 08/03/16					
Chloride	12.1	0.25	0.01	mg/L	10.010	3.46	86	90-110	4	15	QM-05
Fluoride	10.5	0.30	0.02	mg/L	10.010	0.03	105	90-110	5	15	
Sulfate	61.3	1.0	0.05	mg/L	10.010	57.0	43	90-110	0.008	15	QM-05



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080064 - EPA 3005A											
Blank (6080064-BLK1)						Prepared: 08/03/16 Analyzed: 08/04/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6080064-BS1)						Prepared: 08/03/16 Analyzed: 08/04/16					
Antimony	0.104	0.0030	0.0008	mg/L	0.10000		104	80-120			
Arsenic	0.103	0.0050	0.0016	mg/L	0.10000		103	80-120			
Barium	0.102	0.0100	0.0004	mg/L	0.10000		102	80-120			
Beryllium	0.0984	0.0030	0.00008	mg/L	0.10000		98	80-120			
Boron	1.03	0.100	0.0064	mg/L	1.0000		103	80-120			
Cadmium	0.107	0.0010	0.00007	mg/L	0.10000		107	80-120			
Calcium	1.00	0.500	0.0311	mg/L	1.0000		100	80-120			
Chromium	0.105	0.0100	0.0009	mg/L	0.10000		105	80-120			
Cobalt	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Copper	0.0977	0.0250	0.0005	mg/L	0.10000		98	80-120			
Lead	0.101	0.0050	0.0001	mg/L	0.10000		101	80-120			
Molybdenum	0.108	0.0100	0.0017	mg/L	0.10000		108	80-120			
Nickel	0.0992	0.0100	0.0006	mg/L	0.10000		99	80-120			
Selenium	0.102	0.0100	0.0010	mg/L	0.10000		102	80-120			
Silver	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000		103	80-120			
Zinc	0.103	0.0100	0.0021	mg/L	0.10000		103	80-120			
Lithium	0.111	0.0500	0.0021	mg/L	0.10000		111	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080064 - EPA 3005A											
Matrix Spike (6080064-MS1)			Source: AZH0030-01			Prepared: 08/03/16 Analyzed: 08/04/16					
Antimony	0.112	0.0030	0.0008	mg/L	0.10000	0.0006	112	75-125			
Arsenic	0.105	0.0050	0.0016	mg/L	0.10000	ND	105	75-125			
Barium	0.118	0.0100	0.0004	mg/L	0.10000	0.0145	103	75-125			
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000	0.0006	102	75-125			
Boron	1.02	0.100	0.0064	mg/L	1.0000	0.0171	100	75-125			
Cadmium	0.114	0.0010	0.00007	mg/L	0.10000	0.0001	114	75-125			
Calcium	3.79	0.500	0.0311	mg/L	1.0000	3.35	45	75-125			QM-02
Chromium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125			
Cobalt	0.104	0.0100	0.0005	mg/L	0.10000	0.0005	104	75-125			
Copper	0.123	0.0250	0.0005	mg/L	0.10000	0.0178	105	75-125			
Lead	0.101	0.0050	0.0001	mg/L	0.10000	ND	101	75-125			
Molybdenum	0.109	0.0100	0.0017	mg/L	0.10000	ND	109	75-125			
Nickel	0.116	0.0100	0.0006	mg/L	0.10000	0.0113	105	75-125			
Selenium	0.105	0.0100	0.0010	mg/L	0.10000	ND	105	75-125			
Silver	0.111	0.0100	0.0005	mg/L	0.10000	ND	111	75-125			
Thallium	0.102	0.0010	0.0002	mg/L	0.10000	ND	102	75-125			
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000	ND	106	75-125			
Zinc	0.165	0.0100	0.0021	mg/L	0.10000	0.0550	110	75-125			
Lithium	0.132	0.0500	0.0021	mg/L	0.10000	0.0216	110	75-125			
Matrix Spike Dup (6080064-MSD1)			Source: AZH0030-01			Prepared: 08/03/16 Analyzed: 08/04/16					
Antimony	0.108	0.0030	0.0008	mg/L	0.10000	0.0006	107	75-125	4	20	
Arsenic	0.103	0.0050	0.0016	mg/L	0.10000	ND	103	75-125	3	20	
Barium	0.114	0.0100	0.0004	mg/L	0.10000	0.0145	99	75-125	4	20	
Beryllium	0.0951	0.0030	0.00008	mg/L	0.10000	0.0006	94	75-125	7	20	
Boron	0.993	0.100	0.0064	mg/L	1.0000	0.0171	98	75-125	3	20	
Cadmium	0.105	0.0010	0.00007	mg/L	0.10000	0.0001	105	75-125	9	20	
Calcium	3.98	0.500	0.0311	mg/L	1.0000	3.35	63	75-125	5	20	QM-02
Chromium	0.108	0.0100	0.0009	mg/L	0.10000	ND	108	75-125	6	20	
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000	0.0005	102	75-125	1	20	
Copper	0.122	0.0250	0.0005	mg/L	0.10000	0.0178	104	75-125	0.5	20	
Lead	0.101	0.0050	0.0001	mg/L	0.10000	ND	101	75-125	0.5	20	
Molybdenum	0.106	0.0100	0.0017	mg/L	0.10000	ND	106	75-125	3	20	
Nickel	0.119	0.0100	0.0006	mg/L	0.10000	0.0113	108	75-125	2	20	
Selenium	0.102	0.0100	0.0010	mg/L	0.10000	ND	102	75-125	3	20	
Silver	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125	8	20	
Thallium	0.101	0.0010	0.0002	mg/L	0.10000	ND	101	75-125	1	20	
Vanadium	0.110	0.0100	0.0071	mg/L	0.10000	ND	110	75-125	4	20	
Zinc	0.163	0.0100	0.0021	mg/L	0.10000	0.0550	108	75-125	1	20	
Lithium	0.124	0.0500	0.0021	mg/L	0.10000	0.0216	102	75-125	6	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080064 - EPA 3005A											
Post Spike (6080064-PS1)				Source: AZH0030-01				Prepared: 08/03/16 Analyzed: 08/04/16			
Antimony	97.7			ug/L	100.00	0.586	97	80-120			
Arsenic	104			ug/L	100.00	0.0228	104	80-120			
Barium	116			ug/L	100.00	14.5	101	80-120			
Beryllium	104			ug/L	100.00	0.649	104	80-120			
Boron	1040			ug/L	1000.0	17.1	102	80-120			
Cadmium	106			ug/L	100.00	0.127	106	80-120			
Calcium	4090			ug/L	1000.0	3350	74	80-120			QM-02
Chromium	104			ug/L	100.00	0.402	103	80-120			
Cobalt	103			ug/L	100.00	0.485	102	80-120			
Copper	117			ug/L	100.00	17.8	99	80-120			
Lead	102			ug/L	100.00	0.0009	102	80-120			
Molybdenum	110			ug/L	100.00	0.264	110	80-120			
Nickel	113			ug/L	100.00	11.3	102	80-120			
Selenium	102			ug/L	100.00	0.582	101	80-120			
Silver	106			ug/L	100.00	0.0053	106	80-120			
Thallium	102			ug/L	100.00	0.0382	102	80-120			
Vanadium	108			ug/L	100.00	-0.287	108	80-120			
Zinc	163			ug/L	100.00	55.0	108	80-120			
Lithium	132			ug/L	100.00	21.6	110	80-120			

Batch 6080104 - EPA 3005A

Blank (6080104-BLK1)				Prepared & Analyzed: 08/04/16							
Antimony	0.0003	0.0030	0.0002	mg/L							J
Arsenic	ND	0.0050	0.0007	mg/L							
Barium	ND	0.0050	0.0003	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	0.0064	0.100	0.0044	mg/L							J
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	0.0721	0.500	0.0126	mg/L							J
Chromium	ND	0.0100	0.0004	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0004	mg/L							
Lead	ND	0.0050	0.00008	mg/L							
Molybdenum	ND	0.0100	0.0005	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0009	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00006	mg/L							
Vanadium	ND	0.0100	0.0016	mg/L							



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080104 - EPA 3005A											
Blank (6080104-BLK1)						Prepared & Analyzed: 08/04/16					
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0012	mg/L							
LCS (6080104-BS1)						Prepared & Analyzed: 08/04/16					
Antimony	0.107	0.0050	0.0008	mg/L	0.10000		107	80-120			
Arsenic	0.104	0.0050	0.0016	mg/L	0.10000		104	80-120			
Barium	0.100	0.0050	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.107	0.0030	0.00008	mg/L	0.10000		107	80-120			
Boron	1.09	0.100	0.0064	mg/L	1.0000		109	80-120			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000		101	80-120			
Calcium	1.12	0.500	0.0311	mg/L	1.0000		112	80-120			
Chromium	0.103	0.0100	0.0009	mg/L	0.10000		103	80-120			
Cobalt	0.0992	0.0100	0.0005	mg/L	0.10000		99	80-120			
Copper	0.0997	0.0250	0.0005	mg/L	0.10000		100	80-120			
Lead	0.101	0.0050	0.0001	mg/L	0.10000		101	80-120			
Molybdenum	0.107	0.0100	0.0017	mg/L	0.10000		107	80-120			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000		101	80-120			
Selenium	0.106	0.0100	0.0010	mg/L	0.10000		106	80-120			
Silver	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.107	0.0100	0.0071	mg/L	0.10000		107	80-120			
Zinc	0.108	0.0100	0.0021	mg/L	0.10000		108	80-120			
Lithium	0.110	0.0500	0.0012	mg/L	0.10000		110	80-120			
Matrix Spike (6080104-MS1)						Source: AZH0029-01 Prepared & Analyzed: 08/04/16					
Antimony	0.111	0.0050	0.0008	mg/L	0.10000	0.0004	111	75-125			
Arsenic	0.109	0.0050	0.0016	mg/L	0.10000	0.0070	102	75-125			
Barium	0.121	0.0050	0.0004	mg/L	0.10000	0.0200	101	75-125			
Beryllium	0.0958	0.0030	0.00008	mg/L	0.10000	0.0146	81	75-125			
Boron	15.6	2.00	0.128	mg/L	1.0000	9.89	567	75-125			QM-02
Cadmium	0.105	0.0010	0.00007	mg/L	0.10000	0.0014	103	75-125			
Calcium	139	10.0	0.621	mg/L	1.0000	136	296	75-125			QM-02
Chromium	0.101	0.0100	0.0009	mg/L	0.10000	0.0021	99	75-125			
Cobalt	0.126	0.0100	0.0005	mg/L	0.10000	0.0297	96	75-125			
Copper	0.0922	0.0250	0.0005	mg/L	0.10000	0.0007	91	75-125			
Lead	0.0890	0.0050	0.0001	mg/L	0.10000	0.0005	89	75-125			
Molybdenum	0.113	0.0100	0.0017	mg/L	0.10000	0.0005	112	75-125			
Nickel	0.138	0.0100	0.0006	mg/L	0.10000	0.0397	98	75-125			
Selenium	0.118	0.0100	0.0010	mg/L	0.10000	0.0192	98	75-125			
Silver	0.0984	0.0100	0.0005	mg/L	0.10000	ND	98	75-125			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080104 - EPA 3005A											
Matrix Spike (6080104-MS1)			Source: AZH0029-01			Prepared & Analyzed: 08/04/16					
Thallium	0.0910	0.0010	0.0002	mg/L	0.10000	0.00006	91	75-125			
Vanadium	0.105	0.0100	0.0071	mg/L	0.10000	ND	105	75-125			
Zinc	0.232	0.0100	0.0021	mg/L	0.10000	0.130	103	75-125			
Lithium	0.102	0.0500	0.0012	mg/L	0.10000	0.0142	88	75-125			
Matrix Spike Dup (6080104-MSD1)			Source: AZH0029-01			Prepared & Analyzed: 08/04/16					
Antimony	0.107	0.0050	0.0008	mg/L	0.10000	0.0004	106	75-125	4	20	
Arsenic	0.109	0.0050	0.0016	mg/L	0.10000	0.0070	102	75-125	0.8	20	
Barium	0.115	0.0050	0.0004	mg/L	0.10000	0.0200	95	75-125	5	20	
Beryllium	0.0918	0.0030	0.00008	mg/L	0.10000	0.0146	77	75-125	4	20	
Boron	15.7	2.00	0.128	mg/L	1.0000	9.89	581	75-125	0.9	20	QM-02
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000	0.0014	101	75-125	2	20	
Calcium	136	10.0	0.621	mg/L	1.0000	136	NR	75-125	2	20	QM-02
Chromium	0.101	0.0100	0.0009	mg/L	0.10000	0.0021	99	75-125	0.2	20	
Cobalt	0.130	0.0100	0.0005	mg/L	0.10000	0.0297	100	75-125	3	20	
Copper	0.0921	0.0250	0.0005	mg/L	0.10000	0.0007	91	75-125	0.1	20	
Lead	0.0858	0.0050	0.0001	mg/L	0.10000	0.0005	85	75-125	4	20	
Molybdenum	0.112	0.0100	0.0017	mg/L	0.10000	0.0005	111	75-125	0.7	20	
Nickel	0.135	0.0100	0.0006	mg/L	0.10000	0.0397	95	75-125	2	20	
Selenium	0.113	0.0100	0.0010	mg/L	0.10000	0.0192	94	75-125	4	20	
Silver	0.0980	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	0.4	20	
Thallium	0.0865	0.0010	0.0002	mg/L	0.10000	0.00006	86	75-125	5	20	
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000	ND	106	75-125	1	20	
Zinc	0.225	0.0100	0.0021	mg/L	0.10000	0.130	96	75-125	3	20	
Lithium	0.0952	0.0500	0.0012	mg/L	0.10000	0.0142	81	75-125	7	20	
Post Spike (6080104-PS1)			Source: AZH0029-01			Prepared & Analyzed: 08/04/16					
Antimony	99.6			ug/L	100.00	0.447	99	80-120			
Arsenic	110			ug/L	100.00	6.96	103	80-120			
Barium	119			ug/L	100.00	20.0	99	80-120			
Beryllium	95.1			ug/L	100.00	14.6	81	80-120			
Boron	15900			ug/L	1000.0	9890	605	80-120			QM-02
Cadmium	103			ug/L	100.00	1.42	101	80-120			
Calcium	137000			ug/L	1000.0	136000	51	80-120			QM-02
Chromium	96.8			ug/L	100.00	2.08	95	80-120			
Cobalt	124			ug/L	100.00	29.7	94	80-120			
Copper	90.4			ug/L	100.00	0.733	90	80-120			
Lead	86.7			ug/L	100.00	0.479	86	80-120			
Molybdenum	110			ug/L	100.00	0.519	109	80-120			
Nickel	133			ug/L	100.00	39.7	93	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Report No.: AZH0029

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080104 - EPA 3005A											
Post Spike (6080104-PS1)			Source: AZH0029-01			Prepared & Analyzed: 08/04/16					
Selenium	121			ug/L	100.00	19.2	102	80-120			
Silver	96.6			ug/L	100.00	0.0128	97	80-120			
Thallium	88.8			ug/L	100.00	0.0583	89	80-120			
Vanadium	106			ug/L	100.00	-0.203	106	80-120			
Zinc	226			ug/L	100.00	130	97	80-120			
Lithium	104			ug/L	100.00	14.2	89	80-120			
Batch 6080106 - EPA 7470A											
Blank (6080106-BLK1)						Prepared & Analyzed: 08/08/16					
Mercury	ND	0.00030	0.00013	mg/L							
LCS (6080106-BS1)						Prepared & Analyzed: 08/08/16					
Mercury	0.00244	0.00050	0.00013	mg/L	2.5000E-3		98	80-120			
Matrix Spike (6080106-MS1)			Source: AZH0030-03			Prepared & Analyzed: 08/08/16					
Mercury	0.00238	0.00050	0.00013	mg/L	2.5000E-3	ND	95	75-125			
Matrix Spike Dup (6080106-MSD1)			Source: AZH0030-03			Prepared & Analyzed: 08/08/16					
Mercury	0.00249	0.00050	0.00013	mg/L	2.5000E-3	ND	100	75-125	5	20	
Post Spike (6080106-PS1)			Source: AZH0030-03			Prepared & Analyzed: 08/08/16					
Mercury	1.58			ug/L	1.6667	0.00539	94	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

August 09, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1



CLIENT NAME: Southern Company Services		ANALYSIS REQUESTED										
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE B10185 Atlanta, GA 30308		CONTAINER TYPE: PRESERVATION: # of										
REPORT TO: Jain Abraham		CONTAINER TYPE: PRESERVATION: # of										
REQUESTED COMPLETION DATE: Standard		PRESERVATION: # of										
PROJECT NAME/STATE: Yates AP CCR GW		CONTAINER TYPE: PRESERVATION: # of										
PROJECT #:		CONTAINER TYPE: PRESERVATION: # of										
Collection DATE	Collection TIME	MATRIX CODE	COMPO	GRA B	SAMPLE IDENTIFICATION	CONTAINER TYPE: PRESERVATION: # of	ANALYSIS REQUESTED	LAB #	DATE/TIME	DATE/TIME	CLIENT	OTHER FS
8/1/16	0911	GW	X		YGWC-335	3	Metals App III + IV EPA GSD + EPA 7470 CE, T, SO4, EPA 300 TDS, SM5210C Medium 226 + 228: SW-846 9315 + 9320	3	8/2/16 @ 0655	8/2/16 @ 0655	COURIER	
8/1/16	1112	GW	X		YGWC-245	3		3				
8/1/16	-	GW	X		DUP-4	3		3				
8/1/16	1335	GW	X		YGWC-275	3		3				
8/1/16	1430	W	X		EQB-5	3		3				

SAMPLED BY AND TITLE: RECEIVED BY: Wesley Bowen		DATE/TIME:	RELINQUISHED BY:	DATE/TIME:
		8/1/16 @ 1510	JB	8/2/16 @ 0655
RECEIVED BY LAB: C. J. DeBe		8/2/16 0840		

PH checked:	Temp. stored:	Time in transit:	Sample Shipped Via:	Carrier:	Client:	Other FS:
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Min: 2°C Max:	Min: 2h Max:	UPS	FED-EX	USPS	COURIER
Seal: <input checked="" type="checkbox"/> Broken <input type="checkbox"/> Not Present			Quantity Seal: <input checked="" type="checkbox"/>	# of Coolers	Cooler ID:	

COC Revised 2016-05-17.xlsx

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201

PAGE: 1 OF 1



CLIENT NAME: <u>Southern Company Services</u> CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: <u>241 Ralph McGill Blvd SE 310185</u> <u>Atlanta, GA 30308</u>		ANALYSIS REQUESTED # of CONTAINER TYPE: <u>3</u> PRESERVATION: <u>3</u> # of <u>3</u>		CONTAINER TYPE: <u>P</u> PRESERVATION: <u>3</u> # of <u>3</u>		L A B I D N U M B E R <u>678</u>		CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		PRESERVATION: 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
REPORT TO: <u>Jody Abernham</u> REQUESTED COMPLETION DATE: <u>8/1/16</u> PROJECT NAME/STATE: <u>Yates AP CLR GU</u>		CC: <u>MRPADILLE@SouthernCo.com</u> <u>CHILLCORKE@SouthernCo.com</u> PO #: <u>LLMILLET@SouthernCo.com</u>		MATRIX CODE* G R A B C O M P		SAMPLE IDENTIFICATION Y6WC-26I Y6WC-26S Y6WC-27I		*MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT		REMARKS/ADDITIONAL INFORMATION	
COLLECTION DATE: <u>8/1/16</u> COLLECTION TIME: <u>0949</u> MATRIX CODE: <u>G-W</u> SAMPLE IDENTIFICATION: <u>Y6WC-26I</u>		COLLECTION DATE: <u>8/1/16</u> COLLECTION TIME: <u>1133</u> MATRIX CODE: <u>G-W</u> SAMPLE IDENTIFICATION: <u>Y6WC-26S</u>		COLLECTION DATE: <u>8/1/16</u> COLLECTION TIME: <u>1325</u> MATRIX CODE: <u>G-W</u> SAMPLE IDENTIFICATION: <u>Y6WC-27I</u>		RELINQUISHED BY: <u>[Signature]</u> DATE/TIME: <u>8/1/16 0810</u>		RELINQUISHED BY: <u>[Signature]</u> DATE/TIME: <u>8/2/16 0655</u>		FOR LAB USE ONLY LAB #: <u>A2H0029</u> Entered into LIMS: <u>[Signature]</u>	
RECEIVED FROM: <u>Charles Hank</u> RECEIVED BY: <u>[Signature]</u> DATE/TIME: <u>8/2/16 0840</u>		SAMPLE SHIPPED VIA: UPS <u>1</u> FED-EX <u>0</u> USPS <u>0</u> COURIER <u>0</u> OTHER FS <u>0</u> # of Containers		CLIENT: <u>[Signature]</u> COOKER ID: <u>[Signature]</u>		TRACKING #:		TRACKING #:		TRACKING #:	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 8/9/2016 2:09:22PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 08/02/16 08:40

Work Order: AZH0029

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 8

#Containers: 24

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

Product Name: Low-Flow System

Date: 2016-07-25 12:39:40

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name YGWA- 11
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 449474
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Sample Pro
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 57 ft

Pump placement from TOC 48 ft

Well Information:

Well ID YGWA-11
Well diameter 2 in
Well Total Depth 53.5 ft
Screen Length 10 ft
Depth to Water 36.55 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.4444151 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 8.48 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	12:10:38	3899.95	19.86	6.22	61.62	1.38	39.55	2.97	44.17
Last 5	12:15:38	4199.95	20.08	6.21	61.41	1.47	39.56	3.06	45.65
Last 5	12:20:38	4499.95	20.23	6.21	60.73	1.57	39.56	3.18	47.11
Last 5	12:25:38	4799.95	19.95	6.21	60.45	1.59	39.55	3.21	45.39
Last 5	12:30:38	5099.95	20.31	6.21	60.21	0.00*	0.00*	3.42	46.88
Variance 0			0.14	0.00	-0.68			0.12	1.46
Variance 1			-0.28	-0.00	-0.28			0.03	-1.72
Variance 2			0.36	-0.00	-0.24			0.21	1.49

Notes

Purge ended at 12:26. Didn't end low flow before sampling commencement. Will collect DUP-2.

** No Reading, see comment above*

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-26 11:15:14

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-1D
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 449474
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type
Tubing Type
Tubing Diameter 0.17 in
Tubing Length 130 ft

Sample Pro
PE

Pump placement from TOC 123 ft

Well Information:

Well ID YGWA-1D
Well diameter 2 in
Well Total Depth 128.60 ft
Screen Length 10 ft
Depth to Water 50.02 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.770245 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.45 in
Total Volume Pumped 19.95 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	10:51:59	6599.95	18.30	7.45	161.15	5.17	50.47	0.18	-71.66
Last 5	10:56:59	6899.94	18.41	7.44	150.90	4.73	50.47	0.18	-75.82
Last 5	11:01:59	7199.95	18.43	7.44	159.13	4.54	50.45	0.19	-79.30
Last 5	11:06:59	7499.94	18.37	7.43	157.18	4.09	50.50	0.17	-84.21
Last 5	11:11:59	7799.95	18.35	7.43	155.22	4.01	50.47	0.19	-87.46
Variance 0			0.02	-0.01	8.23			0.01	-3.48
Variance 1			-0.06	-0.01	-1.95			-0.02	-4.91
Variance 2			-0.02	-0.00	-1.96			0.02	-3.25

Notes

Will collect FB-2 at well. YGWA-1D Sample collected at 11:20.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-25 13:26:18

Project Information:

Operator Name Corbin
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-3I
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type pe
Tubing Diameter .17 in
Tubing Length 65 ft

Pump placement from TOC 54 ft

Well Information:

Well ID YGWA-3I
Well diameter 2 in
Well Total Depth 58.65 ft
Screen Length 10 ft
Depth to Water 49.55 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.4801225 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 33 in
Total Volume Pumped 28.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	12:32:21	7199.82	19.90	7.73	189.24	0.05	52.30	0.07	-115.48
Last 5	12:37:21	7499.82	20.17	7.74	186.87	0.14	52.29	0.07	-117.17
Last 5	12:42:21	7799.82	20.17	7.73	187.33	0.02	52.30	0.06	-117.43
Last 5	12:47:21	8099.82	20.07	7.75	185.86	0.10	52.30	0.06	-117.19
Last 5	12:52:21	8399.82	19.38	7.74	185.00	0.00	52.30	0.06	-116.16
Variance 0			0.00	-0.01	0.46			-0.00	-0.26
Variance 1			-0.10	0.02	-1.47			-0.01	0.24
Variance 2			-0.70	-0.01	-0.86			0.00	1.03

Notes

Partly cloudy, mid 90's

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-26 10:16:23

Project Information:

Operator Name Corbin
Company Name AECOM
Project Name Plant Yates
Site Name ~~CWC CR~~ YGWA-3D WB
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type pe
Tubing Diameter .17 in
Tubing Length 150 ft

Pump placement from TOC 129.45 ft

Well Information:

Well ID YGWA-3D
Well diameter 2 in
Well Total Depth 134.45 ft
Screen Length 10 ft
Depth to Water 29.89 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.8595135 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.96 in
Total Volume Pumped 10.875 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	09:08:21	3899.93	19.54	7.89	214.05	2.09	29.97	1.48	-95.17
Last 5	09:13:21	4199.93	19.28	7.89	214.30	2.10	29.97	1.38	-96.26
Last 5	09:18:21	4499.93	19.10	7.89	214.44	2.23	29.97	1.38	-98.00
Last 5	09:23:21	4799.93	19.01	7.86	214.87	2.19	29.27	1.39	-99.92
Last 5	09:28:21	5099.93	19.25	7.88	215.65	2.27	29.27	1.43	-101.48
Variance 0			-0.18	0.00	0.14			-0.01	-1.74
Variance 1			-0.09	-0.03	0.42			0.02	-1.92
Variance 2			0.24	0.02	0.79			0.03	-1.56

Notes

Clear, mid 80's

Grab Samples

YGWA-3D
0931

Product Name: Low-Flow System

Date: 2016-07-26 12:27:05

Project Information:

Operator Name Corbin
Company Name AECOM
Project Name Plant Yates (YGWA-14S)
Site Name YGWA-14s
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type peristaltic
Tubing Type pe
Tubing Diameter .17 in
Tubing Length 45 ft

Pump placement from TOC 30.82 ft

Well Information:

Well ID YGWA-14s (YGWA-14S)
Well diameter 2 in
Well Total Depth 35.82 ft
Screen Length 10 ft
Depth to Water 17.76 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.390854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 4.07 in
Total Volume Pumped 3.875 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	11:24:49	600.03	23.20	5.44	60.50	0.10	18.10	5.45	125.70
Last 5	11:29:49	900.02	23.02	5.44	60.20	0.65	18.11	5.24	118.82
Last 5	11:34:49	1200.03	22.71	5.45	59.97	0.04	18.11	5.24	113.29
Last 5	11:39:49	1500.02	22.89	5.45	60.09	0.49	18.11	5.18	109.53
Last 5	11:44:49	1800.02	23.00	5.45	60.06	0.15	18.10	5.33	106.21
Variance 0			-0.32	0.00	-0.23			-0.01	-5.53
Variance 1			0.18	-0.00	0.12			-0.06	-3.76
Variance 2			0.11	0.00	-0.03			0.15	-3.32

Notes

Pt. cloudy, upper 80s

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-25 12:42:59

Project Information:

Operator Name Charles Watson
Company Name AECOM
Project Name Plant Yates
Site Name YGWA-30I
Latitude 33° 27' 26.5"
Longitude -84° -54' -21.36"
Sonde SN 463068
Turbidity Make/Model Lamotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 60 ft

Pump placement from TOC 54 ft

Well Information:

Well ID YGWA-30I
Well diameter 2 in
Well Total Depth 59.63 ft
Screen Length 10 ft
Depth to Water 37.31 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.4578054 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.36 in
Total Volume Pumped 12.55 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	12:15:50	3599.99	21.08	5.82	38.17	5.35	37.34	5.75	78.83
Last 5	12:20:50	3899.99	21.28	5.82	38.43	1.81	37.34	5.85	78.97
Last 5	12:25:50	4199.99	21.21	5.83	38.15	1.77	37.34	5.65	79.44
Last 5	12:30:50	4500.06	21.01	5.83	38.56	1.88	37.34	5.71	79.25
Last 5	12:35:50	4800.00	21.32	5.82	38.62	1.72	37.34	5.71	79.49
Variance 0			-0.07	0.01	-0.28			-0.21	0.47
Variance 1			-0.19	-0.00	0.41			0.06	-0.19
Variance 2			0.31	-0.01	0.06			0.00	0.23

Notes

Sunny 85F. Well site in good condition.
Rate change at 11:20 0.1L/min to 0.15 L/min. Lamotte fogged up at 12:15. Unit cleaned and recalibrated. Sample time 12:42.

Grab Samples

YGWA-30I
Sample time 12:42

Product Name: Low-Flow System

Date: 2016-08-01 12:25:43

Project Information:

Operator Name Corbin
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-26S
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type peristaltic
Tubing Type pe
Tubing Diameter .17 in
Tubing Length 50 ft

Pump placement from TOC 35.1 ft

Well Information:

Well ID YGWC-26S
Well diameter 2 in
Well Total Depth 40.1 ft
Screen Length 10 ft
Depth to Water 21.4 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.3131711 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 12.72 in
Total Volume Pumped 3.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	11:07:53	299.92	24.67	5.15	296.33	2.85	22.04	1.27	22.72
Last 5	11:12:53	599.92	24.42	5.15	299.02	2.52	22.25	1.14	26.25
Last 5	11:17:53	899.92	24.61	5.15	299.21	2.34	22.37	1.09	28.39
Last 5	11:22:53	1199.92	24.33	5.15	299.09	3.11	22.42	1.08	30.63
Last 5	11:27:53	1499.92	24.47	5.17	299.56	2.25	22.46	1.02	32.20
Variance 0			0.19	0.00	0.20			-0.05	2.14
Variance 1			-0.28	0.00	-0.13			-0.01	2.24
Variance 2			0.14	0.02	0.47			-0.06	1.56

Notes

Pt cloudy, upper 70s

Grab Samples

YGWC-26S
1133

Product Name: Low-Flow System

Date: 2016-08-01 10:44:37

Project Information:

Operator Name Corbin
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-26I
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type pe
Tubing Diameter .17 in
Tubing Length 75 ft

Pump placement from TOC 64.71 ft

Well Information:

Well ID ~~GWC-5R~~ YGWC-26I
Well diameter 2 in
Well Total Depth 69.71 ft
Screen Length 10 ft
Depth to Water 24.81 ft

Pumping Information:

Final Pumping Rate 0 mL/min
Total System Volume 0.5247567 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 0 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	09:24:58	2399.94	20.39	5.81	302.69	5.69	25.28	0.12	35.67
Last 5	09:29:58	2699.94	20.30	5.82	302.83	5.30	25.28	0.11	35.53
Last 5	09:34:58	2999.94	20.25	5.82	303.14	4.23	25.28	0.10	34.69
Last 5	09:39:58	3299.94	20.21	5.83	303.12	3.79	25.28	0.10	34.31
Last 5	09:44:58	3599.94	20.25	5.83	303.29	3.79	25.28	0.09	33.79
Variance 0			-0.05	-0.00	0.31			-0.00	-0.84
Variance 1			-0.03	0.00	-0.03			-0.00	-0.38
Variance 2			0.04	0.00	0.18			-0.01	-0.52

Notes

Pt cloudy, mid 70s

Grab Samples

YGWC-26I
0949

Product Name: Low-Flow System

Date: 2016-08-01 13:32:10

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-27S
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 449474
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Proactive Alexis
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 43 ft

Pump placement from TOC ft

Well Information:

Well ID YGWC-27S
Well diameter 2 in
Well Total Depth 39.50 ft
Screen Length 10 ft
Depth to Water 27.29 ft

Pumping Information:

Final Pumping Rate 250 mL/min
Total System Volume 0.2819272 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1.3 in
Total Volume Pumped 8.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	13:10:05	600.02	22.43	6.16	431.26	3.06	27.40	0.16	41.55
Last 5	13:15:05	900.02	22.40	6.14	431.79	1.91	27.40	0.14	41.96
Last 5	13:20:05	1200.02	22.27	6.14	435.27	1.64	27.40	0.13	42.31
Last 5	13:25:05	1500.02	22.36	6.13	435.49	1.60	27.41	0.12	41.73
Last 5	13:30:05	1800.02	22.45	6.12	436.18	1.05	27.42	0.11	40.89
Variance 0			-0.13	-0.01	3.48			-0.01	0.35
Variance 1			0.09	-0.01	0.22			-0.01	-0.57
Variance 2			0.09	-0.01	0.69			-0.01	-0.84

Notes

Collect sample at 13:35

Grab Samples

Product Name: Low-Flow System

Date: 2016-08-01 13:52:18

Project Information:

Operator Name Corbin
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-27I
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 465016
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type bladder
Tubing Type pe
Tubing Diameter .17 in
Tubing Length 85 ft

Pump placement from TOC 74.84 ft

Well Information:

Well ID ~~CWC-5R~~ YGWC-27I
Well diameter 2 in
Well Total Depth 79.84 ft
Screen Length 10 ft
Depth to Water 29.2 ft

Pumping Information:

Final Pumping Rate 300 mL/min
Total System Volume 0.569391 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 6.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	13:06:14	300.02	21.77	6.33	332.35	8.09	29.25	0.39	2.20
Last 5	13:11:14	599.92	21.46	6.35	334.29	3.28	29.40	0.27	-42.07
Last 5	13:16:14	899.92	21.32	6.35	334.65	1.72	29.45	0.21	-59.99
Last 5	13:21:14	1199.92	21.33	6.34	330.00	0.78	29.45	0.19	-62.20
Last 5									
Variance 0			-0.31	0.02	1.94			-0.12	-44.27
Variance 1			-0.14	-0.00	0.36			-0.06	-17.92
Variance 2			0.01	-0.01	-4.65			-0.03	-2.21

Notes

Cloudy, mid 80s

Grab Samples

YGWC-27I
1325

Product Name: Low-Flow System

Date: 2016-08-02 09:20:14

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-28S
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 449474
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Proactive Alexis
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 46 ft

Pump placement from TOC 39 ft

Well Information:

Well ID YGWC-28S
Well diameter 2 in
Well Total Depth 44.90 ft
Screen Length 10 ft
Depth to Water 22.67 ft

Pumping Information:

Final Pumping Rate ~~150~~ 250 mL/min
Total System Volume 0.2953174 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 7.5 in
Total Volume Pumped ~~250 L~~ 9.97 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	08:55:06	1200.02	20.35	6.36	407.32	7.34	23.40	0.11	-58.63
Last 5	09:00:06	1500.02	20.35	6.35	405.10	6.22	23.42	0.09	-56.59
Last 5	09:05:06	1800.02	20.42	6.35	406.23	5.42	23.41	0.09	-56.44
Last 5	09:10:06	2100.02	20.48	6.35	404.24	3.71	23.42	0.08	-55.38
Last 5	09:15:06	2400.02	20.51	6.35	403.45	2.43	23.42	0.09	-55.06
Variance 0			0.07	0.00	1.13			0.00	0.15
Variance 1			0.06	-0.01	-1.99			-0.01	1.05
Variance 2			0.03	0.00	-0.79			0.00	0.33

Notes

Increases purge flow at 08:45 from 225 mL to 250 mL/min. Collect sample at 09:22. Will collect FB-5.

Grab Samples

Product Name: Low-Flow System

Date: 2016-08-02 09:27:00

Project Information:

Operator Name Charles Watson
Company Name AECOM
Project Name Plant Yates
Site Name YGWC-28I
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model Lamotte 2020we

Pump Information:

Pump Model/Type peristaltic
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 75 ft

Pump placement from TOC 65 ft

Well Information:

Well ID YGWC-28I
Well diameter 2 in
Well Total Depth 70.15 ft
Screen Length 10 ft
Depth to Water 24.67 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.4247567 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 27.36 in
Total Volume Pumped 7.23 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	08:58:29	1200.02	21.58	6.43	409.88	1.57	26.74	0.48	44.31
Last 5	09:03:29	1500.02	21.55	6.42	407.75	0.87	26.80	0.48	26.97
Last 5	09:13:29	2100.02	21.74	6.43	410.11	0.79	26.91	0.48	7.27
Last 5	09:18:29	2400.02	21.66	6.42	411.21	0.85	26.93	0.41	6.26
Last 5	09:23:29	2700.02	21.68	6.43	412.33	0.86	26.95	0.44	7.04
Variance 0			0.19	0.01	2.36			-0.01	-19.70
Variance 1			-0.09	-0.01	1.10			-0.07	-1.01
Variance 2			0.02	0.01	1.12			0.03	0.78

Notes

Overcast, humid, 75 F. Well pad in good condition.
No rate changes. Sampling started at 9:27.

Grab Samples

YGWC-28I
Sampling started at 9:27

Product Name: Low-Flow System

Date: 2016-08-02 13:50:47

Project Information:

Operator Name WB
Company Name AECOM
Project Name Plant Yates
Site Name Default Site
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 449474
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Proactive Alexis
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 41 ft

Pump placement from TOC 34 ft

Well Information:

Well ID YGWC-29I
Well diameter 2 in
Well Total Depth 39.17 ft
Screen Length 10 ft
Depth to Water 26.87 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.2730004 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 24.16 in
Total Volume Pumped 24 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	13:28:01	5999.95	21.83	6.18	261.73	0.00	29.77	0.23	40.55
Last 5	13:33:01	6299.95	21.76	6.18	260.52	0.00	29.77	0.31	42.11
Last 5	13:38:01	6599.95	21.99	6.17	260.26	0.00	29.77	0.23	44.65
Last 5	13:43:01	6899.85	22.10	6.17	260.27	0.01	29.77	0.21	48.05
Last 5	13:48:01	7199.85	22.01	6.17	260.32	0.01	29.77	0.24	49.63
Variance 0			0.23	-0.01	-0.26			-0.08	2.54
Variance 1			0.10	-0.00	0.02			-0.02	3.40
Variance 2			-0.09	-0.00	0.04			0.03	1.58

Notes

Collect sample at 13:50. Also collect DUP-5 and lab DUP for Rads.

Grab Samples



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZI0400

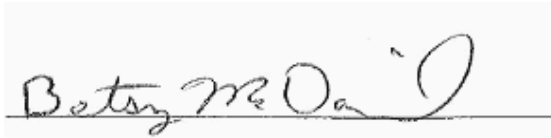
September 21, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-1I	AZI0400-01	Ground Water	09/13/16 10:15	09/14/16 08:50
YGWA-1D	AZI0400-02	Ground Water	09/13/16 12:12	09/14/16 08:50
Dup-1	AZI0400-03	Ground Water	09/13/16 00:00	09/14/16 08:50



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

Project: CCR Event

Client ID: YGWA-1I

Lab Number ID: AZI0400-01

Date/Time Sampled: 9/13/2016 10:15:00AM

Date/Time Received: 9/14/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	67	25	10	mg/L	SM 2540 C		1	09/15/16 17:00	09/15/16 17:00	6090390	JPT
Inorganic Anions											
Chloride	1.3	0.25	0.01	mg/L	EPA 300.0		1	09/16/16 10:33	09/16/16 16:26	6090444	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/16/16 10:33	09/16/16 16:26	6090444	RLC
Sulfate	5.2	1.0	0.05	mg/L	EPA 300.0		1	09/16/16 10:33	09/16/16 16:26	6090444	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Barium	0.0080	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Calcium	2.21	0.500	0.0311	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Cobalt	0.0009	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Molybdenum	0.0100	0.0100	0.0017	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:25	6090367	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/16/16 08:45	09/16/16 13:04	6090412	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

Project: CCR Event

Client ID: YGWA-1D

Lab Number ID: AZI0400-02

Date/Time Sampled: 9/13/2016 12:12:00PM

Date/Time Received: 9/14/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	105	25	10	mg/L	SM 2540 C		1	09/15/16 17:00	09/15/16 17:00	6090390	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	09/16/16 10:33	09/16/16 17:28	6090444	RLC
Fluoride	0.11	0.30	0.02	mg/L	EPA 300.0	J	1	09/16/16 10:33	09/16/16 17:28	6090444	RLC
Sulfate	2.9	1.0	0.05	mg/L	EPA 300.0		1	09/16/16 10:33	09/16/16 17:28	6090444	RLC
Metals, Total											
Antimony	0.0010	0.0030	0.0008	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Barium	0.0084	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Calcium	11.8	2.50	0.155	mg/L	EPA 6020B		5	09/15/16 09:40	09/19/16 14:11	6090367	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Lead	0.0001	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Molybdenum	0.0127	0.0100	0.0017	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Lithium	0.0112	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:30	6090367	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/16/16 08:45	09/16/16 13:07	6090412	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

Project: CCR Event

Client ID: Dup-1

Lab Number ID: AZI0400-03

Date/Time Sampled: 9/13/2016 12:00:00AM

Date/Time Received: 9/14/2016 8:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	112	25	10	mg/L	SM 2540 C		1	09/15/16 17:00	09/15/16 17:00	6090390	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	09/16/16 10:33	09/16/16 17:48	6090444	RLC
Fluoride	0.10	0.30	0.02	mg/L	EPA 300.0	J	1	09/16/16 10:33	09/16/16 17:48	6090444	RLC
Sulfate	2.9	1.0	0.05	mg/L	EPA 300.0		1	09/16/16 10:33	09/16/16 17:48	6090444	RLC
Metals, Total											
Antimony	0.0010	0.0030	0.0008	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Barium	0.0085	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Calcium	11.7	2.50	0.155	mg/L	EPA 6020B		5	09/15/16 09:40	09/19/16 14:17	6090367	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Lead	0.0001	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Molybdenum	0.0122	0.0100	0.0017	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Lithium	0.0105	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/15/16 09:40	09/16/16 00:36	6090367	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/16/16 08:45	09/16/16 13:09	6090412	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090390 - SM 2540 C											
Blank (6090390-BLK1)						Prepared & Analyzed: 09/15/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6090390-BS1)						Prepared & Analyzed: 09/15/16					
Total Dissolved Solids	400	25	10	mg/L	400.00		100	84-108			
Duplicate (6090390-DUP1)						Prepared & Analyzed: 09/15/16					
						Source: AZI0400-02					
Total Dissolved Solids	112	25	10	mg/L		105			6	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090444 - EPA 300.0											
Blank (6090444-BLK1)						Prepared & Analyzed: 09/16/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6090444-BS1)						Prepared & Analyzed: 09/16/16					
Chloride	10.6	0.25	0.01	mg/L	10.010		106	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010		105	90-110			
Sulfate	10.6	1.0	0.05	mg/L	10.010		105	90-110			
Matrix Spike (6090444-MS1)						Source: AZI0400-01 Prepared & Analyzed: 09/16/16					
Chloride	11.1	0.25	0.01	mg/L	10.010	1.33	98	90-110			
Fluoride	10.3	0.30	0.02	mg/L	10.010	ND	103	90-110			
Sulfate	14.6	1.0	0.05	mg/L	10.010	5.23	93	90-110			
Matrix Spike (6090444-MS2)						Source: AZI0413-03 Prepared & Analyzed: 09/16/16					
Chloride	12.2	0.25	0.01	mg/L	10.010	2.51	97	90-110			
Fluoride	10.3	0.30	0.02	mg/L	10.010	0.04	103	90-110			
Sulfate	14.6	1.0	0.05	mg/L	10.010	5.36	92	90-110			
Matrix Spike Dup (6090444-MSD1)						Source: AZI0400-01 Prepared & Analyzed: 09/16/16					
Chloride	11.1	0.25	0.01	mg/L	10.010	1.33	98	90-110	0.1	15	
Fluoride	10.3	0.30	0.02	mg/L	10.010	ND	103	90-110	0.1	15	
Sulfate	14.5	1.0	0.05	mg/L	10.010	5.23	93	90-110	0.08	15	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090367 - EPA 3005A											
Blank (6090367-BLK1)						Prepared & Analyzed: 09/15/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0050	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0050	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0050	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6090367-BS1)						Prepared & Analyzed: 09/15/16					
Antimony	0.102	0.0030	0.0008	mg/L	0.10000		102	80-120			
Arsenic	0.0991	0.0050	0.0016	mg/L	0.10000		99	80-120			
Barium	0.0969	0.0100	0.0004	mg/L	0.10000		97	80-120			
Beryllium	0.0926	0.0030	0.00008	mg/L	0.10000		93	80-120			
Boron	0.986	0.100	0.0064	mg/L	1.0000		99	80-120			
Cadmium	0.0996	0.0010	0.00007	mg/L	0.10000		100	80-120			
Calcium	0.985	0.500	0.0311	mg/L	1.0000		98	80-120			
Chromium	0.0981	0.0100	0.0009	mg/L	0.10000		98	80-120			
Cobalt	0.0969	0.0100	0.0005	mg/L	0.10000		97	80-120			
Copper	0.0960	0.0050	0.0005	mg/L	0.10000		96	80-120			
Lead	0.0961	0.0050	0.0001	mg/L	0.10000		96	80-120			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000		102	80-120			
Nickel	0.0988	0.0050	0.0006	mg/L	0.10000		99	80-120			
Selenium	0.101	0.0100	0.0010	mg/L	0.10000		101	80-120			
Silver	0.0971	0.0050	0.0005	mg/L	0.10000		97	80-120			
Thallium	0.0968	0.0010	0.0002	mg/L	0.10000		97	80-120			
Vanadium	0.0951	0.0100	0.0071	mg/L	0.10000		95	80-120			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000		102	80-120			
Lithium	0.0977	0.0500	0.0021	mg/L	0.10000		98	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090367 - EPA 3005A											
Matrix Spike (6090367-MS1)			Source: AZI0413-02			Prepared & Analyzed: 09/15/16					
Antimony	0.107	0.0030	0.0008	mg/L	0.10000	0.0028	104	75-125			
Arsenic	0.103	0.0050	0.0016	mg/L	0.10000	ND	103	75-125			
Barium	0.115	0.0100	0.0004	mg/L	0.10000	0.0161	99	75-125			
Beryllium	0.0963	0.0030	0.00008	mg/L	0.10000	ND	96	75-125			
Boron	0.974	0.100	0.0064	mg/L	1.0000	ND	97	75-125			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125			
Calcium	33.2	0.500	0.155	mg/L	1.0000	32.5	78	75-125			
Chromium	0.0986	0.0100	0.0009	mg/L	0.10000	ND	99	75-125			
Cobalt	0.0988	0.0100	0.0005	mg/L	0.10000	ND	99	75-125			
Copper	0.0958	0.0050	0.0005	mg/L	0.10000	ND	96	75-125			
Lead	0.0957	0.0050	0.0001	mg/L	0.10000	ND	96	75-125			
Molybdenum	0.103	0.0100	0.0017	mg/L	0.10000	ND	103	75-125			
Nickel	0.0996	0.0050	0.0006	mg/L	0.10000	ND	100	75-125			
Selenium	0.105	0.0100	0.0010	mg/L	0.10000	ND	105	75-125			
Silver	0.0998	0.0050	0.0005	mg/L	0.10000	ND	100	75-125			
Thallium	0.0989	0.0010	0.0002	mg/L	0.10000	ND	99	75-125			
Vanadium	0.101	0.0100	0.0071	mg/L	0.10000	ND	101	75-125			
Zinc	0.106	0.0100	0.0021	mg/L	0.10000	ND	106	75-125			
Lithium	0.100	0.0500	0.0021	mg/L	0.10000	ND	100	75-125			
Matrix Spike Dup (6090367-MSD1)			Source: AZI0413-02			Prepared & Analyzed: 09/15/16					
Antimony	0.108	0.0030	0.0008	mg/L	0.10000	0.0028	105	75-125	1	20	
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000	ND	101	75-125	2	20	
Barium	0.115	0.0100	0.0004	mg/L	0.10000	0.0161	99	75-125	0.3	20	
Beryllium	0.0919	0.0030	0.00008	mg/L	0.10000	ND	92	75-125	5	20	
Boron	1.00	0.100	0.0064	mg/L	1.0000	ND	100	75-125	3	20	
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000	ND	101	75-125	0.3	20	
Calcium	32.9	0.500	0.155	mg/L	1.0000	32.5	43	75-125	1	20	QM-02
Chromium	0.101	0.0100	0.0009	mg/L	0.10000	ND	101	75-125	2	20	
Cobalt	0.0996	0.0100	0.0005	mg/L	0.10000	ND	100	75-125	0.8	20	
Copper	0.0954	0.0050	0.0005	mg/L	0.10000	ND	95	75-125	0.5	20	
Lead	0.0966	0.0050	0.0001	mg/L	0.10000	ND	97	75-125	1	20	
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125	0.7	20	
Nickel	0.102	0.0050	0.0006	mg/L	0.10000	ND	102	75-125	2	20	
Selenium	0.0988	0.0100	0.0010	mg/L	0.10000	ND	99	75-125	6	20	
Silver	0.0981	0.0050	0.0005	mg/L	0.10000	ND	98	75-125	2	20	
Thallium	0.0983	0.0010	0.0002	mg/L	0.10000	ND	98	75-125	0.6	20	
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000	ND	103	75-125	2	20	
Zinc	0.104	0.0100	0.0021	mg/L	0.10000	ND	104	75-125	2	20	
Lithium	0.0957	0.0500	0.0021	mg/L	0.10000	ND	96	75-125	5	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090367 - EPA 3005A											
Post Spike (6090367-PS1)			Source: AZI0413-02			Prepared & Analyzed: 09/15/16					
Antimony	96.4			ug/L	100.00	2.78	94	80-120			
Arsenic	101			ug/L	100.00	-0.133	101	80-120			
Barium	116			ug/L	100.00	16.1	99	80-120			
Beryllium	92.3			ug/L	100.00	0.0085	92	80-120			
Boron	988			ug/L	1000.0	2.59	99	80-120			
Cadmium	97.3			ug/L	100.00	0.0107	97	80-120			
Calcium	33100			ug/L	1000.0	32500	65	80-120			QM-02
Chromium	101			ug/L	100.00	0.402	101	80-120			
Cobalt	100			ug/L	100.00	0.0114	100	80-120			
Copper	93.1			ug/L	100.00	0.101	93	80-120			
Lead	96.7			ug/L	100.00	0.0136	97	80-120			
Molybdenum	103			ug/L	100.00	0.340	102	80-120			
Nickel	98.3			ug/L	100.00	0.0979	98	80-120			
Selenium	101			ug/L	100.00	0.149	100	80-120			
Silver	98.7			ug/L	100.00	0.0021	99	80-120			
Thallium	99.7			ug/L	100.00	0.0176	100	80-120			
Vanadium	100			ug/L	100.00	-0.216	101	80-120			
Zinc	104			ug/L	100.00	1.69	103	80-120			
Lithium	96.4			ug/L	100.00	0.583	96	80-120			

Batch 6090412 - EPA 7470A

Blank (6090412-BLK1)					Prepared & Analyzed: 09/16/16						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6090412-BS1)					Prepared & Analyzed: 09/16/16						
Mercury	0.00238	0.00050	0.000041	mg/L	2.5000E-3		95	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Report No.: AZI0400

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090412 - EPA 7470A											
Matrix Spike (6090412-MS1)			Source: AZI0413-03			Prepared & Analyzed: 09/16/16					
Mercury	0.00244	0.00050	0.000041	mg/L	2.5000E-3	ND	98	75-125			
Matrix Spike Dup (6090412-MSD1)			Source: AZI0413-03			Prepared & Analyzed: 09/16/16					
Mercury	0.00235	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125	4	20	
Post Spike (6090412-PS1)			Source: AZI0413-03			Prepared & Analyzed: 09/16/16					
Mercury	1.77			ug/L	1.6667	-0.00395	106	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 21, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services		CONTAINER TYPE: P P P P		ANALYSIS REQUESTED		L A B I D N U M B E R		PRESERVATION	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE. B10185 Atlanta, GA 30308		PRESERVATION: # of		CONTAINER TYPE: P P P P		CONTAINER TYPE: P P P P		PRESERVATION: 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
REPORT TO: Joju Abraham JABRAHAM@southernco.com		CC: MRPADILL@southernco.com CHMCCORK@southernco.com		EPA 6020/7470 Metals App. III & IV		EPA 300.0, TDS SM 2540C		MATRIX CODES: DW - DRINKING WATER S - SOIL MW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT	
REQUESTED COMPLETION DATE: STANDARD		PO #:		EPA 226 & 228 Radium 226 & 228		SW-846 9315/9320		REMARKS/ADDITIONAL INFORMATION	
PROJECT NAME/STATE YATES AP CCR GW		PROJECT #:		3		3		1 2 3	
Collection DATE	Collection TIME	MATRIX CODE*	COMPA	GRAB	SAMPLE IDENTIFICATION				
9/13/16	1015	GW	X	X	YGWA-1I				
9/13/16	1212	GW	X	X	YGWA-1D				
9/13/16	-	GW	X	X	DUP-1				
SAMPLED BY AND TITLE: Wally Brown		DATE/TIME: 9/13/16 @ 1600		RELINQUISHED BY: Wally Brown		DATE/TIME: 9/13/16 @ 0655		LAB #: A210400	
RECEIVED BY: Wally Brown		DATE/TIME: 9/13/16 @ 0852		RELINQUISHED BY: Wally Brown		DATE/TIME: 9/13/16 @ 0850		Entered into LIMS: MK	
RECEIVED BY LAB: Wally Brown		DATE/TIME: 9/13/16 @ 0850		SAMPLE SHIPPED VIA: UPS		DATE/TIME: 9/13/16 @ 0850		Tracking #:	
Temp: 10		Min: 10		Max: 10		Seal: Intact		Broken: Not Present	
Yes		No		NA		Yes		No	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 9/21/2016 1:41:03PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 09/14/16 08:50

Work Order: AZI0400

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 3

#Containers: 9

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 18, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196055

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 15, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Report reissued 10/18/16 to reflect correction of Client Sample ID's due to login error.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW

Pace Project No.: 30196055

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196055

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196055001	YGWA-1I	Water	09/13/16 10:15	09/15/16 10:40
30196055002	YGWA-1D	Water	09/13/16 12:12	09/15/16 10:40
30196055003	DUP-1	Water	09/13/16 00:01	09/15/16 10:40

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
Pace Project No.: 30196055

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196055001	YGWA-1I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196055002	YGWA-1D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196055003	DUP-1	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196055

Sample: YGWA-1I		Lab ID: 30196055001	Collected: 09/13/16 10:15	Received: 09/15/16 10:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0522 ± 0.168 (0.416)		pCi/L	09/30/16 09:55	13982-63-3	
		C:92% T:NA					
Radium-228	EPA 9320	0.789 ± 0.408 (0.707)		pCi/L	09/30/16 20:40	15262-20-1	
		C:72% T:81%					
Total Radium	Total Radium Calculation	0.841 ± 0.576 (1.12)		pCi/L	10/11/16 09:44	7440-14-4	

Sample: YGWA-1D		Lab ID: 30196055002	Collected: 09/13/16 12:12	Received: 09/15/16 10:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.118 ± 0.159 (0.330)		pCi/L	09/30/16 09:55	13982-63-3	
		C:91% T:NA					
Radium-228	EPA 9320	1.10 ± 0.462 (0.724)		pCi/L	09/30/16 20:40	15262-20-1	
		C:77% T:76%					
Total Radium	Total Radium Calculation	1.22 ± 0.621 (1.05)		pCi/L	10/11/16 09:44	7440-14-4	

Sample: DUP-1		Lab ID: 30196055003	Collected: 09/13/16 00:01	Received: 09/15/16 10:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0791 ± 0.183 (0.435)		pCi/L	09/30/16 09:56	13982-63-3	
		C:90% T:NA					
Radium-228	EPA 9320	0.105 ± 0.322 (0.725)		pCi/L	10/06/16 15:18	15262-20-1	
		C:72% T:79%					
Total Radium	Total Radium Calculation	0.184 ± 0.505 (1.16)		pCi/L	10/11/16 09:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196055

QC Batch: 234043 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30196055003

METHOD BLANK: 1147793 Matrix: Water
Associated Lab Samples: 30196055003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.722 ± 0.384 (0.681) C:79% T:82%	pCi/L	10/06/16 11:54	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196055

QC Batch: 234042 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30196055001, 30196055002

METHOD BLANK: 1147792 Matrix: Water
 Associated Lab Samples: 30196055001, 30196055002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0647 ± 0.343 (0.786) C:72% T:88%	pCi/L	09/30/16 12:31	

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196055

QC Batch: 234040 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196055001, 30196055002

METHOD BLANK: 1147790 Matrix: Water
Associated Lab Samples: 30196055001, 30196055002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0483 ± 0.124 (0.304) C:92% T:NA	pCi/L	09/30/16 09:54	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196055

QC Batch: 234041	Analysis Method: EPA 9315
QC Batch Method: EPA 9315	Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196055003	

METHOD BLANK: 1147791	Matrix: Water
Associated Lab Samples: 30196055003	

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0358 ± 0.114 (0.367) C:90% T:NA	pCi/L	09/30/16 09:56	

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

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196055

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30196055



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30142
(770) 734-4200 : FAX (770) 734-4201 : WWW.PACE-ANALYTICAL.COM



CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd. SE, B10185
Atlanta, GA 30308

REPORT TO: Joti Abraham
JABRAHAM@southernco.com
CC: MRPADILL@southernco.com
CHIMCORK@southernco.com

REQUESTED COMPLETION DATE: PO #:
STANDARD

PROJECT NAME/STATE: YATES AP CCR GW
PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	COMPARISON	SAMPLE IDENTIFICATION
			C	G
			O	R
			M	A
			A	B
			P	
9/13/16	1015	GW	X	YG-WA-11
9/13/16	1212	GW	X	YG-WA-1D
9/13/16	-	GW	X	DUP-1

L CONTAINER TYPE	P PLASTIC	A AMBER GLASS	B CLEAR GLASS	V VOA VIAL	S STERILE	O OTHER	PRESERVATION
*MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT							
REMARKS/ADDITIONAL INFORMATION							
001							
002							
003							

CONTAINER TYPE: PRESERVATION: # of	ANALYSIS REQUESTED	DATE/TIME: DATE/TIME:
3	Metals App. III & IV	9/13/16 @ 1600
7	IC (Cl, F, SO ₄)	
3	EPA 6020/7470	
	EPA 300.0, TDS SM 2540C	
	Radium 226 & 228	
	SV-846 9315/9320	

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
[Signature]	9/13/16 @ 1600	Wally Bowen	9/13/16 @ 1600

SAMPLE SHIPPED VIA:
UPS
Custody Seal: Intact Broken Not Present

RELINQUISHED BY: [Signature]
DATE/TIME: 9/13/16 @ 1600

RECEIVED BY: [Signature]
DATE/TIME: 9/13/16 @ 1600

Temperature: 10.40
Min: Max:

PH checked: Yes No

FILED: Yes No NA

ENTERED INTO LIMS: Tracking #: _____

Sample Condition Upon Receipt Pittsburgh



Client Name: Southern Company Project # _____
SRVCS

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 68125094 1823

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ML 9-15-16

Comments:

	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>W+</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests	X			12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed <u>ML</u> Date/time of preservation _____
				Lot # of added preservative _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:		X		15.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr	X			Initial when completed <u>ML</u> Date: <u>9-15-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/3/2016
Worklist: 31519
Matrix: DW

Method Blank Assessment	
MB Sample ID	1147790
MB Concentration:	0.048
MB Counting Uncertainty:	0.124
MB MDC:	0.304
MB Numerical Performance Indicator:	0.77
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	9/30/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.677
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.517
Target Conc. (pCi/L, g, F):	8.635
Uncertainty (Calculated):	0.406
Result (pCi/L, g, F):	7.775
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.880
Numerical Performance Indicator:	-1.74
Percent Recovery:	90.05%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30195633007
Duplicate Sample I.D.:	30195633007DUP
Sample Result (pCi/L, g, F):	0.296
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.244
Sample Duplicate Result (pCi/L, g, F):	0.148
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.230
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.864
Duplicate RPD:	66.56%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

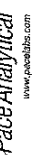
Comments:

***Batch must be re-prepped due to unacceptable precision.

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):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Matrix Spike Result:	
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:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



www.paceabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/3/2016
Worklist: 31520
Matrix: DW

Method Blank Assessment

MB Sample ID	1147791
MB concentration:	-0.036
M/B Counting Uncertainty:	0.113
MB MDC:	0.367
MB Numerical Performance Indicator:	-0.62
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

LCSD (Y or N)?	N
LCSD31520	LCSD31520
Count Date:	9/30/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.677
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.502
Target Conc. (pCi/L, g, F):	8.895
Uncertainty (Calculated):	0.418
Result (pCi/L, g, F):	7.069
LCSD/LCSD Counting Uncertainty (pCi/L, g, F):	0.898
Numerical Performance Indicator:	-3.61
Percent Recovery:	79.47%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment

Sample I.D.:	30196056002
Duplicate Sample I.D.:	30196056002DUP
Sample Result (pCi/L, g, F):	0.042
Sample Result Counting Uncertainty (pCi/L, g, F):	0.205
Sample Duplicate Result (pCi/L, g, F):	0.068
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.236
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.293
Duplicate RPD:	71.82%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30196056002
30196056002DUP

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

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):
MS Aliquot (L, g, F):
MS Target Conc (pCi/L, g, F):
MSD Aliquot (L, g, F):
MSD Target Conc. (pCi/L, g, F):
Spike uncertainty (calculated):

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Matrix Spike Result:
Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result:
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 9/26/2016
Worklist: 31521
Matrix: DW



Method Blank Assessment	
MB Sample ID	1147792
MB Concentration:	0.065
M/B Counting Uncertainty:	0.343
MB MDC:	0.786
MB Numerical Performance Indicator:	0.37
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
LCS# (Y or N)?	N
LCS31521	LCS031521
Count Date:	9/30/2016
Spike I.D.:	16-025
Spike Concentration (pCi/mL):	25.540
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.807
Target Conc. (pCi/L, g, F):	6.328
Uncertainty (Calculated):	0.456
Result (pCi/L, g, F):	6.520
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.814
Numerical Performance Indicator:	0.41
Percent Recovery:	103.05%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30195633007
Duplicate Sample I.D.:	30195633007DUP
Sample Result (pCi/L, g, F):	0.344
Sample Duplicate Result (pCi/L, g, F):	0.401
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.396
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.433
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.172
Duplicate RPD:	14.02%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

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):	
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:	

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:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLVW
Date: 9/26/2016
Worklist: 31522
Matrix: DW

MB Sample ID	1147793
MB concentration:	0.722
M/B Counting Uncertainty:	0.362
MB MDC:	0.681
MB Numerical Performance Indicator:	3.91
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	
LCS# (Y or N)?	N
LCS#	LCS31522
Count Date:	10/6/2016
Spike I.D.:	16-023
Spike Concentration (pCi/mL):	25.489
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.804
Target Conc. (pCi/L, g, F):	6.341
Uncertainty (Calculated):	0.457
Result (pCi/L, g, F):	7.364
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.790
Numerical Performance Indicator:	2.20
Percent Recovery:	116.14%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196056002
Duplicate Sample I.D.:	30196056002DUP
Sample Result (pCi/L, g, F):	0.542
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.310
Sample Duplicate Result (pCi/L, g, F):	0.977
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.359
Are sample and/or duplicate results below MDC?:	See Below ##
Duplicate Numerical Performance Indicator:	-1.797
Duplicate RPD:	57.34%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

*The method blank result is below the reporting limit for this analysis and is acceptable.

***Batch must be re-prepped due to unacceptable precision.

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): 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:

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:

Quartz



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZI0473

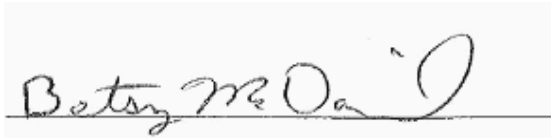
September 22, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-4I	AZI0473-01	Ground Water	09/14/16 09:19	09/15/16 09:00
EQB-1	AZI0473-02	Water	09/14/16 10:00	09/15/16 09:00
YGWA-5I	AZI0473-03	Ground Water	09/14/16 12:04	09/15/16 09:00
YGWA-5D	AZI0473-04	Ground Water	09/14/16 13:05	09/15/16 09:00
FB-1	AZI0473-05	Water	09/14/16 11:30	09/15/16 09:00
YGWA-3I	AZI0473-06	Ground Water	09/14/16 11:42	09/15/16 09:00
YGWA-2I	AZI0473-07	Ground Water	09/14/16 13:38	09/15/16 09:00



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Project: CCR Event

Client ID: YGWA-4I

Lab Number ID: AZI0473-01

Date/Time Sampled: 9/14/2016 9:19:00AM

Date/Time Received: 9/15/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	102	25	10	mg/L	SM 2540 C		1	09/16/16 13:55	09/16/16 13:55	6090436	JPT
Inorganic Anions											
Chloride	3.4	0.25	0.01	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 21:20	6090520	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 21:20	6090520	RLC
Sulfate	7.5	1.0	0.05	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 21:20	6090520	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Barium	0.0143	0.0100	0.0004	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Calcium	8.49	0.500	0.0311	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Cobalt	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Lithium	0.0137	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:01	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 14:43	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Project: CCR Event

Client ID: EQB-1

Lab Number ID: AZI0473-02

Date/Time Sampled: 9/14/2016 10:00:00AM

Date/Time Received: 9/15/2016 9:00:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	09/16/16 13:55	09/16/16 13:55	6090436	JPT
Inorganic Anions											
Chloride	0.07	0.25	0.01	mg/L	EPA 300.0	J	1	09/20/16 10:12	09/21/16 22:22	6090520	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 22:22	6090520	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 22:22	6090520	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Calcium	0.0377	0.500	0.0311	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:43	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 14:50	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Project: CCR Event

Client ID: YGWA-5I

Lab Number ID: AZI0473-03

Date/Time Sampled: 9/14/2016 12:04:00PM

Date/Time Received: 9/15/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	73	25	10	mg/L	SM 2540 C		1	09/16/16 13:55	09/16/16 13:55	6090436	JPT
Inorganic Anions											
Chloride	3.8	0.25	0.01	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 22:42	6090520	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 22:42	6090520	RLC
Sulfate	1.8	1.0	0.05	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 22:42	6090520	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Barium	0.0181	0.0100	0.0004	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Boron	0.0100	0.100	0.0064	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Calcium	2.18	0.500	0.0311	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Lithium	0.0029	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:48	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 14:52	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Project: CCR Event

Client ID: YGWA-5D

Lab Number ID: AZI0473-04

Date/Time Sampled: 9/14/2016 1:05:00PM

Date/Time Received: 9/15/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	187	25	10	mg/L	SM 2540 C		1	09/16/16 13:55	09/16/16 13:55	6090436	JPT
Inorganic Anions											
Chloride	6.6	0.25	0.01	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 23:03	6090520	RLC
Fluoride	0.04	0.30	0.02	mg/L	EPA 300.0	J	1	09/20/16 10:12	09/21/16 23:03	6090520	RLC
Sulfate	19	1.0	0.05	mg/L	EPA 300.0		1	09/20/16 10:12	09/21/16 23:03	6090520	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Barium	0.0085	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Boron	0.0071	0.100	0.0064	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Calcium	31.0	2.50	0.155	mg/L	EPA 6020B		5	09/19/16 09:15	09/22/16 12:28	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Molybdenum	0.0041	0.0100	0.0017	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Lithium	0.0058	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 18:54	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 14:55	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Project: CCR Event

Client ID: FB-1

Lab Number ID: AZI0473-05

Date/Time Sampled: 9/14/2016 11:30:00AM

Date/Time Received: 9/15/2016 9:00:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	09/16/16 13:55	09/16/16 13:55	6090436	JPT
Inorganic Anions											
Chloride	0.07	0.25	0.01	mg/L	EPA 300.0	J	1	09/20/16 10:12	09/22/16 00:46	6090520	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/20/16 10:12	09/22/16 00:46	6090520	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	09/20/16 10:12	09/22/16 00:46	6090520	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:00	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 14:57	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Project: CCR Event

Client ID: YGWA-3I

Lab Number ID: AZI0473-06

Date/Time Sampled: 9/14/2016 11:42:00AM

Date/Time Received: 9/15/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	127	25	10	mg/L	SM 2540 C		1	09/16/16 13:55	09/16/16 13:55	6090436	JPT
Inorganic Anions											
Chloride	1.3	0.25	0.01	mg/L	EPA 300.0		1	09/20/16 10:12	09/22/16 01:07	6090520	RLC
Fluoride	0.18	0.30	0.02	mg/L	EPA 300.0	J	1	09/20/16 10:12	09/22/16 01:07	6090520	RLC
Sulfate	8.6	1.0	0.05	mg/L	EPA 300.0		1	09/20/16 10:12	09/22/16 01:07	6090520	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Barium	0.0027	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Calcium	19.7	2.50	0.155	mg/L	EPA 6020B		5	09/19/16 09:15	09/20/16 17:07	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Molybdenum	0.0034	0.0100	0.0017	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Lithium	0.0120	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:06	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:00	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AZI0473-07

Date/Time Sampled: 9/14/2016 1:38:00PM

Date/Time Received: 9/15/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	152	25	10	mg/L	SM 2540 C		1	09/16/16 13:55	09/16/16 13:55	6090436	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	09/20/16 10:12	09/22/16 01:28	6090520	RLC
Fluoride	0.08	0.30	0.02	mg/L	EPA 300.0	J	1	09/20/16 10:12	09/22/16 01:28	6090520	RLC
Sulfate	9.4	1.0	0.05	mg/L	EPA 300.0		1	09/20/16 10:12	09/22/16 01:28	6090520	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Barium	0.0037	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Calcium	23.5	2.50	0.155	mg/L	EPA 6020B		5	09/19/16 09:15	09/20/16 17:13	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Molybdenum	0.0039	0.0100	0.0017	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Lithium	0.0040	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:11	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:02	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090436 - SM 2540 C											
Blank (6090436-BLK1)						Prepared & Analyzed: 09/16/16					
Total Dissolved Solids	ND	10	10	mg/L							
LCS (6090436-BS1)						Prepared & Analyzed: 09/16/16					
Total Dissolved Solids	403	10	10	mg/L	400.00		101	84-108			
Duplicate (6090436-DUP1)						Source: AZI0473-06 Prepared & Analyzed: 09/16/16					
Total Dissolved Solids	129	10	10	mg/L		127			2	10	
Duplicate (6090436-DUP2)						Source: AZI0473-07 Prepared & Analyzed: 09/16/16					
Total Dissolved Solids	154	10	10	mg/L		152			1	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090520 - EPA 300.0											
Blank (6090520-BLK1)						Prepared: 09/20/16 Analyzed: 09/21/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6090520-BS1)						Prepared: 09/20/16 Analyzed: 09/21/16					
Chloride	10.0	0.25	0.01	mg/L	10.010		100	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010		106	90-110			
Sulfate	10.2	1.0	0.05	mg/L	10.010		102	90-110			
Matrix Spike (6090520-MS1)						Source: AZI0473-01 Prepared: 09/20/16 Analyzed: 09/21/16					
Chloride	12.8	0.25	0.01	mg/L	10.010	3.40	94	90-110			
Fluoride	10.3	0.30	0.02	mg/L	10.010	ND	103	90-110			
Sulfate	16.5	1.0	0.05	mg/L	10.010	7.47	90	90-110			
Matrix Spike (6090520-MS2)						Source: AZI0473-07 Prepared: 09/20/16 Analyzed: 09/22/16					
Chloride	10.7	0.25	0.01	mg/L	10.010	1.12	96	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010	0.08	105	90-110			
Sulfate	18.5	1.0	0.05	mg/L	10.010	9.42	91	90-110			
Matrix Spike Dup (6090520-MSD1)						Source: AZI0473-01 Prepared: 09/20/16 Analyzed: 09/21/16					
Chloride	12.9	0.25	0.01	mg/L	10.010	3.40	95	90-110	0.4	15	
Fluoride	10.3	0.30	0.02	mg/L	10.010	ND	103	90-110	0.3	15	
Sulfate	16.5	1.0	0.05	mg/L	10.010	7.47	91	90-110	0.2	15	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090460 - EPA 7470A											
Blank (6090460-BLK1)						Prepared & Analyzed: 09/19/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6090460-BS1)						Prepared & Analyzed: 09/19/16					
Mercury	0.00242	0.00050	0.000041	mg/L	2.5000E-3		97	80-120			
Matrix Spike (6090460-MS1)						Source: AZI0473-03 Prepared & Analyzed: 09/19/16					
Mercury	0.00243	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125			
Matrix Spike Dup (6090460-MSD1)						Source: AZI0473-03 Prepared & Analyzed: 09/19/16					
Mercury	0.00241	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125	0.6	20	
Post Spike (6090460-PS1)						Source: AZI0473-03 Prepared & Analyzed: 09/19/16					
Mercury	1.72			ug/L	1.6667	0.00864	103	80-120			
Batch 6090463 - EPA 3005A											
Blank (6090463-BLK1)						Prepared & Analyzed: 09/19/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090463 - EPA 3005A											
LCS (6090463-BS1)						Prepared & Analyzed: 09/19/16					
Antimony	0.0946	0.0030	0.0008	mg/L	0.10000		95	80-120			
Arsenic	0.0955	0.0050	0.0016	mg/L	0.10000		95	80-120			
Barium	0.0976	0.0100	0.0004	mg/L	0.10000		98	80-120			
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000		102	80-120			
Boron	1.05	0.100	0.0064	mg/L	1.0000		105	80-120			
Cadmium	0.0978	0.0010	0.00007	mg/L	0.10000		98	80-120			
Calcium	0.972	0.500	0.0311	mg/L	1.0000		97	80-120			
Chromium	0.0965	0.0100	0.0009	mg/L	0.10000		96	80-120			
Cobalt	0.0941	0.0100	0.0005	mg/L	0.10000		94	80-120			
Copper	0.0953	0.0250	0.0005	mg/L	0.10000		95	80-120			
Lead	0.0976	0.0050	0.0001	mg/L	0.10000		98	80-120			
Molybdenum	0.0965	0.0100	0.0017	mg/L	0.10000		97	80-120			
Nickel	0.0956	0.0100	0.0006	mg/L	0.10000		96	80-120			
Selenium	0.0960	0.0100	0.0010	mg/L	0.10000		96	80-120			
Silver	0.0990	0.0100	0.0005	mg/L	0.10000		99	80-120			
Thallium	0.0993	0.0010	0.0002	mg/L	0.10000		99	80-120			
Vanadium	0.0966	0.0100	0.0071	mg/L	0.10000		97	80-120			
Zinc	0.101	0.0100	0.0021	mg/L	0.10000		101	80-120			
Lithium	0.104	0.0500	0.0021	mg/L	0.10000		104	80-120			
Matrix Spike (6090463-MS1)						Source: AZI0582-02 Prepared & Analyzed: 09/19/16					
Antimony	0.0972	0.0030	0.0008	mg/L	0.10000	ND	97	75-125			
Arsenic	0.0985	0.0050	0.0016	mg/L	0.10000	ND	99	75-125			
Barium	0.123	0.0100	0.0004	mg/L	0.10000	0.0259	97	75-125			
Beryllium	0.0988	0.0030	0.00008	mg/L	0.10000	ND	99	75-125			
Boron	0.997	0.100	0.0064	mg/L	1.0000	ND	100	75-125			
Cadmium	0.0970	0.0010	0.00007	mg/L	0.10000	ND	97	75-125			
Calcium	9.65	0.500	0.0311	mg/L	1.0000	8.48	117	75-125			
Chromium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125			
Cobalt	0.0982	0.0100	0.0005	mg/L	0.10000	ND	98	75-125			
Copper	0.0979	0.0250	0.0005	mg/L	0.10000	ND	98	75-125			
Lead	0.0951	0.0050	0.0001	mg/L	0.10000	ND	95	75-125			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125			
Nickel	0.0991	0.0100	0.0006	mg/L	0.10000	0.0008	98	75-125			
Selenium	0.0962	0.0100	0.0010	mg/L	0.10000	ND	96	75-125			
Silver	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125			
Thallium	0.0956	0.0010	0.0002	mg/L	0.10000	ND	96	75-125			
Vanadium	0.0994	0.0100	0.0071	mg/L	0.10000	ND	99	75-125			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000	0.0023	99	75-125			
Lithium	0.102	0.0500	0.0021	mg/L	0.10000	ND	102	75-125			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Report No.: AZI0473

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090463 - EPA 3005A											
Matrix Spike Dup (6090463-MSD1)			Source: AZI0582-02			Prepared & Analyzed: 09/19/16					
Antimony	0.0983	0.0030	0.0008	mg/L	0.10000	ND	98	75-125	1	20	
Arsenic	0.0999	0.0050	0.0016	mg/L	0.10000	ND	100	75-125	1	20	
Barium	0.124	0.0100	0.0004	mg/L	0.10000	0.0259	98	75-125	1	20	
Beryllium	0.100	0.0030	0.00008	mg/L	0.10000	ND	100	75-125	1	20	
Boron	0.993	0.100	0.0064	mg/L	1.0000	ND	99	75-125	0.4	20	
Cadmium	0.0970	0.0010	0.00007	mg/L	0.10000	ND	97	75-125	0.002	20	
Calcium	9.41	0.500	0.0311	mg/L	1.0000	8.48	93	75-125	3	20	
Chromium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125	0.1	20	
Cobalt	0.0979	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	0.2	20	
Copper	0.0950	0.0250	0.0005	mg/L	0.10000	ND	95	75-125	3	20	
Lead	0.0990	0.0050	0.0001	mg/L	0.10000	ND	99	75-125	4	20	
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125	0.08	20	
Nickel	0.0963	0.0100	0.0006	mg/L	0.10000	0.0008	95	75-125	3	20	
Selenium	0.0999	0.0100	0.0010	mg/L	0.10000	ND	100	75-125	4	20	
Silver	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125	0.1	20	
Thallium	0.101	0.0010	0.0002	mg/L	0.10000	ND	101	75-125	5	20	
Vanadium	0.102	0.0100	0.0071	mg/L	0.10000	ND	102	75-125	3	20	
Zinc	0.101	0.0100	0.0021	mg/L	0.10000	0.0023	99	75-125	0.7	20	
Lithium	0.103	0.0500	0.0021	mg/L	0.10000	ND	103	75-125	1	20	
Post Spike (6090463-PS1)			Source: AZI0582-02			Prepared & Analyzed: 09/19/16					
Antimony	86.8			ug/L	100.00	0.229	87	80-120			
Arsenic	97.1			ug/L	100.00	0.618	96	80-120			
Barium	124			ug/L	100.00	25.9	98	80-120			
Beryllium	98.8			ug/L	100.00	0.0341	99	80-120			
Boron	952			ug/L	1000.0	2.43	95	80-120			
Cadmium	97.4			ug/L	100.00	0.0227	97	80-120			
Calcium	9290			ug/L	1000.0	8480	81	80-120			
Chromium	103			ug/L	100.00	0.439	103	80-120			
Cobalt	100			ug/L	100.00	0.151	100	80-120			
Copper	96.3			ug/L	100.00	0.358	96	80-120			
Lead	97.0			ug/L	100.00	0.0889	97	80-120			
Molybdenum	104			ug/L	100.00	0.123	104	80-120			
Nickel	98.2			ug/L	100.00	0.790	97	80-120			
Selenium	100			ug/L	100.00	-0.199	101	80-120			
Silver	99.0			ug/L	100.00	0.0019	99	80-120			
Thallium	98.4			ug/L	100.00	0.0650	98	80-120			
Vanadium	101			ug/L	100.00	0.641	100	80-120			
Zinc	102			ug/L	100.00	2.29	100	80-120			
Lithium	99.9			ug/L	100.00	0.573	99	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 22, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
 241 Ralph McGill Blvd. SE, B10185
 Atlanta, GA 30308
 REPORT TO: Joju Abraham
 JABRAHAM@southernco.com
 CC: MRPADILL@southernco.com
 CHIMCCORK@southernco.com
 REQUESTED COMPLETION DATE: PO #:
 STANDARD
 PROJECT NAME/STATE: YATES AP CCR GW
 PROJECT #:

CONTAINER TYPE	ANALYSIS REQUESTED	RELINQUISHED BY:	DATE/TIME:
3	EPA 60207/470 Metals App, III & IV	[Signature]	9/14/16 @ 1405
7	IC (I, F, SO4) EPA 300.0, TDS SM 2540C	[Signature]	9/14/16 @ 1405
3	Radium 226 & 228 SM-646 9315/9320	[Signature]	9/14/16 @ 1405

CONTAINER TYPE	PRESERVATION	REMARKS/ADDITIONAL INFORMATION
P - PLASTIC	1 - HCl, ≤6°C	
A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C	
G - CLEAR GLASS	3 - HNO ₃	
V - VOA VIAL	4 - NaOH, ≤6°C	
S - STERILE	5 - NaOH/ZnAc, ≤6°C	
O - OTHER	6 - Na ₂ S ₂ O ₈ , ≤6°C	
	7 - ≤6°C not frozen	

CONTAINER TYPE	ANALYSIS REQUESTED	RELINQUISHED BY:	DATE/TIME:
3	EPA 60207/470 Metals App, III & IV	[Signature]	9/14/16 @ 1405
7	IC (I, F, SO4) EPA 300.0, TDS SM 2540C	[Signature]	9/14/16 @ 1405
3	Radium 226 & 228 SM-646 9315/9320	[Signature]	9/14/16 @ 1405

RECEIVED BY: [Signature]
 RECEIVED BY LAB: [Signature]
 pH checked: [Signature]
 No. NA Yes No NA
 DATE/TIME: 9/14/16 @ 1405
 DATE/TIME: 9/14/16 @ 1405
 DATE/TIME: 9/14/16 @ 1405
 SAMPLE SHIPPED VIA: [Signature]
 COURIER: [Signature]
 # of Crystals: [Signature]
 # of Present: [Signature]
 # of Broken: [Signature]
 # of Seal: [Signature]
 Client ID: [Signature]

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.ash-lab.com

CLIENT NAME: Southern Company Services		ANALYSIS REQUESTED		CONTAINER TYPE		PRESERVATION		CONTAINER TYPE		PRESERVATION	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30309		REPORT TO: Joju Abraham JABRAHAM@southernco.com		CC: MRPADILL@southernco.com CHMCCORK@southernco.com		PO #:		P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		1 - HCl, $\le 6^{\circ}\text{C}$ 2 - H_2SO_4 , $\le 6^{\circ}\text{C}$ 3 - $\text{HNO}_3</math>4 - \text{NaOH}</math>, $\le 6^{\circ}\text{C}$5 - \text{NaOH/ZnAg}</math>, $\le 6^{\circ}\text{C}$6 - \text{Na}_2\text{S}_2\text{O}_5</math>, $\le 6^{\circ}\text{C}$7 - $\le 6^{\circ}\text{C}$ not frozen$	
REQUESTED COMPLETION DATE: STANDARD		PROJECT NAME/STATE: YATES AP CCR GW		PROJECT #:		CONTAINERS		L A B		REMARKS/ADDITIONAL INFORMATION	
Collection DATE	Collection TIME	MATRIX CODE*	GRA B	SAMPLE IDENTIFICATION	Metals App. III & IV EPA 6020/7470 IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C Radiun 226 & 228 SW-846 9315/9320	P	P	P			
9/14/16	1130	W	X	F-B-1		3					
9/14/16	1142	GW	X	YGWA-3I		3					
9/14/16	1338	GW	X	YGWA-2I		3					
SAMPLED BY AND TITLE: Charles Worson		DATE/TIME: 9/14/16 @ 1600		RELINQUISHED BY: [Signature]		DATE/TIME: 9/15/16 @ 0700		LAB #:		FOR LAB USE ONLY: AZT-0473	
RECEIVED BY: [Signature]		DATE/TIME: 9/15/16 @ 0700		RELINQUISHED BY: [Signature]		DATE/TIME: 9/15/16 @ 0854		Entered into LIMS:		Tracking #:	
RECEIVED BY LAB: [Signature]		DATE/TIME: 9/15/16 @ 0900		SAMPLE SHIPPED BY: [Signature]		DATE/TIME: 9/15/16 @ 0854		USPS		OTHER FS	
Prepared: [Signature]		No NA No NA		Checked: [Signature]		No NA No NA		COURIER		CLIENT	



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 13, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196259

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW

Pace Project No.: 30196259

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196259

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196259001	YGWA-4I	Water	09/14/16 09:19	09/16/16 09:55
30196259002	EQB-1	Water	09/14/16 10:00	09/16/16 09:55
30196259003	YGWA-5I	Water	09/14/16 12:04	09/16/16 09:55
30196259004	YGWA-5D	Water	09/14/16 13:05	09/16/16 09:55

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
 Pace Project No.: 30196259

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196259001	YGWA-4I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196259002	EQB-1	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196259003	YGWA-5I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196259004	YGWA-5D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196259

Sample: YGWA-4I		Lab ID: 30196259001	Collected: 09/14/16 09:19	Received: 09/16/16 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.286 ± 0.266 (0.518)		pCi/L	09/30/16 11:45	13982-63-3	
		C:85% T:NA					
Radium-228	EPA 9320	0.615 ± 0.428 (0.824)		pCi/L	10/06/16 15:42	15262-20-1	
		C:75% T:78%					
Total Radium	Total Radium Calculation	0.901 ± 0.694 (1.34)		pCi/L	10/12/16 15:25	7440-14-4	

Sample: EQB-1		Lab ID: 30196259002	Collected: 09/14/16 10:00	Received: 09/16/16 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0429 ± 0.0976 (0.341)		pCi/L	09/30/16 11:45	13982-63-3	
		C:92% T:NA					
Radium-228	EPA 9320	0.413 ± 0.354 (0.704)		pCi/L	10/06/16 15:42	15262-20-1	
		C:75% T:82%					
Total Radium	Total Radium Calculation	0.413 ± 0.452 (1.05)		pCi/L	10/12/16 15:25	7440-14-4	

Sample: YGWA-5I		Lab ID: 30196259003	Collected: 09/14/16 12:04	Received: 09/16/16 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0251 ± 0.129 (0.392)		pCi/L	09/30/16 11:45	13982-63-3	
		C:87% T:NA					
Radium-228	EPA 9320	1.27 ± 0.492 (0.714)		pCi/L	10/06/16 15:42	15262-20-1	
		C:76% T:75%					
Total Radium	Total Radium Calculation	1.27 ± 0.621 (1.11)		pCi/L	10/12/16 15:25	7440-14-4	

Sample: YGWA-5D		Lab ID: 30196259004	Collected: 09/14/16 13:05	Received: 09/16/16 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	2.89 ± 0.712 (0.610)		pCi/L	10/03/16 11:34	13982-63-3	
		C:87% T:NA					
Radium-228	EPA 9320	1.07 ± 0.492 (0.799)		pCi/L	10/06/16 15:42	15262-20-1	
		C:74% T:78%					
Total Radium	Total Radium Calculation	3.96 ± 1.20 (1.41)		pCi/L	10/12/16 15:25	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196259

QC Batch: 234043 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30196259001, 30196259002, 30196259003, 30196259004

METHOD BLANK: 1147793 Matrix: Water
 Associated Lab Samples: 30196259001, 30196259002, 30196259003, 30196259004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.722 ± 0.384 (0.681) C:79% T:82%	pCi/L	10/06/16 11:54	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196259

QC Batch: 234041 Analysis Method: EPA 9315
 QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
 Associated Lab Samples: 30196259001, 30196259002, 30196259003, 30196259004

METHOD BLANK: 1147791 Matrix: Water
 Associated Lab Samples: 30196259001, 30196259002, 30196259003, 30196259004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0358 ± 0.114 (0.367) C:90% T:NA	pCi/L	09/30/16 09:56	

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

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196259

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30196259

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA
 (770) 734-4200 : FAX (770) 734-4201 : www.pace-analy.com



CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services		ANALYSIS REQUESTED		CONTAINER TYPE: P P P 3 7 3		PRESERVATION: 3 7 3		CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		PRESERVATION: 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₈ , ≤6°C 7 - ≤6°C not frozen	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308		REPORT TO: Joju Abraham JABRAHAM@southernco.com		CC: MRPADILL@southernco.com CHIMCOCK@southernco.com		PO #:		L A B I D N U M B E R		"MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT	
REQUESTED COMPLETION DATE: STANDARD		PROJECT NAME/STATE: YATES AP CCR GW		PROJECT #:		CONTAINERS →		REMARKS/ADDITIONAL INFORMATION		LAB #: Entered into LIMS: Tracking #:	
Collection DATE	Collection TIME	MATRIX CODE*	COM P	G R A B	SAMPLE IDENTIFICATION	EPA 6020/7470 Metals App. III & IV	IC (I, T) SO ₄ EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320			
9/14/16	0919	GW			YGWA-4I	1 1 1 1	1 1 1 1	1 1 1 1			001
9/14/16	1000	W			EQB-1	1 1 1 1	1 1 1 1	1 1 1 1			002
9/14/16	1204	GW			YGWA-5I	1 1 1 1	1 1 1 1	1 1 1 1			003
9/14/16	1305	GW			YGWA-5D	1 1 1 1	1 1 1 1	1 1 1 1			004
SAMPLED BY AND TITLE: Wales Brown		DATE/TIME: 9/14/16 @ 1405		RELINQUISHED BY:		DATE/TIME: 11/5/16		FOR LAB USE ONLY			
RECEIVED BY: JUDITH E. ZHU		DATE/TIME: 9-10-16 0915		RELINQUISHED BY:		DATE/TIME:					
RECEIVED BY LAB:		DATE/TIME:		TEMPERATURE: NA min. max.		SAMPLE SHIPPED VIA: USPS FEDEX USPS COURIER CLIENT OTHER FS		Custody Seal: Intact Broken Not Present		Carrier ID:	
pH checked: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ice: NA Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature: NA min. max.		Intact <input checked="" type="checkbox"/> Broken <input type="checkbox"/> Not Present <input type="checkbox"/>		Carrier ID:					

Sample Condition Upon Receipt Pittsburgh

30196259



Client Name: Pace Georgia Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250992120

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 9-17-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID/Analysis Matrix: <u>wt</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. <u>PH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>KH</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KH</u> Date: <u>9-17-16</u>

Client Notification/ Resolution: Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyt Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/3/2016
Worklist: 31520
Matrix: DW

Method Blank Assessment

MB Sample ID: 1147791
MB concentration: -0.036
MB Counting Uncertainty: 0.113
MB MDC: 0.367
MB Numerical Performance Indicator: -0.62
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Pass

Laboratory Control Sample Assessment

LCS#	(Y or N)?	N
LCS31520		LCS#31520
Count Date:	9/30/2016	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.677	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	8.895	
Uncertainty (Calculated):	0.418	
Result (pCi/L, g, F):	7.069	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.898	
Numerical Performance Indicator:	-3.61	
Percent Recovery:	79.47%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment

Sample I.D.: 30196056002
Duplicate Sample I.D.: 30196056002DUP
Sample Result (pCi/L, g, F): 0.042
Sample Result Counting Uncertainty (pCi/L, g, F): 0.205
Sample Duplicate Result (pCi/L, g, F): 0.088
Sample Duplicate Counting Uncertainty (pCi/L, g, F): 0.236
Are sample and/or duplicate results below MDC? See Below #
Duplicate Numerical Performance Indicator: -0.293
Duplicate RPD: 71.82%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail**

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30196056002
30196056002DUP

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Signature
10/13/16

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):
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:
Sample Matrix Spike Duplicate 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:

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:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 9/26/2016
Worklist: 31522
Matrix: DW

Method Blank Assessment

MB Sample ID: 1147793
MB concentration: 0.722
M/B Counting Uncertainty: 0.362
MB MDC: 0.881
MB Numerical Performance Indicator: 3.91
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: See Comment*

Laboratory Control Sample Assessment

LCSID (Y or N): N
LCSID: LCSD31522

Count Date: 10/6/2016
Spike I.D.: 18-025
Spike Concentration (pCi/mL): 25.489
Volume Used (mL): 0.20
Aliquot Volume (L, B, F): 0.804
Target Conc. (pCi/L, g, F): 6.341
Uncertainty (Calculated): 0.457
Result (pCi/L, g, F): 7.354
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.790
Numerical Performance Indicator: 2.20
Percent Recovery: 116.14%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30196056002
Duplicate Sample I.D.: 30196056002DUP
Sample Result Counting Uncertainty (pCi/L, g, F): 0.542
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.310
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.977
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -1.797
Duplicate RPD: 57.34%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail**

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.
Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.
***Batch must be re-prepped due to unacceptable precision.

Sample Matrix Spike Control Assessment

Sample Collection Date:
Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
MS/MSD Decay Corrected Spike Concentration (pCi/mL):
Spike I.D.:
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):
Spike uncertainty (calculated):
Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Result Counting Uncertainty (pCi/L, g, F):
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Sample 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:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample 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:

M. Elmore



October 13, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196258

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW

Pace Project No.: 30196258

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196258

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196258001	FB-1	Water	09/14/16 11:30	09/16/16 09:55
30196258002	YGWA-3I	Water	09/14/16 11:42	09/16/16 09:55
30196258003	YGWA-2I	Water	09/14/16 13:38	09/16/16 09:55

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
Pace Project No.: 30196258

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196258001	FB-1	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196258002	YGWA-3I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196258003	YGWA-2I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196258

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: FB-1		Lab ID: 30196258001	Collected: 09/14/16 11:30	Received: 09/16/16 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Radium-226	EPA 9315	0.0197 ± 0.137 (0.367)	pCi/L	09/30/16 11:45	13982-63-3		
Radium-228	EPA 9320	0.977 ± 0.502 (0.880)	pCi/L	10/06/16 15:41	15262-20-1		
Total Radium	Total Radium Calculation	0.997 ± 0.639 (1.25)	pCi/L	10/12/16 15:25	7440-14-4		

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-3I		Lab ID: 30196258002	Collected: 09/14/16 11:42	Received: 09/16/16 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Radium-226	EPA 9315	0.113 ± 0.152 (0.313)	pCi/L	09/30/16 11:45	13982-63-3		
Radium-228	EPA 9320	0.708 ± 0.430 (0.789)	pCi/L	10/06/16 15:41	15262-20-1		
Total Radium	Total Radium Calculation	0.821 ± 0.582 (1.10)	pCi/L	10/12/16 15:25	7440-14-4		

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-2I		Lab ID: 30196258003	Collected: 09/14/16 13:38	Received: 09/16/16 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Radium-226	EPA 9315	0.162 ± 0.175 (0.338)	pCi/L	09/30/16 11:45	13982-63-3		
Radium-228	EPA 9320	0.818 ± 0.453 (0.803)	pCi/L	10/06/16 15:41	15262-20-1		
Total Radium	Total Radium Calculation	0.980 ± 0.628 (1.14)	pCi/L	10/12/16 15:25	7440-14-4		

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196258

QC Batch: 234043 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30196258001, 30196258002, 30196258003

METHOD BLANK: 1147793 Matrix: Water
 Associated Lab Samples: 30196258001, 30196258002, 30196258003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.722 ± 0.384 (0.681) C:79% T:82%	pCi/L	10/06/16 11:54	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196258

QC Batch: 234041 Analysis Method: EPA 9315
 QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
 Associated Lab Samples: 30196258001, 30196258002, 30196258003

METHOD BLANK: 1147791 Matrix: Water
 Associated Lab Samples: 30196258001, 30196258002, 30196258003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0358 ± 0.114 (0.367) C:90% T:NA	pCi/L	09/30/16 09:56	

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

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196258

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30196258

CHAIN OF CUSTODY RECORD



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA:
 (770) 734-4200 : FAX (770) 734-4201 : www.paceanalytical.com



CLIENT NAME: Southern Company Services		CONTAINER TYPE: PRESERVATION:		ANALYSIS REQUESTED		CONTAINER TYPE: PRESERVATION:	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308		# of CONTAINERS →		P P P 3 7 3		P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER	
REPORT TO: Joju Abraham JABRAHAM@southemco.com		CC: MRPADILL@southemco.com CHIMCORK@southemco.com		IC (Cl, F, SO4) EPA 300.0, TDS 5M 2540C		1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
REQUESTED COMPLETION DATE: STANDARD		PO #:		Metals App. III & IV EPA 6020/7470		MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT	
PROJECT NAME/STATE YATES AP CCR GW		PROJECT #:				REMARKS/ADDITIONAL INFORMATION	
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION		
9/14/16	1130	W	X		FB-1		001
9/14/16	1142	GW	X		YGWA-3I		002
9/14/16	1338	GW	X		YGWA-2I		003
SAMPLED BY AND TITLE: Charles Watson		DATE/TIME: 9/14/16		RELINQUISHED BY: <i>[Signature]</i>		DATE/TIME: 9/15/16	
RECEIVED BY: KIMBERLY E. HILL		DATE/TIME: 9-16-16 0455		RELINQUISHED BY:		DATE/TIME:	
RECEIVED BY LAB:		DATE/TIME:		SAMPLE SHIPPED VIA: UPS FEDEX USPS COURIER CLIENT OTHER FS		LAB #: Entered into LIMS: Tracking #:	
pH checked: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature: N/A	Container: Intact <input checked="" type="checkbox"/> Broken <input type="checkbox"/>	# of Coolers	Cooler ID:	file	

Sample Condition Upon Receipt Pittsburgh

30196258



Client Name: Pace Georgia Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5099 2120

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 9-17-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. <u>PHC2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>KH</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KH</u> Date: <u>9-17-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/3/2016
Worklist: 31520
Matrix: DW

Method Blank Assessment	
MB Sample ID	1147791
MB concentration:	-0.036
MB Counting Uncertainty:	0.113
MB MDC:	0.367
MB Numerical Performance Indicator:	-0.62
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
LCSID (Y or N)?	N
LCS31520	LCS031620
Count Date:	9/30/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.677
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.502
Target Conc. (pCi/L, g, F):	8.895
Uncertainty (Calculated):	0.418
Result (pCi/L, g, F):	7.069
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.898
Numerical Performance Indicator:	-3.61
Percent Recovery:	79.47%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196066002
Duplicate Sample I.D.:	30196066002DUP
Sample Result (pCi/L, g, F):	0.042
Sample Duplicate Result (pCi/L, g, F):	0.205
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.098
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.236
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.293
Duplicate Status vs Numerical Indicator:	71.92%
Duplicate Status vs Recovery:	N/A
Duplicate Status vs RPD:	Fail**

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30196066002
30196066002DUP

Comments:

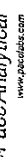
** Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Signature
10/13/16

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):	
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:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
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):	
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):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs Recovery:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 9/26/2016
Worklist: 31522
Matrix: DW

Method Blank Assessment	
MB Sample ID	1147793
MB concentration:	0.722
M/B Counting Uncertainty:	0.362
MB MDC:	0.681
MB Numerical Performance Indicator:	3.91
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment		N
LCS31522		LCS31522
Count Date:	10/6/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.489	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.804	
Target Conc. (pCi/L, g, F):	6.341	
Uncertainty (Calculated):	0.457	
Result (pCi/L, g, F):	7.364	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.790	
Numerical Performance Indicator:	2.20	
Percent Recovery:	116.14%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment	
Sample I.D.:	30196056002
Duplicate Sample I.D.:	30196056002DUP
Duplicate Result (pCi/L, g, F):	0.542
Sample Result Counting Uncertainty (pCi/L, g, F):	0.310
Sample Duplicate Result (pCi/L, g, F):	0.977
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.359
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.797
Duplicate RPD:	57.34%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30196056002
30196056002DUP

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.
Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.
***Batch must be re-prepped due to unacceptable precision.

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.
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):
MS Aliquot (L, g, F):	MS Target Conc. (pCi/L, g, F):
MSD Aliquot (L, g, F):	MSD Target Conc. (pCi/L, g, F):
MSD Target Conc. (pCi/L, g, F):	Spike uncertainty (calculated):
Sample Result	Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:	Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
MS Numerical Performance Indicator:	MS Numerical Performance Indicator:
MSD Numerical Performance Indicator:	MS Percent Recovery:
MS Status vs Numerical Indicator:	MSD Percent Recovery:
MS Status vs Numerical Indicator:	MSD Status vs Numerical Indicator:
MS Status vs Recovery:	MSD Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample MS I.D.:
Sample MSD I.D.:	Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
MS/MSD Duplicate Status vs RPD:	MS/MSD Duplicate Status vs Numerical Indicator:

Handwritten signature: M. J. ...



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 17, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196377

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 19, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW

Pace Project No.: 30196377

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196377

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196377001	YGWA-3D	Water	09/15/16 09:20	09/19/16 09:40
30196377002	YGWA-14S	Water	09/15/16 12:45	09/19/16 09:40
30196377003	DUP-2	Water	09/15/16 00:01	09/19/16 09:40

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
 Pace Project No.: 30196377

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196377001	YGWA-3D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196377002	YGWA-14S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196377003	DUP-2	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196377

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-3D		Lab ID: 30196377001	Collected: 09/15/16 09:20	Received: 09/19/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Radium-226	EPA 9315	0.803 ± 0.317 (0.341)	pCi/L	10/05/16 08:16	13982-63-3		
Radium-228	EPA 9320	3.44 ± 0.807 (0.637) C:80% T:NA	pCi/L	10/04/16 02:42	15262-20-1		
Total Radium	Total Radium Calculation	4.24 ± 1.12 (0.978) C:68% T:82%	pCi/L	10/12/16 15:41	7440-14-4		

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-14S		Lab ID: 30196377002	Collected: 09/15/16 12:45	Received: 09/19/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Radium-226	EPA 9315	0.258 ± 0.199 (0.355)	pCi/L	10/05/16 08:16	13982-63-3		
Radium-228	EPA 9320	0.785 ± 0.451 (0.803) C:89% T:NA	pCi/L	10/04/16 03:04	15262-20-1		
Total Radium	Total Radium Calculation	1.04 ± 0.650 (1.16) C:63% T:72%	pCi/L	10/17/16 11:34	7440-14-4		

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: DUP-2		Lab ID: 30196377003	Collected: 09/15/16 00:01	Received: 09/19/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Radium-226	EPA 9315	0.0141 ± 0.124 (0.333)	pCi/L	10/05/16 08:16	13982-63-3		
Radium-228	EPA 9320	1.08 ± 0.446 (0.698) C:81% T:NA	pCi/L	10/04/16 02:42	15262-20-1		
Total Radium	Total Radium Calculation	1.09 ± 0.570 (1.03) C:66% T:79%	pCi/L	10/17/16 11:34	7440-14-4		

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196377

QC Batch: 234855 Analysis Method: EPA 9315
 QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
 Associated Lab Samples: 30196377001, 30196377002, 30196377003

METHOD BLANK: 1152654 Matrix: Water
 Associated Lab Samples: 30196377001, 30196377002, 30196377003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0759 ± 0.110 (0.232) C:91% T:NA	pCi/L	10/05/16 08:16	

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196377

QC Batch: 234856 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30196377001, 30196377002, 30196377003

METHOD BLANK: 1152655 Matrix: Water
Associated Lab Samples: 30196377001, 30196377002, 30196377003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.522 ± 0.356 (0.662) C:63% T:84%	pCi/L	10/04/16 02:41	

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

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196377

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30196377

CHAIN OF CUSTODY RECORD



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, C
(770) 734-4200 : FAX (770) 734-4201 : www.ash-lab.com



30196377

CLIENT NAME: Southern Company Services		ANALYSIS REQUESTED		CONTAINER TYPE: PRESERVATION:		CONTAINER TYPE PRESERVATION	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308		P P P 3 7 3		P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
REPORT TO: JABRAHAM@southernmco.com Joju Abraham CC: MRPADILL@southernmco.com CHIMCCORK@southernmco.com	PO #:	CONTAINERS		MATRIX CODES:		MATRIX CODES:	
REQUESTED COMPLETION DATE: STANDARD		YATES AP CCR GW		DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT		REMARKS/ADDITIONAL INFORMATION	
PROJECT NAME/STATE		3		EPA 6020/7470 Metals App. III & IV		001	
PROJECT #:		3		IC (Cl, T, SO ₄) EPA 300.0, TDS SM 2540C		002	
Collection DATE	Collection TIME	MATRIX CODE*	COM P	GRA B	SAMPLE IDENTIFICATION	003	
9/15/16	0920	GW	X	X	YGWA-3D		
9/15/16	1245	GW	X	X	YGWA-14S		
9/15/16	-	GW	X	X	DUP-2		
SAMPLED BY AND TITLE: Charles Watson		DATE/TIME:	RELINQUISHED BY:		DATE/TIME:	FOR LAB USE ONLY	
9/15/16		9/15/16	[Signature]		9/16/16 @ 3:53	LAB #:	
RECEIVED BY LAB: William E. Hill		DATE/TIME:	RECEIVED BY:		DATE/TIME:	Entered into LIMS:	
9/16/16		9/16/16	[Signature]		9/16/16	Tracking #:	
pH checked: Yes No NA		Custody Seal: Intact Broken Not Present		SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS			
Temp: NA		# of Coolers		Cooler ID:			

Sample Condition Upon Receipt Pittsburgh

30196377



Client Name: Pace Georgia Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5099 2473

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

Thermometer Used NIA Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp NIA °C Correction Factor: NIA °C Final Temp: NIA °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KA 9-19-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. <u>PH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>KA</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KA</u> Date: <u>9-19-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/3/2016
Worklist: 31648
Matrix: DW

Method Blank Assessment

MB Sample ID: 1152654
MB concentration: 0.076
MB Counting Uncertainty: 0.110
MB MDC: 0.232
MB Numerical Performance Indicator: 1.36
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Pass

Laboratory Control Sample Assessment

LCSID (Y or NY): N
LCS#1648
LCS#1648
Count Date: 10/8/2016

Spike ID.: 16-026
Spike Concentration (pCi/mL): 44.676
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.504
Target Conc. (pCi/L, g, F): 8.861
Uncertainty (Calculated): 0.417
Result (pCi/L, g, F): 7.380
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.843
Numerical Performance Indicator: -3.09
Percent Recovery: 83.28%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Sample Matrix Spike Control Assessment

Sample Collection Date:
Sample ID:
Sample MS ID:
Sample MSD ID:
Spike ID.:

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):
MSD Numerical Performance Indicator:
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:
MS Percent Recovery:
MSD Percent Recovery:
MS Status vs Numerical Indicator:
MSD Status vs Numerical Indicator:
MS Status vs Recovery:
MSD Status vs Recovery:

Duplicate Sample Assessment

Sample I.D.: 30196635005
Duplicate Sample I.D.: 30196635005DUP
Sample Result (pCi/L, g, F): 0.159
Sample Result Counting Uncertainty (pCi/L, g, F): 0.160
Sample Duplicate Result (pCi/L, g, F): 0.120
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.150
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: 0.350
Duplicate RPD: 28.14%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail**

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30196635005
30196635005DUP

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample ID:
Sample MS ID:
Sample MSD ID:
Sample Matrix Spike Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Quelley

Comments:

***Batch must be re-prepped due to unacceptable precision.



Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 10/1/2016
Worklist: 31649
Matrix: DW

Method Blank Assessment	
MB Sample ID	1152855
MB concentration:	0.522
MB Counting Uncertainty:	0.344
MB MDC:	0.662
MB Numerical Performance Indicator:	2.98
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSD (Y or N)?	N
LCSD31649	LCSD31649
Count Date:	10/1/2016
Spike I.D.:	16-025
Spike Concentration (pCi/mL):	25.509
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.809
Target Conc. (pCi/L, g, F):	6.386
Uncertainty (Calculated):	0.454
Result (pCi/L, g, F):	5.426
LCSD Counting Uncertainty (pCi/L, g, F):	0.636
Numerical Performance Indicator:	-2.21
Percent Recovery:	86.04%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

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):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate 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:	

Duplicate Sample Assessment	
Sample I.D.:	3019636002
Duplicate Sample I.D.:	3019636002DUP
Sample Result (pCi/L, g, F):	0.233
Sample Duplicate Result (pCi/L, g, F):	0.291
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.740
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.331
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-2.257
Duplicate Status vs Numerical Indicator:	104.31%
Duplicate Status vs RPD:	N/A
Duplicate Status vs Recovery:	Fail**

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Quaker



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 17, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196376

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 19, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW

Pace Project No.: 30196376

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196376

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196376001	YGWA-6S	Water	09/15/16 09:20	09/19/16 09:40
30196376002	YGWA-6I	Water	09/15/16 13:00	09/19/16 09:40
30196376003	FB-2	Water	09/15/16 13:45	09/19/16 09:40

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
 Pace Project No.: 30196376

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196376001	YGWA-6S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196376002	YGWA-6I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196376003	FB-2	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196376

Sample: YGWA-6S		Lab ID: 30196376001	Collected: 09/15/16 09:20	Received: 09/19/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0975 ± 0.160 (0.355)		pCi/L	09/30/16 11:33	13982-63-3	
		C:90% T:NA					
Radium-228	EPA 9320	1.46 ± 0.556 (0.862)		pCi/L	10/06/16 20:02	15262-20-1	
		C:72% T:73%					
Total Radium	Total Radium Calculation	1.56 ± 0.716 (1.22)		pCi/L	10/12/16 15:41	7440-14-4	

Sample: YGWA-6I		Lab ID: 30196376002	Collected: 09/15/16 13:00	Received: 09/19/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.951 ± 0.367 (0.414)		pCi/L	09/30/16 11:42	13982-63-3	
		C:93% T:NA					
Radium-228	EPA 9320	1.47 ± 0.599 (0.963)		pCi/L	10/06/16 20:17	15262-20-1	
		C:70% T:68%					
Total Radium	Total Radium Calculation	2.42 ± 0.966 (1.38)		pCi/L	10/12/16 15:41	7440-14-4	

Sample: FB-2		Lab ID: 30196376003	Collected: 09/15/16 13:45	Received: 09/19/16 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0111 ± 0.109 (0.297)		pCi/L	10/05/16 08:16	13982-63-3	
		C:88% T:NA					
Radium-228	EPA 9320	0.422 ± 0.382 (0.754)		pCi/L	10/04/16 02:42	15262-20-1	
		C:68% T:75%					
Total Radium	Total Radium Calculation	0.433 ± 0.491 (1.05)		pCi/L	10/12/16 15:41	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196376

QC Batch: 234855 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196376003

METHOD BLANK: 1152654 Matrix: Water
Associated Lab Samples: 30196376003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0759 ± 0.110 (0.232) C:91% T:NA	pCi/L	10/05/16 08:16	

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196376

QC Batch: 234043 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30196376001, 30196376002

METHOD BLANK: 1147793 Matrix: Water
Associated Lab Samples: 30196376001, 30196376002

Table with 5 columns: Parameter, Act ± Unc (MDC) Carr Trac, Units, Analyzed, Qualifiers. Row 1: Radium-228, 0.722 ± 0.384 (0.681) C:79% T:82%, pCi/L, 10/06/16 11:54

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196376

QC Batch: 234856	Analysis Method: EPA 9320
QC Batch Method: EPA 9320	Analysis Description: 9320 Radium 228
Associated Lab Samples: 30196376003	

METHOD BLANK: 1152655	Matrix: Water
Associated Lab Samples: 30196376003	

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.522 ± 0.356 (0.662) C:63% T:84%	pCi/L	10/04/16 02:41	

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

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196376

QC Batch: 234041 Analysis Method: EPA 9315
 QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
 Associated Lab Samples: 30196376001, 30196376002

METHOD BLANK: 1147791 Matrix: Water
 Associated Lab Samples: 30196376001, 30196376002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0358 ± 0.114 (0.367) C:90% T:NA	pCi/L	09/30/16 09:56	

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

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196376

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30196376

CHAIN OF CUSTODY RECORD



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS,
(770) 734-4200 : FAX (770) 734-4201 : www.ast-lab.com



30196376

CLIENT NAME: Southern Company Services		CONTAINER TYPE: PRESERVATION:		ANALYSIS REQUESTED		CONTAINER TYPE: PRESERVATION:	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308		REPORT TO: Joju Abraham JABRAHAM@southernco.com		IC (CL, T, SO4) EPA 300.0, TDS SM 2540C Radium 226 & 228 GW-846 9315/9320		L A B I D N U M B E R ↓	
REQUESTED COMPLETION DATE: STANDARD		PROJECT NAME/STATE YATES AP CCR GW		PROJECT #:		MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT	
Collection DATE	Collection TIME	MATRIX CODE*	COM P	SAMPLE IDENTIFICATION	# of CONTAINERS	CONTAINER TYPE: PRESERVATION:	REMARKS/ADDITIONAL INFORMATION
9/15/16	0920	GW	X	YGWA-6S	4		001
9/15/16	1300	GW	X	YGWA-6I	3		002
9/15/16	1345	W	X	FB-2	3		803
SAMPLED BY AND TITLE: B. Davis, B. Brown		DATE/TIME:	DATE/TIME:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:	LAB #:
RECEIVED BY: Joju Abraham		DATE/TIME:	DATE/TIME:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:	FOR LAB USE ONLY
RECEIVED BY LAB: William E. Bell		DATE/TIME:	DATE/TIME:	DATE/TIME:	SAMPLE SHIPPED VIA: UPS Custody Seal Intact	DATE/TIME:	Entered into LIMS: Tracking #:
pH checked: Yes		Temperature: N/A	Min:	Max:	USPS	COURIER	CLIENT
No		NA	Yes	NA	FED-EX	# of Coolers	COOLER ID:
NA		Min:	Max:	NA	Other Present	Other FS	Other FS

Sample Condition Upon Receipt Pittsburgh

30196376



Client Name: Pace Georgia Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5099 2473

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

Thermometer Used NIA Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp NIA °C Correction Factor: NIA °C Final Temp: NIA °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 9-19-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID/Analysis Matrix: <u>W+</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. <u>PH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>KH</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KH</u> Date: <u>9-19-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Test: Ra-226
Analyst: LAL
Date: 10/3/2016
Worklist: 31520
Matrix: DW

Method Blank Assessment	
MB Sample ID	1147791
MB concentration:	-0.036
M/B Counting Uncertainty:	0.113
MB MDC:	0.367
MB Numerical Performance Indicator:	-0.62
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSD (Y or N)?	N
LCSD31520	LCSD31520
Count Date:	9/30/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.677
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.502
Target Conc. (pCi/L, g, F):	8.895
Uncertainty (Calculated):	0.418
Result (pCi/L, g, F):	7.069
LCSD/LCSD Counting Uncertainty (pCi/L, g, F):	0.888
Numerical Performance Indicator:	-3.61
Percent Recovery:	79.47%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196056002
Duplicate Sample I.D.:	30196056002DUP
Sample Result (pCi/L, g, F):	0.042
Sample Result Counting Uncertainty (pCi/L, g, F):	0.205
Sample Duplicate Result (pCi/L, g, F):	0.088
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.236
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.293
Duplicate RPD:	71.82%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.
Sample MS I.D.	Sample MS I.D.
Sample MSD I.D.	Sample MSD I.D.
Spike I.D.:	Spike I.D.:
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	Spike Volume Used in MS (mL):
MS Aliquot (L, g, F):	MS Aliquot (L, g, F):
MS Target Conc. (pCi/L, g, F):	MSD Aliquot (L, g, F):
MSD Target Conc. (pCi/L, g, F):	MSD Target Conc. (pCi/L, g, F):
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:
MS Numerical Performance Indicator:	MS Percent Recovery:
MS Percent Recovery:	MSD Percent Recovery:
MS Status vs Numerical Indicator:	MS Status vs Numerical Indicator:
MS Status vs Recovery:	MS Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	Sample I.D.
Sample MS I.D.	Sample MS I.D.
Sample MSD I.D.	Sample MSD I.D.
Sample Matrix Spike Result	Sample Matrix Spike Result
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:	MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:	MS/MSD Duplicate Status vs Recovery:

M. J. Kelly

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/3/2016
Worklist: 31648
Matrix: DW

Method Blank Assessment	
MB Sample ID	1152654
MB Concentration:	0.076
M/B Counting Uncertainty:	0.110
MB MDC:	0.232
MB Numerical Performance Indicator:	1.36
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS (Y or N)?	N
LCS31648	LCS031648
Count Date:	10/5/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.676
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.504
Target Conc. (pCi/L, g, F):	8.861
Uncertainty (Calculated):	0.417
Result (pCi/L, g, F):	7.380
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.843
Numerical Performance Indicator:	-3.09
Percent Recovery:	83.28%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196635005
Duplicate Sample I.D.:	30196635005DUP
Sample Result (pCi/L, g, F):	0.159
Sample Duplicate Result (pCi/L, g, F):	0.160
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.120
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.150
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.350
Duplicate RPD:	28.14%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

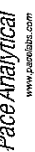
***Batch must be re-prepped due to unacceptable precision.

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
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):	
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:	

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:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Handwritten signature/initials

Quality Control Sample Performance Assessment



www.paceanalytical.com

Test: Ra-228
Analyst: JLW
Date: 9/26/2016
Worklist: 31522
Matrix: DW

Method Blank Assessment	
MB Sample ID	1147793
MB concentration:	0.722
M/B Counting Uncertainty:	0.362
MB MDC:	0.681
MB Numerical Performance Indicator:	3.91
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	
LCS/D (Y or N)?	
LCS31522	N
LCS031522	
Count Date:	10/6/2016
Spike I.D.:	16-025
Spike Concentration (pCi/mL):	25.489
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.804
Target Conc. (pCi/L, g, F):	6.341
Uncertainty (Calculated):	0.457
Result (pCi/L, g, F):	7.364
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.790
Numerical Performance Indicator:	2.20
Percent Recovery:	116.14%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196056002
Duplicate Sample I.D.:	30196056002DUP
Sample Result (pCi/L, g, F):	0.542
Sample Duplicate Result (pCi/L, g, F):	0.310
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.977
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.359
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.797
Duplicate RPD:	57.34%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

*The method blank result is below the reporting limit for this analysis and is acceptable.

**Batch must be re-prepped due to unacceptable precision.

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):	
MSD Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
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:	

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:	
Sample 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:	

Signature

Quality Control Sample Performance Assessment



Test: Ra-228
Analyst: JLW
Date: 10/1/2016
Worklist: 31649
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

<p>Sample Matrix Spike Control Assessment</p> <p>Sample Collection Date: Sample I.D.: Sample MS I.D.: Sample MSD I.D.:</p> <p>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): Spike uncertainty (calculated):</p> <p>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:</p>	<p>Sample Matrix Spike Control Assessment</p> <p>Sample I.D.: Sample MS I.D.: Sample MSD I.D.:</p> <p>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:</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Method Blank Assessment</p> <p>MB Sample ID: 1152655 MB concentration: 0.522 M/B Counting Uncertainty: 0.344 MB MDC: 0.662 MB Numerical Performance Indicator: 2.98 MB Status vs Numerical Indicator: N/A MB Status vs. MDC: Pass</p>	<p>LCS/D (Y or N)?</p> <p>LCS31649 Count Date: 10/1/2016 Spike I.D.: 16-025 Spike Concentration (pCi/mL): 25.509 Volume Used (mL): 0.20 Aliquot Volume (L, g, F): 0.809 Target Conc. (pCi/L, g, F): 6.305 Uncertainty (Calculated): 0.454 Result (pCi/L, g, F): 5.426 LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.636 Numerical Performance Indicator: -2.21 Percent Recovery: 86.04% Status vs Numerical Indicator: N/A Status vs Recovery: Pass</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Laboratory Control Sample Assessment</p> <p>LCS31649 Count Date: 10/1/2016 Spike I.D.: 16-025 Spike Concentration (pCi/mL): 25.509 Volume Used (mL): 0.20 Aliquot Volume (L, g, F): 0.809 Target Conc. (pCi/L, g, F): 6.305 Uncertainty (Calculated): 0.454 Result (pCi/L, g, F): 5.426 LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.636 Numerical Performance Indicator: -2.21 Percent Recovery: 86.04% Status vs Numerical Indicator: N/A Status vs Recovery: Pass</p>	<p>LCS/D (Y or N)?</p> <p>LCS31649</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------

<p>Duplicate Sample Assessment</p> <p>Sample I.D.: 30196636002 Duplicate Sample I.D.: 30196636002DUP Sample Result (pCi/L, g, F): 0.233 Sample Result Counting Uncertainty (pCi/L, g, F): 0.291 Sample Duplicate Result (pCi/L, g, F): 0.740 Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.331 Are sample and/or duplicate results below MDC? See Below ## Duplicate Numerical Performance Indicator: -2.257 Duplicate RPD: 104.31% Duplicate Status vs Numerical Indicator: N/A Duplicate Status vs RPD: Fail**</p>	<p>Enter Duplicate sample IDs if other than LCS/LCSD in the space below.</p> <p>30196636002 30196636002DUP</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------

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

Comments:

Qualitative

***Batch must be re-prepped due to unacceptable precision.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZI0741

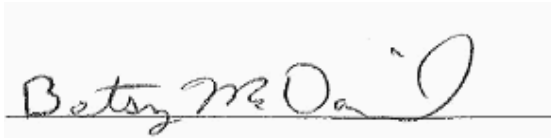
October 04, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-28S	AZI0741-01	Ground Water	09/21/16 09:10	09/22/16 09:00
YGWC-28I	AZI0741-02	Ground Water	09/21/16 11:18	09/22/16 09:00
FB-4	AZI0741-03	Water	09/21/16 11:55	09/22/16 09:00
YGWC-29I	AZI0741-04	Ground Water	09/21/16 15:45	09/22/16 09:00
YGWC-32S	AZI0741-05	Ground Water	09/21/16 11:20	09/22/16 09:00
YGWC-32I	AZI0741-06	Ground Water	09/21/16 12:23	09/22/16 09:00
YGWC-33S	AZI0741-07	Ground Water	09/21/16 14:40	09/22/16 09:00
YGWC-34I	AZI0741-08	Ground Water	09/21/16 16:30	09/22/16 09:00
Dup-4	AZI0741-09	Ground Water	09/21/16 00:00	09/22/16 09:00
EQB-4	AZI0741-10	Water	09/21/16 12:46	09/22/16 09:00



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: YGWC-28S

Lab Number ID: AZI0741-01

Date/Time Sampled: 9/21/2016 9:10:00AM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	216	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	19	0.25	0.01	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 12:56	6090696	RLC
Fluoride	0.25	0.30	0.02	mg/L	EPA 300.0	J	1	09/26/16 10:53	09/27/16 12:56	6090696	RLC
Sulfate	4.1	1.0	0.05	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 12:56	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Barium	0.228	0.0500	0.0022	mg/L	EPA 6020B		5	09/26/16 08:20	09/29/16 12:48	6090680	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Boron	2.54	0.500	0.0321	mg/L	EPA 6020B		5	09/26/16 08:20	09/30/16 12:02	6090680	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Calcium	24.9	2.50	0.155	mg/L	EPA 6020B		5	09/26/16 08:20	09/29/16 12:48	6090680	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Cobalt	0.0008	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Selenium	0.0010	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:47	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:03	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: YGWC-28I

Lab Number ID: AZI0741-02

Date/Time Sampled: 9/21/2016 11:18:00AM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	214	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	09/26/16 10:53	10/04/16 00:31	6090696	RLC
Fluoride	0.08	0.30	0.02	mg/L	EPA 300.0	J	1	09/26/16 10:53	10/04/16 00:31	6090696	RLC
Sulfate	8.0	1.0	0.05	mg/L	EPA 300.0		1	09/26/16 10:53	10/04/16 00:31	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Barium	0.0889	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Boron	2.65	0.500	0.0321	mg/L	EPA 6020B		5	09/26/16 08:20	09/29/16 16:03	6090680	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Calcium	33.2	2.50	0.155	mg/L	EPA 6020B		5	09/26/16 08:20	09/29/16 16:03	6090680	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Lithium	0.0067	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 17:53	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:06	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: FB-4

Lab Number ID: AZI0741-03

Date/Time Sampled: 9/21/2016 11:55:00AM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	09/26/16 10:53	09/30/16 15:42	6090696	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/26/16 10:53	09/30/16 15:42	6090696	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	09/26/16 10:53	09/30/16 15:42	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Boron	0.0089	0.100	0.0064	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 17:58	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:08	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: YGWC-29I

Lab Number ID: AZI0741-04

Date/Time Sampled: 9/21/2016 3:45:00PM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	138	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 14:01	6090696	RLC
Fluoride	0.09	0.30	0.02	mg/L	EPA 300.0	J	1	09/26/16 10:53	09/27/16 14:01	6090696	RLC
Sulfate	32	1.0	0.05	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 14:01	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Barium	0.0782	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Boron	0.853	0.100	0.0064	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Cadmium	0.0002	0.0010	0.00007	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Calcium	11.1	2.50	0.155	mg/L	EPA 6020B		5	09/26/16 08:20	09/29/16 12:59	6090680	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Cobalt	0.0007	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Lithium	0.0074	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:04	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:10	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: YGWC-32S

Lab Number ID: AZI0741-05

Date/Time Sampled: 9/21/2016 11:20:00AM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	531	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	0.07	0.25	0.01	mg/L	EPA 300.0	J	1	09/26/16 10:53	09/27/16 16:09	6090696	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 16:09	6090696	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 16:09	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Barium	0.0225	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Beryllium	0.0025	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Boron	4.29	0.500	0.0321	mg/L	EPA 6020B		5	09/26/16 08:20	09/29/16 16:09	6090680	CSW
Cadmium	0.0006	0.0010	0.00007	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Calcium	101	25.0	1.55	mg/L	EPA 6020B		50	09/26/16 08:20	09/29/16 13:05	6090680	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Cobalt	0.0036	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Lead	0.0001	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Selenium	0.0458	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:10	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:13	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: YGWC-32I

Lab Number ID: AZI0741-06

Date/Time Sampled: 9/21/2016 12:23:00PM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	739	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	13	0.25	0.01	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 16:31	6090696	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 16:31	6090696	RLC
Sulfate	410	50	2.6	mg/L	EPA 300.0		50	09/26/16 10:53	09/29/16 02:10	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Barium	0.0257	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Boron	4.00	0.500	0.0321	mg/L	EPA 6020B		5	09/26/16 08:20	09/29/16 16:14	6090680	CSW
Cadmium	0.0007	0.0010	0.00007	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Calcium	93.4	25.0	1.55	mg/L	EPA 6020B		50	09/26/16 08:20	09/29/16 13:17	6090680	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Cobalt	0.0016	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Selenium	0.0026	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Lithium	0.0033	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:16	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:20	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: YGWC-33S

Lab Number ID: AZI0741-07

Date/Time Sampled: 9/21/2016 2:40:00PM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1220	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	5.5	0.25	0.01	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 16:53	6090696	RLC
Fluoride	0.22	0.30	0.02	mg/L	EPA 300.0	J	1	09/26/16 10:53	09/27/16 16:53	6090696	RLC
Sulfate	840	50	2.6	mg/L	EPA 300.0		50	09/26/16 10:53	09/29/16 02:30	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Arsenic	0.0054	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Barium	0.0183	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Beryllium	0.0149	0.0030	0.00008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Boron	11.1	1.00	0.0642	mg/L	EPA 6020B		10	09/26/16 08:20	09/29/16 16:20	6090680	CSW
Cadmium	0.0017	0.0010	0.00007	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Calcium	131	25.0	1.55	mg/L	EPA 6020B		50	09/26/16 08:20	09/29/16 13:47	6090680	CSW
Chromium	0.0021	0.0100	0.0009	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Cobalt	0.0237	0.0100	0.0005	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Lead	0.0006	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Selenium	0.0147	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Lithium	0.0145	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:21	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:22	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: YGWC-34I

Lab Number ID: AZI0741-08

Date/Time Sampled: 9/21/2016 4:30:00PM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	529	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 17:14	6090696	RLC
Fluoride	0.36	0.30	0.02	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 17:14	6090696	RLC
Sulfate	340	50	2.6	mg/L	EPA 300.0		50	09/26/16 10:53	09/29/16 02:51	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Barium	0.0229	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Beryllium	0.0007	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Boron	4.08	0.500	0.0321	mg/L	EPA 6020B		5	09/26/16 08:20	09/27/16 18:56	6090680	CSW
Cadmium	0.0002	0.0010	0.00007	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Calcium	97.3	25.0	1.55	mg/L	EPA 6020B		50	09/26/16 08:20	09/29/16 13:59	6090680	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Cobalt	0.0046	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Molybdenum	0.0271	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Selenium	0.0746	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Lithium	0.0025	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:27	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:25	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: Dup-4

Lab Number ID: AZI0741-09

Date/Time Sampled: 9/21/2016 12:00:00AM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1270	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	5.6	0.25	0.01	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 17:36	6090696	RLC
Fluoride	0.22	0.30	0.02	mg/L	EPA 300.0	J	1	09/26/16 10:53	09/27/16 17:36	6090696	RLC
Sulfate	830	50	2.6	mg/L	EPA 300.0		50	09/26/16 10:53	09/29/16 03:12	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Arsenic	0.0054	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Barium	0.0175	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Beryllium	0.0137	0.0030	0.00008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Boron	11.2	1.00	0.0642	mg/L	EPA 6020B		10	09/26/16 08:20	09/29/16 16:26	6090680	CSW
Cadmium	0.0015	0.0010	0.00007	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Calcium	133	25.0	1.55	mg/L	EPA 6020B		50	09/26/16 08:20	09/29/16 14:04	6090680	CSW
Chromium	0.0019	0.0100	0.0009	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Cobalt	0.0246	0.0100	0.0005	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Lead	0.0005	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Selenium	0.0140	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Lithium	0.0132	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:33	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:27	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Project: CCR Event

Client ID: EQB-4

Lab Number ID: AZI0741-10

Date/Time Sampled: 9/21/2016 12:46:00PM

Date/Time Received: 9/22/2016 9:00:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	09/26/16 14:15	09/26/16 14:15	6090688	JPT
Inorganic Anions											
Chloride	0.08	0.25	0.01	mg/L	EPA 300.0	J	1	09/26/16 10:53	09/27/16 17:58	6090696	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/26/16 10:53	09/27/16 17:58	6090696	RLC
Sulfate	0.87	1.0	0.05	mg/L	EPA 300.0	J	1	09/26/16 10:53	09/27/16 17:58	6090696	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Boron	0.0539	0.100	0.0064	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Calcium	0.0650	0.500	0.0311	mg/L	EPA 6020B	J	1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/26/16 08:20	09/27/16 18:39	6090680	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/26/16 09:35	09/26/16 14:36	6090674	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090688 - SM 2540 C											
Blank (6090688-BLK1)						Prepared & Analyzed: 09/26/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6090688-BS1)						Prepared & Analyzed: 09/26/16					
Total Dissolved Solids	387	25	10	mg/L	400.00		97	84-108			
Duplicate (6090688-DUP1)						Source: AZI0728-03 Prepared & Analyzed: 09/26/16					
Total Dissolved Solids	136	25	10	mg/L		123			10	10	
Duplicate (6090688-DUP2)						Source: AZI0741-01 Prepared & Analyzed: 09/26/16					
Total Dissolved Solids	214	25	10	mg/L		216			0.9	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090696 - EPA 300.0											
Blank (6090696-BLK1)						Prepared: 09/26/16 Analyzed: 09/27/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6090696-BS1)						Prepared: 09/26/16 Analyzed: 09/27/16					
Chloride	9.73	0.25	0.01	mg/L	10.010		97	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010		106	90-110			
Sulfate	9.92	1.0	0.05	mg/L	10.010		99	90-110			
Duplicate (6090696-DUP1)						Source: AZI0741-03RE1			Prepared: 09/26/16 Analyzed: 09/30/16		
Chloride	ND	1.0	1.0	mg/L		ND				15	
Fluoride	ND	0.10	0.10	mg/L		ND				15	
Sulfate	ND	5.0	5.0	mg/L		ND				15	
Duplicate (6090696-DUP2)						Source: AZI0741-02RE1			Prepared: 09/26/16 Analyzed: 10/04/16		
Chloride	18.0	1.0	1.0	mg/L		17.9			0.8	15	
Fluoride	ND	0.10	0.10	mg/L		0.08				15	
Sulfate	7.98	5.0	5.0	mg/L		8.02			0.5	15	
Matrix Spike (6090696-MS1)						Source: AZI0644-03			Prepared: 09/26/16 Analyzed: 09/27/16		
Chloride	14.2	0.25	0.01	mg/L	10.010	4.21	100	90-110			
Fluoride	9.85	0.30	0.02	mg/L	10.010	ND	98	90-110			
Sulfate	12.7	1.0	0.05	mg/L	10.010	ND	127	90-110			QM-05
Matrix Spike (6090696-MS2)						Source: AZI0778-01			Prepared: 09/26/16 Analyzed: 09/27/16		
Chloride	9.80	0.25	0.01	mg/L	10.010	1.00	88	90-110			QM-05
Fluoride	9.82	0.30	0.02	mg/L	10.010	ND	98	90-110			
Sulfate	9.70	1.0	0.05	mg/L	10.010	0.96	87	90-110			QM-05



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090696 - EPA 300.0											
Matrix Spike Dup (6090696-MSD1)		Source: AZI0644-03				Prepared: 09/26/16 Analyzed: 09/27/16					
Chloride	14.7	0.25	0.01	mg/L	10.010	4.21	105	90-110	3	15	
Fluoride	10.6	0.30	0.02	mg/L	10.010	ND	105	90-110	7	15	
Sulfate	13.3	1.0	0.05	mg/L	10.010	ND	133	90-110	4	15	QM-05



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090674 - EPA 7470A											
Blank (6090674-BLK1)						Prepared & Analyzed: 09/26/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6090674-BS1)						Prepared & Analyzed: 09/26/16					
Mercury	0.00240	0.00050	0.000041	mg/L	2.5000E-3		96	80-120			
Matrix Spike (6090674-MS1)						Source: AZI0741-01 Prepared & Analyzed: 09/26/16					
Mercury	0.00213	0.00050	0.000041	mg/L	2.5000E-3	ND	85	75-125			
Matrix Spike Dup (6090674-MSD1)						Source: AZI0741-01 Prepared & Analyzed: 09/26/16					
Mercury	0.00209	0.00050	0.000041	mg/L	2.5000E-3	ND	84	75-125	2	20	
Post Spike (6090674-PS1)						Source: AZI0741-01 Prepared & Analyzed: 09/26/16					
Mercury	1.55			ug/L	1.6667	-0.00189	93	80-120			
Batch 6090680 - EPA 3005A											
Blank (6090680-BLK1)						Prepared & Analyzed: 09/26/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0050	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0050	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0050	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090680 - EPA 3005A											
LCS (6090680-BS1)						Prepared & Analyzed: 09/26/16					
Antimony	0.105	0.0030	0.0008	mg/L	0.10000		105	80-120			
Arsenic	0.100	0.0050	0.0016	mg/L	0.10000		100	80-120			
Barium	0.0997	0.0100	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000		102	80-120			
Boron	1.02	0.100	0.0064	mg/L	1.0000		102	80-120			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000		101	80-120			
Calcium	0.990	0.500	0.0311	mg/L	1.0000		99	80-120			
Chromium	0.107	0.0100	0.0009	mg/L	0.10000		107	80-120			
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Copper	0.103	0.0050	0.0005	mg/L	0.10000		103	80-120			
Lead	0.101	0.0050	0.0001	mg/L	0.10000		101	80-120			
Molybdenum	0.101	0.0100	0.0017	mg/L	0.10000		101	80-120			
Nickel	0.104	0.0050	0.0006	mg/L	0.10000		104	80-120			
Selenium	0.0976	0.0100	0.0010	mg/L	0.10000		98	80-120			
Silver	0.0991	0.0050	0.0005	mg/L	0.10000		99	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000		106	80-120			
Zinc	0.105	0.0100	0.0021	mg/L	0.10000		105	80-120			
Lithium	0.103	0.0500	0.0021	mg/L	0.10000		103	80-120			
Matrix Spike (6090680-MS1)						Source: AZI0808-03 Prepared & Analyzed: 09/26/16					
Antimony	0.109	0.0150	0.0042	mg/L	0.10000	ND	109	75-125			
Arsenic	0.122	0.0250	0.0082	mg/L	0.10000	0.0168	105	75-125			
Barium	0.774	0.0500	0.0022	mg/L	0.10000	0.672	102	75-125			
Beryllium	0.0959	0.0150	0.0004	mg/L	0.10000	ND	96	75-125			
Boron	1.89	0.500	0.0321	mg/L	1.0000	0.857	103	75-125			
Cadmium	0.0949	0.0050	0.0004	mg/L	0.10000	ND	95	75-125			
Calcium	318	25.0	1.55	mg/L	1.0000	290	NR	75-125			QM-02
Chromium	0.102	0.0500	0.0047	mg/L	0.10000	ND	102	75-125			
Cobalt	0.0989	0.0500	0.0026	mg/L	0.10000	ND	99	75-125			
Copper	0.0901	0.0250	0.0027	mg/L	0.10000	ND	90	75-125			
Lead	0.0953	0.0250	0.0006	mg/L	0.10000	ND	95	75-125			
Molybdenum	0.103	0.0500	0.0086	mg/L	0.10000	ND	103	75-125			
Nickel	0.0947	0.0250	0.0028	mg/L	0.10000	ND	95	75-125			
Selenium	0.0300	0.0500	0.0050	mg/L	0.10000	ND	30	75-125			QM-05, J
Silver	0.0899	0.0250	0.0024	mg/L	0.10000	ND	90	75-125			
Thallium	0.0984	0.0050	0.0010	mg/L	0.10000	ND	98	75-125			
Vanadium	0.115	0.0500	0.0357	mg/L	0.10000	ND	115	75-125			
Zinc	0.0975	0.0500	0.0105	mg/L	0.10000	ND	98	75-125			
Lithium	0.157	0.250	0.0103	mg/L	0.10000	0.0566	100	75-125			J



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Report No.: AZI0741

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090680 - EPA 3005A											
Matrix Spike Dup (6090680-MSD1)			Source: AZI0808-03			Prepared & Analyzed: 09/26/16					
Antimony	0.107	0.0150	0.0042	mg/L	0.10000	ND	107	75-125	2	20	
Arsenic	0.122	0.0250	0.0082	mg/L	0.10000	0.0168	105	75-125	0.09	20	
Barium	0.751	0.0500	0.0022	mg/L	0.10000	0.672	79	75-125	3	20	
Beryllium	0.0939	0.0150	0.0004	mg/L	0.10000	ND	94	75-125	2	20	
Boron	1.87	0.500	0.0321	mg/L	1.0000	0.857	101	75-125	1	20	
Cadmium	0.0915	0.0050	0.0004	mg/L	0.10000	ND	91	75-125	4	20	
Calcium	311	25.0	1.55	mg/L	1.0000	290	NR	75-125	2	20	QM-02
Chromium	0.101	0.0500	0.0047	mg/L	0.10000	ND	101	75-125	1	20	
Cobalt	0.0961	0.0500	0.0026	mg/L	0.10000	ND	96	75-125	3	20	
Copper	0.0920	0.0250	0.0027	mg/L	0.10000	ND	92	75-125	2	20	
Lead	0.0937	0.0250	0.0006	mg/L	0.10000	ND	94	75-125	2	20	
Molybdenum	0.100	0.0500	0.0086	mg/L	0.10000	ND	100	75-125	2	20	
Nickel	0.0917	0.0250	0.0028	mg/L	0.10000	ND	92	75-125	3	20	
Selenium	0.0292	0.0500	0.0050	mg/L	0.10000	ND	29	75-125	3	20	QM-05, J
Silver	0.0905	0.0250	0.0024	mg/L	0.10000	ND	91	75-125	0.7	20	
Thallium	0.0960	0.0050	0.0010	mg/L	0.10000	ND	96	75-125	2	20	
Vanadium	0.112	0.0500	0.0357	mg/L	0.10000	ND	112	75-125	2	20	
Zinc	0.0959	0.0500	0.0105	mg/L	0.10000	ND	96	75-125	2	20	
Lithium	0.154	0.250	0.0103	mg/L	0.10000	0.0566	97	75-125	2	20	J
Post Spike (6090680-PS1)			Source: AZI0808-03			Prepared & Analyzed: 09/26/16					
Antimony	107			ug/L	100.00	0.364	107	80-120			
Arsenic	121			ug/L	100.00	16.8	105	80-120			
Barium	775			ug/L	100.00	672	103	80-120			
Beryllium	99.0			ug/L	100.00	0.0495	99	80-120			
Boron	1920			ug/L	1000.0	857	106	80-120			
Cadmium	95.2			ug/L	100.00	-0.0917	95	80-120			
Calcium	311000			ug/L	1000.0	290000	NR	80-120			QM-02
Chromium	103			ug/L	100.00	0.331	102	80-120			
Cobalt	98.2			ug/L	100.00	0.394	98	80-120			
Copper	87.0			ug/L	100.00	0.276	87	80-120			
Lead	94.9			ug/L	100.00	0.0342	95	80-120			
Molybdenum	105			ug/L	100.00	0.701	105	80-120			
Nickel	91.8			ug/L	100.00	0.360	91	80-120			
Selenium	111			ug/L	100.00	3.12	107	80-120			
Silver	91.4			ug/L	100.00	0.0378	91	80-120			
Thallium	97.3			ug/L	100.00	0.157	97	80-120			
Vanadium	118			ug/L	100.00	5.29	113	80-120			
Zinc	95.0			ug/L	100.00	0.972	94	80-120			
Lithium	162			ug/L	100.00	56.6	106	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

October 04, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD



Peace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CLIENT NAME: Southern Company Services		ANALYSIS REQUESTED	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308		CONTAINER TYPE: P 3 PRESERVATION: 7 3	
REPORT TO: JABRAHAM@southernco.com	CC: MRPADILL@southernco.com CHMCORK@southernco.com	CONTAINER TYPE: P 3 PRESERVATION: 7 3	
REQUESTED COMPLETION DATE: STANDARD	PO #:	CONTAINER TYPE: P 3 PRESERVATION: 7 3	
PROJECT NAME/STATE: YATES AP CCR GW		CONTAINER TYPE: P 3 PRESERVATION: 7 3	
PROJECT #:		CONTAINER TYPE: P 3 PRESERVATION: 7 3	
Collection DATE	Collection TIME	MATRIX CODE	SAMPLE IDENTIFICATION
9/21/16	0910	GW	YGWC-285
9/21/16	1118	GW	YGWC-28I
9/21/16	1155	W	FB-4
9/21/16	1545	GW	YGWC-29I
SAMPLED BY AND TITLE: Charles Lawson		RELINQUISHED BY: [Signature]	
RECEIVED BY: [Signature]		RELINQUISHED BY: [Signature]	
DATE/TIME: 9/21/16 1555		DATE/TIME: 9/22/16 0900	
DATE/TIME: 9/22/16 0900		DATE/TIME: 9/22/16 0900	
Temperature: 10°C Min. 10°C Max.		DATE/TIME: 9/22/16 0900	
LAB #	CLIENT	OTHER FS	
Entered into LIMS:	Client ID:	COURIER	
Tracking #:	Client ID:	# of Coolers	
FOR LAB USE ONLY		Net Present	
AZI 9741		file	



CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd. SE, B10185
Atlanta, GA 30308

REPORT TO: Jolu Abraham
JABRAHAM@southemco.com

CC: MRPADILL@southemco.com
CHMCOORK@southemco.com

REQUESTED COMPLETION DATE: PO #:

STANDARD:

PROJECT NAME/STATE: YATES AP CCR GW

CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESERVATION
P - PLASTIC	P	A	1 - HCl, 56°C
A - AMBER GLASS	P	B	2 - H ₂ SO ₄ , 56°C
G - CLEAR GLASS	3	I	3 - HNO ₃
V - VOA VIAL	7	D	4 - NaOH, 56°C
S - STERILE	3	N	5 - NaOH/ZnAc, 56°C
O - OTHER	3	U	6 - Na ₂ S ₂ O ₃ , 56°C
		M	7 - 56°C not frozen
		B	
		E	
		R	
		↓	
		5	
		6	
		7	
		8	
		9	
		10	

CONTAINER TYPE	ANALYSIS REQUESTED	DATE/TIME
P	3	9/21/16 1700
P	7	9/21/16 1720
P	3	9/21/16 900

RELINQUISHED BY: *DS* DATE/TIME: 9/21/16 1720

RELINQUISHED BY: *DS* DATE/TIME: 9/21/16 900

SAMPLE SHIPPED VIA: UPS () FED-EX () USPS () COURIER () OTHER FS ()

Checklist Seal: Intact () Broken () # of Coolers: _____

Temp: 18°C

SAMPLED BY AND TITLE: Wesley Brown	DATE/TIME: 9/21/16 1700
RECEIVED BY: <i>Ken Lee</i>	DATE/TIME: 9/21/16 1740
RECEIVED BY LAB: Ken Lee	DATE/TIME: 9/21/16 0900
Lab checked: Yes () No ()	Temp: 18°C
Signature: Ken Lee	Signature: Wesley Brown



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 10/4/2016 4:35:27PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 09/22/16 09:00

Work Order: AZI0741

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 10

#Containers: 32

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:



October 21, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196936

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW
Pace Project No.: 30196936

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196936

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196936001	YGWC-28S	Water	09/21/16 09:10	09/23/16 10:30
30196936002	YGWC-28I	Water	09/21/16 11:18	09/23/16 10:30
30196936003	FB-4	Water	09/21/16 11:55	09/23/16 10:30
30196936004	YGWC-29I	Water	09/21/16 15:45	09/23/16 10:30

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
 Pace Project No.: 30196936

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196936001	YGWC-28S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196936002	YGWC-28I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196936003	FB-4	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196936004	YGWC-29I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196936

Sample: YGWC-28S		Lab ID: 30196936001	Collected: 09/21/16 09:10	Received: 09/23/16 10:30	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.115 ± 0.0994 (0.178)		pCi/L	10/14/16 09:43	13982-63-3	
		C:95% T:NA					
Radium-228	EPA 9320	0.401 ± 0.342 (0.683)		pCi/L	10/12/16 14:49	15262-20-1	
		C:66% T:89%					
Total Radium	Total Radium Calculation	0.176 ± 0.398 (0.864)		pCi/L	10/20/16 15:55	7440-14-4	

Sample: YGWC-28I		Lab ID: 30196936002	Collected: 09/21/16 11:18	Received: 09/23/16 10:30	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0978 ± 0.0869 (0.156)		pCi/L	10/14/16 09:44	13982-63-3	
		C:94% T:NA					
Radium-228	EPA 9320	0.0614 ± 0.299 (0.686)		pCi/L	10/12/16 14:49	15262-20-1	
		C:70% T:83%					
Total Radium	Total Radium Calculation	0.335 ± 0.341 (0.681)		pCi/L	10/20/16 15:55	7440-14-4	

Sample: FB-4		Lab ID: 30196936003	Collected: 09/21/16 11:55	Received: 09/23/16 10:30	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.161 ± 0.145 (0.254)		pCi/L	10/14/16 08:44	13982-63-3	
		C:88% T:NA					
Radium-228	EPA 9320	0.237 ± 0.254 (0.525)		pCi/L	10/12/16 14:49	15262-20-1	
		C:80% T:86%					
Total Radium	Total Radium Calculation	0.000 ± #NUM! (#NUM!)		pCi/L	10/12/16 15:41	7440-14-4	

Sample: YGWC-29I		Lab ID: 30196936004	Collected: 09/21/16 15:45	Received: 09/23/16 10:30	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.515 ± 0.259 (0.370)		pCi/L	10/14/16 08:44	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	0.695 ± 0.718 (1.49)		pCi/L	10/11/16 11:56	15262-20-1	
		C:41% T:83%					
Total Radium	Total Radium Calculation	1.21 ± 0.977 (1.86)		pCi/L	10/20/16 15:55	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196936

QC Batch: 234965 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30196936001, 30196936002, 30196936003

METHOD BLANK: 1153052 Matrix: Water
 Associated Lab Samples: 30196936001, 30196936002, 30196936003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.116 ± 0.397 (0.895) C:62% T:83%	pCi/L	10/12/16 14:48	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196936

QC Batch: 234963 Analysis Method: EPA 9315
 QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
 Associated Lab Samples: 30196936001, 30196936002

METHOD BLANK: 1153049 Matrix: Water
 Associated Lab Samples: 30196936001, 30196936002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0113 ± 0.0337 (0.123) C:99% T:NA	pCi/L	10/14/16 10:27	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196936

QC Batch: 235795	Analysis Method: EPA 9315
QC Batch Method: EPA 9315	Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196936003, 30196936004	

METHOD BLANK: 1158144	Matrix: Water
Associated Lab Samples: 30196936003, 30196936004	

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0431 ± 0.0942 (0.223) C:94% T:NA	pCi/L	10/14/16 08:44	

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.

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196936

QC Batch: 235797	Analysis Method: EPA 9320
QC Batch Method: EPA 9320	Analysis Description: 9320 Radium 228
Associated Lab Samples: 30196936004	

METHOD BLANK: 1158148	Matrix: Water
Associated Lab Samples: 30196936004	

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.128 ± 0.383 (0.822) C:45% T:88%	pCi/L	10/11/16 12:00	

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

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196936

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS


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



CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CLIENT NAME: Southern Company Services		ANALYSIS REQUESTED		CONTAINER TYPE: P 3		CONTAINER TYPE: P 3		PRESERVATION: 3		CONTAINER TYPE: P 3		PRESERVATION: 3	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308		CC: MRPADILL@southernco.com CHMCCORK@southernco.com		IC (I, T, S04) EPA 300.0, TDS SM 2540C		Radium 226 & 228 SW-846 9315/9320		Metal App. III & IV EPA 6020/7470					
REPORT TO: Joju Abraham JABRAHAM@southernco.com		PO #:											
REQUESTED COMPLETION DATE:		STANDARD											
PROJECT NAME/STATE: YATES AP CCR GW													
PROJECT #:													
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION	# of CONTAINERS	RELINQUISHED BY:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:	LAB #:	REMARKS/ADDITIONAL INFORMATION	
9/21/16	0910	GW	X	X	YGWC-285	4	Charles Watson	9/21/16 1555					
9/21/16	1118	GW	X	X	YGWC-28 I	3							
9/21/16	1155	W	X		FB-4	3							
9/21/16	1545	GW	X	X	YGWC-29 I	3							

WO# : 30196936

 30196936

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace GA Project # 30196936

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250993734

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

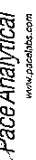
Date and Initials of person examining contents: NJV
9-23-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>pH=2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>NJV</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>NJV</u> Date: <u>9-23-16</u>

Client Notification/ Resolution:
 Person Contacted: _____ Date/Time: _____ Contacted By: _____
 Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226
Analyst: LAL
Date: 10/12/2016
Worklist: 31774
Matrix: DW

Method Blank Assessment	
MB Sample ID	1158144
MB concentration:	0.043
M/B Counting Uncertainty:	0.094
MB WDC:	0.223
MB Numerical Performance Indicator:	0.90
MB Status vs Numerical Indicator:	N/A
MB Status vs. WDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	10/14/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.676
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.502
Target Conc. (pCi/L, g, F):	8.902
Uncertainty (Calculated):	0.419
Result (pCi/L, g, F):	7.731
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.827
Numerical Performance Indicator:	-2.48
Percent Recovery:	86.84%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196937001
Duplicate Sample I.D.:	30196937001DUP
Sample Result (pCi/L, g, F):	0.250
Sample Result Counting Uncertainty (pCi/L, g, F):	0.169
Sample Duplicate Result (pCi/L, g, F):	0.371
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.207
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.889
Duplicate RPD:	39.03%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Handwritten signature: Oubek

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.
Sample MS I.D.	Sample MSD I.D.
Spike 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):	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:

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:
Sample Matrix Spike Duplicate Result:	Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:	MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst: **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226
Analyst: LAL
Date: 10/10/2016
Worklist: 31686
Matrix: DW

Method Blank Assessment

MB Sample ID: 1153049
MB concentration: -0.011
M/B Counting Uncertainty: 0.034
MB MDC: 0.123
MB Numerical Performance Indicator: -0.66
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCS# (Y or N)?	LCS#	N
10/14/2016	LCS31686	LCS31686
Count Date:	16-026	
Spike I.D.:	44.676	
Spike Concentration (pCi/mL):	0.501	
Volume Used (mL):	8.923	
Aliquot Volume (L, g, F):	0.420	
Target Conc. (pCi/L, g, F):	7.036	
Result (pCi/L, g, F):	0.545	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	-5.38	
Numerical Performance Indicator:	78.85%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment

Sample I.D.: 30196936001
Duplicate Sample I.D.: 30196936001DUP
Sample Result (pCi/L, g, F): 0.115
Sample Result Counting Uncertainty (pCi/L, g, F): 0.098
Sample Duplicate Result (pCi/L, g, F): 0.145
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.100
Are sample and/or duplicate results below MDC? See Below #
Duplicate Numerical Performance Indicator: -0.417
Duplicate RPD: 22.90%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30196936001
30196936001DUP

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

Comments:

Juan

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):
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:

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:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 10/21/2016
Worklist: 31776
Matrix: DW

Method Blank Assessment	
MB Sample ID	1158148
MB concentration:	0.128
M/S Counting Uncertainty:	0.382
MB MDC:	0.822
MB Numerical Performance Indicator:	0.66
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	10/11/2016
Spike I.D.:	16-025
Spike Concentration (pCi/ml):	25.447
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.813
Target Conc. (pCi/L, g, F):	6.262
Uncertainty (Calculated):	0.451
Result (pCi/L, g, F):	7.569
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.795
Numerical Performance Indicator:	2.80
Percent Recovery:	120.87%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196938004
Duplicate Sample I.D.:	30196938004DUP
Sample Result (pCi/L, g, F):	0.462
Sample Duplicate Result (pCi/L, g, F):	0.599
Sample Result Counting Uncertainty (pCi/L, g, F):	1.113
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.524
Are sample and/or duplicate results below MDC?	See Below #
Duplicate Numerical Performance Indicator:	-1.603
Duplicate RPD:	82.67%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30196938004
30196938004DUP

Comments:

***Batch must be re-prepped due to unacceptable precision.

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.
Sample MS I.D.:	Sample MSD I.D.
MS/MSD Decay Corrected Spike Concentration (pCi/ml):	Spike I.D.:
Spike Volume Used in MS (mL):	Spike Volume Used in MSD (mL):
MS Aliquot (L, g, F):	MS Target Conc.(pCi/L, g, F):
MS Target Conc.(pCi/L, g, F):	MSD Aliquot (L, g, F):
MSD Target Conc. (pCi/L, g, F):	MSD Numerical Performance Indicator:
Spike uncertainty (calculated):	MS Percent Recovery:
Sample Result:	MSD Percent Recovery:
Sample Result Counting Uncertainty (pCi/L, g, F):	MS Status vs Numerical Indicator:
Sample Matrix Spike Result:	MSD Status vs Numerical Indicator:
Sample Matrix Spike Duplicate Result:	MS Status vs Recovery:
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	MSD Status vs Recovery:
MS Numerical Performance Indicator:	

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

Quality Control Sample Performance Assessment



Test: Ra-228
Analyst: JLW
Date: 10/6/2016
Worklist: 31687
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

<p>Method Blank Assessment</p> <p>MB Sample ID: 1153052 MB concentration: 0.116 MB Counting Uncertainty: 0.396 MB MDC: 0.895 MB Numerical Performance Indicator: 0.58 MB Status vs Numerical Indicator: N/A MB Status vs MDC: Pass</p>	<p>Sample Matrix Spike Control Assessment</p> <p>Sample Collection Date: Sample I.D.: Sample MS I.D.: Sample MSD I.D.:</p> <p>MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (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): Spike uncertainty (calculated): Sample Result:</p> <p>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: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery:</p>
<p>Laboratory Control Sample Assessment</p> <p>LCS (Y or N)? N LCSID: LCS031687</p> <p>Count Date: 10/12/2016 Spike I.D.: 16-025 Spike Concentration (pCi/mL): 25.438 Volume Used (mL): 0.20 Aliquot Volume (L, g, F): 0.803 Target Conc. (pCi/L, g, F): 6.338 Uncertainty (Calculated): 0.456 Result (pCi/L, g, F): 7.347 LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.827 Numerical Performance Indicator: 115.91% Percent Recovery: 2.09 Status vs Numerical Indicator: N/A Status vs Recovery: Pass</p>	<p>Matrix Spike/Matrix Spike Duplicate Sample Assessment</p> <p>Sample I.D.: Sample MS I.D.: Sample MSD I.D.:</p> <p>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:</p>
<p>Duplicate Sample Assessment</p> <p>Sample I.D.: 30196936001 Duplicate Sample I.D.: 30196936001DUP Sample Result (pCi/L, g, F): 0.401 Sample Result Counting Uncertainty (pCi/L, g, F): 0.334 Sample Duplicate Result (pCi/L, g, F): -0.043 Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.283 Are sample and/or duplicate results below MDC? See Below ## Duplicate Numerical Performance Indicator: 1.985 Duplicate RPD: 248.14% Duplicate Status vs Numerical Indicator: N/A Duplicate Status vs RPD: Fail***</p>	<p>Enter Duplicate sample IDs if other than LCS/LCSD in the space below.</p> <p>30196936001 30196936001DUP</p> <p>## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.</p> <p>Comments: <i>Duplicate</i></p> <p>***Batch must be re-prepped due to unacceptable precision.</p>



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 21, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196938

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW

Pace Project No.: 30196938

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196938

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196938001	YGWC-32S	Water	09/21/16 11:20	09/23/16 10:30
30196938002	YGWC-32I	Water	09/21/16 12:23	09/23/16 10:30
30196938003	YGWC-33S	Water	09/21/16 14:40	09/23/16 10:30
30196938004	YGWC-34I	Water	09/21/16 16:30	09/23/16 10:30
30196938005	Dup-4	Water	09/21/16 00:01	09/23/16 10:30
30196938006	EQB-4	Water	09/21/16 12:46	09/23/16 10:30

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
 Pace Project No.: 30196938

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196938001	YGWC-32S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196938002	YGWC-32I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196938003	YGWC-33S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196938004	YGWC-34I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196938005	Dup-4	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196938006	EQB-4	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196938

Sample: YGWC-32S		Lab ID: 30196938001	Collected: 09/21/16 11:20	Received: 09/23/16 10:30	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.00424 ± 0.145 (0.396) C:79% T:NA	pCi/L	10/14/16 07:58	13982-63-3	
Radium-228	EPA 9320	0.962 ± 0.723 (1.43) C:46% T:78%	pCi/L	10/11/16 11:54	15262-20-1	
Total Radium	Total Radium Calculation	0.962 ± 0.868 (1.83)	pCi/L	10/20/16 15:55	7440-14-4	

Sample: YGWC-32I		Lab ID: 30196938002	Collected: 09/21/16 12:23	Received: 09/23/16 10:30	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.200 ± 0.203 (0.406) C:88% T:NA	pCi/L	10/14/16 07:58	13982-63-3	
Radium-228	EPA 9320	-0.453 ± 0.366 (0.976) C:52% T:83%	pCi/L	10/11/16 11:59	15262-20-1	
Total Radium	Total Radium Calculation	0.200 ± 0.569 (1.38)	pCi/L	10/20/16 15:55	7440-14-4	

Sample: YGWC-33S		Lab ID: 30196938003	Collected: 09/21/16 14:40	Received: 09/23/16 10:30	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.412 ± 0.215 (0.273) C:92% T:NA	pCi/L	10/14/16 07:58	13982-63-3	
Radium-228	EPA 9320	1.95 ± 0.824 (1.31) C:53% T:67%	pCi/L	10/11/16 11:59	15262-20-1	
Total Radium	Total Radium Calculation	2.36 ± 1.04 (1.58)	pCi/L	10/20/16 15:55	7440-14-4	

Sample: YGWC-34I		Lab ID: 30196938004	Collected: 09/21/16 16:30	Received: 09/23/16 10:30	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.100 ± 0.195 (0.540) C:96% T:NA	pCi/L	10/14/16 07:59	13982-63-3	
Radium-228	EPA 9320	0.462 ± 0.604 (1.10) C:50% T:76%	pCi/L	10/11/16 15:43	15262-20-1	
Total Radium	Total Radium Calculation	0.462 ± 0.799 (1.64)	pCi/L	10/20/16 16:19	7440-14-4	

Sample: Dup-4		Lab ID: 30196938005	Collected: 09/21/16 00:01	Received: 09/23/16 10:30	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.284 ± 0.179 (0.261) C:97% T:NA	pCi/L	10/14/16 07:59	13982-63-3	
Radium-228	EPA 9320	0.892 ± 0.495 (0.872) C:57% T:81%	pCi/L	10/11/16 11:59	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196938

Sample: Dup-4		Lab ID: 30196938005	Collected: 09/21/16 00:01	Received: 09/23/16 10:30	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	1.18 ± 0.674 (1.13)	pCi/L	10/20/16 16:19	7440-14-4	

Sample: EQB-4		Lab ID: 30196938006	Collected: 09/21/16 12:46	Received: 09/23/16 10:30	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.122 ± 0.152 (0.314) C:91% T:NA	pCi/L	10/14/16 07:59	13982-63-3	
Radium-228	EPA 9320	1.30 ± 0.616 (1.03) C:54% T:81%	pCi/L	10/11/16 11:59	15262-20-1	
Total Radium	Total Radium Calculation	1.42 ± 0.768 (1.34)	pCi/L	10/20/16 16:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196938

QC Batch: 235795 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196938001, 30196938002, 30196938003, 30196938004, 30196938005, 30196938006

METHOD BLANK: 1158144 Matrix: Water
Associated Lab Samples: 30196938001, 30196938002, 30196938003, 30196938004, 30196938005, 30196938006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0431 ± 0.0942 (0.223) C:94% T:NA	pCi/L	10/14/16 08:44	

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.

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196938

QC Batch: 235797 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30196938001, 30196938002, 30196938003, 30196938004, 30196938005, 30196938006

METHOD BLANK: 1158148 Matrix: Water
 Associated Lab Samples: 30196938001, 30196938002, 30196938003, 30196938004, 30196938005, 30196938006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.128 ± 0.383 (0.822) C:45% T:88%	pCi/L	10/11/16 12:00	

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

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196938

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.as-lab.com

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd. SE, B10185
Atlanta, GA 30308

REPORT TO: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: PO #:
STANDARD

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	GRA B	SAMPLE IDENTIFICATION
9/21/16	1120	G-W	X	Y6-WC-32S
9/21/16	1223	G-W	X	Y6-WC-32I
9/21/16	1440	G-W	X	Y6-WC-33S
9/21/16	1630	G-W	X	Y6-WC-34I
9/21/16	-	G-W	X	DUP-4
9/21/16	1246	W	X	EGB-4

CONTAINER TYPE:	P	P	P	P	P	P	P
# of	3	7	3				

CONTAINER TYPE:	ANALYSIS REQUESTED	RELINQUISHED BY:	DATE/TIME:
			9/21/16 1700

CONTAINER TYPE:	ANALYSIS REQUESTED	RELINQUISHED BY:	DATE/TIME:
			9/21/16 1700

RECEIVED BY LAB: *Wesley Brown*

RECEIVED BY: *Ken*

DATE/TIME: 9/23/16 1030

Temperature: Min: Max:

Ice: Yes No NA

pH checked: Yes No NA

WO#: 30196938

CONTAINER TYPE	ANALYSIS REQUESTED	RELINQUISHED BY	DATE/TIME
			9/21/16 1700
			9/21/16 1700

LAB #:

Entered into LIMS:

Tracking #:

FOR LAB USE ONLY

RECEIVED BY LAB: *Wesley Brown*

RECEIVED BY: *Ken*

DATE/TIME: 9/23/16 1030

Temperature: Min: Max:

Ice: Yes No NA

pH checked: Yes No NA

Sample Condition Upon Receipt Pittsburgh

30196938



Client Name: Pace GA Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681250993734

Custody Seal on Cooler/Box Present: yes no Seals Intact: yes no

Thermometer Used N/A Type of Ice: Wet Blue None
Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: NSV
9-23-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				
				Initial when completed: <u>NSV</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>NSV</u> Date: <u>9-23-16</u>

Client Notification/ Resolution:
 Person Contacted: _____ Date/Time: _____ Contacted By: _____
 Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/12/2016
Worklist: 31774
Matrix: DW

Method Blank Assessment	
MB Sample ID	1158144
MB Concentration:	0.043
M/B Counting Uncertainty:	0.094
MB MDC:	0.223
MB Numerical Performance Indicator:	0.90
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSID (Y or N)?	N
LCSID	LCS031774
Count Date:	10/14/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.676
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.502
Target Conc. (pCi/L, g, F):	8.902
Uncertainty (Calculated):	0.419
Result (pCi/L, g, F):	7.731
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.827
Numerical Performance Indicator:	-2.48
Percent Recovery:	86.84%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196937001
Duplicate Sample I.D.:	30196937001DUP
Sample Result Counting Uncertainty (pCi/L, g, F):	0.250
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.169
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.371
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.207
Are sample and/or duplicate results below MDC?	See Below #
Duplicate Numerical Performance Indicator:	-0.889
Duplicate RPD:	39.03%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Quark

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.:	Sample MS I.D.
Sample MSD I.D.:	Sample MSD I.D.
Spike 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):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate 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:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample I.D.
Sample MS I.D.:	Sample MS I.D.
Sample MSD I.D.:	Sample MSD I.D.
Matrix Spike Result:	Sample Matrix Spike Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:	MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:	MS/MSD Duplicate Status vs RPD:

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JILW
Date: 10/7/2016
Worklist: 31776
Matrix: DW

Method Blank Assessment	
MB Sample ID	1158148
MB concentration:	0.128
MB Counting Uncertainty:	0.382
MB MDC:	0.822
MB Numerical Performance Indicator:	0.66
MB Status vs. Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	10/11/2016
Spike I.D.:	LCSS31776
Spike Concentration (pCi/mL):	16.025
Volume Used (mL):	25.447
Aliquot Volume (L, g, F):	0.20
Target Conc. (pCi/L, g, F):	0.813
Result (pCi/L, g, F):	6.262
Uncertainty (Calculated):	0.451
Result (pCi/L, g, F):	7.569
Numerical Performance Indicator:	0.795
Percent Recovery:	2.80
Status vs. Numerical Indicator:	120.87%
Status vs. Recovery:	N/A
	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196938004
Duplicate Sample I.D.:	30196938004DUP
Sample Result (pCi/L, g, F):	0.462
Sample Duplicate Result (pCi/L, g, F):	0.599
Sample Duplicate Result (pCi/L, g, F):	1.113
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.524
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.603
Duplicate RPD:	82.67%
Duplicate Status vs. Numerical Indicator:	N/A
Duplicate Status vs. RPD:	Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30196938004
30196938004DUP

Handwritten signature: JILW

Comments:

***Batch must be re-prepped due to unacceptable precision.

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):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Matrix Spike Duplicate Result:	
Sample 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:	

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

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



October 20, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196785

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 22, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Report reissued 10/20/16 to reflect correction of Sample ID's due to login and review error.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW
Pace Project No.: 30196785

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196785

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196785001	YGWC-23S	Water	09/20/16 09:56	09/22/16 09:50
30196785002	YGWC-24S	Water	09/20/16 11:27	09/22/16 09:50
30196785003	YGWC-27S	Water	09/20/16 15:20	09/22/16 09:50
30196785004	DUP-3	Water	09/20/16 00:01	09/22/16 09:50

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
Pace Project No.: 30196785

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196785001	YGWC-23S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196785002	YGWC-24S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196785003	YGWC-27S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196785004	DUP-3	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196785

Sample: YGWC-23S **Lab ID: 30196785001** Collected: 09/20/16 09:56 Received: 09/22/16 09:50 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0835 ± 0.0861 (0.164) C:90% T:NA	pCi/L	10/14/16 09:42	13982-63-3	
Radium-228	EPA 9320	1.39 ± 0.583 (0.958) C:71% T:76%	pCi/L	10/12/16 15:35	15262-20-1	
Total Radium	Total Radium Calculation	1.47 ± 0.669 (1.12)	pCi/L	10/18/16 11:16	7440-14-4	

Sample: YGWC-24S **Lab ID: 30196785002** Collected: 09/20/16 11:27 Received: 09/22/16 09:50 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0321 ± 0.0801 (0.191) C:97% T:NA	pCi/L	10/14/16 09:42	13982-63-3	
Radium-228	EPA 9320	0.821 ± 0.470 (0.855) C:66% T:79%	pCi/L	10/12/16 15:35	15262-20-1	
Total Radium	Total Radium Calculation	0.853 ± 0.550 (1.05)	pCi/L	10/18/16 11:16	7440-14-4	

Sample: YGWC-27S **Lab ID: 30196785003** Collected: 09/20/16 15:20 Received: 09/22/16 09:50 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.140 ± 0.115 (0.214) C:93% T:NA	pCi/L	10/14/16 09:42	13982-63-3	
Radium-228	EPA 9320	1.13 ± 0.542 (0.922) C:59% T:84%	pCi/L	10/12/16 15:35	15262-20-1	
Total Radium	Total Radium Calculation	1.27 ± 0.657 (1.14)	pCi/L	10/18/16 11:16	7440-14-4	

Sample: DUP-3 **Lab ID: 30196785004** Collected: 09/20/16 00:01 Received: 09/22/16 09:50 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.119 ± 0.0903 (0.147) C:96% T:NA	pCi/L	10/14/16 09:43	13982-63-3	
Radium-228	EPA 9320	0.109 ± 0.355 (0.800) C:64% T:85%	pCi/L	10/12/16 14:48	15262-20-1	
Total Radium	Total Radium Calculation	0.228 ± 0.445 (0.947)	pCi/L	10/18/16 11:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196785

QC Batch: 234965 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30196785001, 30196785002, 30196785003, 30196785004

METHOD BLANK: 1153052 Matrix: Water
 Associated Lab Samples: 30196785001, 30196785002, 30196785003, 30196785004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.116 ± 0.397 (0.895) C:62% T:83%	pCi/L	10/12/16 14:48	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196785

QC Batch: 234963 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196785001, 30196785002, 30196785003, 30196785004

METHOD BLANK: 1153049 Matrix: Water
Associated Lab Samples: 30196785001, 30196785002, 30196785003, 30196785004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0113 ± 0.0337 (0.123) C:99% T:NA	pCi/L	10/14/16 10:27	

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

REPORT OF LABORATORY ANALYSIS

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196785

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30196785

CHAIN OF CUSTODY RECORD



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 3006
 (770) 734-4200 : FAX (770) 734-4201 : www.ash-lab.com

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
 241 Ralph McGill Blvd. SE, B10185
 Atlanta, GA 30308

REPORT TO: Joju Abraham
 JABRAHAM@southernco.com
 CC: MRPADILL@southernco.com
 CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD
 PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #: YATES AP CCR GW

Collection DATE	Collection TIME	MATRIX CODE*	SAMPLE IDENTIFICATION				
			C	O	R	A	
9/20/16	0956	GW	X				Y6-GWC-23S
9/20/16	1127	GW	X				Y6-GWC-24S
9/20/16	1520	GW	X				Y6-GWC-27S
9/20/16	-	GW	X				DUP-3

SAMPLED BY AND TITLE: *Joju Abraham*
 RECEIVED BY: *Joju Abraham*
 DATE/TIME: 9/20/16 @ 1600
 DATE/TIME: 9-22-16 950

RECEIVED BY LAB: *[Signature]*
 pH checked: Yes No NA
 Ice: Yes No NA
 Temperature: Min. Max.

ANALYSIS REQUESTED

CONTAINER TYPE	P	P	P	P
PRESERVATION: # of	3	7	3	3
CONTAINERS	Metals App. III & IV EPA 6020/1740	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	

CONTAINER TYPE: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER

PRESERVATION: 1 - HCl, ≤6°C, 2 - H₂SO₄, ≤6°C, 3 - HNO₃, 4 - NaOH, ≤6°C, 5 - NaOH/ZnAc, ≤6°C, 6 - Na₂S₂O₃, ≤6°C, 7 - ≤6°C not frozen

MATRIX CODES: DW - DRINKING WATER, WW - WASTEWATER, GW - GROUNDWATER, SW - SURFACE WATER, W - WATER, S - SOIL, SL - SLUDGE, SD - SOLID, A - AIR, L - LIQUID, P - PRODUCT

REMARKS/ADDITIONAL INFORMATION: 001, 002, 003, 004

LAB #: FOR LAB USE ONLY

Entered into LIMS: Tracking #:

Sample Condition Upon Receipt Pittsburgh



Client Name: Georgia power

Project # 30196785

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5099 3355

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9-22-16

Comments:

	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-includes date/time/ID/Analysis Matrix: <u>Wf</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10. <u>1/2 gallons</u>
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests		X		12.
All containers needing preservation have been checked.	X			13. <u>PH 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>ML</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:		X		15.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>ML</u> Date: <u>9-22-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/10/2016
Worklist: 31686
Matrix: DW

Method Blank Assessment	
MB Sample ID	1153049
MB concentration:	-0.011
M/B Counting Uncertainty:	0.034
MB MDC:	0.123
MB Numerical Performance Indicator:	-0.66
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	10/14/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.676
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.501
Target Conc. (pCi/L, g, F):	8.923
Uncertainty (Calculated):	0.420
Result (pCi/L, g, F):	7.036
Uncertainty (pCi/L, g, F):	0.545
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	-5.38
Numerical Performance Indicator:	78.85%
Percent Recovery:	N/A
Status vs Numerical Indicator:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196936001
Duplicate Sample I.D.:	30196936001DUP
Sample Result (pCi/L, g, F):	0.115
Sample Result Counting Uncertainty (pCi/L, g, F):	0.099
Sample Duplicate Result (pCi/L, g, F):	0.145
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.100
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.417
Duplicate RPD:	22.90%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

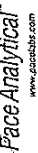
Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Test: Ra-228
Analyst: JLLW
Date: 10/6/2016
Worklist: 31687
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

<p>Method Blank Assessment</p> <p>MB Sample ID: 1153052 MB Concentration: 0.116 MB Counting Uncertainty: 0.396 MB MDC: 0.895 MB Numerical Performance Indicator: 0.58 MB Status vs Numerical Indicator: N/A MB Status vs. MDC: Pass</p>	<p>Sample Matrix Spike Control Assessment</p> <p>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): 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:</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Laboratory Control Sample Assessment</p> <p>LCS#1687 Count Date: 10/12/2016 Spike I.D.: 16-025 Spike Concentration (pCi/mL): 25.438 Volume Used (mL): 0.20 Aliquot Volume (L, g, F): 0.803 Target Conc. (pCi/L, g, F): 6.338 Uncertainty (Calculated): 0.456 Result (pCi/L, g, F): 7.347 LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.827 Numerical Performance Indicator: 2.09 Percent Recovery: 115.91% Status vs Numerical Indicator: N/A Status vs Recovery: Pass</p>	<p>Matrix Spike/Matrix Spike Duplicate Sample Assessment</p> <p>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: Sample 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:</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Duplicate Sample Assessment</p> <p>Sample I.D.: 30196936001 Duplicate Sample I.D.: 30196936001DUP Sample Result (pCi/L, g, F): 0.401 Sample Result Counting Uncertainty (pCi/L, g, F): 0.334 Sample Duplicate Result (pCi/L, g, F): -0.043 Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.283 Are sample and/or duplicate results below MDC? See Below # Duplicate Numerical Performance Indicator: 1.985 Duplicate RPD: 248.14% Duplicate Status vs Numerical Indicator: N/A Duplicate Status vs RPD: Fail***</p>	<p>Enter Duplicate sample IDs if other than LCS/LCSD in the space below. 30196936001 30196936001DUP</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------

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

Comments:

***Batch must be re-prepped due to unacceptable precision.



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 20, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196786

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on September 22, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: YATES AP CCR GW

Pace Project No.: 30196786

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196786

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196786001	YGWC-26S	Water	09/20/16 09:56	09/22/16 09:50
30196786002	YGWC-26I	Water	09/20/16 11:28	09/22/16 09:50
30196786003	EQB-3	Water	09/20/16 12:15	09/22/16 09:50
30196786004	YGWC-27I	Water	09/20/16 14:23	09/22/16 09:50

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
 Pace Project No.: 30196786

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196786001	YGWC-26S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196786002	YGWC-26I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196786003	EQB-3	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30196786004	YGWC-27I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196786

Sample: YGWC-26S		Lab ID: 30196786001	Collected: 09/20/16 09:56	Received: 09/22/16 09:50	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0860 ± 0.0842 (0.156) C:91% T:NA	pCi/L	10/14/16 09:43	13982-63-3	
Radium-228	EPA 9320	0.469 ± 0.378 (0.752) C:75% T:77%	pCi/L	10/12/16 14:48	15262-20-1	
Total Radium	Total Radium Calculation	0.555 ± 0.462 (0.908)	pCi/L	10/18/16 11:16	7440-14-4	

Sample: YGWC-26I		Lab ID: 30196786002	Collected: 09/20/16 11:28	Received: 09/22/16 09:50	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0223 ± 0.0795 (0.200) C:78% T:NA	pCi/L	10/14/16 09:43	13982-63-3	
Radium-228	EPA 9320	0.543 ± 0.421 (0.834) C:77% T:74%	pCi/L	10/12/16 14:49	15262-20-1	
Total Radium	Total Radium Calculation	0.565 ± 0.501 (1.03)	pCi/L	10/18/16 11:16	7440-14-4	

Sample: EQB-3		Lab ID: 30196786003	Collected: 09/20/16 12:15	Received: 09/22/16 09:50	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0182 ± 0.0602 (0.153) C:95% T:NA	pCi/L	10/14/16 09:43	13982-63-3	
Radium-228	EPA 9320	0.451 ± 0.406 (0.821) C:66% T:77%	pCi/L	10/12/16 14:48	15262-20-1	
Total Radium	Total Radium Calculation	0.469 ± 0.466 (0.974)	pCi/L	10/18/16 11:16	7440-14-4	

Sample: YGWC-27I		Lab ID: 30196786004	Collected: 09/20/16 14:23	Received: 09/22/16 09:50	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	2.21 ± 0.463 (0.197) C:95% T:NA	pCi/L	10/14/16 09:43	13982-63-3	
Radium-228	EPA 9320	0.911 ± 0.413 (0.669) C:67% T:87%	pCi/L	10/12/16 14:48	15262-20-1	
Total Radium	Total Radium Calculation	3.12 ± 0.876 (0.866)	pCi/L	10/19/16 14:55	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
 Pace Project No.: 30196786

QC Batch: 234965 Analysis Method: EPA 9320
 QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
 Associated Lab Samples: 30196786001, 30196786002, 30196786003, 30196786004

METHOD BLANK: 1153052 Matrix: Water
 Associated Lab Samples: 30196786001, 30196786002, 30196786003, 30196786004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.116 ± 0.397 (0.895) C:62% T:83%	pCi/L	10/12/16 14:48	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196786

QC Batch: 234963 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196786001, 30196786002, 30196786003, 30196786004

METHOD BLANK: 1153049 Matrix: Water
Associated Lab Samples: 30196786001, 30196786002, 30196786003, 30196786004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0113 ± 0.0337 (0.123) C:99% T:NA	pCi/L	10/14/16 10:27	

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

REPORT OF LABORATORY ANALYSIS

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



QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196786

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30196786

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30097
(770) 734-4200 : FAX (770) 734-4201 : WWW.PACE-ANALYTICAL.COM



CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services		ANALYSIS REQUESTED		CONTAINER TYPE: P P P P 3 7 3 3		LAB NUMBER	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308		PRESERVATION: # of		P P P P 3 7 3 3		LAB NUMBER	
REPORT TO: Joju Abraham JABRAHAM@southernco.com		CONTAINERS		P P P P 3 7 3 3		LAB NUMBER	
REQUESTED COMPLETION DATE: STANDARD		C O N T A I N E R S		P P P P 3 7 3 3		LAB NUMBER	
PROJECT NAME/STATE: YATES AP CCR GW		PO #:		P P P P 3 7 3 3		LAB NUMBER	
PROJECT #:		EPA 6020/7470 Metals App. III & IV		P P P P 3 7 3 3		LAB NUMBER	
Collection DATE		EPA 300.0, TDS SM 2540C		P P P P 3 7 3 3		LAB NUMBER	
Collection TIME		IC (Cl, F, SO4)		P P P P 3 7 3 3		LAB NUMBER	
MATRIX CODE*		Radium 226 & 228		P P P P 3 7 3 3		LAB NUMBER	
Sample Identification		SM-846 9315/9320		P P P P 3 7 3 3		LAB NUMBER	
9/20/16 0956 G-W YG-WC-265				P P P P 3 7 3 3		LAB NUMBER	
9/20/16 1128 G-W YG-WC-26I				P P P P 3 7 3 3		LAB NUMBER	
9/20/16 1215 W EQB-3				P P P P 3 7 3 3		LAB NUMBER	
9/20/16 1423 G-W YG-WC-27E				P P P P 3 7 3 3		LAB NUMBER	
SAMPLED BY AND TITLE: Charles Watson		RELINQUISHED BY:		DATE/TIME: 9/20/16 1600		DATE/TIME: 9/21/16	
RECEIVED BY LAB:		RELINQUISHED BY:		DATE/TIME: 9-22-16 950		DATE/TIME:	
pH checked: Yes No NA Yes No NA		TEMPERATURE: min: max:		SAMPLE SHIPPED VIA: USPS FedEx		CARRIER: # of Coolers	
Ice: Yes No NA Yes No NA		Intact Broken Not Present		CARRIER: # of Coolers		CLIENT: Container ID:	
Temperature: min: max:		Intact Broken Not Present		CARRIER: # of Coolers		CLIENT: Container ID:	
pH checked: Yes No NA Yes No NA		Intact Broken Not Present		CARRIER: # of Coolers		CLIENT: Container ID:	
Ice: Yes No NA Yes No NA		Intact Broken Not Present		CARRIER: # of Coolers		CLIENT: Container ID:	
Temperature: min: max:		Intact Broken Not Present		CARRIER: # of Coolers		CLIENT: Container ID:	
pH checked: Yes No NA Yes No NA		Intact Broken Not Present		CARRIER: # of Coolers		CLIENT: Container ID:	
Ice: Yes No NA Yes No NA		Intact Broken Not Present		CARRIER: # of Coolers		CLIENT: Container ID:	
Temperature: min: max:		Intact Broken Not Present		CARRIER: # of Coolers		CLIENT: Container ID:	

Sample Condition Upon Receipt Pittsburgh



Client Name: Georgia power Project # 30196786

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5099 3355

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9-22-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>W/F</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10. <u>1/2 gallons</u>
-Pace Containers Used:		X		
Containers Intact:	X			11.
Filtered volume received for Dissolved tests		X		12.
All containers needing preservation have been checked.	X			13. <u>PH 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>ML</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:		X		15.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>ML</u> Date: <u>9-22-16</u>

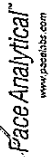
Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 10/10/2016
Worklist: 31686
Matrix: DW

Method Blank Assessment	
MB Sample ID	1153049
MB concentration:	-0.011
M/B Counting Uncertainty:	0.034
MB MDC:	0.123
MB Numerical Performance Indicator:	-0.66
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS ID:	LCS31686
Count Date:	10/14/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.676
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.501
Target Conc. (pCi/L, g, F):	8.923
Uncertainty (Calculated):	0.420
Result (pCi/L, g, F):	7.036
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.545
Numerical Performance Indicator:	-5.38
Percent Recovery:	78.85%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196936001
Duplicate Sample I.D.:	30196936001DUP
Sample Result (pCi/L, g, F):	0.115
Sample Duplicate Result (pCi/L, g, F):	0.098
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.145
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.100
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.417
Duplicate RPD:	22.50%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
 Analyst: JLW
 Date: 10/6/2016
 Worklist: 31687
 Matrix: DW

Method Blank Assessment	
MB Sample ID	1153052
MB Concentration:	0.116
M/B Counting Uncertainty:	0.396
MB MDC:	0.895
MB Numerical Performance Indicator:	0.58
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSID (Y or N)?	N
LCS31687	LCS031687
Count Date:	10/12/2016
Spike I.D.:	16-025
Spike Concentration (pCi/mL):	25.438
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.803
Target Conc. (pCi/L, g, F):	6.338
Uncertainty (Calculated):	0.456
Result (pCi/L, g, F):	7.347
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.827
Numerical Performance Indicator:	2.09
Percent Recovery:	115.91%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30196936001
Duplicate Sample I.D.:	30196936001DUP
Sample Result (pCi/L, g, F):	0.401
Sample Result Counting Uncertainty (pCi/L, g, F):	0.334
Sample Duplicate Result (pCi/L, g, F):	-0.043
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.283
Are sample and/or duplicate results below MDC?	See Below #
Duplicate Numerical Performance Indicator:	1.985
Duplicate RPD:	248.14%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample 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):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample 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:	

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:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
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:	

[Handwritten signature]



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZI0670

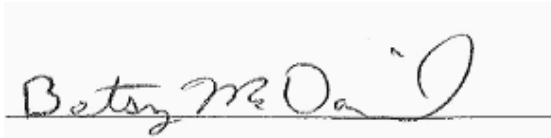
September 28, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-23S	AZI0670-01	Ground Water	09/20/16 09:56	09/21/16 09:20
YGWC-24S	AZI0670-02	Ground Water	09/20/16 11:27	09/21/16 09:20
YGWC-27S	AZI0670-03	Ground Water	09/20/16 15:20	09/21/16 09:20
Dup-3	AZI0670-04	Ground Water	09/20/16 00:00	09/21/16 09:20
YGWC-26S	AZI0670-05	Ground Water	09/20/16 09:56	09/21/16 09:20
YGWC-26I	AZI0670-06	Ground Water	09/20/16 11:28	09/21/16 09:20
EQB-3	AZI0670-07	Water	09/20/16 12:15	09/21/16 09:20
YGWC-27I	AZI0670-08	Ground Water	09/20/16 14:23	09/21/16 09:20



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Project: CCR Event

Client ID: YGWC-23S

Lab Number ID: AZI0670-01

Date/Time Sampled: 9/20/2016 9:56:00AM

Date/Time Received: 9/21/2016 9:20:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	132	25	10	mg/L	SM 2540 C		1	09/23/16 15:20	09/23/16 15:20	6090664	JPT
Inorganic Anions											
Chloride	2.4	0.25	0.01	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 13:10	6090685	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 13:10	6090685	RLC
Sulfate	68	2.0	0.10	mg/L	EPA 300.0		2	09/25/16 10:10	09/26/16 15:54	6090685	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Barium	0.0561	0.0100	0.0004	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Boron	1.35	0.500	0.0321	mg/L	EPA 6020B		5	09/23/16 09:50	09/27/16 20:20	6090643	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/23/16 09:50	09/26/16 16:19	6090643	CSW
Calcium	9.28	0.500	0.0311	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Selenium	0.0464	0.0100	0.0010	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Lithium	0.0021	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:20	6090643	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/23/16 08:35	09/23/16 13:07	6090648	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Project: CCR Event

Client ID: YGWC-24S

Lab Number ID: AZI0670-02

Date/Time Sampled: 9/20/2016 11:27:00AM

Date/Time Received: 9/21/2016 9:20:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	53	25	10	mg/L	SM 2540 C		1	09/23/16 15:20	09/23/16 15:20	6090664	JPT
Inorganic Anions											
Chloride	5.5	0.25	0.01	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 13:30	6090685	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 13:30	6090685	RLC
Sulfate	0.38	1.0	0.05	mg/L	EPA 300.0	J	1	09/25/16 10:10	09/25/16 13:30	6090685	RLC
Metals, Total											
Antimony	0.0009	0.0030	0.0008	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Barium	0.0203	0.0100	0.0004	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Boron	0.0111	0.100	0.0064	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/23/16 09:50	09/26/16 14:45	6090643	CSW
Calcium	1.78	0.500	0.0311	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:25	6090643	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/23/16 08:35	09/23/16 13:09	6090648	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Project: CCR Event

Client ID: YGWC-27S

Lab Number ID: AZI0670-03

Date/Time Sampled: 9/20/2016 3:20:00PM

Date/Time Received: 9/21/2016 9:20:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	224	25	10	mg/L	SM 2540 C		1	09/23/16 15:20	09/23/16 15:20	6090664	JPT
Inorganic Anions											
Chloride	22	0.25	0.01	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 13:51	6090685	RLC
Fluoride	0.32	0.30	0.02	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 13:51	6090685	RLC
Sulfate	21	1.0	0.05	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 13:51	6090685	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Barium	0.108	0.0100	0.0004	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Boron	1.69	0.500	0.0321	mg/L	EPA 6020B		5	09/23/16 09:50	09/27/16 14:05	6090643	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/23/16 09:50	09/26/16 14:51	6090643	CSW
Calcium	39.5	2.50	0.155	mg/L	EPA 6020B		5	09/23/16 09:50	09/27/16 14:05	6090643	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Cobalt	0.0026	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Lead	0.0002	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:31	6090643	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/23/16 08:35	09/23/16 13:12	6090648	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Project: CCR Event

Client ID: Dup-3

Lab Number ID: AZI0670-04

Date/Time Sampled: 9/20/2016 12:00:00AM

Date/Time Received: 9/21/2016 9:20:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	59	25	10	mg/L	SM 2540 C		1	09/23/16 15:20	09/23/16 15:20	6090664	JPT
Inorganic Anions											
Chloride	5.5	0.25	0.01	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 14:12	6090685	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 14:12	6090685	RLC
Sulfate	0.34	1.0	0.05	mg/L	EPA 300.0	J	1	09/25/16 10:10	09/25/16 14:12	6090685	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Barium	0.0198	0.0100	0.0004	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Beryllium	0.00009	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Boron	0.0130	0.100	0.0064	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/23/16 09:50	09/26/16 15:08	6090643	CSW
Calcium	1.74	0.500	0.0311	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:37	6090643	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/23/16 08:35	09/23/16 13:14	6090648	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Project: CCR Event

Client ID: YGWC-26S

Lab Number ID: AZI0670-05

Date/Time Sampled: 9/20/2016 9:56:00AM

Date/Time Received: 9/21/2016 9:20:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	213	25	10	mg/L	SM 2540 C		1	09/23/16 15:20	09/23/16 15:20	6090664	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 14:32	6090685	RLC
Fluoride	0.03	0.30	0.02	mg/L	EPA 300.0	J	1	09/25/16 10:10	09/25/16 14:32	6090685	RLC
Sulfate	100	5.0	0.26	mg/L	EPA 300.0		5	09/25/16 10:10	09/26/16 16:15	6090685	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Barium	0.0298	0.0100	0.0004	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Boron	0.644	0.500	0.0321	mg/L	EPA 6020B		5	09/23/16 09:50	09/27/16 14:11	6090643	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/23/16 09:50	09/26/16 15:14	6090643	CSW
Calcium	12.2	2.50	0.155	mg/L	EPA 6020B		5	09/23/16 09:50	09/27/16 14:11	6090643	CSW
Chromium	0.0010	0.0100	0.0009	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Cobalt	0.0030	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:42	6090643	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/23/16 08:35	09/23/16 13:16	6090648	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Project: CCR Event

Client ID: YGWC-26I

Lab Number ID: AZI0670-06

Date/Time Sampled: 9/20/2016 11:28:00AM

Date/Time Received: 9/21/2016 9:20:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	217	25	10	mg/L	SM 2540 C		1	09/23/16 15:20	09/23/16 15:20	6090664	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 15:34	6090685	RLC
Fluoride	0.05	0.30	0.02	mg/L	EPA 300.0	J	1	09/25/16 10:10	09/25/16 15:34	6090685	RLC
Sulfate	78	2.0	0.10	mg/L	EPA 300.0		2	09/25/16 10:10	09/26/16 16:36	6090685	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Barium	0.0663	0.0100	0.0004	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Boron	1.04	0.500	0.0321	mg/L	EPA 6020B		5	09/23/16 09:50	09/27/16 14:16	6090643	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/23/16 09:50	09/26/16 15:20	6090643	CSW
Calcium	15.3	2.50	0.155	mg/L	EPA 6020B		5	09/23/16 09:50	09/27/16 14:16	6090643	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Selenium	0.0022	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Lithium	0.0062	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:48	6090643	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/23/16 08:35	09/23/16 13:19	6090648	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Project: CCR Event

Client ID: EQB-3

Lab Number ID: AZI0670-07

Date/Time Sampled: 9/20/2016 12:15:00PM

Date/Time Received: 9/21/2016 9:20:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	09/23/16 15:20	09/23/16 15:20	6090664	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 15:55	6090685	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 15:55	6090685	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 15:55	6090685	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Boron	0.0080	0.100	0.0064	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/23/16 09:50	09/26/16 15:28	6090643	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 20:54	6090643	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/23/16 08:35	09/23/16 13:21	6090648	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Project: CCR Event

Client ID: YGWC-271

Lab Number ID: AZI0670-08

Date/Time Sampled: 9/20/2016 2:23:00PM

Date/Time Received: 9/21/2016 9:20:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	205	25	10	mg/L	SM 2540 C		1	09/23/16 15:20	09/23/16 15:20	6090664	JPT
Inorganic Anions											
Chloride	13	0.25	0.01	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 17:38	6090685	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 17:38	6090685	RLC
Sulfate	5.6	1.0	0.05	mg/L	EPA 300.0		1	09/25/16 10:10	09/25/16 17:38	6090685	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Barium	0.0687	0.0100	0.0004	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Beryllium	0.00009	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Boron	2.02	0.500	0.0321	mg/L	EPA 6020B		5	09/23/16 09:50	09/27/16 14:22	6090643	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/23/16 09:50	09/26/16 15:32	6090643	CSW
Calcium	26.3	2.50	0.155	mg/L	EPA 6020B		5	09/23/16 09:50	09/23/16 21:05	6090643	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Cobalt	0.0020	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Lithium	0.0111	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/23/16 09:50	09/23/16 21:00	6090643	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/23/16 08:35	09/23/16 13:24	6090648	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090664 - SM 2540 C											
Blank (6090664-BLK1)						Prepared & Analyzed: 09/23/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6090664-BS1)						Prepared & Analyzed: 09/23/16					
Total Dissolved Solids	402	25	10	mg/L	400.00		100	84-108			
Duplicate (6090664-DUP1)						Source: AZI0667-04 Prepared & Analyzed: 09/23/16					
Total Dissolved Solids	12	25	10	mg/L		14			15	10	QR-01, J
Duplicate (6090664-DUP2)						Source: AZI0670-03 Prepared & Analyzed: 09/23/16					
Total Dissolved Solids	226	25	10	mg/L		224			0.9	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090685 - EPA 300.0											
Blank (6090685-BLK1)						Prepared & Analyzed: 09/25/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6090685-BS1)						Prepared & Analyzed: 09/25/16					
Chloride	10.5	0.25	0.01	mg/L	10.010		105	90-110			
Fluoride	11.0	0.30	0.02	mg/L	10.010		110	90-110			
Sulfate	10.8	1.0	0.05	mg/L	10.010		108	90-110			
Matrix Spike (6090685-MS1)						Source: AZI0670-05 Prepared & Analyzed: 09/25/16					
Chloride	26.1	0.25	0.01	mg/L	10.010	17.7	84	90-110			QM-05
Fluoride	10.9	0.30	0.02	mg/L	10.010	0.03	108	90-110			
Sulfate	96.4	1.0	0.05	mg/L	10.010	96.7	NR	90-110			QM-05
Matrix Spike (6090685-MS2)						Source: AZI0728-01 Prepared & Analyzed: 09/25/16					
Chloride	11.2	0.25	0.01	mg/L	10.010	1.21	99	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010	ND	106	90-110			
Sulfate	12.1	1.0	0.05	mg/L	10.010	2.21	99	90-110			
Matrix Spike Dup (6090685-MSD1)						Source: AZI0670-05 Prepared & Analyzed: 09/25/16					
Chloride	26.2	0.25	0.01	mg/L	10.010	17.7	85	90-110	0.3	15	QM-05
Fluoride	11.0	0.30	0.02	mg/L	10.010	0.03	110	90-110	1	15	
Sulfate	96.5	1.0	0.05	mg/L	10.010	96.7	NR	90-110	0.06	15	QM-05



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090643 - EPA 3005A											
Blank (6090643-BLK1)						Prepared & Analyzed: 09/23/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6090643-BS1)						Prepared & Analyzed: 09/23/16					
Antimony	0.109	0.0030	0.0008	mg/L	0.10000		109	80-120			
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000		102	80-120			
Barium	0.102	0.0100	0.0004	mg/L	0.10000		102	80-120			
Beryllium	0.0924	0.0030	0.00008	mg/L	0.10000		92	80-120			
Boron	0.973	0.100	0.0064	mg/L	1.0000		97	80-120			
Cadmium	0.0992	0.0010	0.00007	mg/L	0.10000		99	80-120			
Calcium	0.987	0.500	0.0311	mg/L	1.0000		99	80-120			
Chromium	0.0990	0.0100	0.0009	mg/L	0.10000		99	80-120			
Cobalt	0.0996	0.0100	0.0005	mg/L	0.10000		100	80-120			
Copper	0.0976	0.0250	0.0005	mg/L	0.10000		98	80-120			
Lead	0.0980	0.0050	0.0001	mg/L	0.10000		98	80-120			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000		102	80-120			
Nickel	0.0987	0.0100	0.0006	mg/L	0.10000		99	80-120			
Selenium	0.101	0.0100	0.0010	mg/L	0.10000		101	80-120			
Silver	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Thallium	0.0965	0.0010	0.0002	mg/L	0.10000		96	80-120			
Vanadium	0.101	0.0100	0.0071	mg/L	0.10000		101	80-120			
Zinc	0.104	0.0100	0.0021	mg/L	0.10000		104	80-120			
Lithium	0.0948	0.0500	0.0021	mg/L	0.10000		95	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090643 - EPA 3005A											
Matrix Spike (6090643-MS1)			Source: AZI0670-02			Prepared & Analyzed: 09/23/16					
Antimony	0.108	0.0030	0.0008	mg/L	0.10000	0.0009	107	75-125			
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125			
Barium	0.119	0.0100	0.0004	mg/L	0.10000	0.0203	99	75-125			
Beryllium	0.0902	0.0030	0.00008	mg/L	0.10000	0.0001	90	75-125			
Boron	0.912	0.100	0.0064	mg/L	1.0000	0.0111	90	75-125			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000	ND	101	75-125			
Calcium	2.54	0.500	0.0311	mg/L	1.0000	1.78	76	75-125			
Chromium	0.0997	0.0100	0.0009	mg/L	0.10000	ND	100	75-125			
Cobalt	0.0981	0.0100	0.0005	mg/L	0.10000	ND	98	75-125			
Copper	0.0995	0.0250	0.0005	mg/L	0.10000	ND	100	75-125			
Lead	0.100	0.0050	0.0001	mg/L	0.10000	ND	100	75-125			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125			
Nickel	0.102	0.0100	0.0006	mg/L	0.10000	ND	102	75-125			
Selenium	0.102	0.0100	0.0010	mg/L	0.10000	ND	102	75-125			
Silver	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125			
Thallium	0.0980	0.0010	0.0002	mg/L	0.10000	ND	98	75-125			
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000	ND	103	75-125			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000	0.0021	100	75-125			
Lithium	0.0908	0.0500	0.0021	mg/L	0.10000	ND	91	75-125			
Matrix Spike Dup (6090643-MSD1)			Source: AZI0670-02			Prepared & Analyzed: 09/23/16					
Antimony	0.110	0.0030	0.0008	mg/L	0.10000	0.0009	109	75-125	2	20	
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125	0.05	20	
Barium	0.121	0.0100	0.0004	mg/L	0.10000	0.0203	101	75-125	1	20	
Beryllium	0.0922	0.0030	0.00008	mg/L	0.10000	0.0001	92	75-125	2	20	
Boron	0.935	0.100	0.0064	mg/L	1.0000	0.0111	92	75-125	3	20	
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125	1	20	
Calcium	2.66	0.500	0.0311	mg/L	1.0000	1.78	88	75-125	4	20	
Chromium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125	3	20	
Cobalt	0.0962	0.0100	0.0005	mg/L	0.10000	ND	96	75-125	2	20	
Copper	0.101	0.0250	0.0005	mg/L	0.10000	ND	101	75-125	2	20	
Lead	0.102	0.0050	0.0001	mg/L	0.10000	ND	102	75-125	1	20	
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125	0.3	20	
Nickel	0.102	0.0100	0.0006	mg/L	0.10000	ND	102	75-125	0.2	20	
Selenium	0.100	0.0100	0.0010	mg/L	0.10000	ND	100	75-125	2	20	
Silver	0.0995	0.0100	0.0005	mg/L	0.10000	ND	100	75-125	1	20	
Thallium	0.100	0.0010	0.0002	mg/L	0.10000	ND	100	75-125	2	20	
Vanadium	0.102	0.0100	0.0071	mg/L	0.10000	ND	102	75-125	0.6	20	
Zinc	0.102	0.0100	0.0021	mg/L	0.10000	0.0021	100	75-125	0.2	20	
Lithium	0.0930	0.0500	0.0021	mg/L	0.10000	ND	93	75-125	2	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090643 - EPA 3005A											
Post Spike (6090643-PS1)				Source: AZI0670-02			Prepared & Analyzed: 09/23/16				
Antimony	101			ug/L	100.00	0.855	100	80-120			
Arsenic	103			ug/L	100.00	0.355	102	80-120			
Barium	120			ug/L	100.00	20.3	99	80-120			
Beryllium	95.6			ug/L	100.00	0.110	95	80-120			
Boron	957			ug/L	1000.0	11.1	95	80-120			
Cadmium	101			ug/L	100.00	0.0100	101	80-120			
Calcium	2680			ug/L	1000.0	1780	89	80-120			
Chromium	100			ug/L	100.00	0.546	100	80-120			
Cobalt	103			ug/L	100.00	0.0371	102	80-120			
Copper	101			ug/L	100.00	0.101	101	80-120			
Lead	100			ug/L	100.00	0.0742	100	80-120			
Molybdenum	103			ug/L	100.00	0.0978	103	80-120			
Nickel	100			ug/L	100.00	0.209	100	80-120			
Selenium	101			ug/L	100.00	0.211	100	80-120			
Silver	98.8			ug/L	100.00	0.0041	99	80-120			
Thallium	98.0			ug/L	100.00	0.0123	98	80-120			
Vanadium	103			ug/L	100.00	0.744	102	80-120			
Zinc	104			ug/L	100.00	2.14	102	80-120			
Lithium	96.6			ug/L	100.00	0.437	96	80-120			

Batch 6090648 - EPA 7470A

Blank (6090648-BLK1)				Prepared & Analyzed: 09/23/16							
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6090648-BS1)				Prepared & Analyzed: 09/23/16							
Mercury	0.00245	0.00050	0.000041	mg/L	2.5000E-3		98	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Report No.: AZI0670

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090648 - EPA 7470A											
Matrix Spike (6090648-MS1)			Source: AZI0670-01			Prepared & Analyzed: 09/23/16					
Mercury	0.00242	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125			
Matrix Spike Dup (6090648-MSD1)			Source: AZI0670-01			Prepared & Analyzed: 09/23/16					
Mercury	0.00241	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125	0.4	20	
Post Spike (6090648-PS1)			Source: AZI0670-01			Prepared & Analyzed: 09/23/16					
Mercury	1.70			ug/L	1.6667	0.00383	102	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 28, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-01** RPD was outside acceptance limits due to sample concentrations near or below the reporting limit.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.ast-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308 REPORT TO: Joju Abraham JABRAHAM@southernco.com REQUESTED COMPLETION DATE: STANDARD PROJECT NAME/STATE: YATES AP CCR GW PROJECT #:		ANALYSIS REQUESTED CONTAINER TYPE: P P P PRESERVATION: 3 7 3 # of CONTAINERS → Metals App. III & IV EPA 6020/7470 IC (Cl, F, SO ₄) EPA 300.0, TDS SM 2540C Radium 226 & 228 SW-46 9315/9320		CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen			
CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen		MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT		REMARKS/ADDITIONAL INFORMATION			
Collection DATE 9/20/16 9/20/16 9/20/16 9/20/16	Collection TIME 0956 1127 1520 -	MATRIX CODE* GW GW GW GW	COM P X X X X	GRA B X X X X	SAMPLE IDENTIFICATION YGWC-23S YGWC-24S YGWC-27S DUP-3	CONTAINER TYPE P P P PRESERVATION: 3 7 3 # of CONTAINERS → Metals App. III & IV EPA 6020/7470 IC (Cl, F, SO ₄) EPA 300.0, TDS SM 2540C Radium 226 & 228 SW-46 9315/9320	REMARKS/ADDITIONAL INFORMATION 1 2 3 4
SAMPLED BY AND TITLE: RECEIVED BY: <i>ADY</i> RECEIVED BY LAB: <i>ADY</i> Checked: Yes No NA Inp: Yes No NA Temperature: 18°C Min: 18°C Max: 18°C		RELINQUISHED BY: RELINQUISHED BY: <i>[Signature]</i> SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER OTHER FS Contact Seal: Intact Broken Not Present file		DATE/TIME: DATE/TIME: 9/20/16 @ 1600 DATE/TIME: 9/21/16 0951 DATE/TIME: 9/21/16 0920		LAB #: AZI 0670 Entered into LIMS: Tracking #:	



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
 241 Ralph McGill Blvd. SE, B10185
 Atlanta, GA 30308

REPORT TO: Jolu Abraham
 JABRAHAM@southemco.com
 CC: MRPADILL@southemco.com
 CHMCORIK@southemco.com

REQUESTED COMPLETION DATE: PO #:
 STANDARD

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	SAMPLE IDENTIFICATION	CONTAINERS				ANALYSIS REQUESTED	CONTAINER TYPE:	PRESERVATION:	# of										
				C	O	M	P														
9/20/16	0956	G-W	YGWC-26S	X				3													
9/20/16	1128	G-W	YGWC-26I	X				3													
9/20/16	1215	W	EQB-3	X				3													
9/20/16	1423	G-W	YGWC-27I	X				3													

CONTAINER TYPE: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER

PRESERVATION: 1 - HCl, 56°C, 2 - H₂SO₄, 56°C, 3 - HNO₃, 4 - NaOH, 56°C, 5 - NaOH/ZnAc, 56°C, 6 - Na₂S₂O₃, 56°C, 7 - 56°C not frozen

MATRIX CODES: DW - DRINKING WATER, S - SOIL, WW - WASTEWATER, SL - SLUDGE, GW - GROUNDWATER, SD - SOLID, SW - SURFACE WATER, A - AIR, ST - STORM WATER, L - LIQUID, W - WATER, P - PRODUCT

REMARKS/ADDITIONAL INFORMATION:

LAB #:	DATE/TIME:	DATE/TIME:	DATE/TIME:	REINQUISHED BY:	REINQUISHED BY:	SAMPLE SHIPPED VIA:	COURIER	CLIENT	OTHER FS
AZJ 0670	9/21/16 @ 0851	9/21/16 @ 0916	9/21/16 @ 0920	S. J. Adams	S. J. Adams	UPS	USPS	0	0

ENTERED INTO LIMS: Tracking #:

RELINQUISHED BY: RELINQUISHED BY:

SAMPLE SHIPPED VIA: UPS, FED-EX, USPS, COURIER, OTHER FS

Tempature: (Min: Max:)

Seal: Intact, Broken, Not Present



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 9/28/2016 2:36:05PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 09/21/16 09:20

Work Order: AZI0670

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 8

#Containers: 24

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZI0541

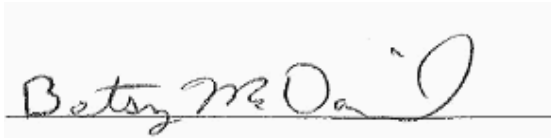
September 26, 2016

Project: CCR Event

Project #: Plant Yates AP

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-3D	AZI0541-01	Ground Water	09/15/16 09:20	09/16/16 08:45
YGWA-14S	AZI0541-02	Ground Water	09/15/16 12:45	09/16/16 08:45
Dup-2	AZI0541-03	Ground Water	09/15/16 00:00	09/16/16 08:45
YGWA-6S	AZI0541-04	Ground Water	09/15/16 09:20	09/16/16 08:45
YGWA-6I	AZI0541-05	Ground Water	09/15/16 13:00	09/16/16 08:45
FB-2	AZI0541-06	Water	09/15/16 13:45	09/16/16 08:45



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Project: CCR Event

Client ID: YGWA-3D

Lab Number ID: AZI0541-01

Date/Time Sampled: 9/15/2016 9:20:00AM

Date/Time Received: 9/16/2016 8:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	153	25	10	mg/L	SM 2540 C		1	09/19/16 16:00	09/19/16 16:00	6090483	JPT
Inorganic Anions											
Chloride	1.5	0.25	0.01	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 03:53	6090603	RLC
Fluoride	0.54	0.30	0.02	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 03:53	6090603	RLC
Sulfate	6.0	1.0	0.05	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 03:53	6090603	RLC
Metals, Total											
Antimony	0.0027	0.0030	0.0008	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Barium	0.0090	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Boron	0.0102	0.100	0.0064	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Calcium	27.0	2.50	0.155	mg/L	EPA 6020B		5	09/22/16 08:30	09/23/16 12:51	6090584	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Lead	0.0002	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Molybdenum	0.0112	0.0100	0.0017	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Lithium	0.0197	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:47	6090584	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:04	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Project: CCR Event

Client ID: YGWA-14S

Lab Number ID: AZI0541-02

Date/Time Sampled: 9/15/2016 12:45:00PM

Date/Time Received: 9/16/2016 8:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	54	25	10	mg/L	SM 2540 C		1	09/19/16 16:00	09/19/16 16:00	6090483	JPT
Inorganic Anions											
Chloride	4.2	0.25	0.01	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 04:14	6090603	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 04:14	6090603	RLC
Sulfate	6.1	1.0	0.05	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 04:14	6090603	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Barium	0.0087	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Beryllium	0.0002	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Boron	0.0214	0.100	0.0064	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Calcium	1.17	0.500	0.0311	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Selenium	0.0014	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:53	6090584	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:07	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Project: CCR Event

Client ID: Dup-2

Lab Number ID: AZI0541-03

Date/Time Sampled: 9/15/2016 12:00:00AM

Date/Time Received: 9/16/2016 8:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	60	25	10	mg/L	SM 2540 C		1	09/19/16 16:00	09/19/16 16:00	6090483	JPT
Inorganic Anions											
Chloride	4.2	0.25	0.01	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 05:18	6090603	RLC
Fluoride	0.08	0.30	0.02	mg/L	EPA 300.0	J	1	09/21/16 16:48	09/22/16 05:18	6090603	RLC
Sulfate	6.6	1.0	0.05	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 05:18	6090603	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Barium	0.0079	0.0100	0.0004	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Beryllium	0.0002	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Boron	0.0197	0.100	0.0064	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Calcium	1.17	0.500	0.0311	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Selenium	0.0015	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 13:58	6090584	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:09	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Project: CCR Event

Client ID: YGWA-6S

Lab Number ID: AZI0541-04

Date/Time Sampled: 9/15/2016 9:20:00AM

Date/Time Received: 9/16/2016 8:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	86	25	10	mg/L	SM 2540 C		1	09/19/16 16:00	09/19/16 16:00	6090483	JPT
Inorganic Anions											
Chloride	2.1	0.25	0.01	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 05:39	6090603	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 05:39	6090603	RLC
Sulfate	22	1.0	0.05	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 05:39	6090603	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Barium	0.0142	0.0100	0.0004	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Boron	0.0482	0.100	0.0064	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Calcium	3.79	0.500	0.0311	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Chromium	0.0021	0.0100	0.0009	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Selenium	0.0011	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/22/16 08:30	09/22/16 14:04	6090584	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:11	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Project: CCR Event

Client ID: YGWA-6I

Lab Number ID: AZI0541-05

Date/Time Sampled: 9/15/2016 1:00:00PM

Date/Time Received: 9/16/2016 8:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	156	25	10	mg/L	SM 2540 C		1	09/19/16 16:00	09/19/16 16:00	6090483	JPT
Inorganic Anions											
Chloride	6.3	0.25	0.01	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 06:00	6090603	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 06:00	6090603	RLC
Sulfate	53	2.0	0.10	mg/L	EPA 300.0		2	09/21/16 16:48	09/23/16 05:24	6090603	RNB
Metals, Total											
Antimony	0.0010	0.0030	0.0008	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Barium	0.0215	0.0100	0.0004	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Boron	0.0620	0.100	0.0064	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Calcium	8.23	0.500	0.0311	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Lead	0.0001	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Selenium	0.0010	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Lithium	0.0075	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:17	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:18	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Project: CCR Event

Client ID: FB-2

Lab Number ID: AZI0541-06

Date/Time Sampled: 9/15/2016 1:45:00PM

Date/Time Received: 9/16/2016 8:45:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	09/19/16 16:00	09/19/16 16:00	6090483	JPT
Inorganic Anions											
Chloride	0.13	0.25	0.01	mg/L	EPA 300.0	J	1	09/21/16 16:48	09/22/16 06:21	6090603	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 06:21	6090603	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 06:21	6090603	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:23	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:21	6090460	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090483 - SM 2540 C											
Blank (6090483-BLK1)						Prepared & Analyzed: 09/19/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6090483-BS1)						Prepared & Analyzed: 09/19/16					
Total Dissolved Solids	378	25	10	mg/L	400.00		94	84-108			
Duplicate (6090483-DUP1)						Prepared & Analyzed: 09/19/16					
						Source: AZI0541-01					
Total Dissolved Solids	140	25	10	mg/L		153			9	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090603 - EPA 300.0											
Blank (6090603-BLK1)						Prepared: 09/21/16 Analyzed: 09/22/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6090603-BS1)						Prepared: 09/21/16 Analyzed: 09/22/16					
Chloride	9.82	0.25	0.01	mg/L	10.010		98	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.010		106	90-110			
Sulfate	9.98	1.0	0.05	mg/L	10.010		100	90-110			
Matrix Spike (6090603-MS1)						Source: AZI0541-02			Prepared: 09/21/16 Analyzed: 09/22/16		
Chloride	12.7	0.25	0.01	mg/L	10.010	4.17	85	90-110			QM-05
Fluoride	9.53	0.30	0.02	mg/L	10.010	ND	95	90-110			
Sulfate	14.4	1.0	0.05	mg/L	10.010	6.12	83	90-110			QM-05
Matrix Spike (6090603-MS2)						Source: AZI0582-01			Prepared: 09/21/16 Analyzed: 09/22/16		
Chloride	11.9	0.25	0.01	mg/L	10.010	3.49	84	90-110			QM-05
Fluoride	9.18	0.30	0.02	mg/L	10.010	ND	92	90-110			
Sulfate	14.9	1.0	0.05	mg/L	10.010	6.68	82	90-110			QM-05
Matrix Spike Dup (6090603-MSD1)						Source: AZI0541-02			Prepared: 09/21/16 Analyzed: 09/22/16		
Chloride	13.8	0.25	0.01	mg/L	10.010	4.17	96	90-110	8	15	
Fluoride	11.2	0.30	0.02	mg/L	10.010	ND	112	90-110	16	15	QM-05
Sulfate	15.4	1.0	0.05	mg/L	10.010	6.12	93	90-110	7	15	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090460 - EPA 7470A											
Blank (6090460-BLK1)						Prepared & Analyzed: 09/19/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6090460-BS1)						Prepared & Analyzed: 09/19/16					
Mercury	0.00242	0.00050	0.000041	mg/L	2.5000E-3		97	80-120			
Matrix Spike (6090460-MS1)						Source: AZI0473-03 Prepared & Analyzed: 09/19/16					
Mercury	0.00243	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125			
Matrix Spike Dup (6090460-MSD1)						Source: AZI0473-03 Prepared & Analyzed: 09/19/16					
Mercury	0.00241	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125	0.6	20	
Post Spike (6090460-PS1)						Source: AZI0473-03 Prepared & Analyzed: 09/19/16					
Mercury	1.72			ug/L	1.6667	0.00864	103	80-120			
Batch 6090463 - EPA 3005A											
Blank (6090463-BLK1)						Prepared & Analyzed: 09/19/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090463 - EPA 3005A											
LCS (6090463-BS1)						Prepared & Analyzed: 09/19/16					
Antimony	0.0946	0.0030	0.0008	mg/L	0.10000		95	80-120			
Arsenic	0.0955	0.0050	0.0016	mg/L	0.10000		95	80-120			
Barium	0.0976	0.0100	0.0004	mg/L	0.10000		98	80-120			
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000		102	80-120			
Boron	1.05	0.100	0.0064	mg/L	1.0000		105	80-120			
Cadmium	0.0978	0.0010	0.00007	mg/L	0.10000		98	80-120			
Calcium	0.972	0.500	0.0311	mg/L	1.0000		97	80-120			
Chromium	0.0965	0.0100	0.0009	mg/L	0.10000		96	80-120			
Cobalt	0.0941	0.0100	0.0005	mg/L	0.10000		94	80-120			
Copper	0.0953	0.0250	0.0005	mg/L	0.10000		95	80-120			
Lead	0.0976	0.0050	0.0001	mg/L	0.10000		98	80-120			
Molybdenum	0.0965	0.0100	0.0017	mg/L	0.10000		97	80-120			
Nickel	0.0956	0.0100	0.0006	mg/L	0.10000		96	80-120			
Selenium	0.0960	0.0100	0.0010	mg/L	0.10000		96	80-120			
Silver	0.0990	0.0100	0.0005	mg/L	0.10000		99	80-120			
Thallium	0.0993	0.0010	0.0002	mg/L	0.10000		99	80-120			
Vanadium	0.0966	0.0100	0.0071	mg/L	0.10000		97	80-120			
Zinc	0.101	0.0100	0.0021	mg/L	0.10000		101	80-120			
Lithium	0.104	0.0500	0.0021	mg/L	0.10000		104	80-120			
Matrix Spike (6090463-MS1)						Source: AZI0582-02 Prepared & Analyzed: 09/19/16					
Antimony	0.0972	0.0030	0.0008	mg/L	0.10000	ND	97	75-125			
Arsenic	0.0985	0.0050	0.0016	mg/L	0.10000	ND	99	75-125			
Barium	0.123	0.0100	0.0004	mg/L	0.10000	0.0259	97	75-125			
Beryllium	0.0988	0.0030	0.00008	mg/L	0.10000	ND	99	75-125			
Boron	0.997	0.100	0.0064	mg/L	1.0000	ND	100	75-125			
Cadmium	0.0970	0.0010	0.00007	mg/L	0.10000	ND	97	75-125			
Calcium	9.65	0.500	0.0311	mg/L	1.0000	8.48	117	75-125			
Chromium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125			
Cobalt	0.0982	0.0100	0.0005	mg/L	0.10000	ND	98	75-125			
Copper	0.0979	0.0250	0.0005	mg/L	0.10000	ND	98	75-125			
Lead	0.0951	0.0050	0.0001	mg/L	0.10000	ND	95	75-125			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125			
Nickel	0.0991	0.0100	0.0006	mg/L	0.10000	0.0008	98	75-125			
Selenium	0.0962	0.0100	0.0010	mg/L	0.10000	ND	96	75-125			
Silver	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125			
Thallium	0.0956	0.0010	0.0002	mg/L	0.10000	ND	96	75-125			
Vanadium	0.0994	0.0100	0.0071	mg/L	0.10000	ND	99	75-125			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000	0.0023	99	75-125			
Lithium	0.102	0.0500	0.0021	mg/L	0.10000	ND	102	75-125			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090463 - EPA 3005A											
Matrix Spike Dup (6090463-MSD1)			Source: AZI0582-02			Prepared & Analyzed: 09/19/16					
Antimony	0.0983	0.0030	0.0008	mg/L	0.10000	ND	98	75-125	1	20	
Arsenic	0.0999	0.0050	0.0016	mg/L	0.10000	ND	100	75-125	1	20	
Barium	0.124	0.0100	0.0004	mg/L	0.10000	0.0259	98	75-125	1	20	
Beryllium	0.100	0.0030	0.00008	mg/L	0.10000	ND	100	75-125	1	20	
Boron	0.993	0.100	0.0064	mg/L	1.0000	ND	99	75-125	0.4	20	
Cadmium	0.0970	0.0010	0.00007	mg/L	0.10000	ND	97	75-125	0.002	20	
Calcium	9.41	0.500	0.0311	mg/L	1.0000	8.48	93	75-125	3	20	
Chromium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125	0.1	20	
Cobalt	0.0979	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	0.2	20	
Copper	0.0950	0.0250	0.0005	mg/L	0.10000	ND	95	75-125	3	20	
Lead	0.0990	0.0050	0.0001	mg/L	0.10000	ND	99	75-125	4	20	
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125	0.08	20	
Nickel	0.0963	0.0100	0.0006	mg/L	0.10000	0.0008	95	75-125	3	20	
Selenium	0.0999	0.0100	0.0010	mg/L	0.10000	ND	100	75-125	4	20	
Silver	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125	0.1	20	
Thallium	0.101	0.0010	0.0002	mg/L	0.10000	ND	101	75-125	5	20	
Vanadium	0.102	0.0100	0.0071	mg/L	0.10000	ND	102	75-125	3	20	
Zinc	0.101	0.0100	0.0021	mg/L	0.10000	0.0023	99	75-125	0.7	20	
Lithium	0.103	0.0500	0.0021	mg/L	0.10000	ND	103	75-125	1	20	
Post Spike (6090463-PS1)											
Source: AZI0582-02			Prepared & Analyzed: 09/19/16								
Antimony	86.8			ug/L	100.00	0.229	87	80-120			
Arsenic	97.1			ug/L	100.00	0.618	96	80-120			
Barium	124			ug/L	100.00	25.9	98	80-120			
Beryllium	98.8			ug/L	100.00	0.0341	99	80-120			
Boron	952			ug/L	1000.0	2.43	95	80-120			
Cadmium	97.4			ug/L	100.00	0.0227	97	80-120			
Calcium	9290			ug/L	1000.0	8480	81	80-120			
Chromium	103			ug/L	100.00	0.439	103	80-120			
Cobalt	100			ug/L	100.00	0.151	100	80-120			
Copper	96.3			ug/L	100.00	0.358	96	80-120			
Lead	97.0			ug/L	100.00	0.0889	97	80-120			
Molybdenum	104			ug/L	100.00	0.123	104	80-120			
Nickel	98.2			ug/L	100.00	0.790	97	80-120			
Selenium	100			ug/L	100.00	-0.199	101	80-120			
Silver	99.0			ug/L	100.00	0.0019	99	80-120			
Thallium	98.4			ug/L	100.00	0.0650	98	80-120			
Vanadium	101			ug/L	100.00	0.641	100	80-120			
Zinc	102			ug/L	100.00	2.29	100	80-120			
Lithium	99.9			ug/L	100.00	0.573	99	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090584 - EPA 3005A											
Blank (6090584-BLK1)						Prepared & Analyzed: 09/22/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6090584-BS1)						Prepared & Analyzed: 09/22/16					
Antimony	0.108	0.0030	0.0008	mg/L	0.10000		108	80-120			
Arsenic	0.0973	0.0050	0.0016	mg/L	0.10000		97	80-120			
Barium	0.100	0.0100	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.0980	0.0030	0.00008	mg/L	0.10000		98	80-120			
Boron	1.02	0.100	0.0064	mg/L	1.0000		102	80-120			
Cadmium	0.100	0.0010	0.00007	mg/L	0.10000		100	80-120			
Calcium	0.980	0.500	0.0311	mg/L	1.0000		98	80-120			
Chromium	0.101	0.0100	0.0009	mg/L	0.10000		101	80-120			
Cobalt	0.0951	0.0100	0.0005	mg/L	0.10000		95	80-120			
Copper	0.101	0.0250	0.0005	mg/L	0.10000		101	80-120			
Lead	0.0965	0.0050	0.0001	mg/L	0.10000		96	80-120			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000		102	80-120			
Nickel	0.0948	0.0100	0.0006	mg/L	0.10000		95	80-120			
Selenium	0.0958	0.0100	0.0010	mg/L	0.10000		96	80-120			
Silver	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Thallium	0.0972	0.0010	0.0002	mg/L	0.10000		97	80-120			
Vanadium	0.102	0.0100	0.0071	mg/L	0.10000		102	80-120			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000		102	80-120			
Lithium	0.102	0.0500	0.0021	mg/L	0.10000		102	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090584 - EPA 3005A											
Matrix Spike (6090584-MS1)			Source: AZI0574-03			Prepared & Analyzed: 09/22/16					
Antimony	0.104	0.0030	0.0008	mg/L	0.10000	ND	104	75-125			
Arsenic	0.0996	0.0050	0.0016	mg/L	0.10000	ND	100	75-125			
Barium	0.105	0.0100	0.0004	mg/L	0.10000	0.0109	94	75-125			
Beryllium	0.0899	0.0030	0.00008	mg/L	0.10000	ND	90	75-125			
Boron	0.969	0.100	0.0064	mg/L	1.0000	ND	97	75-125			
Cadmium	0.0991	0.0010	0.00007	mg/L	0.10000	ND	99	75-125			
Calcium	19.0	2.50	0.155	mg/L	1.0000	18.2	81	75-125			
Chromium	0.103	0.0100	0.0009	mg/L	0.10000	ND	103	75-125			
Cobalt	0.0985	0.0100	0.0005	mg/L	0.10000	ND	99	75-125			
Copper	0.103	0.0250	0.0005	mg/L	0.10000	ND	103	75-125			
Lead	0.0971	0.0050	0.0001	mg/L	0.10000	ND	97	75-125			
Molybdenum	0.0971	0.0100	0.0017	mg/L	0.10000	ND	97	75-125			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000	ND	101	75-125			
Selenium	0.0993	0.0100	0.0010	mg/L	0.10000	ND	99	75-125			
Silver	0.0980	0.0100	0.0005	mg/L	0.10000	ND	98	75-125			
Thallium	0.0997	0.0010	0.0002	mg/L	0.10000	ND	100	75-125			
Vanadium	0.108	0.0100	0.0071	mg/L	0.10000	ND	108	75-125			
Zinc	0.107	0.0100	0.0021	mg/L	0.10000	ND	107	75-125			
Lithium	0.0964	0.0500	0.0021	mg/L	0.10000	ND	96	75-125			
Matrix Spike Dup (6090584-MSD1)			Source: AZI0574-03			Prepared & Analyzed: 09/22/16					
Antimony	0.108	0.0030	0.0008	mg/L	0.10000	ND	108	75-125	4	20	
Arsenic	0.0957	0.0050	0.0016	mg/L	0.10000	ND	96	75-125	4	20	
Barium	0.109	0.0100	0.0004	mg/L	0.10000	0.0109	98	75-125	3	20	
Beryllium	0.0941	0.0030	0.00008	mg/L	0.10000	ND	94	75-125	5	20	
Boron	0.940	0.100	0.0064	mg/L	1.0000	ND	94	75-125	3	20	
Cadmium	0.100	0.0010	0.00007	mg/L	0.10000	ND	100	75-125	1	20	
Calcium	18.2	2.50	0.155	mg/L	1.0000	18.2	8	75-125	4	20	QM-02
Chromium	0.104	0.0100	0.0009	mg/L	0.10000	ND	104	75-125	0.8	20	
Cobalt	0.0971	0.0100	0.0005	mg/L	0.10000	ND	97	75-125	1	20	
Copper	0.0986	0.0250	0.0005	mg/L	0.10000	ND	99	75-125	4	20	
Lead	0.0968	0.0050	0.0001	mg/L	0.10000	ND	97	75-125	0.3	20	
Molybdenum	0.104	0.0100	0.0017	mg/L	0.10000	ND	104	75-125	6	20	
Nickel	0.0987	0.0100	0.0006	mg/L	0.10000	ND	99	75-125	2	20	
Selenium	0.0981	0.0100	0.0010	mg/L	0.10000	ND	98	75-125	1	20	
Silver	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125	3	20	
Thallium	0.0986	0.0010	0.0002	mg/L	0.10000	ND	99	75-125	1	20	
Vanadium	0.105	0.0100	0.0071	mg/L	0.10000	ND	105	75-125	2	20	
Zinc	0.105	0.0100	0.0021	mg/L	0.10000	ND	105	75-125	2	20	
Lithium	0.0974	0.0500	0.0021	mg/L	0.10000	ND	97	75-125	1	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Report No.: AZI0541

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090584 - EPA 3005A											
Post Spike (6090584-PS1)			Source: AZI0574-03			Prepared & Analyzed: 09/22/16					
Antimony	94.5			ug/L	100.00	0.331	94	80-120			
Arsenic	97.2			ug/L	100.00	0.114	97	80-120			
Barium	105			ug/L	100.00	10.9	94	80-120			
Beryllium	91.9			ug/L	100.00	0.0207	92	80-120			
Boron	951			ug/L	1000.0	3.67	95	80-120			
Cadmium	98.1			ug/L	100.00	0.0221	98	80-120			
Calcium	18700			ug/L	1000.0	18200	50	80-120			QM-02
Chromium	99.6			ug/L	100.00	0.261	99	80-120			
Cobalt	95.9			ug/L	100.00	0.0395	96	80-120			
Copper	94.7			ug/L	100.00	0.217	95	80-120			
Lead	95.4			ug/L	100.00	0.0535	95	80-120			
Molybdenum	101			ug/L	100.00	0.0398	101	80-120			
Nickel	94.7			ug/L	100.00	0.222	95	80-120			
Selenium	97.1			ug/L	100.00	0.515	97	80-120			
Silver	97.7			ug/L	100.00	0.0072	98	80-120			
Thallium	95.9			ug/L	100.00	0.0210	96	80-120			
Vanadium	102			ug/L	100.00	0.194	101	80-120			
Zinc	104			ug/L	100.00	1.29	103	80-120			
Lithium	94.1			ug/L	100.00	1.14	93	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

September 26, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Southern Company Services CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd. SE, B10185 Atlanta, GA 30308 REPORT TO: Joju Abraham JABRAHAM@southernco.com CC: MRPADILL@southernco.com CHMCCORK@southernco.com REQUESTED COMPLETION DATE: STANDARD PROJECT NAME/STATE: YATES AP CCR GW PROJECT #:		CONTAINER TYPE: P PRESERVATION: 3 # of CONTAINERS → 4		ANALYSIS REQUESTED EPA 6020/7470 Metals App. III & IV IC (Cl, T, SO4) EPA 300.0, TDS SM 2540C Radium 226 & 228 SW-646 9315/9320		CONTAINER TYPE: P PRESERVATION: 3		ANALYSIS REQUESTED		CONTAINER TYPE: P PRESERVATION: 3	
Collection DATE 9/15/16 9/15/16 9/15/16	Collection TIME 0920 1300 1345	MATRIX CODE* GW GW W	COM P X X X	GRA B X X X	SAMPLE IDENTIFICATION YGWA-6S YGWA-6I FB-2	DATE/TIME: 9/15/16 DATE/TIME: 9/16/16 0653 DATE/TIME: 9/16/16 0845	RELINQUISHED BY: [Signature] RELINQUISHED BY: [Signature]	DATE/TIME: 9/16/16 0653 DATE/TIME: 9/16/16 0845	LAB #: A218541 Entered into LIMS: [Signature] Tracking #:	FOR LAB USE ONLY	
RECEIVED BY AND TITLE: [Signature] RECEIVED BY: [Signature] RECEIVED BY AB: [Signature] Checked: Yes No NA						SAMPLE SHIPPED VIA: UPS FEDEX USPS COURIER OTHER FS Curtesy Seal: Intact Broken Not Present # of Coolers:					
REMARKS/ADDITIONAL INFORMATION						REMARKS/ADDITIONAL INFORMATION					



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 9/26/2016 3:15:05PM

Attn: Mr. Joju Abraham
Client: Georgia Power
Project: CCR Event
Date Received: 09/16/16 08:45

Work Order: AZI0541
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 6 **#Containers:** 19
Minimum Temp(C): 1.0 **Maximum Temp(C):** 1.0 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZL0694

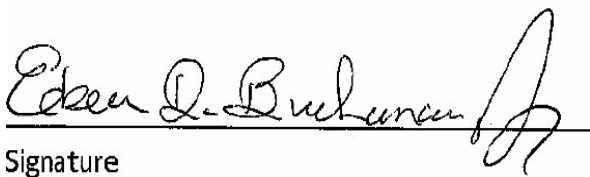
December 28, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:


Signature

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

December 28, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-2I	AZL0694-01	Ground Water	12/15/16 13:30	12/16/16 09:55



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

December 28, 2016

Attention: Mr. Joju Abraham

Report No.: AZL0694

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AZL0694-01

Date/Time Sampled: 12/15/2016 1:30:00PM

Date/Time Received: 12/16/2016 9:55:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	191	25	10	mg/L	SM 2540 C		1	12/19/16 13:00	12/19/16 13:00	6120550	JPT
Inorganic Anions											
Chloride	2.9	0.25	0.01	mg/L	EPA 300.0		1	12/22/16 16:55	12/23/16 15:00	6120712	RNB
Fluoride	0.06	0.30	0.02	mg/L	EPA 300.0	J	1	12/22/16 16:55	12/23/16 15:00	6120712	RNB
Sulfate	1.8	1.0	0.05	mg/L	EPA 300.0		1	12/22/16 16:55	12/23/16 15:00	6120712	RNB
Metals, Total											
Antimony	0.0012	0.0030	0.0008	mg/L	EPA 6020B	J	1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Arsenic	0.0023	0.0050	0.0016	mg/L	EPA 6020B	J	1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Barium	0.0056	0.0100	0.0004	mg/L	EPA 6020B	J	1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Boron	0.0107	0.0400	0.0064	mg/L	EPA 6020B	J	1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Calcium	23.1	2.50	0.155	mg/L	EPA 6020B	B-01	5	12/20/16 16:35	12/23/16 15:07	6120609	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Molybdenum	0.0066	0.0100	0.0017	mg/L	EPA 6020B	J	1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Lithium	0.0026	0.0500	0.0021	mg/L	EPA 6020B	J	1	12/20/16 16:35	12/22/16 13:15	6120609	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	12/19/16 09:55	12/19/16 14:22	6120545	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

December 28, 2016

Report No.: AZL0694

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6120550 - SM 2540 C											
Blank (6120550-BLK1)						Prepared & Analyzed: 12/19/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6120550-BS1)						Prepared & Analyzed: 12/19/16					
Total Dissolved Solids	401	25	10	mg/L	400.00		100	84-108			
Duplicate (6120550-DUP1)						Prepared & Analyzed: 12/19/16					
						Source: AZL0694-01					
Total Dissolved Solids	196	25	10	mg/L		191			3	10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

December 28, 2016

Report No.: AZL0694

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6120712 - EPA 300.0											
Blank (6120712-BLK1)						Prepared: 12/22/16 Analyzed: 12/23/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6120712-BS1)						Prepared: 12/22/16 Analyzed: 12/23/16					
Chloride	10.2	0.25	0.01	mg/L	10.010		102	90-110			
Fluoride	10.5	0.30	0.02	mg/L	10.020		105	90-110			
Sulfate	10.2	1.0	0.05	mg/L	10.020		101	90-110			
Matrix Spike (6120712-MS1)						Source: AZL0418-01					
Prepared: 12/22/16 Analyzed: 12/23/16											
Chloride	15.6	0.25	0.01	mg/L	10.010	6.97	87	90-110			QM-02
Fluoride	9.22	0.30	0.02	mg/L	10.020	0.09	91	90-110			
Sulfate	70.7	1.0	0.05	mg/L	10.020	68.3	24	90-110			QM-02
Matrix Spike (6120712-MS2)						Source: AZL0435-03					
Prepared: 12/22/16 Analyzed: 12/23/16											
Chloride	182	0.25	0.01	mg/L	10.010	199	NR	90-110			QM-02
Fluoride	13.4	0.30	0.02	mg/L	10.020	0.63	127	90-110			QM-05
Sulfate	415	1.0	0.05	mg/L	10.020	440	NR	90-110			QM-02
Matrix Spike Dup (6120712-MSD1)						Source: AZL0418-01					
Prepared: 12/22/16 Analyzed: 12/23/16											
Chloride	16.5	0.25	0.01	mg/L	10.010	6.97	95	90-110	5	15	
Fluoride	10.1	0.30	0.02	mg/L	10.020	0.09	100	90-110	9	15	
Sulfate	70.9	1.0	0.05	mg/L	10.020	68.3	25	90-110	0.2	15	QM-02



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

December 28, 2016

Report No.: AZL0694

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6120545 - EPA 7470A											
Blank (6120545-BLK1) Prepared & Analyzed: 12/19/16											
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6120545-BS1) Prepared & Analyzed: 12/19/16											
Mercury	0.00253	0.00050	0.000041	mg/L	2.5000E-3		101	80-120			
Matrix Spike (6120545-MS1) Source: AZL0715-01 Prepared & Analyzed: 12/19/16											
Mercury	0.00253	0.00050	0.000041	mg/L	2.5000E-3	ND	101	75-125			
Matrix Spike Dup (6120545-MSD1) Source: AZL0715-01 Prepared & Analyzed: 12/19/16											
Mercury	0.00254	0.00050	0.000041	mg/L	2.5000E-3	ND	102	75-125	0.6	20	
Post Spike (6120545-PS1) Source: AZL0715-01 Prepared & Analyzed: 12/19/16											
Mercury	1.71			ug/L	1.6667	0.0125	102	80-120			
Batch 6120609 - EPA 3005A											
Blank (6120609-BLK1) Prepared: 12/20/16 Analyzed: 12/22/16											
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	0.0407	0.500	0.0311	mg/L							J
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

December 28, 2016

Report No.: AZL0694

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6120609 - EPA 3005A

LCS (6120609-BS1)

Prepared: 12/20/16 Analyzed: 12/22/16

Antimony	0.104	0.0030	0.0008	mg/L	0.10000		104	80-120			
Arsenic	0.0988	0.0050	0.0016	mg/L	0.10000		99	80-120			
Barium	0.103	0.0100	0.0004	mg/L	0.10000		103	80-120			
Beryllium	0.0972	0.0030	0.00008	mg/L	0.10000		97	80-120			
Boron	0.930	0.0400	0.0064	mg/L	1.0000		93	80-120			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000		101	80-120			
Calcium	0.966	0.500	0.0311	mg/L	1.0000		97	80-120			
Chromium	0.102	0.0100	0.0009	mg/L	0.10000		102	80-120			
Cobalt	0.102	0.0100	0.0005	mg/L	0.10000		102	80-120			
Copper	0.0992	0.0250	0.0005	mg/L	0.10000		99	80-120			
Lead	0.0992	0.0050	0.0001	mg/L	0.10000		99	80-120			
Molybdenum	0.104	0.0100	0.0017	mg/L	0.10000		104	80-120			
Nickel	0.104	0.0100	0.0006	mg/L	0.10000		104	80-120			
Selenium	0.101	0.0100	0.0010	mg/L	0.10000		101	80-120			
Silver	0.104	0.0100	0.0005	mg/L	0.10000		104	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.0997	0.0100	0.0071	mg/L	0.10000		100	80-120			
Zinc	0.0960	0.0100	0.0021	mg/L	0.10000		96	80-120			
Lithium	0.0996	0.0500	0.0021	mg/L	0.10000		100	80-120			

Matrix Spike (6120609-MS1)

Source: AZL0694-01

Prepared: 12/20/16 Analyzed: 12/22/16

Antimony	0.104	0.0030	0.0008	mg/L	0.10000	0.0012	103	75-125			
Arsenic	0.105	0.0050	0.0016	mg/L	0.10000	0.0023	103	75-125			
Barium	0.109	0.0100	0.0004	mg/L	0.10000	0.0056	104	75-125			
Beryllium	0.111	0.0030	0.00008	mg/L	0.10000	ND	111	75-125			
Boron	0.916	0.200	0.0321	mg/L	1.0000	ND	92	75-125			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125			
Calcium	23.1	2.50	0.155	mg/L	1.0000	23.1	7	75-125			QM-02
Chromium	0.104	0.0100	0.0009	mg/L	0.10000	ND	104	75-125			
Cobalt	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125			
Copper	0.104	0.0250	0.0005	mg/L	0.10000	0.0019	102	75-125			
Lead	0.104	0.0050	0.0001	mg/L	0.10000	ND	104	75-125			
Molybdenum	0.111	0.0100	0.0017	mg/L	0.10000	0.0066	105	75-125			
Nickel	0.108	0.0100	0.0006	mg/L	0.10000	ND	108	75-125			
Selenium	0.106	0.0100	0.0010	mg/L	0.10000	ND	106	75-125			
Silver	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125			
Thallium	0.106	0.0010	0.0002	mg/L	0.10000	ND	106	75-125			
Vanadium	0.108	0.0100	0.0071	mg/L	0.10000	ND	108	75-125			
Zinc	0.100	0.0100	0.0021	mg/L	0.10000	0.0026	98	75-125			
Lithium	0.110	0.0500	0.0021	mg/L	0.10000	0.0026	107	75-125			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

December 28, 2016

Report No.: AZL0694

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6120609 - EPA 3005A

Matrix Spike Dup (6120609-MSD1)		Source: AZL0694-01				Prepared: 12/20/16 Analyzed: 12/22/16					
Antimony	0.103	0.0030	0.0008	mg/L	0.10000	0.0012	102	75-125	1	20	
Arsenic	0.106	0.0050	0.0016	mg/L	0.10000	0.0023	104	75-125	1	20	
Barium	0.107	0.0100	0.0004	mg/L	0.10000	0.0056	101	75-125	2	20	
Beryllium	0.104	0.0030	0.00008	mg/L	0.10000	ND	104	75-125	7	20	
Boron	0.971	0.200	0.0321	mg/L	1.0000	ND	97	75-125	6	20	
Cadmium	0.104	0.0010	0.00007	mg/L	0.10000	ND	104	75-125	2	20	
Calcium	23.8	2.50	0.155	mg/L	1.0000	23.1	75	75-125	3	20	
Chromium	0.105	0.0100	0.0009	mg/L	0.10000	ND	105	75-125	1	20	
Cobalt	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125	0.2	20	
Copper	0.105	0.0250	0.0005	mg/L	0.10000	0.0019	103	75-125	0.6	20	
Lead	0.105	0.0050	0.0001	mg/L	0.10000	ND	105	75-125	0.8	20	
Molybdenum	0.109	0.0100	0.0017	mg/L	0.10000	0.0066	102	75-125	2	20	
Nickel	0.104	0.0100	0.0006	mg/L	0.10000	ND	104	75-125	3	20	
Selenium	0.106	0.0100	0.0010	mg/L	0.10000	ND	106	75-125	0.1	20	
Silver	0.0998	0.0100	0.0005	mg/L	0.10000	ND	100	75-125	2	20	
Thallium	0.105	0.0010	0.0002	mg/L	0.10000	ND	105	75-125	0.3	20	
Vanadium	0.111	0.0100	0.0071	mg/L	0.10000	ND	111	75-125	3	20	
Zinc	0.107	0.0100	0.0021	mg/L	0.10000	0.0026	104	75-125	6	20	
Lithium	0.106	0.0500	0.0021	mg/L	0.10000	0.0026	103	75-125	4	20	

Post Spike (6120609-PS1)		Source: AZL0694-01				Prepared: 12/20/16 Analyzed: 12/22/16					
Antimony	99.0			ug/L	100.00	1.22	98	80-120			
Arsenic	104			ug/L	100.00	2.28	102	80-120			
Barium	111			ug/L	100.00	5.61	106	80-120			
Beryllium	104			ug/L	100.00	0.0085	104	80-120			
Boron	946			ug/L	1000.0	10.7	93	80-120			
Cadmium	101			ug/L	100.00	0.0138	101	80-120			
Calcium	23800			ug/L	1000.0	23100	73	80-120			QM-02
Chromium	107			ug/L	100.00	0.854	107	80-120			
Cobalt	106			ug/L	100.00	0.256	105	80-120			
Copper	106			ug/L	100.00	1.92	104	80-120			
Lead	105			ug/L	100.00	0.0681	105	80-120			
Molybdenum	110			ug/L	100.00	6.64	103	80-120			
Nickel	106			ug/L	100.00	0.422	105	80-120			
Selenium	105			ug/L	100.00	0.120	105	80-120			
Silver	100			ug/L	100.00	0.0111	100	80-120			
Thallium	107			ug/L	100.00	0.0905	107	80-120			
Vanadium	113			ug/L	100.00	2.91	110	80-120			
Zinc	104			ug/L	100.00	2.56	101	80-120			
Lithium	105			ug/L	100.00	2.65	102	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

December 28, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



CHAIN OF CUSTODY RECORD

CLIENT NAME:
 Georgia Power

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 404-506-7239

REPORT TO:
 Lauren Petty

CC: Maria Padilla
 Heath McCorkle

REQUESTED COMPLETION DATE:
 PO #:
 laburch@southernco.com

PROJECT NAME/STATE:
 Plant Yates AP

CONTAINER TYPE		ANALYSIS REQUESTED		CONTAINERS				L A B I D N U M B E R
PRESERVATION:	# of	P	P	P	P	P		
Metals App. III & IV (EPA 6020/470)	3		3	7	3		1	
Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)								
Radium 226 & 228 (SW-846 9315/9320)								

Collection DATE	Collection TIME	MATRIX CODE*	COM P	G R A B	DATE/TIME	DATE/TIME	DATE/TIME	RELINQUISHED BY:	RELINQUISHED BY:	SAMPLE SHIPPED VIA:	CUSTOMER:	COURIER	OTHER FS
M - D - Y Y										UPS	FED-EX	USPS	FS
12-15-16	1330	BW		V	YGWA-2E	12/15/2016	1900						

SAMPLED BY AND TITLE:
 Chris Parker (Acc)

RECEIVED BY:
 Karen Hanks

TEMPERATURE:
 Min: Max:

DATE/TIME: 12/15/2016 1900

DATE/TIME: 12/16/16 0955

DATE/TIME: 12/16/16 0955

RELINQUISHED BY: [Signature]

RELINQUISHED BY: [Signature]

SAMPLE SHIPPED VIA: CLIENT

CUSTOMER: [Signature]

COURIER: [Signature]

OTHER FS: [Signature]

CONTAINER TYPE: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER

PRESERVATION: 1 - HCl, ≤6°C, 2 - H₂SO₄, ≤6°C, 3 - HNO₃, 4 - NaOH, ≤6°C, 5 - NaOH/ZnAc, ≤6°C, 6 - Na₂S₂O₃, ≤6°C, 7 - ≤6°C not frozen

*MATRIX CODES:

DW - DRINKING WATER, WW - WASTEWATER, GW - GROUNDWATER, SW - SURFACE WATER, ST - STORM WATER, W - WATER, S - SOIL, SL - SLUDGE, SD - SOLID, A - AIR, L - LIQUID, P - PRODUCT

REMARKS/ADDITIONAL INFORMATION:

LAB #: AZL0694

Entered into LIMS: [Signature]

Tracking #: [Signature]



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 12/19/2016 9:33:52AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 12/16/16 09:55

Work Order: AZL0694

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 1

#Containers: 3

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: Y6WA-1I	SAMPLE ID: Y6WA-1I
FIELD TECHNICIAN: Wesley Bowen	DATE: 9/13/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 43.85 feet to 53.85 feet	STATIC DEPTH TO WATER (feet): 37.83	PURGE PUMP TYPE OR BAILER: bladder pump
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 3x - 31.23 L			
1 WELL VOLUME = (53.85 feet - 37.83 feet) X 0.65 liters/foot = 10.41 liters			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME			
1 EQUIPMENT VOLUME = 0.1 liters + (55 feet X 0.005 liters/foot) + 0.1 liters = 0.48 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 48.85	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 48.95	PURGING INITIATED AT: 0916	PURGING ENDED AT: 1008
WATER QUALITY INSTRUMENT(S): In-Situ SmartTroll LaMotte 2020we		SERIAL NO(S): 449474 7949-0413	
TOTAL VOLUME PURGED (liters): 5.71			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/65	0923	0.91	0.91	0.13	39.05	3.32	6.17	54.20	-183.10	0.67	18.73
103/65	0928	0.65	0.56	0.13	39.64	3.12	6.18	54.40	-169.90	0.63	18.47
103/65	0933	0.65	2.21	0.13	40.05	2.79	6.15	54.00	-154.70	0.95	18.43
103/63	0938	0.50	2.71	0.10	40.01	2.33	6.17	54.00	-145.50	1.37	19.26
103/63	0943	0.50	3.21	0.10	40.23	2.10	6.16	54.60	-123.30	2.24	18.76
103/63	0948	0.50	3.71	0.10	40.41	2.18	6.16	54.90	-119.0	2.45	18.66
103/63	0953	0.50	4.21	0.10	40.56	2.30	6.17	56.00	-112.70	2.71	18.63
103/63	0958	0.50	4.71	0.10	40.70	2.35	6.14	56.70	-106.70	2.86	18.73
103/63	1003	0.50	5.21	0.10	40.79	2.11	6.15	57.50	-102.70	2.99	18.71
103/63	1008	0.50	5.71	0.10	40.87	2.06	6.16	58.00	-100.40	3.02	18.70

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; 1/4" = 0.01; 3/8" = 0.022; 1/2" = 0.04; 5/8" = 0.06; 3/4" = 0.09; 1" = 0.16

NOTES:
 @ 0933 reduce purge rate to 100 mL/min

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required:
Turbidity: <5 NTU, or stable (±10%)
pH: ± 0.1 SU
Specific Conductance: ± 5% (µS/cm)
Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L) | Record Only:
Oxygen Reduction Potential (mV)
Temperature (°C) |
| Other: Minimum 3 L purge volume | |

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
<input type="checkbox"/> CONTINUED ON ADDITIONAL SHEETS											

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required:
Turbidity: <5 NTU, or stable (±10%)
pH: ±0.1 SU
Specific Conductance: ± 5% (µS/cm)
Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L) | Record Only:
Oxygen Reduction Potential (mV)
Temperature (°C) |
| | Other:
Minimum 3 L purge volume |

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>Wesley Bowen / AECOM</u>				SAMPLER(S) SIGNATURES:				DATE SAMPLED: <u>9/13/16</u>				SAMPLING INITIATED AT: <u>1015</u>			
PUMP OR TUBING DEPTH IN WELL (feet): <u>48.85</u>				SAMPLE PUMP FLOW RATE (L per minute): <u>0.100</u>				TUBING MATERIAL CODE: <u>PE</u>				SAMPLING ENDED AT: <u>1045</u>			
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N				FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N				FILTER SIZE: _____ µm				QC Sample Collected: <input checked="" type="radio"/> Y <input type="radio"/> N <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank			
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE							
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED											
<u>Y6WA-1E</u>	<u>1</u>	<u>0.25L</u>	<u>PE</u>	<u>HNO₃</u>			<u>Metals app. III & IV</u>	<u>BP</u>							
<u>Y6WA-1E</u>	<u>1</u>	<u>1.25L</u>	<u>PE</u>	<u>N/A</u>			<u>Cl, F, SO₄, TDS</u>	<u>BP</u>							
<u>Y6WA-1E</u>	<u>1</u>	<u>1 GAL</u>	<u>PE</u>	<u>HNO₃</u>			<u>Ra 226/228</u>	<u>BP</u>							
REMARKS: <u>pH check for sample preservation = ~2.0</u>															
FINAL DEPTH TO WATER: <u>40.80</u>			DEPTH TO BOTTOM: <u>53.85</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)															
SAMPLING / PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)															

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWA-1D	SAMPLE ID: YGWA-1D
FIELD TECHNICIAN: Wesley Bowen	DATE: 9/13/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 116.53 feet to 128.53 feet	STATIC DEPTH TO WATER (feet): 51.45	PURGE PUMP TYPE OR BAILER: bladder pump
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY $1 \text{ WELL VOLUME} = (128.53 \text{ feet} - 51.45 \text{ feet}) \times 0.65 \text{ liters/foot} = 50.10 \text{ liters}$ $3 \times 50.10 = 150.30$			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME $1 \text{ EQUIPMENT VOLUME} = 0.1 \text{ liters} + (130 \text{ feet} \times 0.005 \text{ liters/foot}) + 0.1 \text{ liters} = 0.85 \text{ liters}$			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 123.53	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 123.53	PURGING INITIATED AT: 1107	PURGING ENDED AT: 1205
WATER QUALITY INSTRUMENT(S): In-Situ Smartroll LaMotte 2020we		SERIAL NO(S): 409474 2949-0113	
TOTAL VOLUME PURGED (liters): 6.45			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
108/150	1115	1.2	1.2	0.15	51.55	3.57	7.22	151.20	-212.00	1.09	19.09
108/150	1120	0.75	1.95	0.15	51.54	2.94	7.33	152.40	-221.90	0.60	18.46
108/150	1125	0.75	2.70	0.15	51.54	2.68	7.37	152.40	-226.50	0.52	18.51
-	1130	-	-	-	-	-	-	-	-	-	-
-	1135	-	-	-	-	-	-	-	-	-	-
-	1140	-	-	-	-	-	-	-	-	-	-
108/150	1145	0.75	3.45	0.15	51.58	3.84	7.45	150.0	-215.0	0.96	21.28
108/150	1150	0.75	4.2	0.15	51.58	4.04	7.42	150.90	-226.20	0.34	18.74
108/150	1155	0.75	4.95	0.15	51.61	3.56	7.43	151.20	-227.70	0.32	18.62
108/150	1200	0.75	5.70	0.15	51.64	2.64	7.44	151.20	-228.40	0.27	18.60
108/150	1205	0.75	6.45	0.15	51.65	2.60	7.44	151.20	-228.50	0.27	18.65

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; ¼" = 0.01; ⅜" = 0.022; ½" = 0.04; ⅝" = 0.06; ¾" = 0.09; 1" = 0.16

NOTES:
 - @ 1128 fuel needed in generator. Attempt to run off of truck battery to power MP-50. Will not work. Get fuel from C. Watson @ YGWA-ZI. Resume @ 1143.

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required:
Turbidity: <5 NTU, or stable (±10%)
pH: ± 0.1 SU
Specific Conductance: ± 5% (µS/cm)
Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L) | Record Only:
Oxygen Reduction Potential (mV)
Temperature (°C) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
- Other: Minimum 3 L purge volume

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)

CONTINUED ON ADDITIONAL SHEETS

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:
 Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:
 Oxygen Reduction Potential (mV)
 Temperature (°C)

Other:
 Minimum 3 L purge volume

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Wesley Bowen / AECOM		SAMPLER(S) SIGNATURES: 		DATE SAMPLED: 9/13/16		SAMPLING INITIATED AT: 1212	
PUMP OR TUBING DEPTH IN WELL (feet): 123.53		SAMPLE PUMP FLOW RATE (L per minute): 0.150		TUBING MATERIAL CODE: PE		SAMPLING ENDED AT: 1305	
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N		FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/> F Filtration Equipment Type: _____		FILTER SIZE: _____ µm		QC Sample Collected: <input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank	
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED			
Y6WA-10	1	0.25L	PE	HNO ₃		Metals app. III & IV	BP
Y6WA-10	1	0.5L	PE	N/A		Cl, F, SO ₄ , TDS	BP
Y6WA-10	1	1GAL	PE	HNO ₃		Ra 226/228	BP
DWP-1	1	0.25L	PE	HNO ₃		Metals app. III & IV	BP
DWP-1	1	1qt	PE	N/A		Cl, F, SO ₄ , TDS	BP
DWP-1	1	1/2gal	PE	HNO ₃		Ra 226/228	BP
REMARKS: Samples turned a grey color in the unpreserved containers, possibly oxidation. Clear in preserved containers. Recalibrated LaMotte to insure proper readings.							
FINAL DEPTH TO WATER:		51.79		DEPTH TO BOTTOM:		128.53	
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)							
SAMPLING / PURGING: APP = After Peristaltic Pump; B = Bailor; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump							
EQUIPMENT CODES: RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; ~ = Other (Specify)							

PH check of preserved containers - ~2.0 pH Page 2 of 2 LaMotte was accurate during recalibration test.

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWA-2I	SAMPLE ID: YGWA-2I
FIELD TECHNICIAN: <i>Charles Watson</i>	DATE: 9/13/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 54.04 feet to 64.04 feet	STATIC DEPTH TO WATER (feet): 44.95	PURGE PUMP TYPE OR BAILER: Bladder
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY			
1 WELL VOLUME = (64.37 feet - 44.95 feet) X 0.65 liters/foot = 12.62 liters 3x = 37.86 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME			
1 EQUIPMENT VOLUME = 0.1 liters + (70 feet X 0.005 liters/foot) + 0.1 liters = 0.55 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 59	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 61	PURGING INITIATED AT: 923	PURGING ENDED AT: 1426
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 463068 1511-4111	
TOTAL VOLUME PURGED (liters): 25.425			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/37	926	0.55	0.55	0.15	44.70	2.30	6.88	214.4	-116	1.67	20.29
	931	0.75	1.30	0.15	45.60	1.65	7.18	222.1	-116.2	0.58	18.73
	936	0.75	2.05	0.15	46.61	3.60	7.28	220.1	-120.8	0.35	18.45
	941	0.75	2.80	0.15	47.96	1.99	7.31	216.2	-123.5	0.35	18.38
103/37	946	0.75	3.55	0.15	48.93	1.54	7.28	205.4	-132.9	0.35	18.30
103/35	951	0.50	4.05	0.10	44.64	1.77	7.23	202.3	-137.2	0.37	18.70
	956	0.50	4.55	0.10	50.33	2.35	7.19	198.7	-141.2	0.35	18.81
	1001	0.50	5.05	0.10	51.19	1.89	7.19	198.6	-142.6	0.35	18.79
	1006	0.50	5.55	0.10	52.05	1.65	7.18	196.9	-144.2	0.32	18.90
	1011	0.50	6.05	0.10	52.95	1.89	7.17	197.5	-143.1	0.31	18.93
	1016	0.50	6.55	0.10	53.70	2.25	7.16	198.2	-141.0	0.31	18.99
103/35	1021	0.50	7.05	0.10	54.35	2.52	7.15	199.0	-137.4	0.31	19.06
103/30	1026	0.375	7.425	0.075	54.55	2.45	7.15	203.0	-136.8	0.33	19.86
	1031	0.375	7.80	0.075	54.73	2.26	7.17	203.5	-133.4	0.32	20.31
	1036	0.375	8.175	0.075	54.75	2.50	7.17	205.5	-129.6	0.35	20.39
	1041	0.375	8.55	0.075	54.88	2.64	7.17	206.9	-127.7	0.38	20.59
	1046	0.375	8.925	0.075	55.06	2.74	7.17	204.8	-123.7	0.40	20.81
103/30	1051	0.375	9.30	0.075	55.11	2.83	7.18	205.2	-121.1	0.42	20.92

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; 1/4" = 0.01; 3/8" = 0.022; 1/2" = 0.04; 5/8" = 0.06; 3/4" = 0.09; 7/8" = 0.12; 1" = 0.16

NOTES: *Rate Change 946 - 0.15 → 0.10 L/min, 1021 0.10 → 0.075 L/min*

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:

Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:

Oxygen Reduction Potential (mV)
 Temperature (°C)

Other:

Minimum 3 L purge volume

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/30	1056	0.375	9.675	0.075	55.24	2.51	7.21	207.3	-118.1	0.44	21.10
	1101	0.375	10.05	0.075	55.39	1.92	7.28	203.5	-115.8	0.44	21.01
	1106	0.375	10.425	0.075	55.55	1.86	7.35	217.0	-115.1	0.46	21.16
	1111	0.375	10.80	0.075	55.68	2.08	7.38	218.5	-114.8	0.48	21.31
	1116	0.375	11.175	0.075	55.80	1.98	7.38	219.1	-113.9	0.47	21.35
	1121	0.375	11.55	0.075	55.93	1.95	7.37	216.4	-113.0	0.46	21.50
	1126	0.375	11.925	0.075	56.02	2.24	7.35	216.2	-111.2	0.46	21.38
	1131	0.375	12.3	0.075	56.14	1.93	7.37	219.9	-112.3	0.47	21.45
	1136	0.375	12.675	0.075	56.29	1.88	7.42	225.5	-115.6	0.46	21.48
	1141	0.375	13.05	0.075	56.39	2.20	7.46	226.7	-118.4	0.46	21.46
	1146	0.375	13.425	0.075	56.55	2.07	7.49	227.3	-120.7	0.46	21.53
	1151	0.375	13.80	0.075	56.65	1.72	7.49	227.5	-121.9	0.47	21.50
	1156	0.375	14.175	0.075	56.79	1.68	7.47	226.6	-121.9	0.48	21.68
	1201	0.375	14.55	0.075	56.86	1.58	7.49	229.9	-124.1	0.46	21.55
	1206	0.375	14.925	0.075	56.98	1.68	7.50	232.5	-127.2	0.45	21.77
	1211	0.375	15.30	0.075	57.11	2.25	7.50	232.1	-128.9	0.46	21.80
	1216	0.375	15.675	0.075	57.21	1.51	7.49	230.3	-129.1	0.45	21.92
	1221	0.375	16.05	0.075	57.35	1.50	7.48	230.1	-128.7	0.44	21.95
103/30	1226	0.375	16.425	0.075	57.41	1.83	7.48	230.8	-131.2	0.43	22.06

CONTINUED ON ADDITIONAL SHEETS

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:

- Turbidity: <5 NTU, or stable (±10%)
- pH: ± 0.1 SU
- Specific Conductance: ± 5% (µS/cm)
- Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:

- Oxygen Reduction Potential (mV)
- Temperature (°C)

Other:

- Minimum 3 L purge volume

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: /AECOM			SAMPLER(S) SIGNATURES:			DATE SAMPLED:		SAMPLING INITIATED AT:	
PUMP OR TUBING DEPTH IN WELL (feet):			SAMPLE PUMP FLOW RATE (L per minute):			TUBING MATERIAL CODE:		SAMPLING ENDED AT:	
FIELD DECONTAMINATION: Y N			FIELD-FILTERED: Y N FILTER SIZE: _____ µm Filtration Equipment Type: _____			QC Sample Collected: Y N <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank			
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE		
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED					
	1	0.5 L	PE	HNO ₃		Metals app. III & IV			
	1	0.5 L	PE	N/A		Cl, F, SO ₄ , TDS			
	1	1 GAL	PE	HNO ₃		Ra 226/228			
REMARKS: <p align="center"><i>See pg. 4</i></p>									
FINAL DEPTH TO WATER:					DEPTH TO BOTTOM:				
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)									
SAMPLING / PURGING APP = After Peristaltic Pump; B = Bailor; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump									
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)									

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: Y6WA-2I	SAMPLE ID:
FIELD TECHNICIAN: Charles Watson	DATE: 9/13/16

PURGING DATA

WELL DIAMETER (Inches): 2	WELL SCREEN INTERVAL DEPTH: 54.04 feet to 64.04 feet	STATIC DEPTH TO WATER (feet): 44.95	PURGE PUMP TYPE OR BAILER: Blower
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (64.37 feet - 44.95 feet) X 0.65 liters/foot = 12.62 liters 3x = 37.86 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0.1 liters + (20 feet X 0.005 liters/foot) + 0.1 liters = 0.95 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 59	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 61	PURGING INITIATED AT: 923	PURGING ENDED AT: 1426
WATER QUALITY INSTRUMENT(S): In-Situ SmartTroll LaMotte 2020we		SERIAL NO(S): 469068 1511-411	
TOTAL VOLUME PURGED (liters): 25.425			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103130	1231	0.375	16.30	0.075	57.60	1.51	7.49	230.4	-132.5	0.43	21.86
	1236	0.375	17.175	0.075	57.72	1.60	7.49	231.0	-134.9	0.44	21.94
	1241	0.375	17.55	0.075	57.86	1.60	7.49	231.4	-137.2	0.42	22.26
	1246	0.375	17.925	0.075	57.97	1.81	7.49	232.5	-139.6	0.42	22.02
	1251	0.375	18.30	0.075	58.09	1.27	7.49	230.9	-141.6	0.40	22.40
	1256	0.375	18.675	0.075	58.19	1.26	7.50	231.4	-142.1	0.39	22.86
	1301	0.375	19.05	0.075	58.30	1.12	7.49	230.7	-144.5	0.39	22.10
	1306	0.375	19.425	0.075	58.47	1.09	7.46	227.9	-142.9	0.40	22.00
	1311	0.375	19.80	0.075	58.51	1.41	7.47	217.0	-137.6	0.31	21.59
	1316	0.375	20.175	0.075	58.75	1.52	7.48	214.1	-136.3	0.28	21.51
	1321	0.375	20.55	0.075	58.92	1.48	7.47	217.3	-137.3	0.31	21.68
	1326	0.375	20.925	0.075	59.02	1.42	7.47	217.9	-138.4	0.32	21.82
	1331	0.375	21.30	0.075	59.16	1.28	7.46	218.1	-139.4	0.36	21.58
	1336	0.375	21.675	0.075	59.31	1.28	7.45	219.9	-138.6	0.37	21.42
	1341	0.375	22.05	0.075	59.41	1.27	7.44	216.3	-137.6	0.36	22.00
	1346	0.375	22.425	0.075	59.54	1.13	7.41	214.2	-135.5	0.37	21.91
	1351	0.375	22.80	0.075	59.65	1.09	7.40	213.0	-136.6	0.38	22.03
103130	1356	0.375	23.175	0.075	59.90	1.46	7.40	212	-136.4	0.39	21.82

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; ¼" = 0.01; ⅜" = 0.022; ½" = 0.04; ⅝" = 0.06; ¾" = 0.09; 1" = 0.16

NOTES: Pump lowered 2' at 1301 to 61'

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required:
Turbidity: <5 NTU, or stable (±10%)
pH: ± 0.1 SU
Specific Conductance: ± 5% (µS/cm)
Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L) | Record Only:
Oxygen Reduction Potential (mV)
Temperature (°C) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
- Other:** Minimum 3 L purge volume

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/30	1401	0.375	23.55	0.075	60.08	1.13	7.40	211.1	-138.1	0.41	22.41
103/30	1406	0.375	23.925	0.075	60.20	1.23	7.40	210.2	-136.9	0.39	22.47
103/30	1411	0.375	24.3	0.075	60.30	0.81	7.41	208.6	-135.6	0.40	22.38
	1416	0.375	24.675	0.075	60.44	1.19	7.42	212.3	-135.3	0.42	22.67
	1421	0.375	25.05	0.075	60.51	1.08	7.44	210.3	-131.6	0.45	22.60
103/30	1426	0.375	25.425	0.075	61.0	0.88	7.45	210.5	-128.5	0.50	22.46
CONTINUED ON ADDITIONAL SHEETS											

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:

Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:

Oxygen Reduction Potential (mV)
 Temperature (°C)

Other:

Minimum 3 L purge volume

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: /AECOM				SAMPLER(S) SIGNATURES:			DATE SAMPLED:		SAMPLING INITIATED AT:	
PUMP OR TUBING DEPTH IN WELL (feet):				SAMPLE PUMP FLOW RATE (L per minute):			TUBING MATERIAL CODE:		SAMPLING ENDED AT:	
FIELD DECONTAMINATION: Y N				FIELD-FILTERED: Y N		FILTER SIZE: µm		QC Sample Collected: Y N <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank		
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE		
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED						
	1	0.5 L	PE	HNO ₃			Metals app. III & IV			
	1	0.5 L	PE	N/A			Cl, F, SO ₄ , TDS			
	1	1 GAL	PE	HNO ₃			Ra 226/228			
REMARKS: well purged Drt sample to be collected within 24 hours										
FINAL DEPTH TO WATER:				DEPTH TO BOTTOM:						
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)										
SAMPLING / PURGING APP = After Peristaltic Pump; B = Bailor; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump										
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)										

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWA-2I	SAMPLE ID: YGWA-2I
FIELD TECHNICIAN: Charles Watson	DATE: 9/14/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 54.04 feet to 64.04 feet	STATIC DEPTH TO WATER (feet): 55.36/54.59	PURGE PUMP TYPE OR BAILER: Blower
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY			
1 WELL VOLUME = (64.37 feet - 55.36 feet) X 0.65 liters/foot = 5.85 liters 3x = 17.55 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME			
1 EQUIPMENT VOLUME = 0.1 liters + (70 feet X 0.005 liters/foot) + 0.1 liters = 0.55 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 59	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 61	PURGING INITIATED AT: —	PURGING ENDED AT: —
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S):	463068 1511-4111

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
←	1437	—	—	—	56.25	2.70	7.41	207.35	91.74	0.50	22.46
←	1438	—	—	—	56.25	—	7.41	208.16	-91.86	0.50	22.44

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; ¼" = 0.01; ⅝" = 0.022; ½" = 0.04; ¾" = 0.06; 1" = 0.09; 1 ¼" = 0.12; 1 ½" = 0.16

NOTES:
 Sampling of YGWA-2I after complex evacuation on 9/13/16 @ 1436.
 9/14/16
 WL-55.36 @ 820 54.60 @ 1250 54.51' @ 1325

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required:
Turbidity: <5 NTU, or stable (±10%)
pH: ± 0.1 SU
Specific Conductance: ± 5% (µS/cm)
Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L) | Record Only:
Oxygen Reduction Potential (mV)
Temperature (°C) |
| Other:
Minimum 3 L purge volume | |

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)

CONTINUED ON ADDITIONAL SHEETS

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:

- Turbidity:** <5 NTU, or stable (±10%)
- pH:** ± 0.1 SU
- Specific Conductance:** ± 5% (µS/cm)
- Dissolved Oxygen:** ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:

- Oxygen Reduction Potential (mV)**
- Temperature (°C)**

Other:

Minimum 3 L purge volume

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Wasse LAECOM				SAMPLER(S) SIGNATURES: <i>[Signature]</i>			DATE SAMPLED: 9/14/16			SAMPLING INITIATED AT: 1338		
PUMP OR TUBING DEPTH IN WELL (feet): 61				SAMPLE PUMP FLOW RATE (L per minute): 0.1			TUBING MATERIAL CODE: PE			SAMPLING ENDED AT: 1433		
FIELD DECONTAMINATION: 0 N				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N			FILTER SIZE: _____ µm			QC Sample Collected: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank		
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE				
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED								
YGWA-2I	1	0.5 L	PE	HNO ₃			Metals app. III & IV	BP				
YGWA-2I	1	0.5 L	PE	N/A			Cl, F, SO ₄ , TDS	BP				
YGWA-2I	1	1 GAL	PE	HNO ₃			Ra 226/228	BP				

REMARKS:

FINAL DEPTH TO WATER:	56.25	DEPTH TO BOTTOM:	64.37
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)			
SAMPLING / PURGING APP = After Peristaltic Pump; B = Bailor; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump			
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)			

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWA-3I	SAMPLE ID: YGWA-3I
FIELD TECHNICIAN: Charles Watson	DATE: 9/14/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 48.55 feet to 58.55 feet	STATIC DEPTH TO WATER (feet): 50.45	PURGE PUMP TYPE OR BAILER: Blower
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (58.88 feet - 50.45 feet) X 0.65 liters/foot = 5.265 liters 3x ~ 15.80 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0.1 liters + (65 feet X 0.005 liters/foot) + 0.1 liters = 0.5 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 54	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 54	PURGING INITIATED AT: 931	PURGING ENDED AT: 1135
WATER QUALITY INSTRUMENT(S): In-Situ SmartTroll LaMotte 2020we		SERIAL NO(S): 467068 1511-4111	
TOTAL VOLUME PURGED (liters): 16.25			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/30	935	0.50	0.50	0.10	50.64	1.87	7.19	227.2	-57.7	1.80	24.11
	940	0.50	1.00	0.10	50.73	1.57	7.44	241.0	-65.9	0.89	20.80
	945	0.50	1.50	0.10	50.78	1.53	7.48	246.5	-73.0	0.58	20.66
	950	0.50	2.00	0.10	50.83	1.46	7.48	239.4	-78.7	0.44	20.79
	955	0.50	2.50	0.10	50.85	1.77	7.48	238.5	-82.9	0.37	20.97
	1000	0.50	3.00	0.10	50.86	1.22	7.51	236.2	-86.6	0.35	20.57
	1005	0.50	3.50	0.10	50.88	1.05	7.54	228.3	-90.9	0.31	20.83
	1010	0.50	4.00	0.10	50.89	1.07	7.57	219.7	-91.9	0.28	21.04
	10:15	0.50	4.50	0.10	50.90	0.92	7.58	213.2	-93.1	0.28	20.58
103/30	1020	0.50	5.00	0.10	50.92	1.49	7.57	213.3	-87.4	0.45	19.39
103/35	1025	0.75	5.75	0.15	51.27	1.34	7.50	213.7	-86.4	0.39	19.20
	1030	0.75	6.50	0.15	51.38	1.17	7.52	210.1	-86.5	0.34	18.70
	1035	0.75	7.25	0.15	51.45	0.98	7.51	212.2	-92.8	0.29	18.65
	1040	0.75	8.00	0.15	51.57	0.93	7.52	207.3	-97.1	0.26	18.67
	1045	0.75	8.75	0.15	51.65	0.85	7.54	203.2	-100.7	0.26	18.95
	1050	0.75	9.50	0.15	51.71	0.88	7.56	200.6	-102.4	0.23	19.01
	1055	0.75	10.25	0.15	51.73	0.95	7.57	200.2	-103.8	0.20	18.88
103/35	1100	0.75	11.00	0.15	51.77	0.81	7.59	198.9	-105.9	0.22	18.67

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; 1/4" = 0.01; 3/8" = 0.022; 1/2" = 0.04; 5/8" = 0.06; 3/4" = 0.09; 1" = 0.16

NOTES: Volume purge - WL is inside screen interval

Rate change @ 1020 0.10 → 0.15 L/min

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:

Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:

Oxygen Reduction Potential (mV)
 Temperature (°C)

Other: Minimum 3 L purge volume

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWA-3D	SAMPLE ID: YGWA-3D
FIELD TECHNICIAN: Charles Watson	DATE: 9/15/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 124 feet to 134 feet	STATIC DEPTH TO WATER (feet): 30.90	PURGE PUMP TYPE OR BAILER: Blodder
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (134.41 feet - 30.90 feet) X 0.65 liters/foot = 67.28 liters 3x = 201.85 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0.1 liters + (140 feet X 0.005 liters/foot) + 0.1 liters = 0.90 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 129	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 129	PURGING INITIATED AT: 836	PURGING ENDED AT: 916
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 463068 1511-4111	
TOTAL VOLUME PURGED (liters): 5.4			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/70	846	0.90	0.90	0.15	31.05	3.83	6.98	210.9	-23.5	0.81	19.85
	851	0.75	1.65	0.15	30.97	8.93	7.50	221.2	-52.3	0.49	18.60
	856	0.75	2.40	0.15	31.00	4.59	7.62	222.1	-58.2	0.16	18.39
	901	0.75	3.15	0.15	30.98	4.54	7.67	222.5	-64.1	0.11	18.39
	906	0.75	3.90	0.15	30.98	3.35	7.72	221.9	-68.5	0.09	18.41
	911	0.75	4.65	0.15	30.98	2.20	7.74	222.0	-74.3	0.08	18.36
103/70	916	0.75	5.40	0.15	30.97	2.54	7.74	222.6	-77.2	0.07	18.45

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; ¼" = 0.01; ⅜" = 0.022; ½" = 0.04; ⅝" = 0.06; ¾" = 0.09; 1" = 0.16

NOTES:

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:
 Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:
 Oxygen Reduction Potential (mV)
 Temperature (°C)

Other: Minimum 3 L purge volume

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWA-145	SAMPLE ID: YGWA-145
FIELD TECHNICIAN:	DATE: 9/15/16

PURGING DATA

WELL DIAMETER (Inches): 2	WELL SCREEN INTERVAL DEPTH: 25 feet to 35 feet	STATIC DEPTH TO WATER (feet): 19.49	PURGE PUMP TYPE OR BAILER: Peristaltic
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (35-30 feet - 19.49 feet) X 0.65 liters/foot = 10.27 liters 3x = 30.82 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0.7 liters + (40 feet X 0.005 liters/foot) + 0.1 liters = 0.3 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 30	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 30	PURGING INITIATED AT: 1147	PURGING ENDED AT: 1241
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 463068 1511-4111	
TOTAL VOLUME PURGED (liters): 7.80			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
4.39	1151	0.3	0.3	0.15	19.80	1.23	5.75	58.4	72.3	4.36	26.87
	1156	0.75	1.05	0.15	19.90	1.37	5.54	61.4	70.4	4.55	22.73
	1201	0.75	1.80	0.15	19.89	1.91	5.49	63.1	763.9	4.84	22.27
	1206	0.75	2.55	0.15	19.89	2.16	5.48	62.0	58.9	4.77	22.15
	1211	0.75	3.30	0.15	19.89	1.82	5.47	61.0	55.9	4.74	21.72
	1216	0.75	4.05	0.15	19.89	1.70	5.45	64.0	54.9	4.53	21.61
	1221	0.75	4.80	0.15	19.89	2.07	5.46	62.4	53.8	4.35	22.28
	1226	0.75	5.55	0.15	19.89	1.32	5.46	61.2	53.1	4.34	22.09
	1231	0.75	6.30	0.15	19.89	1.24	5.46	61.5	52.7	4.56	21.92
	1236	0.75	7.05	0.15	19.89	0.73	5.45	62.9	53.7	4.47	22.10
4.39	1241	0.75	7.80	0.15	19.89	1.07	5.45	62.8	53.2	4.55	21.76

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; ¼" = 0.01; ⅜" = 0.022; ½" = 0.04; ⅝" = 0.06; ¾" = 0.09; 1" = 0.16

NOTES: 33° 27' 20.80" large air bubble removed from DO sensor @ 1216
 -84° 54' 4.55" continued purge to ensure accurate DO reading

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required:
Turbidity: <5 NTU, or stable (±10%)
pH: ± 0.1 SU
Specific Conductance: ± 5% (µS/cm)
Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L) | Record Only:
Oxygen Reduction Potential (mV)
Temperature (°C) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
- Other: Minimum 3 L purge volume

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWC-265	SAMPLE ID: YGWC-265
FIELD TECHNICIAN: Charles Watson	DATE: 9/20/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 30 feet to 40 feet	STATIC DEPTH TO WATER (feet): 21.45	PURGE PUMP TYPE OR BAILER: Peristaltic
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (40.3 feet - 21.45 feet) X 0.65 liters/foot = 12.25 liters 3x = 36.75 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0 liters + (40 feet X 0.005 liters/foot) + 0.1 liters = 0.3 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 35	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 35	PURGING INITIATED AT: 905	PURGING ENDED AT: 952
WATER QUALITY INSTRUMENT(S): In-Situ SmartTroll LaMotte 2020we		SERIAL NO(S): 463068 1511-4111	
			TOTAL VOLUME PURGED (liters): 7.05

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
5.05	907	0.3	0.3	0.15	21.8	7.3	5.21	286.8	100.3	2.98	21.85
	912	0.75	1.05	0.15	22.2	4.63	5.19	292.7	82.7	1.76	20.82
	917	0.75	1.80	0.15	22.45	2.89	5.34	306.9	75.7	1.32	20.68
	922	0.75	2.55	0.15	22.62	2.90	5.31	300.2	72.7	1.28	20.65
	927	0.75	3.30	0.15	22.69	2.50	5.31	302.8	71.8	1.33	20.65
	932	0.75	4.05	0.15	22.75	2.80	5.31	304.8	71.3	1.32	20.7
	937	0.75	4.80	0.15	22.75	1.93	5.32	304.3	70.3	1.64	20.75
	942	0.75	5.55	0.15	22.76	1.89	5.34	306.6	71.3	1.28	20.79
	947	0.75	6.30	0.15	22.75	1.81	5.34	306.6	70.9	1.18	20.84
5.05	952	0.75	7.05	0.15	22.75	1.92	5.35	307.4	72.2	1.12	20.84

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; 1/4" = 0.01; 3/8" = 0.022; 1/2" = 0.04; 5/8" = 0.06; 3/4" = 0.09; 7/8" = 0.12; 1" = 0.16

NOTES:

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:

Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:

Oxygen Reduction Potential (mV)
 Temperature (°C)

Other: Minimum 3 L purge volume

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)

CONTINUED ON ADDITIONAL SHEETS

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Required:
 Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)</p> | <p>Record Only:
 Oxygen Reduction Potential (mV)
 Temperature (°C)</p> <p>Other:
 Minimum 3 L purge volume</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Charles Watson / AECOM</i>		SAMPLER(S) SIGNATURES: <i>[Signature]</i>		DATE SAMPLED: <i>9/20/16</i>	SAMPLING INITIATED AT: <i>09:56</i>		
PUMP OR TUBING DEPTH IN WELL (feet): <i>35</i>		SAMPLE PUMP FLOW RATE (L per minute): <i>0.15</i>		TUBING MATERIAL CODE: <i>PE</i>	SAMPLING ENDED AT: <i>10:28</i>		
FIELD DECONTAMINATION: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Filtration Equipment Type: _____		FILTER SIZE: _____ µm			
				QC Sample Collected: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank			
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED			
<i>YGWC-269</i>	<i>1</i>	<i>0.25</i> L	<i>PE</i>	<i>HNO₃</i>		<i>Metals app. III & IV</i>	<i>APP</i>
<i>YGWC-265</i>	<i>1</i>	<i>1.05</i> L	<i>PE</i>	<i>N/A</i>		<i>Cl, F, SO₄, TDS</i>	<i>APP</i>
<i>YGWC-265</i>	<i>1</i>	<i>1/20</i> GAL	<i>PE</i>	<i>HNO₃</i>		<i>Ra 226/228</i>	<i>APP</i>
REMARKS:							
FINAL DEPTH TO WATER: <i>22.70</i>				DEPTH TO BOTTOM: <i>40.3</i>			
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)							
SAMPLING / PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)							

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWC-26 I	SAMPLE ID: YGWC-26 I
FIELD TECHNICIAN: Charley Watson	DATE: 9/20/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 59.61 feet to 69.61 feet	STATIC DEPTH TO WATER (feet): 24.73	PURGE PUMP TYPE OR BAILER: Peristaltic
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (69.94 feet - 24.73 feet) X 0.65 liters/foot = 29.39 liters 3x = 88.16 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0 liters + (70 feet X 0.005 liters/foot) + 0.1 liters = 0.45 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 64.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 64.5	PURGING INITIATED AT: 10.5	PURGING ENDED AT: 11.25
WATER QUALITY INSTRUMENT(S): In-Situ Smartroll LaMotte 2020we		SERIAL NO(S): 463068 1511-4111	
TOTAL VOLUME PURGED (liters): 4.2			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
4.86	1100	0.45	0.45	0.15	24.91	1.57	6.00	272.1	-125	1.17	25.56
	1105	0.75	1.20	0.15	24.95	2.47	5.93	298.5	11.2	1.02	22.96
	1110	0.75	1.95	0.15	24.95	1.47	5.90	297.3	21.2	0.84	22.84
	1115	0.75	2.70	0.15	24.95	1.68	5.90	298.8	26.0	0.79	22.92
	1120	0.75	3.45	0.15	24.95	1.24	5.88	299.2	29.3	0.78	22.93
4.86	1125	0.75	4.20	0.15	24.95	1.65	5.89	298.4	31.5	0.76	22.80

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; ¼" = 0.01; ⅜" = 0.022; ½" = 0.04; ⅝" = 0.06; ¾" = 0.09; 1" = 0.16

NOTES:

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:

Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:

Oxygen Reduction Potential (mV)
 Temperature (°C)

Other: Minimum 3 L purge volume

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)

CONTINUED ON ADDITIONAL SHEETS

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

<p>Required: Turbidity: <5 NTU, or stable (±10%) pH: ± 0.1 SU Specific Conductance: ± 5% (µS/cm) Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)</p>	<p>Record Only: Oxygen Reduction Potential (mV) Temperature (°C)</p> <p>Other: Minimum 3 L purge volume</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Ward / AECOM			SAMPLER(S) SIGNATURES: 			DATE SAMPLED: 9/20/16			SAMPLING INITIATED AT: 1128		
PUMP OR TUBING DEPTH IN WELL (feet): 64.5			SAMPLE PUMP FLOW RATE (L per minute): 0.15			TUBING MATERIAL CODE: PE			SAMPLING ENDED AT: 1205		
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N			FIELD-FILTERED: Y <input checked="" type="radio"/> N			FILTER SIZE: _____ µm			QC Sample Collected: <input checked="" type="radio"/> Y <input type="radio"/> N <input type="checkbox"/> Duplicate <input checked="" type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank		
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE			
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED							
YGWC-26I	1	0.25 0.25 L	PE	HNO ₃			Metals app. III & IV	APP			
YGWC-26E	1	1 QT	PE	N/A			Cl, F, SO ₄ , TDS	APP			
YGWC-26D	1	1/2 GAL	PE	HNO ₃			Ra 226/228	APP			
EQB-3	1	0.25 L	PE	HNO ₃			metals app 304	POUT			
EQB-3	1	1 QT	PE	N/A			Cl, F, SO ₄ , TDS	POUT			
EQB-3	1	0.5 GAL	PE	HNO ₃			Ra 226/228	POUT			
REMARKS: EQB-3 : 1215											
FINAL DEPTH TO WATER:			64.95			DEPTH TO BOTTOM:			69.95		
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)											
SAMPLING / PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)											

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: V6WC-27S	SAMPLE ID: V6WC-27S
FIELD TECHNICIAN: Wesley Bowen	DATE: 9/20/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 29.50 feet to 39.50 feet	STATIC DEPTH TO WATER (feet): 27.23	PURGE PUMP TYPE OR BAILER: Bladley Pump
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY $1 \text{ WELL VOLUME} = (39.50 \text{ feet} - 27.23 \text{ feet}) \times 0.65 \text{ liters/foot} = 7.97 \text{ liters}$ $3 \times 7.97 \text{ liters} = 23.92 \text{ L}$			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME $1 \text{ EQUIPMENT VOLUME} = 0.1 \text{ liters} + (43 \text{ feet} \times 0.005 \text{ liters/foot}) + 0.1 \text{ liters} = 0.41 \text{ liters}$			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 34	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 34	PURGING INITIATED AT: 1347	PURGING ENDED AT: 1513
WATER QUALITY INSTRUMENT(S): In-Situ SmartTroll LaMotte 2020we		SERIAL NO(S): 249474 2949-0413	
TOTAL VOLUME PURGED (liters): 28.10			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
108/52	1353	1.2	1.2	0.20	27.33	38.5	6.27	436.90	19.50	0.42	21.87
108/52	1358	1.0	2.2	0.20	27.33	26.8	6.26	440.50	21.70	0.30	21.37
109/60	1403	1.68	3.88	0.335	27.36	22.6	6.26	438.80	22.90	0.23	20.30
109/60	1408	1.68	5.56	0.335	27.39	20.2	6.24	436.40	22.40	0.17	20.13
109/60	1413	1.68	7.24	0.335	27.38	20.0	6.25	438.46	22.60	0.14	20.18
109/60	1418	1.68	8.92	0.335	27.39	14.6	6.24	435.00	23.30	0.09	20.17
109/60	1423	1.68	10.6	0.335	27.39	13.8	6.23	437.00	22.20	0.07	19.87
109/60	1428	1.68	12.28	0.335	27.40	11.2	6.23	438.10	20.80	0.11	19.68
109/60	1433	1.68	13.96	0.335	27.43	11.86	6.24	439.20	19.20	0.11	19.86
109/60	1438	1.68	15.64	0.335	27.41	12.44	6.24	439.80	16.10	0.07	19.97
109/65	1443	1.78	17.42	0.355	27.43	9.60	6.25	441.90	12.60	0.08	19.89
109/65	1448	1.78	19.2	0.355	27.46	8.30	6.25	443.80	6.50	0.16	20.08
109/65	1453	1.78	20.98	0.355	27.46	7.17	6.26	442.20	6.80	0.17	20.04
109/65	1458	1.78	22.76	0.355	27.46	7.07	6.28	446.20	-3.80	0.05	20.01
109/65	1503	1.78	24.54	0.355	27.46	5.36	6.28	449.10	-5.90	0.07	20.04
109/65	1508	1.78	26.32	0.355	27.46	4.89	6.28	446.90	-6.60	0.03	20.12
109/65	1513	1.78	28.10	0.355	27.46	4.78	6.30	447.90	-9.90	0.07	20.19

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; 1/4" = 0.01; 3/8" = 0.022; 1/2" = 0.04; 5/8" = 0.06; 3/4" = 0.09; 7/8" = 0.12; 1" = 0.16

NOTES:

© 1358 increase purge rate from 200 mL/min to 335 mL/min.
 © 1438 increase purge rate from 335 mL/min to 355 mL/min.
 recalibrate LaMotte 2020we @ 1503.

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:

Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:

Oxygen Reduction Potential (mV)
 Temperature (°C)

Other: Minimum 3 L purge volume

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
<input type="checkbox"/> CONTINUED ON ADDITIONAL SHEETS											

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

<p><u>Required:</u> Turbidity: <5 NTU, or stable (±10%) pH: ± 0.1 SU Specific Conductance: ± 5% (µS/cm) Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)</p>	<p><u>Record Only:</u> Oxygen Reduction Potential (mV) Temperature (°C)</p> <p><u>Other:</u> Minimum 3 L purge volume</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Wesley Bowen / AECOM</i>			SAMPLER(S) SIGNATURES: 			DATE SAMPLED: <i>9/20/16</i>		SAMPLING INITIATED AT: <i>1520</i>			
PUMP OR TUBING DEPTH IN WELL (feet): <i>34</i>			SAMPLE PUMP FLOW RATE (L per minute): <i>0.355</i>			TUBING MATERIAL CODE: <i>PE</i>		SAMPLING ENDED AT: <i>1529</i>			
FIELD DECONTAMINATION: <input checked="checked" type="radio"/> Y <input type="radio"/> N			FIELD-FILTERED: <input checked="checked" type="radio"/> Y <input type="radio"/> N FILTER SIZE: _____ µm Filtration Equipment Type:			QC Sample Collected: <input checked="checked" type="radio"/> Y <input type="radio"/> N <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank					
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE				
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED							
<i>V6WC-27S</i>	1	<i>0.25 L</i>	PE	<i>HNO₃</i>		<i>Metals app. III & IV</i>	<i>BP</i>				
<i>V6WC-27S</i>	1	<i>0.5 L</i>	PE	<i>N/A</i>		<i>Cl, F, SO₄, TDS</i>	<i>BP</i>				
<i>V6WC-27S</i>	1	<i>1/2 GAL</i>	PE	<i>HNO₃</i>		<i>Ra 226/228</i>	<i>BP</i>				
							<i>B</i>				
REMARKS:											
FINAL DEPTH TO WATER:				<i>27.40</i>				DEPTH TO BOTTOM:		<i>39.50</i>	
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)											
SAMPLING / PURGING APP = After Peristaltic Pump; B = Bailer; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump											
EQUIPMENT CODES: RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)											

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWC-27 E	SAMPLE ID: YGWC-27 E
FIELD TECHNICIAN: Charles Watson	DATE: 9/20/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 69.9 feet to 79.9 feet	STATIC DEPTH TO WATER (feet): 27.82	PURGE PUMP TYPE OR BAILER: Bladder
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (80.21 feet - 27.82 feet) X 0.65 liters/foot = 34.05 liters 3x = 102.15 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0.1 liters + (90 feet X 0.005 liters/foot) + 0.1 liters = 0.65 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 75	PURGING INITIATED AT: 1350	PURGING ENDED AT: 1421
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 463067 1511-4111	
TOTAL VOLUME PURGED (liters): 4.40			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/45	1356	0.65	0.65	0.15	28.2	3.41	6.51	256.8	-28.5	2.18	27.48
	1401	0.75	1.40	0.15	28.40	3.89	6.44	328.6	-18.7	0.72	22.71
	1406	0.75	2.15	0.15	28.5	3.60	6.41	335.2	-21.2	0.48	22.03
	1411	0.75	2.90	0.15	28.60	3.32	6.38	336.8	-25.5	0.39	21.73
	1416	0.75	3.65	0.15	28.60	2.38	6.37	337.0	-28.0	0.34	21.63
103/45	1421	0.75	4.40	0.15	28.60	2.22	6.36	336.3	-28.6	0.29	21.24

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; 1/4" = 0.01; 3/8" = 0.022; 1/2" = 0.04; 5/8" = 0.06; 3/4" = 0.09; 7/8" = 0.12; 1" = 0.16

NOTES:

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required:
Turbidity: <5 NTU, or stable (±10%)
pH: ±0.1 SU
Specific Conductance: ± 5% (µS/cm)
Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L) | Record Only:
Oxygen Reduction Potential (mV)
Temperature (°C) |
| | Other:
Minimum 3 L purge volume |

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWC-27I	SAMPLE ID: YGWC-27I
FIELD TECHNICIAN: Charles Watson	DATE: 9/20/16

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
<input type="checkbox"/> CONTINUED ON ADDITIONAL SHEETS											

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required: Turbidity: <5 NTU, or stable (±10%) pH: ± 0.1 SU Specific Conductance: ± 5% (µS/cm) Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)	Record Only: Oxygen Reduction Potential (mV) Temperature (°C)
Other: Minimum 3 L purge volume	

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Watson/AECOM			SAMPLER(S) SIGNATURES: 			DATE SAMPLED: 09/20/16			SAMPLING INITIATED AT: 1423		
PUMP OR TUBING DEPTH IN WELL (feet): 75			SAMPLE PUMP FLOW RATE (L per minute): 0.15			TUBING MATERIAL CODE: PE			SAMPLING ENDED AT: 1450		
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input checked="" type="radio"/> N			FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/> FILTER SIZE: _____ µm			QC Sample Collected: Y <input checked="" type="radio"/> N <input type="radio"/> <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank					
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE			
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED							
YGWC-27I	1	250 mL	PE	HNO ₃			Metals app. III & IV	BP			
YGWC-27I	1	1 L	PE	N/A			Cl, F, SO ₄ , TDS	BP			
YGWC-27I	1	0.5 GAL	PE	HNO ₃			Ra 226/228	BP			

REMARKS:

FINAL DEPTH TO WATER: 24.60	DEPTH TO BOTTOM: 80.20
-----------------------------	------------------------

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)
 SAMPLING / PURGING APP = After Peristaltic Pump; B = Bailor; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump
 EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWC-285	SAMPLE ID: YGWC-285
FIELD TECHNICIAN: Charles Watson	DATE: 9/21/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 34.58 feet to 44.58 feet	STATIC DEPTH TO WATER (feet): 22.84	PURGE PUMP TYPE OR BAILER: Peristaltic
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (44.91 feet - 22.84 feet) X 0.65 liters/foot = 14.35 liters 3x = 43.05 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0 liters + (50 feet X 0.005 liters/foot) + 0.1 liters = 0.35 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 39.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 39.6	PURGING INITIATED AT: 839	PURGING ENDED AT: 906
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S):	463068 1511-4111
			TOTAL VOLUME PURGED (liters): 4.10

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
4.90	841	0.35	0.35	0.15	23.19	4.46	6.29	418	-2.7	2.17	21.05
	846	0.75	1.10	0.15	23.23	3.87	6.37	420.1	-27.90	0.49	20.23
	851	0.75	1.85	0.15	23.24	4.10	6.38	421.9	-36.9	0.41	20.13
	856	0.75	2.60	0.15	23.24	4.16	6.38	422.1	-41.7	0.37	20.08
	901	0.75	3.35	0.15	23.23	3.74	6.39	422.0	-44.4	0.34	20.08
4.90	906	0.75	4.10	0.15	23.23	3.71	6.39	422.2	-46.4	0.34	20.08

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; ¼" = 0.01; ⅜" = 0.022; ½" = 0.04; ⅝" = 0.06; ¾" = 0.09; 1" = 0.16

NOTES:

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Required:
 Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)</p> | <p>Record Only:
 Oxygen Reduction Potential (mV)
 Temperature (°C)</p> <p>Other:
 Minimum 3 L purge volume</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: Y6WC-285	SAMPLE ID: Y6WC-285
FIELD TECHNICIAN: Charles Watson	DATE: 9/21/16

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (μS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
☐		CONTINUED ON ADDITIONAL SHEETS									

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required: Turbidity: <5 NTU, or stable (±10%) pH: ± 0.1 SU Specific Conductance: ± 5% (μS/cm) Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)	Record Only: Oxygen Reduction Potential (mV) Temperature (°C)
	Other: Minimum 3 L purge volume

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Charles Watson</i> / AECOM		SAMPLER(S) SIGNATURES: 		DATE SAMPLED: <i>9/21/16</i>	SAMPLING INITIATED AT: <i>910</i>		
PUMP OR TUBING DEPTH IN WELL (feet): <i>39.6</i>		SAMPLE PUMP FLOW RATE (L per minute): <i>0.15</i>		TUBING MATERIAL CODE: <i>PE</i>	SAMPLING ENDED AT: <i>1000</i>		
FIELD DECONTAMINATION: <input checked="" type="checkbox"/> N		FIELD-FILTERED: <input checked="" type="checkbox"/> Y Filtration Equipment Type: _____		FILTER SIZE: _____ μm	QC Sample Collected: <input checked="" type="checkbox"/> N <i>LAB AP</i> <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank		
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED			
Y6WC-285	1	250 mL	PE	HNO ₃		Metals app. III & IV	APP
Y6WC-285	1	1 L	PE	N/A		Cl, F, SO ₄ , TDS	APP
Y6WC-285	<i>20</i>	0.5 GAL	PE	HNO ₃		Ra 226/228	APP
REMARKS: <i>Lab 1000 dup</i>							
FINAL DEPTH TO WATER: <i>23.23</i>				DEPTH TO BOTTOM: <i>44.89</i>			
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)							
SAMPLING / PURGING: APP = After Peristaltic Pump; B = Bailor; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump							
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)							

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: Y6WC-28 I	SAMPLE ID: Y6WC-28 I
FIELD TECHNICIAN: Charles Watson	DATE: 9/21/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 59.83 feet to 69.83 feet	STATIC DEPTH TO WATER (feet): 24.62	PURGE PUMP TYPE OR BAILER: Peristaltic
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (70.16 feet - 24.62 feet) X 0.65 liters/foot = 29.60 liters 3x 88.80 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0 liters + (75 feet X 0.005 liters/foot) + 0.1 liters = 0.5 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 65	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 65	PURGING INITIATED AT: 1027	PURGING ENDED AT: 1116
WATER QUALITY INSTRUMENT(S): In-Situ SmartTroll LaMotte 2020we		SERIAL NO(S): 463068 1511-4111	

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
4.95	1031	0.5	0.5	0.15	24.94	4.51	6.50	384.8	14.1	1.09	23.54
	1036	0.75	1.25	0.15	25.55	2.47	6.46	399.4	26.0	0.80	24.96
	1041	0.75	2.00	0.15	25.90	1.92	6.45	399.3	28.7	0.77	21.83
	1046	0.75	2.75	0.15	26.07	1.62	6.44	395.4	28.6	0.95	21.78
	1051	0.75	3.50	0.15	26.20	1.73	6.43	388.7	28.2	0.92	21.86
	1056	0.75	4.25	0.15	26.29	1.89	6.43	394.3	27.6	0.87	21.86
	1061	0.75	5.00	0.15	26.34	1.56	6.42	394.6	26.0	0.83	22.00
	1106	0.75	5.75	0.15	26.37	1.59	6.44	394.7	25.1	0.84	22.00
	1111	0.75	6.50	0.15	26.39	1.34	6.44	400.0	25.1	0.79	22.02
4.95	1116	0.75	7.25	0.15	26.41	1.33	6.45	402.6	25.3	0.75	22.0

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; 1/4" = 0.01; 3/8" = 0.022; 1/2" = 0.04; 5/8" = 0.06; 3/4" = 0.09; 7/8" = 0.12; 1" = 0.16

NOTES:

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required: Turbidity: <5 NTU, or stable (±10%) pH: ± 0.1 SU Specific Conductance: ± 5% (µS/cm) Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)	Record Only: Oxygen Reduction Potential (mV) Temperature (°C)
Other: Minimum 3 L purge volume	

AECOM GROUNDWATER SAMPLING LOG

SITE NAME:	Georgia Power Company Plant Yates	SITE LOCATION:	708 Dyer Road Newnan, GA
WELL NO:	YGWC-28 I	SAMPLE ID:	YGWC-28 I
FIELD TECHNICIAN:	Charles Watson	DATE:	9/21/16

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. ($\mu\text{S}/\text{cm}$)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. ($^{\circ}\text{C}$)

CONTINUED ON ADDITIONAL SHEETS

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:
 Turbidity: <5 NTU, or stable ($\pm 10\%$)
 pH: ± 0.1 SU
 Specific Conductance: $\pm 5\%$ ($\mu\text{S}/\text{cm}$)
 Dissolved Oxygen: ± 0.2 mg/L or $\pm 10\%$ (if >0.5 mg/L)

Record Only:
 Oxygen Reduction Potential (mV)
 Temperature ($^{\circ}\text{C}$)

Other:
 Minimum 3 L purge volume

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Watson / AECOM			SAMPLER(S) SIGNATURES: <i>Charles Watson</i>		DATE SAMPLED: 9/21/16	SAMPLING INITIATED AT: 1118	
PUMP OR TUBING DEPTH IN WELL (feet): 65			SAMPLE PUMP FLOW RATE (L per minute): 0.15		TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1202	
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N			FIELD-FILTERED: <input checked="" type="radio"/> Y <input checked="" type="radio"/> N FILTER SIZE: _____ μm		QC Sample Collected: <input checked="" type="radio"/> Y <input type="radio"/> N <input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input checked="" type="checkbox"/> Field Blank		
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED			
YGWC-28 I	1	250 mL	PE	HNO ₃		Metals app. III & IV	APP
YGWC-28 I	1	1 QT	PE	N/A		Cl, F, SO ₄ , TDS	APP
YGWC-28 I	1	0.5 GAL	PE	HNO ₃		Ra 226/228	APP
FB-4	1	250 mL	PE	HNO₃		metals app III & IV	POUF
FB-4	1	1 QT	PE	N/A		Cl, F, SO₄, TDS	POUF
FB-4	1	0.5 GAL	PE	HNO ₃		Ra 226/228	POUF
REMARKS: FB-4: 1155							
FINAL DEPTH TO WATER: 26.35				DEPTH TO BOTTOM: 70.15			
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify)							
SAMPLING / PURGING: APP = After Peristaltic Pump; B = Bailer; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump							
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)							

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: Y6WC-29I	SAMPLE ID: Y6WC-29I
FIELD TECHNICIAN: Charles Watson	DATE: 9/21/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 28.85 feet to 37.85 feet	STATIC DEPTH TO WATER (feet): 27.11	PURGE PUMP TYPE OR BAILER: Blotter
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (39.18 feet - 27.11 feet) X 0.65 liters/foot = 7.84 liters 3x = 23.52 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0.1 liters + (45 feet X 0.005 liters/foot) + 0.1 liters = 0.45 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 33.85	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 33.85	PURGING INITIATED AT: 1336	PURGING ENDED AT: 1539
WATER QUALITY INSTRUMENT(S): In-Situ SmartTroll LaMotte 2020we		SERIAL NO(S):	463064 1511-4111

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/20	1339	0.45	0.45	0.10	27.25	4.82	6.46	225.41	35.0	2.97	29.10
103/20	1344	0.50	0.95	0.10	27.70	9.83	6.32	242.3	40.2	1.79	25.05
103/30	1349	1.25	2.20	0.25	28.35	12.20	6.26	243.3	44.8	1.04	22.13
	1354	1.25	3.45	0.25	29.11	8.52	6.24	245.9	44.9	0.72	21.68
	1359	1.25	4.70	0.25	29.25	4.68	6.23	245.7	43.9	0.56	21.44
	1404	1.25	5.95	0.25	29.53	3.16	6.22	240.5	43.6	0.49	21.23
	1409	1.25	7.20	0.25	29.73	2.95	6.23	251.7	38.1	0.45	21.28
	1414	1.25	8.45	0.25	29.84	2.57	6.23	254.9	33.90	0.39	21.37
	1419	1.25	9.70	0.25	29.98	2.78	6.23	256.7	30.9	0.35	21.33
	1424	1.25	10.95	0.25	30.14	2.77	6.23	257.0	28.2	0.32	21.33
	1429	1.25	12.20	0.25	30.17	2.51	6.23	258.8	28.2	0.31	20.43
	1434	1.25	13.45	0.25	30.29	3.89	6.22	256.4	30.6	0.35	20.66
	1439	1.25	14.70	0.25	30.45	2.07	6.21	254.8	34.2	0.25	20.66
	1444	1.25	15.95	0.25	30.54	2.57	6.19	252.3	36.6	0.19	21.15
	1449	1.25	17.20	0.25	30.65	2.00	6.19	250.1	40.9	0.15	21.10
	1454	1.25	18.45	0.25	30.66	1.88	6.20	250.2	43.8	0.14	20.75
	1459	1.25	19.70	0.25	30.72	1.77	6.20	251.0	45.0	0.13	20.79
103/30	1504	1.25	20.95	0.25	30.77	2.08	6.20	251.5	45.7	0.12	20.77

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; 1/4" = 0.01; 3/8" = 0.022; 1/2" = 0.04; 5/8" = 0.06; 3/4" = 0.09; 7/8" = 0.12; 1" = 0.16

NOTES: 33' 27' 31.95" 3 volume purge as WL is within 1 ft of top of screen
 -84' 54' 32.19"

Rate Change 1344 0.1 → 0.25 L/min 1519 - 0.25 → 0.20 L/min

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required:
Turbidity: <5 NTU, or stable (±10%)
pH: ± 0.1 SU
Specific Conductance: ± 5% (µS/cm)
Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L) | Record Only:
Oxygen Reduction Potential (mV)
Temperature (°C) |
| Other:
Minimum 3 L purge volume | |

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWC-29I	SAMPLE ID: YGWC-29I
FIELD TECHNICIAN: Charles Watson	DATE: 9/21/16

FIELD DATA TABLE (continued)

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/30	1509	1.25	22.20	0.25	30.83	1.96	6.20	253.4	46.4	0.11	20.61
103/30	1514	1.25	23.45	0.25	30.85	1.81	6.20	254.5	46.3	0.10	20.84
103/25	1519	1.00	24.45	0.20	30.70	1.80	6.20	254.7	46.9	0.09	20.95
	1524	1.00	25.45	0.20	30.67	1.68	6.18	255.1	47.8	0.09	21.17
	1529	1.00	26.45	0.20	30.65	1.77	6.19	253.3	48.0	0.09	21.01
	1534	1.00	27.45	0.20	30.58	1.84	6.20	257.4	48.3	0.10	20.92
103/25	1539	1.00	28.45	0.20	30.58	1.75	6.20	252.4	48.2	0.11	20.92
<input type="checkbox"/> CONTINUED ON ADDITIONAL SHEETS											

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required: Turbidity: <5 NTU, or stable (±10%) pH: ± 0.1 SU Specific Conductance: ± 5% (µS/cm) Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)	Record Only: Oxygen Reduction Potential (mV) Temperature (°C) Other: Minimum 3 L purge volume
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Watson / AECOM			SAMPLER(S) SIGNATURES: <i>[Signature]</i>			DATE SAMPLED: 9/21/16		SAMPLING INITIATED AT: 1545	
PUMP OR TUBING DEPTH IN WELL (feet): 33.85			SAMPLE PUMP FLOW RATE (L per minute): 0.20			TUBING MATERIAL CODE: PE		SAMPLING ENDED AT: 1600	
FIELD DECONTAMINATION: <input checked="" type="checkbox"/> N			FIELD-FILTERED: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N FILTER SIZE: _____ µm			QC Sample Collected: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N			
Filtration Equipment Type: _____			<input type="checkbox"/> Duplicate <input type="checkbox"/> Equipment Blank <input type="checkbox"/> Field Blank						
SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE		
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED					
YGWC-29I	1	250 mL	PE	HNO ₃		Metals app. III & IV	BP		
YGWC-29I	1	1 QT	PE	N/A		Cl, F, SO ₄ , TDS	BP		
YGWC-29I	1	0.5 GAL	PE	HNO ₃		Ra 226/228	BP		
REMARKS:									
FINAL DEPTH TO WATER: 30.63				DEPTH TO BOTTOM: 39.20					
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicon; T = Teflon; O = Other (Specify) SAMPLING / PURGING: APP = After Peristaltic Pump; B = Bailor; ESP = Electric Submersible Pump; PP = Peristaltic Pump; BP = Bladder Pump EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)									

AECOM GROUNDWATER SAMPLING LOG

SITE NAME: Georgia Power Company Plant Yates	SITE LOCATION: 708 Dyer Road Newnan, GA
WELL NO: YGWA-30I	SAMPLE ID: YGWA-30I
FIELD TECHNICIAN: Charles Watson	DATE: 9/19/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 49.31 feet to 59.31 feet	STATIC DEPTH TO WATER (feet): 37.96	PURGE PUMP TYPE OR BAILER: B19DJJ
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY 1 WELL VOLUME = (59.64 feet - 37.96 feet) X 0.65 liters/foot = 14.09 liters 3x - 42.27 L			
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME 1 EQUIPMENT VOLUME = 0.1 liters + (65 feet X 0.005 liters/foot) + 0.1 liters = 0.50 liters			
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 54.3	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 54.3	PURGING INITIATED AT: 935	PURGING ENDED AT: 1017
WATER QUALITY INSTRUMENT(S): In-Situ SmartTroll LaMotte 2020we		SERIAL NO(S): 463068 1511-4111	
TOTAL VOLUME PURGED (liters): 5.75			

FIELD DATA TABLE

PUMP SETTING / PSI	TIME	VOLUME PURGED (liters)	TOTAL VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TURBIDITY (NTUs)	pH (standard units)	SPECIFIC COND. (µS/cm)	OXYGEN REDUCTION POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TEMP. (°C)
103/35	942	0.50	0.50	0.15	37.97	12.8	6.02	41.3	39.4	5.60	22.35
	947	0.75	1.25	0.15	38.00	11.9	5.83	39.3	47.2	6.16	20.59
	952	0.75	2.00	0.15	38.01	9.44	5.79	39.0	50.1	6.36	19.28
	957	0.75	2.75	0.15	38.01	7.20	5.80	39.0	52.0	6.36	19.12
	1002	0.75	3.50	0.15	38.01	5.66	5.80	39.0	52.7	6.28	19.11
	1007	0.75	4.25	0.15	38.01	3.98	5.79	38.8	55.6	6.31	19.41
	1012	0.75	5.00	0.15	38.01	3.30	5.79	38.4	55.3	6.28	19.53
103/35	1017	0.75	5.75	0.15	38.01	2.79	5.78	38.5	56.8	6.23	19.64

CONTINUED ON REVERSE SIDE

WELL CAPACITY (L Per Ft): 0.75" = 0.10; 1" = 0.20; 1.25" = 0.30; 2" = 0.65; 3" = 1.45; 4" = 2.50; 5" = 3.90; 6" = 5.60; 8" = 9.75; 10" = 15.40; 12" = 21.80
 TUBING CAPACITY (L Per Ft): 1/16" = 0.001; 0.17" = 0.005; ¼" = 0.01; ⅜" = 0.022; ½" = 0.04; ⅝" = 0.06; ¾" = 0.09; 1" = 0.16

NOTES: 33.457376
-54.905971

CHEMICAL PARAMETER STABILIZATION CRITERIA (THREE CONSECUTIVE READINGS AFTER DEPTH TO WATER HAS STABILIZED)

Required:
 Turbidity: <5 NTU, or stable (±10%)
 pH: ± 0.1 SU
 Specific Conductance: ± 5% (µS/cm)
 Dissolved Oxygen: ± 0.2 mg/L or ± 10% (if >0.5 mg/L)

Record Only:
 Oxygen Reduction Potential (mV)
 Temperature (°C)

Other: Minimum 3 L purge volume



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZK0088

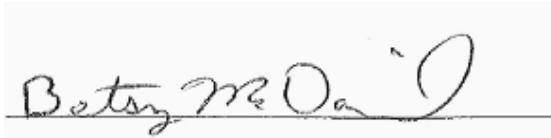
November 11, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:



Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-1D	AZK0088-01	Ground Water	11/01/16 16:25	11/02/16 17:10
YGWA-3I	AZK0088-02	Ground Water	11/01/16 18:35	11/02/16 17:10
YGWA-3D	AZK0088-03	Ground Water	11/01/16 13:40	11/02/16 17:10
YGWA-30I	AZK0088-04	Ground Water	11/01/16 14:00	11/02/16 17:10
EB-1-11-1-16	AZK0088-05	Water	11/01/16 17:15	11/02/16 17:10



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Project: CCR Event

Client ID: YGWA-1D

Lab Number ID: AZK0088-01

Date/Time Sampled: 11/1/2016 4:25:00PM

Date/Time Received: 11/2/2016 5:10:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	44	25	10	mg/L	SM 2540 C		1	11/04/16 18:03	11/04/16 18:03	6110126	JPT
Inorganic Anions											
Chloride	1.3	0.25	0.01	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 02:50	6110139	ric
Fluoride	0.10	0.30	0.02	mg/L	EPA 300.0	J	1	11/04/16 13:43	11/05/16 02:50	6110139	ric
Sulfate	3.9	1.0	0.05	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 02:50	6110139	ric
Metals, Total											
Antimony	0.0015	0.0030	0.0008	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Barium	0.0062	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Boron	0.0086	0.100	0.0064	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Calcium	11.0	2.50	0.155	mg/L	EPA 6020B		5	11/04/16 08:40	11/09/16 13:35	6110106	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Molybdenum	0.0092	0.0100	0.0017	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Lithium	0.0163	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:01	6110106	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/04/16 08:40	11/04/16 15:27	6110104	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Project: CCR Event

Client ID: YGWA-3I

Lab Number ID: AZK0088-02

Date/Time Sampled: 11/1/2016 6:35:00PM

Date/Time Received: 11/2/2016 5:10:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	75	25	10	mg/L	SM 2540 C		1	11/04/16 18:03	11/04/16 18:03	6110126	JPT
Inorganic Anions											
Chloride	1.4	0.25	0.01	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 05:15	6110139	ric
Fluoride	0.15	0.30	0.02	mg/L	EPA 300.0	J	1	11/04/16 13:43	11/05/16 05:15	6110139	ric
Sulfate	8.9	1.0	0.05	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 05:15	6110139	ric
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Barium	0.0027	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Calcium	18.4	2.50	0.155	mg/L	EPA 6020B		5	11/04/16 08:40	11/09/16 13:41	6110106	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Molybdenum	0.0025	0.0100	0.0017	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Lithium	0.0115	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:07	6110106	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/04/16 08:40	11/04/16 15:30	6110104	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Project: CCR Event

Client ID: YGWA-3D

Lab Number ID: AZK0088-03

Date/Time Sampled: 11/1/2016 1:40:00PM

Date/Time Received: 11/2/2016 5:10:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	92	25	10	mg/L	SM 2540 C		1	11/04/16 18:03	11/04/16 18:03	6110126	JPT
Inorganic Anions											
Chloride	1.7	0.25	0.01	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 05:35	6110139	ric
Fluoride	0.68	0.30	0.02	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 05:35	6110139	ric
Sulfate	4.9	1.0	0.05	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 05:35	6110139	ric
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Barium	0.0079	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Calcium	25.6	2.50	0.155	mg/L	EPA 6020B		5	11/04/16 08:40	11/09/16 13:47	6110106	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Molybdenum	0.0099	0.0100	0.0017	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Lithium	0.0194	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:12	6110106	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/04/16 08:40	11/04/16 15:32	6110104	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Project: CCR Event

Client ID: YGWA-30I

Lab Number ID: AZK0088-04

Date/Time Sampled: 11/1/2016 2:00:00PM

Date/Time Received: 11/2/2016 5:10:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	11/04/16 18:03	11/04/16 18:03	6110126	JPT
Inorganic Anions											
Chloride	1.8	0.25	0.01	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 05:56	6110139	rlc
Fluoride	0.07	0.30	0.02	mg/L	EPA 300.0	J	1	11/04/16 13:43	11/05/16 05:56	6110139	rlc
Sulfate	1.3	1.0	0.05	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 05:56	6110139	rlc
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Barium	0.0070	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Calcium	1.14	0.500	0.0311	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Cobalt	0.0255	0.0100	0.0005	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:18	6110106	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/04/16 08:40	11/04/16 15:34	6110104	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Project: CCR Event

Client ID: EB-1-11-1-16

Lab Number ID: AZK0088-05

Date/Time Sampled: 11/1/2016 5:15:00PM

Date/Time Received: 11/2/2016 5:10:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	11/04/16 18:03	11/04/16 18:03	6110126	JPT
Inorganic Anions											
Chloride	0.02	0.25	0.01	mg/L	EPA 300.0	J	1	11/04/16 13:43	11/05/16 06:17	6110139	ric
Fluoride	0.04	0.30	0.02	mg/L	EPA 300.0	J	1	11/04/16 13:43	11/05/16 06:17	6110139	ric
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	11/04/16 13:43	11/05/16 06:17	6110139	ric
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/04/16 08:40	11/08/16 21:24	6110106	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/04/16 08:40	11/04/16 15:37	6110104	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110126 - SM 2540 C											
Blank (6110126-BLK1)						Prepared & Analyzed: 11/04/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6110126-BS1)						Prepared & Analyzed: 11/04/16					
Total Dissolved Solids	341	25	10	mg/L	400.00		85	84-108			
Duplicate (6110126-DUP1)						Source: AZK0088-05 Prepared & Analyzed: 11/04/16					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (6110126-DUP2)						Source: AZK0136-03 Prepared & Analyzed: 11/04/16					
Total Dissolved Solids	15500	250	100	mg/L		20600			28	10	QR-03



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110139 - EPA 300.0											
Blank (6110139-BLK1)						Prepared & Analyzed: 11/04/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6110139-BS1)						Prepared & Analyzed: 11/04/16					
Chloride	11.0	0.25	0.01	mg/L	10.010		110	90-110			
Fluoride	11.0	0.30	0.02	mg/L	10.020		110	90-110			
Sulfate	10.8	1.0	0.05	mg/L	10.020		108	90-110			
Matrix Spike (6110139-MS1)						Source: AZK0088-01		Prepared: 11/04/16 Analyzed: 11/05/16			
Chloride	11.2	0.25	0.01	mg/L	10.010	1.30	99	90-110			
Fluoride	10.4	0.30	0.02	mg/L	10.020	0.10	103	90-110			
Sulfate	13.5	1.0	0.05	mg/L	10.020	3.92	96	90-110			
Matrix Spike Dup (6110139-MSD1)						Source: AZK0088-01		Prepared: 11/04/16 Analyzed: 11/05/16			
Chloride	10.6	0.25	0.01	mg/L	10.010	1.30	93	90-110	5	15	
Fluoride	9.89	0.30	0.02	mg/L	10.020	0.10	98	90-110	5	15	
Sulfate	12.8	1.0	0.05	mg/L	10.020	3.92	89	90-110	5	15	QM-05



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110104 - EPA 7470A											
Blank (6110104-BLK1)						Prepared & Analyzed: 11/04/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6110104-BS1)						Prepared & Analyzed: 11/04/16					
Mercury	0.00254	0.00050	0.000041	mg/L	2.5000E-3		102	80-120			
Matrix Spike (6110104-MS1)						Source: AZK0088-01 Prepared & Analyzed: 11/04/16					
Mercury	0.00243	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125			
Matrix Spike Dup (6110104-MSD1)						Source: AZK0088-01 Prepared & Analyzed: 11/04/16					
Mercury	0.00242	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125	0.3	20	
Post Spike (6110104-PS1)						Source: AZK0088-01 Prepared & Analyzed: 11/04/16					
Mercury	1.71			ug/L	1.6667	0.00413	103	80-120			
Batch 6110106 - EPA 3005A											
Blank (6110106-BLK1)						Prepared: 11/04/16 Analyzed: 11/08/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.100	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110106 - EPA 3005A											
LCS (6110106-BS1)						Prepared: 11/04/16 Analyzed: 11/08/16					
Antimony	0.0999	0.0030	0.0008	mg/L	0.10000		100	80-120			
Arsenic	0.0984	0.0050	0.0016	mg/L	0.10000		98	80-120			
Barium	0.0966	0.0100	0.0004	mg/L	0.10000		97	80-120			
Beryllium	0.107	0.0030	0.00008	mg/L	0.10000		107	80-120			
Boron	1.11	0.100	0.0064	mg/L	1.0000		111	80-120			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000		101	80-120			
Calcium	0.997	0.500	0.0311	mg/L	1.0000		100	80-120			
Chromium	0.102	0.0100	0.0009	mg/L	0.10000		102	80-120			
Cobalt	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Copper	0.101	0.0250	0.0005	mg/L	0.10000		101	80-120			
Lead	0.0998	0.0050	0.0001	mg/L	0.10000		100	80-120			
Molybdenum	0.0972	0.0100	0.0017	mg/L	0.10000		97	80-120			
Nickel	0.103	0.0100	0.0006	mg/L	0.10000		103	80-120			
Selenium	0.0957	0.0100	0.0010	mg/L	0.10000		96	80-120			
Silver	0.0998	0.0100	0.0005	mg/L	0.10000		100	80-120			
Thallium	0.102	0.0010	0.0002	mg/L	0.10000		102	80-120			
Vanadium	0.104	0.0100	0.0071	mg/L	0.10000		104	80-120			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000		102	80-120			
Lithium	0.111	0.0500	0.0021	mg/L	0.10000		111	80-120			
Matrix Spike (6110106-MS1)						Source: AZK0088-02 Prepared: 11/04/16 Analyzed: 11/08/16					
Antimony	0.101	0.0030	0.0008	mg/L	0.10000	ND	101	75-125			
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000	ND	101	75-125			
Barium	0.100	0.0100	0.0004	mg/L	0.10000	0.0027	97	75-125			
Beryllium	0.0936	0.0030	0.00008	mg/L	0.10000	ND	94	75-125			
Boron	1.01	0.100	0.0064	mg/L	1.0000	ND	101	75-125			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000	ND	101	75-125			
Calcium	19.3	2.50	0.155	mg/L	1.0000	18.4	88	75-125			
Chromium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125			
Cobalt	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125			
Copper	0.101	0.0250	0.0005	mg/L	0.10000	ND	101	75-125			
Lead	0.102	0.0050	0.0001	mg/L	0.10000	ND	102	75-125			
Molybdenum	0.101	0.0100	0.0017	mg/L	0.10000	0.0025	99	75-125			
Nickel	0.102	0.0100	0.0006	mg/L	0.10000	ND	102	75-125			
Selenium	0.0969	0.0100	0.0010	mg/L	0.10000	ND	97	75-125			
Silver	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000	ND	101	75-125			
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000	ND	106	75-125			
Zinc	0.101	0.0100	0.0021	mg/L	0.10000	ND	101	75-125			
Lithium	0.109	0.0500	0.0021	mg/L	0.10000	0.0115	98	75-125			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Report No.: AZK0088

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110106 - EPA 3005A											
Matrix Spike Dup (6110106-MSD1)		Source: AZK0088-02				Prepared: 11/04/16 Analyzed: 11/08/16					
Antimony	0.101	0.0030	0.0008	mg/L	0.10000	ND	101	75-125	0.7	20	
Arsenic	0.0989	0.0050	0.0016	mg/L	0.10000	ND	99	75-125	2	20	
Barium	0.101	0.0100	0.0004	mg/L	0.10000	0.0027	98	75-125	0.5	20	
Beryllium	0.0939	0.0030	0.00008	mg/L	0.10000	ND	94	75-125	0.3	20	
Boron	0.966	0.100	0.0064	mg/L	1.0000	ND	97	75-125	4	20	
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000	ND	103	75-125	1	20	
Calcium	20.1	2.50	0.155	mg/L	1.0000	18.4	170	75-125	4	20	QM-02
Chromium	0.103	0.0100	0.0009	mg/L	0.10000	ND	103	75-125	0.5	20	
Cobalt	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125	0.1	20	
Copper	0.103	0.0250	0.0005	mg/L	0.10000	ND	103	75-125	2	20	
Lead	0.101	0.0050	0.0001	mg/L	0.10000	ND	101	75-125	0.9	20	
Molybdenum	0.0992	0.0100	0.0017	mg/L	0.10000	0.0025	97	75-125	2	20	
Nickel	0.103	0.0100	0.0006	mg/L	0.10000	ND	103	75-125	1	20	
Selenium	0.0945	0.0100	0.0010	mg/L	0.10000	ND	95	75-125	2	20	
Silver	0.0978	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	5	20	
Thallium	0.104	0.0010	0.0002	mg/L	0.10000	ND	104	75-125	2	20	
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000	ND	106	75-125	0.2	20	
Zinc	0.104	0.0100	0.0021	mg/L	0.10000	ND	104	75-125	2	20	
Lithium	0.106	0.0500	0.0021	mg/L	0.10000	0.0115	94	75-125	3	20	
Post Spike (6110106-PS1)		Source: AZK0088-02				Prepared: 11/04/16 Analyzed: 11/08/16					
Antimony	93.6			ug/L	100.00	0.361	93	80-120			
Arsenic	98.2			ug/L	100.00	0.295	98	80-120			
Barium	98.1			ug/L	100.00	2.72	95	80-120			
Beryllium	90.1			ug/L	100.00	0.0153	90	80-120			
Boron	943			ug/L	1000.0	3.90	94	80-120			
Cadmium	99.5			ug/L	100.00	-0.0298	100	80-120			
Calcium	19000			ug/L	1000.0	18400	61	80-120			QM-02
Chromium	102			ug/L	100.00	0.0825	102	80-120			
Cobalt	102			ug/L	100.00	0.0099	102	80-120			
Copper	101			ug/L	100.00	0.0896	101	80-120			
Lead	98.8			ug/L	100.00	0.0056	99	80-120			
Molybdenum	100			ug/L	100.00	2.49	98	80-120			
Nickel	102			ug/L	100.00	0.0553	101	80-120			
Selenium	94.0			ug/L	100.00	0.298	94	80-120			
Silver	100			ug/L	100.00	0.0076	100	80-120			
Thallium	103			ug/L	100.00	0.0359	103	80-120			
Vanadium	106			ug/L	100.00	0.0768	106	80-120			
Zinc	98.1			ug/L	100.00	1.04	97	80-120			
Lithium	104			ug/L	100.00	11.5	93	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 11, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power			CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239			REPORT TO: Lauren Petty CC: Maria Padilla Heath McConkie			REQUESTED COMPLETION DATE: PO #: laburch@southernmco.com			PROJECT NAME/STATE: Plant Yates AP			PROJECT #: Phase 2 CCR				
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION	CONTAINER TYPE	PRESERVATION:	# of	CONTAINERS	ANALYSIS REQUESTED	RELINQUISHED BY:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:	
11-1-16	1625	GW	✓	✓	Y6WA-1D	3		3		Metals App. III & IV (EPA 6020/7470)	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker
11-1-16	1835	GW	✓	✓	Y6WA-3I	3		3		Cl, T, SO ₄ & TDS (EPA 300.0 & SM 2540C)	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker
11-1-16	1340	GW	✓	✓	Y6WA-3D	3		3		Radium 226 & 228 (SM-846 9315/8320)	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker
11-1-16	1400	GW	✓	✓	Y6WA-30I	3		3			JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker
11-1-16	1715	W	✓	✓	EB-1-11-1-16	3		3			JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker	11-2-16 1710	JK Parker

CONTAINER TYPE: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER
 PRESERVATION: 1 - HCl, 56°C, 2 - H₂SO₄, 56°C, 3 - HNO₃, 4 - NaOH, 56°C, 5 - NaOH/ZnAc, 56°C, 6 - Na₂S₂O₃, 56°C, 7 - 56°C not frozen
 *MATRIX CODES:
 DW - DRINKING WATER, S - SOIL, WW - WASTEWATER, SL - SLUDGE, GW - GROUNDWATER, SD - SOLID, SW - SURFACE WATER, A - AIR, ST - STORM WATER, L - LIQUID, W - WATER, P - PRODUCT
 REMARKS/ADDITIONAL INFORMATION:
 LAB #: A2K9088
 Entered into LIMS: [Signature]
 Tracking #: [Signature]



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 11/11/2016 4:55:45PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 11/02/16 17:10

Work Order: AZK0088

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 5

#Containers: 15

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

December 08, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30201560

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on November 04, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30201560

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates

Pace Project No.: 30201560

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30201560001	YGWA-1D	Water	11/01/16 16:25	11/04/16 11:00
30201560002	YGWA-3I	Water	11/01/16 18:35	11/04/16 11:00
30201560003	YGWA-3D	Water	11/01/16 13:40	11/04/16 11:00
30201560004	YGWA-30I	Water	11/01/16 14:00	11/04/16 11:00
30201560005	EB-1-11-1-16	Water	11/01/16 17:15	11/04/16 11:00

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30201560

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30201560001	YGWA-1D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201560002	YGWA-3I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201560003	YGWA-3D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201560004	YGWA-30I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201560005	EB-1-11-1-16	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30201560

Sample: YGWA-1D		Lab ID: 30201560001	Collected: 11/01/16 16:25	Received: 11/04/16 11:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.121 ± 0.104 (0.195)		pCi/L	11/25/16 08:45	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	0.684 ± 0.552 (1.11)		pCi/L	12/05/16 16:11	15262-20-1	
		C:59% T:80%					
Total Radium	Total Radium Calculation	0.805 ± 0.656 (1.31)		pCi/L	12/07/16 15:53	7440-14-4	

Sample: YGWA-3I		Lab ID: 30201560002	Collected: 11/01/16 18:35	Received: 11/04/16 11:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.351 ± 0.224 (0.333)		pCi/L	11/22/16 15:52	13982-63-3	
		C:85% T:NA					
Radium-228	EPA 9320	0.234 ± 0.416 (0.909)		pCi/L	12/05/16 16:11	15262-20-1	
		C:69% T:78%					
Total Radium	Total Radium Calculation	0.585 ± 0.640 (1.24)		pCi/L	12/07/16 15:53	7440-14-4	

Sample: YGWA-3D		Lab ID: 30201560003	Collected: 11/01/16 13:40	Received: 11/04/16 11:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.01 ± 0.371 (0.358)		pCi/L	11/22/16 15:52	13982-63-3	
		C:84% T:NA					
Radium-228	EPA 9320	2.91 ± 0.822 (0.932)		pCi/L	12/05/16 16:12	15262-20-1	
		C:61% T:81%					
Total Radium	Total Radium Calculation	3.92 ± 1.19 (1.29)		pCi/L	12/07/16 15:53	7440-14-4	

Sample: YGWA-30I		Lab ID: 30201560004	Collected: 11/01/16 14:00	Received: 11/04/16 11:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0453 ± 0.117 (0.374)		pCi/L	11/22/16 15:52	13982-63-3	
		C:86% T:NA					
Radium-228	EPA 9320	0.307 ± 0.354 (0.741)		pCi/L	12/05/16 16:12	15262-20-1	
		C:66% T:86%					
Total Radium	Total Radium Calculation	0.307 ± 0.471 (1.12)		pCi/L	12/07/16 15:53	7440-14-4	

Sample: EB-1-11-1-16		Lab ID: 30201560005	Collected: 11/01/16 17:15	Received: 11/04/16 11:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.131 ± 0.109 (0.443)		pCi/L	11/22/16 15:52	13982-63-3	
		C:76% T:NA					
Radium-228	EPA 9320	0.518 ± 0.395 (0.768)		pCi/L	12/05/16 16:12	15262-20-1	
		C:70% T:74%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30201560

Sample: EB-1-11-1-16 **Lab ID: 30201560005** Collected: 11/01/16 17:15 Received: 11/04/16 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.518 ± 0.504 (1.21)	pCi/L	12/07/16 15:53	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30201560

QC Batch: 239889 Analysis Method: EPA 9320

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

Associated Lab Samples: 30201560001, 30201560002, 30201560003, 30201560004, 30201560005

METHOD BLANK: 1178571 Matrix: Water

Associated Lab Samples: 30201560001, 30201560002, 30201560003, 30201560004, 30201560005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0833 ± 0.402 (0.975) C:55% T:71%	pCi/L	12/05/16 16:12	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30201560

QC Batch: 239637

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30201560001

METHOD BLANK: 1177546

Matrix: Water

Associated Lab Samples: 30201560001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00688 ± 0.0448 (0.138) C:97% T:NA	pCi/L	11/25/16 10:11	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30201560

QC Batch: 239638 Analysis Method: EPA 9315

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

Associated Lab Samples: 30201560002, 30201560003, 30201560004, 30201560005

METHOD BLANK: 1177547 Matrix: Water

Associated Lab Samples: 30201560002, 30201560003, 30201560004, 30201560005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.116 ± 0.178 (0.388) C:78% T:NA	pCi/L	11/22/16 15:52	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30201560

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

30201560

Chain of Custody



Results Requested By: 12/6/2016

Workorder: AZK0088 **Workorder Name:** Pace - Pittsburgh
Subcontract To: 1638 Roseytown Road
 Stes. 2,3,4
 Greensburg, PA 15601
 Phone (724) 850-5600
Owner Received Date:

Report To:
 Betsy McDaniel
 Pace Analytical Atlanta
 110 Technology Parkway
 Peachtree Corners, GA 30092
 Phone (770)-734-4200

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers		LAB USE ONLY
						CON	HE	
1	YGWA-1D	G	11/1/2016 16:25	AZK0088-01	GW	1		001
2	YGWA-3I	G	11/1/2016 18:35	AZK0088-02	GW	1		002
3	YGWA-3D	G	11/1/2016 13:40	AZK0088-03	GW	1		003
4	YGWA-30I	G	11/1/2016 14:00	AZK0088-04	GW	1		004
5	EB-1-11-1-16	G	11/1/2016 17:15	AZK0088-05	W	1		005
6								
7								
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1.			<i>Karen Hill</i>	11-4-16 1100	
2					
3					

Cooler Temperature on Receipt N/A °C **Custody Seal Y or N** **Received on Ice Y or N** **Sample Intact Y or N**
 ***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Condition Upon Receipt Pittsburgh



30201560

Client Name: Pace Georgia

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 0812 5100 2282

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KJA 11-4-16

Comments:

	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID/Analysis Matrix: <u>W+</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. <u>PH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>KJA</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KJA</u> Date: <u>11-4-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.ashi-lab.com



CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty Heath McCorkle	CC: Mania Padilla	PO #: laburch@southernmco.com	PROJECT NAME/STATE: Plant Yates AP	PROJECT #: Phase 2 CCR	CONTAINER TYPE: PRESERVATION:	ANALYSIS REQUESTED	LAB #:	REMARKS/ADDITIONAL INFORMATION
Collection DATE	Collection TIME	MATRIX CODE	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	P	P	P	P	DATE/TIME	DATE/TIME
11-1-16	1625	GW		V	Y6WA-1D	3	1	1	1	1	11-2-16 1710	
11-1-16	1835	GW		V	Y6WA-3E	3	1	1	1	1	11-2-16 1710	
11-1-16	1340	GW		V	Y6WA-3D	3	1	1	1	1	11-2-16 1710	
11-1-16	1400	GW		V	Y6WA-3OI	3	1	1	1	1	11-2-16 1710	
11-1-16	1715	W		V	EB-1-11-1-16	3	1	1	1	1	11-2-16 1710	

FOR LAB USE ONLY
 LAB #:
 Entered into LIMS:
 Tracking #:

RELINQUISHED BY:
 RELINQUISHED BY:

SAMPLE SHIPPED VIA:
 UPS: FED-EX: USPS: COURIER: OTHER: FS

DATE/TIME: 11-2-16 1710
 DATE/TIME: 11-2-16 1710
 RECEIVED BY: [Signature]
 RECEIVED BY: [Signature]

Plant Yates COC Ash Ponds.xlsx

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 11/21/2016
Worklist: 32367
Matrix: DW

Method Blank Assessment

MB Sample ID: 1177547
MB concentration: 0.116
M/B Counting Uncertainty: 0.177
MB MDC: 0.388
MB Numerical Performance Indicator: 1.28
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCSID (Y or N)? N
LCS232367

Count Date: 11/23/2016
Spike ID: 16-026
Spike Concentration (pCi/mL): 44.674
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.500
Target Conc. (pCi/L, g, F): 8.943
Uncertainty (Calculated): 0.421
Result (pCi/L, g, F): 7.032
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.757
Numerical Performance Indicator: -4.33
Percent Recovery: 78.63%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample ID: 30201763002
Duplicate Sample ID: 30201763002DUP
Sample Result (pCi/L, g, F): 3.881
Sample Duplicate Result (pCi/L, g, F): 0.618
Sample Duplicate Counting Uncertainty (pCi/L, g, F): 3.949
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.564
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -0.161
Duplicate RPD: 1.75%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30201763002
30201763002DUP

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):
Spike uncertainty (calculated):

Sample Result:
Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:
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:
MS Status vs Numerical Indicator:
MSD Status vs Numerical Indicator:
MS Status vs Recovery:
MSD Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.
Sample MS I.D.
Sample MSD I.D.

Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

Doc 11/21/16

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 11/16/2016
Worklist: 32366
Matrix: DW

Method Blank Assessment

MB Sample ID: 1177546
MB concentration: -0.007
MB Counting Uncertainty: 0.045
MB MDC: 0.138
MB Numerical Performance Indicator: -0.30
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCSD (Y or N)? N
LCSD32366
Count Date: 11/25/2016
Spike I.D.: 16-026
Spike Concentration (pCi/mL): 44.674
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.498
Target Conc. (pCi/L, g, F): 8.965
Uncertainty (Calculated): 0.422
Result (pCi/L, g, F): 6.785
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.516
Numerical Performance Indicator: -6.41
Percent Recovery: 75.69%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30201555003
Duplicate Sample I.D.: 30201555003DUP
Sample Result (pCi/L, g, F): 0.119
Sample Result Counting Uncertainty (pCi/L, g, F): 0.107
Sample Duplicate Result (pCi/L, g, F): 0.043
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.073
Are sample and/or duplicate results below MDC? See below ##
Duplicate Numerical Performance Indicator: 1.147
Duplicate RPD: 94.26%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

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):
Spike uncertainty (calculated):
Sample Result:
Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result:
MS Numerical Performance Indicator:
MS 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:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result:
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

M/L # 1-2-16

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 11/28/2016
Worklist: 32411
Matrix: DW

Method Blank Assessment	
MB Sample ID	1178571
MB concentration:	-0.083
M/B Counting Uncertainty:	0.402
MB MDC:	0.975
MB Numerical Performance Indicator:	-0.41
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		N
LCS/MSD Counting Uncertainty (pCi/L, g, F):		LCS/MSD32411
Count Date:	12/5/2016	
Spike I.D.:	16-027	
Spike Concentration (pCi/mL):	25.902	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.810	
Target Conc. (pCi/L, g, F):	6.394	
Uncertainty (Calculated):	0.460	
Result (pCi/L, g, F):	8.194	
LCS/MSD Counting Uncertainty (pCi/L, g, F):	0.868	
Numerical Performance Indicator:	3.59	
Percent Recovery:	128.15%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment	
Sample I.D.:	30201555003
Duplicate Sample I.D.:	30201555003DUP
Sample Result (pCi/L, g, F):	0.406
Sample Result Counting Uncertainty (pCi/L, g, F):	0.361
Sample Duplicate Result (pCi/L, g, F):	0.357
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.376
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.182
Duplicate RPD:	12.71%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

June 17/16

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (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):	
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:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZK0157

November 15, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McQueen".

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-4I	AZK0157-01	Ground Water	11/02/16 12:55	11/04/16 09:35
YGWA-5D	AZK0157-02	Ground Water	11/02/16 11:20	11/04/16 09:35
YGWA-6I	AZK0157-03	Ground Water	11/02/16 15:35	11/04/16 09:35
YGWA-14S	AZK0157-04	Ground Water	11/02/16 10:50	11/04/16 09:35
YGWA-20S	AZK0157-05	Ground Water	11/02/16 14:40	11/04/16 09:35
FB-1-11-2-16	AZK0157-06	Water	11/02/16 13:00	11/04/16 09:35



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Project: CCR Event

Client ID: YGWA-4I

Lab Number ID: AZK0157-01

Date/Time Sampled: 11/2/2016 12:55:00PM

Date/Time Received: 11/4/2016 9:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	115	25	10	mg/L	SM 2540 C		1	11/07/16 16:35	11/07/16 16:35	6110167	JPT
Inorganic Anions											
Chloride	4.5	0.25	0.01	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 20:14	6110157	RLC
Fluoride	0.07	0.30	0.02	mg/L	EPA 300.0	J	1	11/06/16 12:15	11/06/16 20:14	6110157	RLC
Sulfate	8.2	1.0	0.05	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 20:14	6110157	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Barium	0.0148	0.0100	0.0004	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Calcium	7.83	0.500	0.0311	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Lithium	0.0136	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 17:52	6110103	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/09/16 09:20	11/09/16 15:01	6110232	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Project: CCR Event

Client ID: YGWA-5D

Lab Number ID: AZK0157-02

Date/Time Sampled: 11/2/2016 11:20:00AM

Date/Time Received: 11/4/2016 9:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	181	25	10	mg/L	SM 2540 C		1	11/07/16 16:35	11/07/16 16:35	6110167	JPT
Inorganic Anions											
Chloride	7.6	0.25	0.01	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 20:34	6110157	RLC
Fluoride	0.20	0.30	0.02	mg/L	EPA 300.0	J	1	11/06/16 12:15	11/06/16 20:34	6110157	RLC
Sulfate	20	1.0	0.05	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 20:34	6110157	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Barium	0.0091	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Calcium	30.9	2.50	0.155	mg/L	EPA 6020B		5	11/07/16 08:50	11/09/16 12:23	6110103	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Molybdenum	0.0039	0.0100	0.0017	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Lithium	0.0053	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 17:58	6110103	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/09/16 09:20	11/09/16 15:04	6110232	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Project: CCR Event

Client ID: YGWA-6I

Lab Number ID: AZK0157-03

Date/Time Sampled: 11/2/2016 3:35:00PM

Date/Time Received: 11/4/2016 9:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	142	25	10	mg/L	SM 2540 C		1	11/07/16 16:35	11/07/16 16:35	6110167	JPT
Inorganic Anions											
Chloride	7.5	0.25	0.01	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 21:36	6110157	RLC
Fluoride	0.16	0.30	0.02	mg/L	EPA 300.0	J	1	11/06/16 12:15	11/06/16 21:36	6110157	RLC
Sulfate	55	5.0	0.26	mg/L	EPA 300.0		5	11/06/16 12:15	11/11/16 04:32	6110157	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Barium	0.0244	0.0100	0.0004	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Boron	0.0569	0.100	0.0064	mg/L	EPA 6020B	B-01, J	1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Calcium	8.49	0.500	0.0311	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Lead	0.0002	0.0050	0.0001	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Selenium	0.0010	0.0100	0.0010	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Lithium	0.0076	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 18:03	6110103	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/09/16 09:20	11/09/16 15:06	6110232	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Project: CCR Event

Client ID: YGWA-14S

Lab Number ID: AZK0157-04

Date/Time Sampled: 11/2/2016 10:50:00AM

Date/Time Received: 11/4/2016 9:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	71	25	10	mg/L	SM 2540 C		1	11/07/16 16:35	11/07/16 16:35	6110167	JPT
Inorganic Anions											
Chloride	4.9	0.25	0.01	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 21:57	6110157	RLC
Fluoride	0.04	0.30	0.02	mg/L	EPA 300.0	J	1	11/06/16 12:15	11/06/16 21:57	6110157	RLC
Sulfate	6.3	1.0	0.05	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 21:57	6110157	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Barium	0.0082	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Beryllium	0.0002	0.0030	0.00008	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Boron	0.0151	0.100	0.0064	mg/L	EPA 6020B	B-01, J	1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Calcium	1.23	0.500	0.0311	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:09	6110103	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/09/16 09:20	11/09/16 15:08	6110232	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Project: CCR Event

Client ID: YGWA-20S

Lab Number ID: AZK0157-05

Date/Time Sampled: 11/2/2016 2:40:00PM

Date/Time Received: 11/4/2016 9:35:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	53	25	10	mg/L	SM 2540 C		1	11/07/16 16:35	11/07/16 16:35	6110167	JPT
Inorganic Anions											
Chloride	2.6	0.25	0.01	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 22:18	6110157	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 22:18	6110157	RLC
Sulfate	0.10	1.0	0.05	mg/L	EPA 300.0	J	1	11/06/16 12:15	11/06/16 22:18	6110157	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Barium	0.0157	0.0100	0.0004	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Calcium	2.13	0.500	0.0311	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Lead	0.0013	0.0050	0.0001	mg/L	EPA 6020B	J	1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:15	6110103	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/09/16 09:20	11/09/16 15:11	6110232	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Project: CCR Event

Client ID: FB-1-11-2-16

Lab Number ID: AZK0157-06

Date/Time Sampled: 11/2/2016 1:00:00PM

Date/Time Received: 11/4/2016 9:35:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	11/07/16 16:35	11/07/16 16:35	6110167	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 23:40	6110157	RLC
Fluoride	0.06	0.30	0.02	mg/L	EPA 300.0	J	1	11/06/16 12:15	11/06/16 23:40	6110157	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	11/06/16 12:15	11/06/16 23:40	6110157	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/07/16 08:50	11/08/16 18:32	6110103	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/09/16 09:20	11/09/16 15:13	6110232	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110167 - SM 2540 C											
Blank (6110167-BLK1)						Prepared & Analyzed: 11/07/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6110167-BS1)						Prepared & Analyzed: 11/07/16					
Total Dissolved Solids	378	25	10	mg/L	400.00		94	84-108			
Duplicate (6110167-DUP1)						Source: AZK0092-01 Prepared & Analyzed: 11/07/16					
Total Dissolved Solids	249	25	10	mg/L		260			4	10	
Duplicate (6110167-DUP2)						Source: AZK0157-05 Prepared & Analyzed: 11/07/16					
Total Dissolved Solids	41	25	10	mg/L		53			26	10	QR-03



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110157 - EPA 300.0											
Blank (6110157-BLK1)						Prepared & Analyzed: 11/06/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6110157-BS1)						Prepared & Analyzed: 11/06/16					
Chloride	10.8	0.25	0.01	mg/L	10.010		107	90-110			
Fluoride	10.4	0.30	0.02	mg/L	10.020		104	90-110			
Sulfate	10.4	1.0	0.05	mg/L	10.020		104	90-110			
Matrix Spike (6110157-MS1)						Source: AZK0157-02 Prepared & Analyzed: 11/06/16					
Chloride	16.7	0.25	0.01	mg/L	10.010	7.58	91	90-110			
Fluoride	10.8	0.30	0.02	mg/L	10.020	0.20	106	90-110			
Sulfate	28.1	1.0	0.05	mg/L	10.020	19.7	84	90-110			QM-05
Matrix Spike (6110157-MS2)						Source: AZK0144-01 Prepared & Analyzed: 11/06/16					
Chloride	10.9	0.25	0.01	mg/L	10.010	1.22	96	90-110			
Fluoride	10.1	0.30	0.02	mg/L	10.020	0.11	100	90-110			
Sulfate	11.0	1.0	0.05	mg/L	10.020	1.46	95	90-110			
Matrix Spike Dup (6110157-MSD1)						Source: AZK0157-02 Prepared & Analyzed: 11/06/16					
Chloride	16.7	0.25	0.01	mg/L	10.010	7.58	91	90-110	0.01	15	
Fluoride	10.8	0.30	0.02	mg/L	10.020	0.20	106	90-110	0.009	15	
Sulfate	28.0	1.0	0.05	mg/L	10.020	19.7	84	90-110	0.09	15	QM-05



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110103 - EPA 3005A											
Blank (6110103-BLK1)						Prepared & Analyzed: 11/07/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	0.0086	0.0400	0.0064	mg/L							J
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6110103-BS1)						Prepared & Analyzed: 11/07/16					
Antimony	0.107	0.0030	0.0008	mg/L	0.10000		107	80-120			
Arsenic	0.0975	0.0050	0.0016	mg/L	0.10000		98	80-120			
Barium	0.0985	0.0100	0.0004	mg/L	0.10000		98	80-120			
Beryllium	0.100	0.0030	0.00008	mg/L	0.10000		100	80-120			
Boron	1.04	0.0400	0.0064	mg/L	1.0000		104	80-120			
Cadmium	0.0998	0.0010	0.00007	mg/L	0.10000		100	80-120			
Calcium	0.989	0.500	0.0311	mg/L	1.0000		99	80-120			
Chromium	0.101	0.0100	0.0009	mg/L	0.10000		101	80-120			
Cobalt	0.0974	0.0100	0.0005	mg/L	0.10000		97	80-120			
Copper	0.0989	0.0250	0.0005	mg/L	0.10000		99	80-120			
Lead	0.101	0.0050	0.0001	mg/L	0.10000		101	80-120			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000		102	80-120			
Nickel	0.0989	0.0100	0.0006	mg/L	0.10000		99	80-120			
Selenium	0.0990	0.0100	0.0010	mg/L	0.10000		99	80-120			
Silver	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.100	0.0100	0.0071	mg/L	0.10000		100	80-120			
Zinc	0.101	0.0100	0.0021	mg/L	0.10000		101	80-120			
Lithium	0.103	0.0500	0.0021	mg/L	0.10000		103	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110103 - EPA 3005A											
Matrix Spike (6110103-MS1)		Source: AZK0144-01				Prepared & Analyzed: 11/07/16					
Antimony	0.108	0.0030	0.0008	mg/L	0.10000	0.0021	106	75-125			
Arsenic	0.100	0.0050	0.0016	mg/L	0.10000	ND	100	75-125			
Barium	0.111	0.0100	0.0004	mg/L	0.10000	0.0115	99	75-125			
Beryllium	0.0978	0.0030	0.00008	mg/L	0.10000	ND	98	75-125			
Boron	1.02	0.0400	0.0064	mg/L	1.0000	0.0125	101	75-125			
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000	ND	103	75-125			
Calcium	19.3	2.50	0.155	mg/L	1.0000	18.2	103	75-125			QM-02
Chromium	0.0994	0.0100	0.0009	mg/L	0.10000	ND	99	75-125			
Cobalt	0.0957	0.0100	0.0005	mg/L	0.10000	ND	96	75-125			
Copper	0.0945	0.0250	0.0005	mg/L	0.10000	ND	95	75-125			
Lead	0.0999	0.0050	0.0001	mg/L	0.10000	ND	100	75-125			
Molybdenum	0.101	0.0100	0.0017	mg/L	0.10000	ND	101	75-125			
Nickel	0.0980	0.0100	0.0006	mg/L	0.10000	ND	98	75-125			
Selenium	0.101	0.0100	0.0010	mg/L	0.10000	ND	101	75-125			
Silver	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125			
Thallium	0.100	0.0010	0.0002	mg/L	0.10000	ND	100	75-125			
Vanadium	0.100	0.0100	0.0071	mg/L	0.10000	ND	100	75-125			
Zinc	0.0939	0.0100	0.0021	mg/L	0.10000	ND	94	75-125			
Lithium	0.101	0.0500	0.0021	mg/L	0.10000	ND	101	75-125			
Matrix Spike Dup (6110103-MSD1)		Source: AZK0144-01				Prepared & Analyzed: 11/07/16					
Antimony	0.111	0.0030	0.0008	mg/L	0.10000	0.0021	109	75-125	3	20	
Arsenic	0.0976	0.0050	0.0016	mg/L	0.10000	ND	98	75-125	3	20	
Barium	0.113	0.0100	0.0004	mg/L	0.10000	0.0115	101	75-125	2	20	
Beryllium	0.0988	0.0030	0.00008	mg/L	0.10000	ND	99	75-125	1	20	
Boron	1.05	0.0400	0.0064	mg/L	1.0000	0.0125	103	75-125	3	20	
Cadmium	0.104	0.0010	0.00007	mg/L	0.10000	ND	104	75-125	0.9	20	
Calcium	19.3	2.50	0.155	mg/L	1.0000	18.2	111	75-125	0.4	20	QM-02
Chromium	0.100	0.0100	0.0009	mg/L	0.10000	ND	100	75-125	0.8	20	
Cobalt	0.0950	0.0100	0.0005	mg/L	0.10000	ND	95	75-125	0.7	20	
Copper	0.0961	0.0250	0.0005	mg/L	0.10000	ND	96	75-125	2	20	
Lead	0.101	0.0050	0.0001	mg/L	0.10000	ND	101	75-125	1	20	
Molybdenum	0.104	0.0100	0.0017	mg/L	0.10000	ND	104	75-125	3	20	
Nickel	0.0983	0.0100	0.0006	mg/L	0.10000	ND	98	75-125	0.3	20	
Selenium	0.0967	0.0100	0.0010	mg/L	0.10000	ND	97	75-125	5	20	
Silver	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125	1	20	
Thallium	0.102	0.0010	0.0002	mg/L	0.10000	ND	102	75-125	2	20	
Vanadium	0.0993	0.0100	0.0071	mg/L	0.10000	ND	99	75-125	0.8	20	
Zinc	0.0987	0.0100	0.0021	mg/L	0.10000	ND	99	75-125	5	20	
Lithium	0.101	0.0500	0.0021	mg/L	0.10000	ND	101	75-125	0.8	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110103 - EPA 3005A											
Post Spike (6110103-PS1)				Source: AZK0144-01			Prepared & Analyzed: 11/07/16				
Antimony	91.9			ug/L	100.00	2.06	90	80-120			
Arsenic	96.7			ug/L	100.00	0.0818	97	80-120			
Barium	104			ug/L	100.00	11.5	92	80-120			
Beryllium	93.4			ug/L	100.00	0.0405	93	80-120			
Boron	975			ug/L	1000.0	12.5	96	80-120			
Cadmium	102			ug/L	100.00	0.0278	102	80-120			
Calcium	19300			ug/L	1000.0	18200	103	80-120			QM-02
Chromium	95.6			ug/L	100.00	0.407	95	80-120			
Cobalt	92.8			ug/L	100.00	0.0718	93	80-120			
Copper	92.8			ug/L	100.00	0.137	93	80-120			
Lead	98.9			ug/L	100.00	0.0980	99	80-120			
Molybdenum	97.8			ug/L	100.00	0.224	98	80-120			
Nickel	93.6			ug/L	100.00	0.203	93	80-120			
Selenium	98.9			ug/L	100.00	0.119	99	80-120			
Silver	98.3			ug/L	100.00	0.0292	98	80-120			
Thallium	100			ug/L	100.00	0.143	100	80-120			
Vanadium	97.7			ug/L	100.00	0.394	97	80-120			
Zinc	94.7			ug/L	100.00	1.33	93	80-120			
Lithium	96.8			ug/L	100.00	1.18	96	80-120			

Batch 6110232 - EPA 7470A

Blank (6110232-BLK1)				Prepared & Analyzed: 11/09/16							
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6110232-BS1)				Prepared & Analyzed: 11/09/16							
Mercury	0.00242	0.00050	0.000041	mg/L	2.5000E-3		97	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0157

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110232 - EPA 7470A											
Matrix Spike (6110232-MS1)			Source: AZK0144-03			Prepared & Analyzed: 11/09/16					
Mercury	0.00240	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125			
Matrix Spike Dup (6110232-MSD1)			Source: AZK0144-03			Prepared & Analyzed: 11/09/16					
Mercury	0.00243	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125	1	20	
Post Spike (6110232-PS1)			Source: AZK0144-03			Prepared & Analyzed: 11/09/16					
Mercury	1.71			ug/L	1.6667	0.00533	102	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

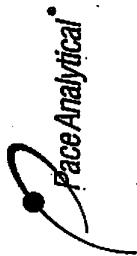
1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.ash-lab.com

CLIENT NAME: Georgia Power			CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239			REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle			REQUESTED COMPLETION DATE: laburch@southernco.com			PROJECT NAME/STATE: Plant Yates AP				
PROJECT #: Phase 2 CCR																
Collection DATE m/d/yyyy	MATRIX CODE	GRA B	C O M P	SAMPLE IDENTIFICATION	CONTAINER TYPE	P	P	P	P	ANALYSIS REQUESTED	L A B I D N U M B E R	CONTAINER TYPE	PRESERVATION			
11-2-16	GW	✓	✓	YGWA-4 I	3	1	1	1	3	Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2640C) Radium 226 & 228 (SW-846 9316/9320)	1	P - PLASTIC	1 - HCl, 56°C			
11-2-16	GW	✓	✓	YGWA-5 D	4	1	1	2			2	A - AMBER GLASS	2 - H ₂ SO ₄ , 56°C			
11-2-16	GW	✓	✓	YGWA-6 I	3	1	1	1			3	G - CLEAR GLASS	3 - HNO ₃			
11-2-16	GW	✓	✓	YGWA-14S	3	1	1	1			4	V - VOA VIAL	4 - NaOH, 56°C			
11-2-16	GW	✓	✓	YGWA-20S	3	1	1	1			5	S - STERILE	5 - NaOH/ZnAc, 56°C			
11-2-16	W	✓	✓	FB-1-11-2-16	3	1	1	1			6	O - OTHER	6 - Na ₂ S ₂ O ₈ , 56°C			
													7 - 56°C not frozen			
RELINQUISHED BY: <i>[Signature]</i> DATE/TIME: 11-3-16 0900													LAB #: A2K0157		FOR LAB USE ONLY	
RECEIVED BY LAB: <i>[Signature]</i> DATE/TIME: 11-16-16 0935													Entered into LIMS:		Tracking #:	
RECEIVED BY: <i>[Signature]</i>			SAMPLE SHIPPED VIA: UPS			COURIER:			CLIENT: OTHER			FS				
Temperature:			Broken:			Not Present:			Cooler ID:			FS				



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 11/15/2016 1:53:06PM

Attn: Mr. Jeju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 11/04/16 09:35

Work Order: AZK0157

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 6

#Containers: 19

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

December 08, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30201763

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on November 07, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30201763

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates

Pace Project No.: 30201763

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30201763001	YGWA-4I	Water	11/02/16 12:55	11/07/16 09:25
30201763002	YGWA-5D	Water	11/02/16 11:20	11/07/16 09:25
30201763003	YGWA-6I	Water	11/02/16 15:35	11/07/16 09:25
30201763004	YGWA-14S	Water	11/02/16 10:50	11/07/16 09:25
30201763005	YGWA-20S	Water	11/02/16 14:40	11/07/16 09:25
30201763006	FB-1-11-2-16	Water	11/02/16 13:00	11/07/16 09:25

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30201763

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30201763001	YGWA-4I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201763002	YGWA-5D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201763003	YGWA-6I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201763004	YGWA-14S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201763005	YGWA-20S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30201763006	FB-1-11-2-16	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30201763

Sample: YGWA-4I		Lab ID: 30201763001	Collected: 11/02/16 12:55	Received: 11/07/16 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.761 ± 0.319 (0.361) C:84% T:NA	pCi/L	11/22/16 15:52	13982-63-3	
Radium-228	EPA 9320	0.325 ± 0.359 (0.747) C:74% T:77%	pCi/L	12/05/16 16:12	15262-20-1	
Total Radium	Total Radium Calculation	1.09 ± 0.678 (1.11)	pCi/L	12/07/16 15:53	7440-14-4	

Sample: YGWA-5D		Lab ID: 30201763002	Collected: 11/02/16 11:20	Received: 11/07/16 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	3.88 ± 0.835 (0.403) C:91% T:NA	pCi/L	11/22/16 15:52	13982-63-3	
Radium-228	EPA 9320	0.651 ± 0.402 (0.742) C:68% T:83%	pCi/L	12/05/16 16:12	15262-20-1	
Total Radium	Total Radium Calculation	4.53 ± 1.24 (1.15)	pCi/L	12/07/16 15:53	7440-14-4	

Sample: YGWA-6I		Lab ID: 30201763003	Collected: 11/02/16 15:35	Received: 11/07/16 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.955 ± 0.376 (0.388) C:76% T:NA	pCi/L	11/22/16 15:52	13982-63-3	
Radium-228	EPA 9320	0.602 ± 0.390 (0.725) C:69% T:80%	pCi/L	12/05/16 16:12	15262-20-1	
Total Radium	Total Radium Calculation	1.56 ± 0.766 (1.11)	pCi/L	12/07/16 15:53	7440-14-4	

Sample: YGWA-14S		Lab ID: 30201763004	Collected: 11/02/16 10:50	Received: 11/07/16 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0626 ± 0.108 (0.372) C:85% T:NA	pCi/L	11/22/16 15:52	13982-63-3	
Radium-228	EPA 9320	0.496 ± 0.413 (0.822) C:66% T:80%	pCi/L	12/05/16 16:13	15262-20-1	
Total Radium	Total Radium Calculation	0.496 ± 0.522 (1.20)	pCi/L	12/07/16 15:53	7440-14-4	

Sample: YGWA-20S		Lab ID: 30201763005	Collected: 11/02/16 14:40	Received: 11/07/16 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0516 ± 0.150 (0.368) C:84% T:NA	pCi/L	11/22/16 15:52	13982-63-3	
Radium-228	EPA 9320	0.739 ± 0.512 (0.982) C:64% T:70%	pCi/L	12/05/16 16:13	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30201763

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.791 ± 0.662 (1.35)	pCi/L	12/07/16 15:53	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0798 ± 0.0700 (0.305) C:97% T:NA	pCi/L	11/22/16 15:51	13982-63-3	
Radium-228	EPA 9320	0.484 ± 0.312 (0.569) C:78% T:80%	pCi/L	12/05/16 16:13	15262-20-1	
Total Radium	Total Radium Calculation	0.484 ± 0.382 (0.874)	pCi/L	12/07/16 15:53	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30201763

QC Batch: 239889 Analysis Method: EPA 9320

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

Associated Lab Samples: 30201763001, 30201763002, 30201763003, 30201763004, 30201763005, 30201763006

METHOD BLANK: 1178571 Matrix: Water

Associated Lab Samples: 30201763001, 30201763002, 30201763003, 30201763004, 30201763005, 30201763006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0833 ± 0.402 (0.975) C:55% T:71%	pCi/L	12/05/16 16:12	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30201763

QC Batch: 239638 Analysis Method: EPA 9315

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

Associated Lab Samples: 30201763001, 30201763002, 30201763003, 30201763004, 30201763005, 30201763006

METHOD BLANK: 1177547 Matrix: Water

Associated Lab Samples: 30201763001, 30201763002, 30201763003, 30201763004, 30201763005, 30201763006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.116 ± 0.178 (0.388) C:78% T:NA	pCi/L	11/22/16 15:52	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30201763

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30201763



30201763

Chain of Custody



Workorder: AZK0157

Workorder Name: Plant Yates

Owner Received Date:

Results Requested By: 12/8/2016

Report To: Betsy McDaniel

Requested Analysis

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

Pace - Pittsburgh
 1638 Roseytown Road
 Stes. 2,3,4
 Greensburg, PA 15601
 Phone (724) 850-5600

Preserved Containers

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers			Date/Time	Comments	
						E	O	NH			
1	YGWA-4I	G	11/2/2016 12:55	AZK0157-01	GW	1			X	Radium 226, 228, Total	001
2	YGWA-5D	G	11/2/2016 11:20	AZK0157-02	GW	2			X		002
3	YGWA-6I	G	11/2/2016 15:35	AZK0157-03	GW	1			X		003
4	YGWA-14S	G	11/2/2016 10:50	AZK0157-04	GW	1			X		004
5	YGWA-20S	G	11/2/2016 14:40	AZK0157-05	GW	1			X		005
6	FB-1-11-2-16	G	11/2/2016 13:00	AZK0157-06	W	1			X		006
7											
8											
9											
10											

Cooler Temperature on Receipt NA °C Custody Seal Y or (N) Received on Ice Y or (N) Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

Friday, June 17, 2016 11:01:34 AM

FMT-ALL-C-002rev.0024March2009

Page 1 of 1

30201763

PAGE: 1 OF 1

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com



CHAIN OF CUSTODY RECORD

CLIENT NAME:
Georgia Power

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd SE B10185
Atlanta, GA 30308
404-506-7239

REPORT TO:
Lauren Petty
CC: Maria Padilla
Heath McCorkle

REQUESTED COMPLETION DATE:
laburch@southernco.com

PROJECT NAME/STATE:
Plant Yates AP

PROJECT #:
Phase 2 CCR

CONTAINER TYPE	PRESERVATION	P	P	P	P	P	P	ANALYSIS REQUESTED	CONTAINERS	REMARKS/ADDITIONAL INFORMATION
3	7	3	7	3				Metals App. III & IV (EPA 6020/7470)	3	
								Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)	4	
								Radium 226 & 228 (SW-846 9315/9320)	3	
									3	
									3	
									3	
									3	

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H₂SO₄, ≤6°C
3 - HNO₃
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - Na₂S₂O₃, ≤6°C
7 - ≤6°C not frozen

*MATRIX CODES:
DW - DRINKING WATER S - SOIL
WW - WASTEWATER SL - SLUDGE
GW - GROUNDWATER SD - SOLID
SW - SURFACE WATER A - AIR
ST - STORM WATER L - LIQUID
W - WATER P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

SAMPLED BY AND TITLE: *Chris Parker, Brandon Reynolds* DATE/TIME: 11-3-16 0900

RECEIVED BY: *Brandon Reynolds* DATE/TIME: 11-3-16 0900

RELINQUISHED BY: *McLoud* DATE/TIME: 11/4/2016 0935

RELINQUISHED BY: *McLoud* DATE/TIME: 11/4/2016 0935

RECEIVED BY LAB: *Brandon Reynolds* DATE/TIME: 11/01/16 0935

Temperature: *19C* Min. *19C* Max.

Ice: Yes No

Seal: Intact Broken Not Present

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present

of Coolers: Coolers

LAB #: *A2K0157*

Entered into LIMS: *NR*

Tracking #: *NR*

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace Georgia

Project # 30201763

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5100 2466

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KSH 11-7-14

Comments:	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID/Analysis Matrix: <u>W4</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. <u>PH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>KSH</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KSH</u> Date: <u>11-7-14</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.



Test: Ra-226
Analyst: LAL
Date: 11/21/2016
Worklist: 32367
Matrix: DW

Method Blank Assessment

MB Sample ID: 1177547
MB concentration: 0.116
M/B Counting Uncertainty: 0.177
MB MDC: 0.388
MB Numerical Performance Indicator: 1.28
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCSD (Y or N)? N
LCSD32367
Count Date: 11/23/2016
Spike I.D.: 16-026
Spike Concentration (pCi/ml): 44.674
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.500
Target Conc. (pCi/L, g, F): 8.943
Uncertainty (Calculated): 0.421
Result (pCi/L, g, F): 7.032
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.757
Numerical Performance Indicator: -4.33
Percent Recovery: 78.63%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30201763002
Duplicate Sample I.D.: 30201763002DUP
Sample Result Counting Uncertainty (pCi/L, g, F): 3.881
Sample Duplicate Result (pCi/L, g, F): 0.618
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 3.949
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.564
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -0.161
Duplicate RPD: 1.76%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

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):
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:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

11/21/16

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 11/28/2016
Worklist: 32411
Matrix: DW

Method Blank Assessment	
MB Sample ID	1178571
MB concentration:	-0.093
M/B Counting Uncertainty:	0.402
MB MDC:	0.975
MB Numerical Performance Indicator:	-0.41
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSID (Y or N)?	N
LCS32411	LCS032411
Count Date:	12/5/2016
Spike ID:	16-027
Spike Concentration (pCi/mL):	25.902
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.810
Target Conc. (pCi/L, g, F):	6.394
Uncertainty (Calculated):	0.460
Result (pCi/L, g, F):	8.194
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.868
Numerical Performance Indicator:	3.59
Percent Recovery:	128.15%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample ID:	30201555003
Duplicate Sample ID:	30201555003DUP
Sample Result (pCi/L, g, F):	0.406
Sample Result Counting Uncertainty (pCi/L, g, F):	0.361
Sample Duplicate Result (pCi/L, g, F):	0.357
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.376
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.182
Duplicate RPD:	12.71%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
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:	

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:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

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

Comments:

MHC Form 10/16



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZK0200

November 15, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McQueen".

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-6S	AZK0200-01	Ground Water	11/03/16 09:15	11/05/16 10:40
YGWA-17S	AZK0200-02	Ground Water	11/03/16 12:35	11/05/16 10:40
YGWA-18S	AZK0200-03	Ground Water	11/03/16 15:00	11/05/16 10:40
YGWA-18I	AZK0200-04	Ground Water	11/03/16 13:20	11/05/16 10:40
YGWA-21I	AZK0200-05	Ground Water	11/03/16 11:25	11/05/16 10:40
EB-2-11-3-16	AZK0200-06	Water	11/03/16 14:50	11/05/16 10:40
Dup 1	AZK0200-07	Ground Water	11/03/16 00:00	11/05/16 10:40
YGWA-1I	AZK0200-08	Ground Water	11/04/16 11:25	11/05/16 10:40
YGWA-2I	AZK0200-09	Ground Water	11/04/16 14:15	11/05/16 10:40
YGWA-5I	AZK0200-10	Ground Water	11/04/16 09:55	11/05/16 10:40
FB-2-11-4-16	AZK0200-11	Water	11/04/16 15:15	11/05/16 10:40



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: YGWA-6S

Lab Number ID: AZK0200-01

Date/Time Sampled: 11/3/2016 9:15:00AM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	70	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	3.0	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 23:46	6110208	RNB
Fluoride	0.02	0.30	0.02	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 23:46	6110208	RNB
Sulfate	28	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 23:46	6110208	RNB
Metals, Total											
Antimony	0.0016	0.0030	0.0008	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Barium	0.0161	0.0100	0.0004	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Boron	0.0568	0.100	0.0064	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Calcium	4.90	0.500	0.0311	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Chromium	0.0034	0.0100	0.0009	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Selenium	0.0013	0.0100	0.0010	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 14:11	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/09/16 09:20	11/09/16 15:37	6110232	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: YGWA-17S

Lab Number ID: AZK0200-02

Date/Time Sampled: 11/3/2016 12:35:00PM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	41	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	5.4	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 22:03	6110208	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 22:03	6110208	RNB
Sulfate	5.3	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 22:03	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Barium	0.0128	0.0100	0.0004	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Boron	0.0077	0.100	0.0064	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Calcium	1.99	0.500	0.0311	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Selenium	0.0015	0.0100	0.0010	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:23	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:02	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: YGWA-18S

Lab Number ID: AZK0200-03

Date/Time Sampled: 11/3/2016 3:00:00PM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	48	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	7.4	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 22:24	6110208	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 22:24	6110208	RNB
Sulfate	1.9	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 22:24	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Barium	0.0159	0.0100	0.0004	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Boron	0.0082	0.100	0.0064	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Calcium	1.31	0.500	0.0311	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Lithium	0.0021	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:29	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:05	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: YGWA-18I

Lab Number ID: AZK0200-04

Date/Time Sampled: 11/3/2016 1:20:00PM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	104	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	7.5	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 17:34	6110208	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 17:34	6110208	RNB
Sulfate	0.69	1.0	0.05	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 17:34	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Barium	0.0248	0.0100	0.0004	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Beryllium	ND	0.0030	0.0004	mg/L	EPA 6020B		5	11/08/16 08:35	11/10/16 12:05	6110190	KLH
Boron	ND	0.500	0.0321	mg/L	EPA 6020B	R-01	5	11/08/16 08:35	11/10/16 12:05	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Calcium	5.25	2.50	0.155	mg/L	EPA 6020B		5	11/08/16 08:35	11/10/16 12:05	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:35	6110190	KLH
Lithium	ND	0.0500	0.0103	mg/L	EPA 6020B		5	11/08/16 08:35	11/10/16 12:05	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:07	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: YGWA-211

Lab Number ID: AZK0200-05

Date/Time Sampled: 11/3/2016 11:25:00AM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	61	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	2.9	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 17:55	6110208	RNB
Fluoride	0.07	0.30	0.02	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 17:55	6110208	RNB
Sulfate	5.0	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 17:55	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Barium	0.0092	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Beryllium	ND	0.0030	0.0004	mg/L	EPA 6020B		5	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Boron	ND	0.500	0.0321	mg/L	EPA 6020B	R-01	5	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Calcium	3.40	2.50	0.155	mg/L	EPA 6020B		5	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Cobalt	0.0130	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Lithium	ND	0.0500	0.0103	mg/L	EPA 6020B		5	11/08/16 08:35	11/08/16 15:40	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:09	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: EB-2-11-3-16

Lab Number ID: AZK0200-06

Date/Time Sampled: 11/3/2016 2:50:00PM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	0.04	0.25	0.01	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 18:16	6110208	RNB
Fluoride	0.04	0.30	0.02	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 18:16	6110208	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 18:16	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:46	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:12	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: Dup 1

Lab Number ID: AZK0200-07

Date/Time Sampled: 11/3/2016 12:00:00AM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	69	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	2.9	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 18:36	6110208	RNB
Fluoride	0.02	0.30	0.02	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 18:36	6110208	RNB
Sulfate	28	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 18:36	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Barium	0.0172	0.0100	0.0004	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Boron	0.0496	0.100	0.0064	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Calcium	4.85	0.500	0.0311	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Chromium	0.0033	0.0100	0.0009	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:52	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:19	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: YGWA-1I

Lab Number ID: AZK0200-08

Date/Time Sampled: 11/4/2016 11:25:00AM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	60	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	1.6	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 18:57	6110208	RNB
Fluoride	0.07	0.30	0.02	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 18:57	6110208	RNB
Sulfate	5.0	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 18:57	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Barium	0.0067	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Calcium	2.67	0.500	0.0311	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Cobalt	0.0025	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Molybdenum	0.0100	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 15:58	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:21	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AZK0200-09

Date/Time Sampled: 11/4/2016 2:15:00PM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	148	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	1.4	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 19:18	6110208	RNB
Fluoride	0.12	0.30	0.02	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 19:18	6110208	RNB
Sulfate	13	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 19:18	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Arsenic	0.0017	0.0050	0.0016	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Barium	0.0059	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Beryllium	ND	0.0030	0.0004	mg/L	EPA 6020B		5	11/08/16 08:35	11/10/16 12:16	6110190	KLH
Boron	ND	0.500	0.0321	mg/L	EPA 6020B	R-01	5	11/08/16 08:35	11/10/16 12:16	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Calcium	23.7	2.50	0.155	mg/L	EPA 6020B		5	11/08/16 08:35	11/10/16 12:16	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Molybdenum	0.0077	0.0100	0.0017	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:03	6110190	KLH
Lithium	ND	0.0500	0.0103	mg/L	EPA 6020B		5	11/08/16 08:35	11/10/16 12:16	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:24	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: YGWA-5I

Lab Number ID: AZK0200-10

Date/Time Sampled: 11/4/2016 9:55:00AM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	75	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	4.8	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 19:38	6110208	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 19:38	6110208	RNB
Sulfate	2.0	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 19:38	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Barium	0.0165	0.0100	0.0004	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Beryllium	ND	0.0030	0.0004	mg/L	EPA 6020B		5	11/08/16 08:35	11/10/16 12:22	6110190	KLH
Boron	ND	0.500	0.0321	mg/L	EPA 6020B	R-01	5	11/08/16 08:35	11/10/16 12:22	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Calcium	2.17	2.50	0.155	mg/L	EPA 6020B	J	5	11/08/16 08:35	11/10/16 12:22	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:09	6110190	KLH
Lithium	ND	0.0500	0.0103	mg/L	EPA 6020B		5	11/08/16 08:35	11/10/16 12:22	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:26	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Project: CCR Event

Client ID: FB-2-11-4-16

Lab Number ID: AZK0200-11

Date/Time Sampled: 11/4/2016 3:15:00PM

Date/Time Received: 11/5/2016 10:40:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	11/08/16 15:40	11/08/16 15:40	6110198	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 20:20	6110208	RNB
Fluoride	0.05	0.30	0.02	mg/L	EPA 300.0	J	1	11/08/16 11:06	11/08/16 20:20	6110208	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	11/08/16 11:06	11/08/16 20:20	6110208	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Boron	ND	0.100	0.0064	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Lead	0.0002	0.0050	0.0001	mg/L	EPA 6020B	J	1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/08/16 08:35	11/08/16 16:15	6110190	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:28	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110198 - SM 2540 C											
Blank (6110198-BLK1)						Prepared & Analyzed: 11/08/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6110198-BS1)						Prepared & Analyzed: 11/08/16					
Total Dissolved Solids	395	25	10	mg/L	400.00		99	84-108			
Duplicate (6110198-DUP1)						Source: AZK0200-03 Prepared & Analyzed: 11/08/16					
Total Dissolved Solids	43	25	10	mg/L		48			11	10	QR-03
Duplicate (6110198-DUP2)						Source: AZK0200-09 Prepared & Analyzed: 11/08/16					
Total Dissolved Solids	141	25	10	mg/L		148			5	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110208 - EPA 300.0											
Blank (6110208-BLK1)						Prepared & Analyzed: 11/08/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6110208-BS1)						Prepared & Analyzed: 11/08/16					
Chloride	10.7	0.25	0.01	mg/L	10.010		107	90-110			
Fluoride	10.7	0.30	0.02	mg/L	10.020		107	90-110			
Sulfate	10.4	1.0	0.05	mg/L	10.020		104	90-110			
Matrix Spike (6110208-MS1)						Source: AZK0189-01 Prepared & Analyzed: 11/08/16					
Chloride	11.7	0.25	0.01	mg/L	10.010	2.80	89	90-110			QM-05
Fluoride	9.64	0.30	0.02	mg/L	10.020	0.05	96	90-110			
Sulfate	14.7	1.0	0.05	mg/L	10.020	6.08	86	90-110			QM-05
Matrix Spike (6110208-MS2)						Source: AZK0200-10 Prepared & Analyzed: 11/08/16					
Chloride	13.8	0.25	0.01	mg/L	10.010	4.79	90	90-110			
Fluoride	10.4	0.30	0.02	mg/L	10.020	ND	104	90-110			
Sulfate	11.4	1.0	0.05	mg/L	10.020	1.96	94	90-110			
Matrix Spike Dup (6110208-MSD1)						Source: AZK0189-01 Prepared & Analyzed: 11/08/16					
Chloride	12.5	0.25	0.01	mg/L	10.010	2.80	97	90-110	7	15	
Fluoride	10.6	0.30	0.02	mg/L	10.020	0.05	105	90-110	9	15	
Sulfate	15.5	1.0	0.05	mg/L	10.020	6.08	94	90-110	5	15	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110190 - EPA 3005A											
Blank (6110190-BLK1)						Prepared & Analyzed: 11/08/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6110190-BS1)						Prepared & Analyzed: 11/08/16					
Antimony	0.0987	0.0030	0.0008	mg/L	0.10000		99	80-120			
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000		101	80-120			
Barium	0.0956	0.0100	0.0004	mg/L	0.10000		96	80-120			
Beryllium	0.103	0.0030	0.00008	mg/L	0.10000		103	80-120			
Boron	1.08	0.0400	0.0064	mg/L	1.0000		108	80-120			
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000		103	80-120			
Calcium	0.987	0.500	0.0311	mg/L	1.0000		99	80-120			
Chromium	0.101	0.0100	0.0009	mg/L	0.10000		101	80-120			
Cobalt	0.0987	0.0100	0.0005	mg/L	0.10000		99	80-120			
Copper	0.101	0.0250	0.0005	mg/L	0.10000		101	80-120			
Lead	0.101	0.0050	0.0001	mg/L	0.10000		101	80-120			
Molybdenum	0.0963	0.0100	0.0017	mg/L	0.10000		96	80-120			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000		101	80-120			
Selenium	0.0988	0.0100	0.0010	mg/L	0.10000		99	80-120			
Silver	0.102	0.0100	0.0005	mg/L	0.10000		102	80-120			
Thallium	0.105	0.0010	0.0002	mg/L	0.10000		105	80-120			
Vanadium	0.101	0.0100	0.0071	mg/L	0.10000		101	80-120			
Zinc	0.101	0.0100	0.0021	mg/L	0.10000		101	80-120			
Lithium	0.105	0.0500	0.0021	mg/L	0.10000		105	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110190 - EPA 3005A											
Matrix Spike (6110190-MS1)			Source: AZK0200-01			Prepared & Analyzed: 11/08/16					
Antimony	0.104	0.0030	0.0008	mg/L	0.10000	0.0016	103	75-125			
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000	ND	101	75-125			
Barium	0.114	0.0100	0.0004	mg/L	0.10000	0.0161	98	75-125			
Beryllium	0.0949	0.0030	0.00008	mg/L	0.10000	ND	95	75-125			
Boron	1.05	0.0400	0.0064	mg/L	1.0000	0.0568	99	75-125			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125			
Calcium	5.62	0.500	0.0311	mg/L	1.0000	4.90	72	75-125			QM-02
Chromium	0.108	0.0100	0.0009	mg/L	0.10000	0.0034	105	75-125			
Cobalt	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125			
Copper	0.104	0.0250	0.0005	mg/L	0.10000	ND	104	75-125			
Lead	0.102	0.0050	0.0001	mg/L	0.10000	ND	102	75-125			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125			
Nickel	0.105	0.0100	0.0006	mg/L	0.10000	ND	105	75-125			
Selenium	0.102	0.0100	0.0010	mg/L	0.10000	0.0013	100	75-125			
Silver	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125			
Thallium	0.104	0.0010	0.0002	mg/L	0.10000	ND	104	75-125			
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000	ND	106	75-125			
Zinc	0.105	0.0100	0.0021	mg/L	0.10000	ND	105	75-125			
Lithium	0.101	0.0500	0.0021	mg/L	0.10000	ND	101	75-125			
Matrix Spike Dup (6110190-MSD1)			Source: AZK0200-01			Prepared & Analyzed: 11/08/16					
Antimony	0.104	0.0030	0.0008	mg/L	0.10000	0.0016	103	75-125	0.04	20	
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125	0.9	20	
Barium	0.116	0.0100	0.0004	mg/L	0.10000	0.0161	99	75-125	2	20	
Beryllium	0.0992	0.0030	0.00008	mg/L	0.10000	ND	99	75-125	4	20	
Boron	1.07	0.0400	0.0064	mg/L	1.0000	0.0568	101	75-125	2	20	
Cadmium	0.104	0.0010	0.00007	mg/L	0.10000	ND	104	75-125	2	20	
Calcium	5.94	0.500	0.0311	mg/L	1.0000	4.90	104	75-125	6	20	
Chromium	0.108	0.0100	0.0009	mg/L	0.10000	0.0034	105	75-125	0.4	20	
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125	0.1	20	
Copper	0.104	0.0250	0.0005	mg/L	0.10000	ND	104	75-125	0.07	20	
Lead	0.101	0.0050	0.0006	mg/L	0.10000	ND	101	75-125	1	20	
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125	0.3	20	
Nickel	0.105	0.0100	0.0006	mg/L	0.10000	ND	105	75-125	0.1	20	
Selenium	0.100	0.0100	0.0010	mg/L	0.10000	0.0013	99	75-125	1	20	
Silver	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125	0.06	20	
Thallium	0.0990	0.0050	0.0010	mg/L	0.10000	ND	99	75-125	5	20	
Vanadium	0.109	0.0100	0.0071	mg/L	0.10000	ND	109	75-125	3	20	
Zinc	0.103	0.0100	0.0021	mg/L	0.10000	ND	103	75-125	3	20	
Lithium	0.100	0.0500	0.0021	mg/L	0.10000	ND	100	75-125	0.5	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110190 - EPA 3005A											
Post Spike (6110190-PS1)				Source: AZK0200-01			Prepared & Analyzed: 11/08/16				
Antimony	95.7			ug/L	100.00	1.58	94	80-120			
Arsenic	101			ug/L	100.00	0.114	101	80-120			
Barium	116			ug/L	100.00	16.1	100	80-120			
Beryllium	96.9			ug/L	100.00	0.0232	97	80-120			
Boron	1080			ug/L	1000.0	56.8	102	80-120			
Cadmium	99.3			ug/L	100.00	-0.0362	99	80-120			
Calcium	5730			ug/L	1000.0	4900	83	80-120			
Chromium	106			ug/L	100.00	3.36	102	80-120			
Cobalt	102			ug/L	100.00	0.0713	102	80-120			
Copper	103			ug/L	100.00	0.415	103	80-120			
Lead	102			ug/L	100.00	0.0380	102	80-120			
Molybdenum	103			ug/L	100.00	0.704	103	80-120			
Nickel	104			ug/L	100.00	0.380	104	80-120			
Selenium	98.9			ug/L	100.00	1.29	98	80-120			
Silver	105			ug/L	100.00	0.0086	105	80-120			
Thallium	104			ug/L	100.00	0.115	104	80-120			
Vanadium	105			ug/L	100.00	0.287	105	80-120			
Zinc	102			ug/L	100.00	1.99	100	80-120			
Lithium	100			ug/L	100.00	0.245	100	80-120			

Batch 6110232 - EPA 7470A

Blank (6110232-BLK1)				Prepared & Analyzed: 11/09/16							
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6110232-BS1)				Prepared & Analyzed: 11/09/16							
Mercury	0.00242	0.00050	0.000041	mg/L	2.5000E-3		97	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Report No.: AZK0200

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110232 - EPA 7470A											
Matrix Spike (6110232-MS1) Source: AZK0144-03 Prepared & Analyzed: 11/09/16											
Mercury	0.00240	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125			
Matrix Spike Dup (6110232-MSD1) Source: AZK0144-03 Prepared & Analyzed: 11/09/16											
Mercury	0.00243	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125	1	20	
Post Spike (6110232-PS1) Source: AZK0144-03 Prepared & Analyzed: 11/09/16											
Mercury	1.71			ug/L	1.6667	0.00533	102	80-120			
Batch 6110259 - EPA 7470A											
Blank (6110259-BLK1) Prepared & Analyzed: 11/10/16											
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6110259-BS1) Prepared & Analyzed: 11/10/16											
Mercury	0.00256	0.00050	0.000041	mg/L	2.5000E-3		102	80-120			
Matrix Spike (6110259-MS1) Source: AZK0200-02 Prepared & Analyzed: 11/10/16											
Mercury	0.00244	0.00050	0.000041	mg/L	2.5000E-3	ND	98	75-125			
Matrix Spike Dup (6110259-MSD1) Source: AZK0200-02 Prepared & Analyzed: 11/10/16											
Mercury	0.00251	0.00050	0.000041	mg/L	2.5000E-3	ND	100	75-125	3	20	
Post Spike (6110259-PS1) Source: AZK0200-02 Prepared & Analyzed: 11/10/16											
Mercury	1.75			ug/L	1.6667	-0.0167	105	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 15, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- R-01** Elevated reporting limit due to matrix interference.
- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.ash-lab.com

PAGE: 1 OF 1

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239
 REPORT TO: Lauren Petty
 CC: Maria Padilla Heath McCorkle
 REQUESTED COMPLETION DATE: laburch@southernco.com
 PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

Collection DATE	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION
11-3-16	0915	GW	✓	✓	Y6WA-6S
11-3-16	1235	GW	✓	✓	Y6WA-17S
11-3-16	1500	GW	✓	✓	Y6WA-18S
11-3-16	1320	GW	✓	✓	Y6WA-18I
11-3-16	1125	GW	✓	✓	Y6WA-21I
11-3-16	1450	W	✓	✓	EB-2-11-3-16
11-3-16	--	GW	✓	✓	DUP 1

SAMPLED BY AND TITLE: R. W. Reynolds (ACS)
 RECEIVED BY: [Signature]
 DATE/TIME: 11-4-16 1000
 DATE/TIME: [Blank]

RECEIVED BY LAB: [Signature]
 pH checked: [Blank]
 Temperature: 10°C Min, 10°C Max
 DATE/TIME: 11/05/16 1040
 DATE/TIME: [Blank]

CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESERVATION	LAB #	REMARKS/ADDITIONAL INFORMATION
P - PLASTIC	P P P P	P P P P	3 7 3	1040	
A - AMBER GLASS					
G - CLEAR GLASS					
V - VOA VIAL					
S - STERILE					
O - OTHER					

LAB #	DATE/TIME	DATE/TIME	CLIENT	OTHER	FS
1	11-5-16	1040	CLIENT		
2					
3					
4					
5					
6					
7					

FOR LAB USE ONLY
 LAB #: A Z K 0 2 0 0
 Entered into LIMS: [Signature]
 Tracking #: [Blank]

Plant Yates COC Ash Ponds.xlsx



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.ash-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239 REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle REQUESTED COMPLETION DATE: laburch@southernco.com PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR		ANALYSIS REQUESTED P P P P 3 7 3 # of CONTAINERS →		CONTAINER TYPE PRESERVATION # of CONTAINERS →		CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
RECEIVED BY LAB: Yes No NA (CS) No NA [Signature]		RECEIVED BY: [Signature]		DATE/TIME: 11-4-16 1530		DATE/TIME: 11-5-16 1040	
SAMPLED BY AND TITLE: B. Brynolds, R. Walker (per)		RELINQUISHED BY: [Signature]		DATE/TIME: 11-5-16 1040		LAB #: A2K0200	
RECEIVED BY LAB: Yes No NA (CS) No NA [Signature]		RECEIVED BY: [Signature]		DATE/TIME: 11-5-16 1040		Entered Into LIMS: [Signature]	
Collection DATE A-D-Y-Y		Collection TIME		MATRIX CODE*		COMPARISON	
11-4-16 1125		11-4-16 1415		11-4-16 0955		11-4-16 1515	
GW		GW		GW		W	
Y6WA-1I		Y6WA-2I		Y6WA-5I		FB-2-11-4-16	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
3		3		3		3	
Metals App. III & IV (EPA 6020/7470)		Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)		Radium 226 & 228 (SM 846 9315/9320)		L A B I D N U M B E R →	
8		9		10		11	
REMARKS/ADDITIONAL INFORMATION		REMARKS/ADDITIONAL INFORMATION		REMARKS/ADDITIONAL INFORMATION		REMARKS/ADDITIONAL INFORMATION	
DW - DRINKING WATER WW - WASTEWATER GW - GROUNDWATER SW - SURFACE WATER ST - STORM WATER W - WATER		S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT		MATRIX CODES:		FOR LAB USE ONLY LAB #: Entered Into LIMS: Tracking #:	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 11/15/2016 2:02:08PM

Attn: Mr. Jeju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 11/05/16 10:40

Work Order: AZK0200

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 11

#Containers: 33

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

December 15, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30202029

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on November 09, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates

Pace Project No.: 30202029

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates

Pace Project No.: 30202029

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30202029001	YGWA-6S	Water	11/03/16 09:15	11/09/16 10:35
30202029002	YGWA-17S	Water	11/03/16 12:35	11/09/16 10:35
30202029003	YGWA-18S	Water	11/03/16 15:00	11/09/16 10:35
30202029004	YGWA-18I	Water	11/03/16 13:20	11/09/16 10:35
30202029005	YGWA-21I	Water	11/03/16 11:25	11/09/16 10:35
30202029006	EB-2-11-3-16	Water	11/03/16 14:50	11/09/16 10:35
30202029007	Dup 1	Water	11/03/16 00:00	11/09/16 10:35
30202029008	YGWA-1I	Water	11/04/16 11:25	11/09/16 10:35
30202029009	YGWA-2I	Water	11/04/16 14:15	11/09/16 10:35
30202029010	YGWA-5I	Water	11/04/16 09:55	11/09/16 10:35
30202029011	FB-2-11-4-16	Water	11/04/16 15:15	11/09/16 10:35

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30202029

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30202029001	YGWA-6S	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029002	YGWA-17S	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029003	YGWA-18S	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029004	YGWA-18I	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029005	YGWA-21I	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029006	EB-2-11-3-16	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029007	Dup 1	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029008	YGWA-1I	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029009	YGWA-2I	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029010	YGWA-5I	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202029011	FB-2-11-4-16	EPA 9315	JC2	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202029

Sample: YGWA-6S		Lab ID: 30202029001	Collected: 11/03/16 09:15	Received: 11/09/16 10:35	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0934 ± 0.105 (0.209)		pCi/L	11/25/16 08:38	13982-63-3	
		C:90% T:NA					
Radium-228	EPA 9320	-0.0711 ± 0.364 (0.791)		pCi/L	12/12/16 18:54	15262-20-1	
		C:65% T:86%					
Total Radium	Total Radium Calculation	0.0934 ± 0.469 (1.000)		pCi/L	12/15/16 06:59	7440-14-4	

Sample: YGWA-17S		Lab ID: 30202029002	Collected: 11/03/16 12:35	Received: 11/09/16 10:35	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0794 ± 0.124 (0.274)		pCi/L	11/25/16 08:38	13982-63-3	
		C:86% T:NA					
Radium-228	EPA 9320	0.235 ± 0.418 (0.852)		pCi/L	12/12/16 18:54	15262-20-1	
		C:63% T:90%					
Total Radium	Total Radium Calculation	0.314 ± 0.542 (1.13)		pCi/L	12/15/16 06:59	7440-14-4	

Sample: YGWA-18S		Lab ID: 30202029003	Collected: 11/03/16 15:00	Received: 11/09/16 10:35	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0323 ± 0.0651 (0.221)		pCi/L	11/25/16 08:38	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	0.928 ± 0.538 (0.954)		pCi/L	12/12/16 18:54	15262-20-1	
		C:52% T:87%					
Total Radium	Total Radium Calculation	0.928 ± 0.603 (1.18)		pCi/L	12/15/16 06:59	7440-14-4	

Sample: YGWA-18I		Lab ID: 30202029004	Collected: 11/03/16 13:20	Received: 11/09/16 10:35	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0404 ± 0.0856 (0.201)		pCi/L	11/25/16 08:38	13982-63-3	
		C:94% T:NA					
Radium-228	EPA 9320	0.302 ± 0.376 (0.747)		pCi/L	12/12/16 18:54	15262-20-1	
		C:60% T:87%					
Total Radium	Total Radium Calculation	0.342 ± 0.462 (0.948)		pCi/L	12/15/16 06:59	7440-14-4	

Sample: YGWA-21I		Lab ID: 30202029005	Collected: 11/03/16 11:25	Received: 11/09/16 10:35	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.166 ± 0.133 (0.228)		pCi/L	11/25/16 08:38	13982-63-3	
		C:85% T:NA					
Radium-228	EPA 9320	0.631 ± 0.512 (0.973)		pCi/L	12/12/16 18:54	15262-20-1	
		C:58% T:82%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202029

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-211 Lab ID: 30202029005 Collected: 11/03/16 11:25 Received: 11/09/16 10:35 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.797 ± 0.645 (1.20)	pCi/L	12/15/16 06:59	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-2-11-3-16 Lab ID: 30202029006 Collected: 11/03/16 14:50 Received: 11/09/16 10:35 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.00202 ± 0.0711 (0.206) C:88% T:NA	pCi/L	11/25/16 08:41	13982-63-3	
Radium-228	EPA 9320	0.178 ± 0.357 (0.733) C:71% T:86%	pCi/L	12/12/16 18:54	15262-20-1	
Total Radium	Total Radium Calculation	0.178 ± 0.428 (0.939)	pCi/L	12/15/16 06:59	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: Dup 1 Lab ID: 30202029007 Collected: 11/03/16 00:00 Received: 11/09/16 10:35 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0797 ± 0.163 (0.378) C:74% T:NA	pCi/L	11/25/16 08:41	13982-63-3	
Radium-228	EPA 9320	0.196 ± 0.324 (0.659) C:69% T:84%	pCi/L	12/12/16 18:55	15262-20-1	
Total Radium	Total Radium Calculation	0.276 ± 0.487 (1.04)	pCi/L	12/15/16 06:59	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-11 Lab ID: 30202029008 Collected: 11/04/16 11:25 Received: 11/09/16 10:35 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0113 ± 0.0588 (0.191) C:85% T:NA	pCi/L	11/25/16 08:41	13982-63-3	
Radium-228	EPA 9320	0.166 ± 0.490 (1.02) C:56% T:90%	pCi/L	12/13/16 18:51	15262-20-1	
Total Radium	Total Radium Calculation	0.166 ± 0.549 (1.21)	pCi/L	12/15/16 06:59	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-2I Lab ID: 30202029009 Collected: 11/04/16 14:15 Received: 11/09/16 10:35 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0533 ± 0.0859 (0.188) C:87% T:NA	pCi/L	11/25/16 10:13	13982-63-3	
Radium-228	EPA 9320	0.224 ± 0.385 (0.785) C:59% T:90%	pCi/L	12/13/16 18:52	15262-20-1	
Total Radium	Total Radium Calculation	0.277 ± 0.471 (0.973)	pCi/L	12/15/16 06:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202029

Sample: YGWA-5I		Lab ID: 30202029010	Collected: 11/04/16 09:55	Received: 11/09/16 10:35	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.135 ± 0.126 (0.239) C:91% T:NA	pCi/L	11/25/16 10:13	13982-63-3	
Radium-228	EPA 9320	0.299 ± 0.389 (0.778) C:58% T:89%	pCi/L	12/13/16 18:53	15262-20-1	
Total Radium	Total Radium Calculation	0.434 ± 0.515 (1.02)	pCi/L	12/15/16 06:59	7440-14-4	

Sample: FB-2-11-4-16		Lab ID: 30202029011	Collected: 11/04/16 15:15	Received: 11/09/16 10:35	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0504 ± 0.0856 (0.272) C:90% T:NA	pCi/L	11/25/16 10:13	13982-63-3	
Radium-228	EPA 9320	0.257 ± 0.311 (0.618) C:66% T:88%	pCi/L	12/13/16 18:53	15262-20-1	
Total Radium	Total Radium Calculation	0.257 ± 0.397 (0.890)	pCi/L	12/15/16 06:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202029

QC Batch: 242653 Analysis Method: EPA 9320

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

Associated Lab Samples: 30202029008, 30202029009, 30202029010, 30202029011

METHOD BLANK: 1192645 Matrix: Water

Associated Lab Samples: 30202029008, 30202029009, 30202029010, 30202029011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.240 ± 0.394 (0.801) C:60% T:86%	pCi/L	12/13/16 18:52	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202029

QC Batch:	240769	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30202029001, 30202029002, 30202029003, 30202029004, 30202029005, 30202029006, 30202029007, 30202029008, 30202029009, 30202029010, 30202029011		

METHOD BLANK:	1183232	Matrix:	Water
Associated Lab Samples:	30202029001, 30202029002, 30202029003, 30202029004, 30202029005, 30202029006, 30202029007, 30202029008, 30202029009, 30202029010, 30202029011		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0189 ± 0.0805 (0.209) C:84% T:NA	pCi/L	11/25/16 08:38	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202029

QC Batch: 242652

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30202029001, 30202029002, 30202029003, 30202029004, 30202029005, 30202029006, 30202029007

METHOD BLANK: 1192644

Matrix: Water

Associated Lab Samples: 30202029001, 30202029002, 30202029003, 30202029004, 30202029005, 30202029006, 30202029007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.250 ± 0.461 (0.941) C:64% T:88%	pCi/L	12/12/16 18:48	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30202029

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30202029



Chain of Custody



Workorder: AZK0200

Workorder Name: Plant Yates

Owner Received Date:

Results Requested By: 12/9/2016

Report To:

Subcontract To:

Requested Analysis

Betsy McDaniel
Pace Analytical Atlanta
110 Technology Parkway
Peachtree Corners, GA 30092
Phone (770)-734-4200

Pace - Pittsburgh
1638 Roseytown Road
Stes. 2,3,4
Greensburg, PA 15601
Phone (724) 850-5600

Radium 226, 228, Total

Preserved Containers

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	NO3	NO2	NO3	NO2	LAB USE ONLY
1	YGWA-6S	G	11/3/2016 9:15	AZK0200-01	GW	1				001
2	YGWA-17S	G	11/3/2016 12:35	AZK0200-02	GW	1				002
3	YGWA-18S	G	11/3/2016 15:00	AZK0200-03	GW	1				003
4	YGWA-18I	G	11/3/2016 13:20	AZK0200-04	GW	1				004
5	YGWA-21I	G	11/3/2016 11:25	AZK0200-05	GW	1				005
6	EB-2-11-3-16	G	11/3/2016 14:50	AZK0200-06	W	1				006
7	Dup 1	G	11/3/2016 0:00	AZK0200-07	GW	1				007
8	YGWA-1I	G	11/4/2016 11:25	AZK0200-08	GW	1				008
9	YGWA-2I	G	11/4/2016 14:15	AZK0200-09	GW	1				009
10	YGWA-5I	G	11/4/2016 9:55	AZK0200-10	WGW	1				010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	<i>M. D. Loman</i>	11/07/16	<i>[Signature]</i>	11/17/2016	
2					
3					

Cooler Temperature on Receipt NA °C Custody Seal Y or (N) Received on Ice Y or (N) Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Friday, June 17, 2016 11:01:34 AM

FMT-ALL-C-002rev.00 24March2009

Page 1 of 2

30202029

Chain of Custody



Results Requested By: 12/9/2016

Owner Received Date:

Workorder Name: Plant Yates

Report To:	Workorder Name:		Subcontract To:		Requested Analysis	
Betsy McDaniel	Pace - Pittsburgh		Pace - Pittsburgh		Radium 226, 228, Total	
Pace Analytical Atlanta	1638 Roseytown Road		1638 Roseytown Road			
110 Technology Parkway	Stes. 2,3,4		Stes. 2,3,4			
Peachtree Corners, GA 30092	Greensburg, PA 15601		Greensburg, PA 15601			
Phone (770)-734-4200	Phone (724) 850-5600		Phone (724) 850-5600			
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	LAB USE ONLY
11	FB-2-11-4-16	G	11/4/2016 15:15	AZK0200-11	W	Oil
12						
13						
14						
15						
16						
17						
18						
19						
20						
Transfers	Released By	Date/Time	Received By	Date/Time	Comments	
1	<i>M. Johnson</i>	11/07/16	<i>[Signature]</i>	11-16-16		
2						
3						

Cooler Temperature on Receipt MA °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.



CHAIN OF CUSTODY RECORD

30202029

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CLIENT NAME: Georgia Power			ANALYSIS REQUESTED			CONTAINER TYPE: PRESERVATION	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239			P P P P P P P P P P P 3 7 3 (EPA 300.0 & SM 2540C) Cl, F, SO ₄ & TDS (EPA 6020/7470) Metals App. III & IV Radium 226 & 228 (SW-846 9315/9320)			P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER	
REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle			# of CONTAINERS →			PRESERVATION:	
REQUESTED COMPLETION DATE: laburch@southernmco.com			3 3 3 3 3 3 3			1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
PROJECT NAME/STATE: Plant Yates AP			CONTAINERS →			*MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT	
PROJECT #: Phase 2 CCR			SAMPLE IDENTIFICATION			REMARKS/ADDITIONAL INFORMATION	
Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION		
11-3-16	0915	6W	✓	✓	Y6WA-6S		
11-3-16	1235	6W	✓	✓	Y6WA-17S		
11-3-16	1500	6W	✓	✓	Y6WA-18S		
11-3-16	1320	6W	✓	✓	Y6WA-18T		
11-3-16	1125	6W	✓	✓	Y6WA-21T		
11-3-16	1450	W	✓	✓	EB-2-11-3-16		
11-3-16	—	6W	✓	✓	DUP 1		
SAMPLED BY AND TITLE: R.W. Reynolds (94)						RELINQUISHED BY: <i>J.R. Park</i>	
RECEIVED BY: <i>M. Johnson</i>						DATE/TIME: 11-4-16 1000	
RECEIVED BY LAB: B. Reynolds (94)						DATE/TIME: 11-5-16 1040	
pH Checked: <input checked="" type="checkbox"/> Yes / <input checked="" type="checkbox"/> No / <input type="checkbox"/> NA / <input type="checkbox"/> NA						Lab #: <i>AZK0200</i>	
Temperature: <i>10°C</i> Min / <i>10°C</i> Max						Entered into LIMS: <i>MR</i>	
CUSTODY SEAL: <input checked="" type="checkbox"/> Intact / <input type="checkbox"/> Broken / <input type="checkbox"/> Not Present						Tracking #:	
CLIENT:						FS	
COURIER:						OTHER:	

Plant Yates COC Ash Ponds.xlsx



CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

30202029

PAGE: 1 OF 1

Form containing client information, project details, analysis requested, and a table with columns for collection date, matrix code, sample identification, and analysis results.

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace Ga

Project # 30202029

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5100 2742

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ML 11-9-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X	X		4. <u>ML 11-9-16</u>
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>WA</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13. <u>PH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>ML</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:		X		15.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>ML</u> Date: <u>11-9-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Test: Ra-226
Analyst: JC2
Date: 11/21/2016
Worklist: 32548
Matrix: DW

Method Blank Assessment	
MB Sample ID	1183232
MB concentration:	0.019
M/B Counting Uncertainty:	0.080
MB MDC:	0.209
MB Numerical Performance Indicator:	0.46
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	LCS32548
Spike I.D.:	11/25/2016
Spike Concentration (pCi/mL):	18-026
Volume Used (mL):	44.674
Aliquot Volume (L, g, F):	0.10
Target Conc. (pCi/L, g, F):	0.502
Uncertainty (Calculated):	8.904
Result (pCi/L, g, F):	0.419
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	8.463
Numerical Performance Indicator:	0.787
Percent Recovery:	-0.97
Status vs Numerical Indicator:	95.05%
Status vs Recovery:	N/A
	Pass

Duplicate Sample Assessment	
Sample I.D.:	30202040001
Duplicate Sample I.D.:	30202040001DUP
Sample Result (pCi/L, g, F):	0.008
Sample Result Counting Uncertainty (pCi/L, g, F):	0.078
Sample Duplicate Result (pCi/L, g, F):	-0.042
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.064
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.966
Duplicate RPD:	-294.57%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

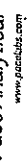
Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample I.D.:
Sample MS I.D.:	Sample MS I.D.:
Sample MSD I.D.:	Sample MSD I.D.:
Sample Matrix Spike Result:	Sample Matrix Spike Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	Duplicate Numerical Performance Indicator:
Duplicate Numerical Performance Indicator:	MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:
MS/MSD Duplicate Status vs Recovery:	MS/MSD Duplicate Status vs Recovery:

Handwritten signature/initials

Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-228
Analyst: JAL
Date: 12/9/2016
Worklist: 32862
Matrix: DW

Method Blank Assessment	
MB Sample ID	1192645
MB concentration:	0.240
M/B Counting Uncertainty:	0.392
MB MDC:	0.601
MB Numerical Performance Indicator:	1.20
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCSD (Y or N)?	N
Count Date:	12/13/2016	LCSS2862	LCSD32862
Spike I.D.:	16-027		
Spike Concentration (pCi/mL):	25.832		
Volume Used (mL):	0.20		
Aliquot Volume (L, g, F):	0.806		
Target Conc. (pCi/L, g, F):	6.414		
Uncertainty (Calculated):	0.462		
Result (pCi/L, g, F):	6.672		
LCSD/LCSD Counting Uncertainty (pCi/L, g, F):	0.640		
Numerical Performance Indicator:	0.64		
Percent Recovery:	104.02%		
Status vs Numerical Indicator:	N/A		
Status vs Recovery:	Pass		

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30202155001	30202155001DUP
Duplicate Sample I.D.:	30202155001DUP	
Sample Result (pCi/L, g, F):	0.822	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.398	
Sample Duplicate Result (pCi/L, g, F):	1.045	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.401	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.774	
Duplicate RPD:	23.89%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

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

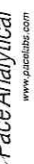
Comments:

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.:
Sample MS I.D.:	Sample MS I.D.:
Sample MSD I.D.:	Sample MSD I.D.:
Spike 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):	Spike uncertainty (calculated):
Sample Result:	Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:	Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:
MS Numerical Performance Indicator:	MS Numerical Performance Indicator:
MS Percent Recovery:	MS Percent Recovery:
MSD Percent Recovery:	MSD Percent Recovery:
MS Status vs Numerical Indicator:	MS Status vs Numerical Indicator:
MSD Status vs Recovery:	MSD Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample MS I.D.:
Sample MS I.D.:	Sample MSD I.D.:
Sample Matrix Spike Result:	Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:
Duplicate Numerical Performance Indicator:	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:

Handwritten signature

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JAL
Date: 12/8/2016
Worklist: 32861
Matrix: DW

Method Blank Assessment	
MB Sample ID	1192644
MB Concentration:	0.250
M/B Counting Uncertainty:	0.459
MB MDC:	0.941
MB Numerical Performance Indicator:	1.07
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	12/12/2016
Spike I.D.:	16-027
Spike Concentration (pCi/mL):	25.841
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.820
Target Conc. (pCi/L, g, F):	6.371
Uncertainty (Calculated):	0.454
Result (pCi/L, g, F):	5.218
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.668
Numerical Performance Indicator:	-2.63
Percent Recovery:	82.83%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	LCS32861
Duplicate Sample I.D.:	LCS32861
Sample Result (pCi/L, g, F):	5.218
Sample Result Counting Uncertainty (pCi/L, g, F):	0.668
Sample Duplicate Result (pCi/L, g, F):	6.099
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.714
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	-1.766
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	14.46%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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):	
MSD Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
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:	
Sample Matrix Spike Duplicate 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:	

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

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

Comments:

Handwritten signature and date: JAL 12/15/2016



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZK0288

November 17, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McQueen".

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-27I	AZK0288-01	Ground Water	11/07/16 10:40	11/08/16 16:45
YGWC-27S	AZK0288-02	Ground Water	11/07/16 12:15	11/08/16 16:45
YGWC-26I	AZK0288-03	Ground Water	11/07/16 14:20	11/08/16 16:45
YGWC-26S	AZK0288-04	Ground Water	11/07/16 15:20	11/08/16 16:45
YGWC-29I	AZK0288-05	Ground Water	11/07/16 10:35	11/08/16 16:45
YGWC-28S	AZK0288-06	Ground Water	11/07/16 17:00	11/08/16 16:45
Dup-2	AZK0288-07	Ground Water	11/07/16 00:00	11/08/16 16:45



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Project: CCR Event

Client ID: YGWC-271

Lab Number ID: AZK0288-01

Date/Time Sampled: 11/7/2016 10:40:00AM

Date/Time Received: 11/8/2016 4:45:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	264	25	10	mg/L	SM 2540 C		1	11/09/16 12:55	11/09/16 12:55	6110247	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	11/09/16 17:36	11/15/16 01:44	6110275	RNB
Fluoride	0.12	0.30	0.02	mg/L	EPA 300.0	J	1	11/09/16 17:36	11/15/16 01:44	6110275	RNB
Sulfate	5.4	1.0	0.05	mg/L	EPA 300.0		1	11/09/16 17:36	11/15/16 01:44	6110275	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Barium	0.0639	0.0100	0.0004	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Boron	1.91	0.200	0.0321	mg/L	EPA 6020B		5	11/10/16 08:35	11/14/16 14:34	6110266	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Calcium	26.1	2.50	0.155	mg/L	EPA 6020B		5	11/10/16 08:35	11/14/16 14:34	6110266	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Cobalt	0.0016	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Lithium	0.0097	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:20	6110266	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:50	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Project: CCR Event

Client ID: YGWC-27S

Lab Number ID: AZK0288-02

Date/Time Sampled: 11/7/2016 12:15:00PM

Date/Time Received: 11/8/2016 4:45:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	291	25	10	mg/L	SM 2540 C		1	11/09/16 12:55	11/09/16 12:55	6110247	JPT
Inorganic Anions											
Chloride	24	2.5	0.14	mg/L	EPA 300.0		10	11/09/16 17:36	11/15/16 02:04	6110275	RNB
Fluoride	0.20	0.30	0.02	mg/L	EPA 300.0	J	1	11/09/16 17:36	11/15/16 02:25	6110275	RNB
Sulfate	24	1.0	0.05	mg/L	EPA 300.0		1	11/09/16 17:36	11/15/16 02:25	6110275	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Barium	0.102	0.0100	0.0004	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Boron	1.35	0.0400	0.0064	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Calcium	34.9	2.50	0.155	mg/L	EPA 6020B		5	11/10/16 08:35	11/14/16 14:40	6110266	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Cobalt	0.0025	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:26	6110266	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:52	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Project: CCR Event

Client ID: YGWC-261

Lab Number ID: AZK0288-03

Date/Time Sampled: 11/7/2016 2:20:00PM

Date/Time Received: 11/8/2016 4:45:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	301	25	10	mg/L	SM 2540 C		1	11/09/16 12:55	11/09/16 12:55	6110247	JPT
Inorganic Anions											
Chloride	17	0.25	0.01	mg/L	EPA 300.0		1	11/09/16 17:36	11/15/16 04:29	6110275	RNB
Fluoride	0.12	0.30	0.02	mg/L	EPA 300.0	J	1	11/09/16 17:36	11/15/16 04:29	6110275	RNB
Sulfate	81	5.0	0.26	mg/L	EPA 300.0		5	11/09/16 17:36	11/15/16 02:46	6110275	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Barium	0.0650	0.0100	0.0004	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Boron	0.852	0.0400	0.0064	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Calcium	13.8	2.50	0.155	mg/L	EPA 6020B		5	11/10/16 08:35	11/14/16 14:46	6110266	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Selenium	0.0017	0.0100	0.0010	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Lithium	0.0057	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:31	6110266	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:54	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Project: CCR Event

Client ID: YGWC-26S

Lab Number ID: AZK0288-04

Date/Time Sampled: 11/7/2016 3:20:00PM

Date/Time Received: 11/8/2016 4:45:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	284	25	10	mg/L	SM 2540 C		1	11/09/16 12:55	11/09/16 12:55	6110247	JPT
Inorganic Anions											
Chloride	16	0.25	0.01	mg/L	EPA 300.0		1	11/09/16 17:36	11/15/16 05:10	6110275	RNB
Fluoride	0.44	0.30	0.02	mg/L	EPA 300.0		1	11/09/16 17:36	11/15/16 05:10	6110275	RNB
Sulfate	100	5.0	0.26	mg/L	EPA 300.0		5	11/09/16 17:36	11/15/16 04:50	6110275	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Barium	0.0289	0.0100	0.0004	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Boron	0.621	0.0400	0.0064	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Calcium	12.1	2.50	0.155	mg/L	EPA 6020B		5	11/10/16 08:35	11/14/16 14:52	6110266	CSW
Chromium	0.0013	0.0100	0.0009	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Cobalt	0.0025	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:37	6110266	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 15:57	6110259	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Project: CCR Event

Client ID: YGWC-29I

Lab Number ID: AZK0288-05

Date/Time Sampled: 11/7/2016 10:35:00AM

Date/Time Received: 11/8/2016 4:45:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	291	25	10	mg/L	SM 2540 C		1	11/09/16 12:55	11/09/16 12:55	6110247	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	11/09/16 17:36	11/10/16 12:06	6110275	RNB
Fluoride	0.11	0.30	0.02	mg/L	EPA 300.0	J	1	11/09/16 17:36	11/15/16 05:31	6110275	RNB
Sulfate	33	1.0	0.05	mg/L	EPA 300.0		1	11/09/16 17:36	11/10/16 12:06	6110275	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Barium	0.0712	0.0100	0.0004	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Boron	0.815	0.0400	0.0064	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Cadmium	0.0002	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Calcium	11.4	2.50	0.155	mg/L	EPA 6020B		5	11/10/16 08:35	11/14/16 14:59	6110266	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Lithium	0.0057	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:43	6110266	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 16:58	6110260	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Project: CCR Event

Client ID: YGWC-28S

Lab Number ID: AZK0288-06

Date/Time Sampled: 11/7/2016 5:00:00PM

Date/Time Received: 11/8/2016 4:45:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	399	25	10	mg/L	SM 2540 C		1	11/09/16 12:55	11/09/16 12:55	6110247	JPT
Inorganic Anions											
Chloride	20	0.25	0.01	mg/L	EPA 300.0		1	11/09/16 17:36	11/10/16 12:27	6110275	RNB
Fluoride	0.27	0.30	0.02	mg/L	EPA 300.0	J	1	11/09/16 17:36	11/15/16 05:53	6110275	RNB
Sulfate	4.3	1.0	0.05	mg/L	EPA 300.0		1	11/09/16 17:36	11/10/16 12:27	6110275	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Barium	0.214	0.0500	0.0022	mg/L	EPA 6020B		5	11/10/16 08:35	11/11/16 15:00	6110266	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Boron	2.49	0.200	0.0321	mg/L	EPA 6020B		5	11/10/16 08:35	11/11/16 15:00	6110266	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Calcium	25.1	2.50	0.155	mg/L	EPA 6020B		5	11/10/16 08:35	11/11/16 15:00	6110266	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Cobalt	0.0010	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:48	6110266	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/10/16 10:05	11/10/16 17:06	6110260	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Project: CCR Event

Client ID: Dup-2

Lab Number ID: AZK0288-07

Date/Time Sampled: 11/7/2016 12:00:00AM

Date/Time Received: 11/8/2016 4:45:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	248	25	10	mg/L	SM 2540 C		1	11/09/16 12:55	11/09/16 12:55	6110247	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	11/09/16 17:36	11/10/16 12:49	6110275	RNB
Fluoride	0.24	0.30	0.02	mg/L	EPA 300.0	J	1	11/09/16 17:36	11/15/16 06:14	6110275	RNB
Sulfate	33	1.0	0.05	mg/L	EPA 300.0		1	11/09/16 17:36	11/10/16 12:49	6110275	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Barium	0.0720	0.0100	0.0004	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Boron	0.813	0.0400	0.0064	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Cadmium	0.0002	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Calcium	10.7	2.50	0.155	mg/L	EPA 6020B		5	11/10/16 08:35	11/14/16 15:05	6110266	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Lithium	0.0057	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/10/16 08:35	11/11/16 14:54	6110266	CSW
Mercury	0.00007	0.00050	0.000041	mg/L	EPA 7470A	J	1	11/10/16 10:05	11/10/16 17:08	6110260	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110247 - SM 2540 C											
Blank (6110247-BLK1)						Prepared & Analyzed: 11/09/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6110247-BS1)						Prepared & Analyzed: 11/09/16					
Total Dissolved Solids	401	25	10	mg/L	400.00		100	84-108			
Duplicate (6110247-DUP1)						Prepared & Analyzed: 11/09/16					
						Source: AZK0288-06					
Total Dissolved Solids	391	25	10	mg/L		399			2	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110275 - EPA 9056A											
Blank (6110275-BLK1)						Prepared: 11/09/16 Analyzed: 11/10/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6110275-BS1)						Prepared: 11/09/16 Analyzed: 11/10/16					
Chloride	10.7	0.25	0.01	mg/L	10.010		107	90-110			
Fluoride	10.9	0.30	0.02	mg/L	10.020		108	90-110			
Sulfate	10.5	1.0	0.05	mg/L	10.020		104	90-110			
Matrix Spike (6110275-MS1)						Source: AZK0229-02RE1 Prepared: 11/09/16 Analyzed: 11/10/16					
Chloride	11.7	0.25	0.01	mg/L	10.010	2.78	89	90-110			QM-05
Fluoride	9.93	0.30	0.02	mg/L	10.020	0.10	98	90-110			
Sulfate	12.9	1.0	0.05	mg/L	10.020	4.06	88	90-110			QM-05
Matrix Spike (6110275-MS2)						Source: AZK0288-04RE2 Prepared: 11/09/16 Analyzed: 11/10/16					
Chloride	24.4	0.25	0.01	mg/L	10.010	16.3	81	90-110			QM-05
Fluoride	11.0	0.30	0.02	mg/L	10.020	0.44	106	90-110			
Sulfate	95.0	1.0	0.05	mg/L	10.020	89.5	54	90-110			QM-02
Matrix Spike Dup (6110275-MSD1)						Source: AZK0229-02RE1 Prepared: 11/09/16 Analyzed: 11/10/16					
Chloride	12.7	0.25	0.01	mg/L	10.010	2.78	99	90-110	8	15	
Fluoride	11.1	0.30	0.02	mg/L	10.020	0.10	110	90-110	11	15	
Sulfate	13.9	1.0	0.05	mg/L	10.020	4.06	99	90-110	8	15	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110259 - EPA 7470A											
Blank (6110259-BLK1)						Prepared & Analyzed: 11/10/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6110259-BS1)						Prepared & Analyzed: 11/10/16					
Mercury	0.00256	0.00050	0.000041	mg/L	2.5000E-3		102	80-120			
Matrix Spike (6110259-MS1)						Source: AZK0200-02 Prepared & Analyzed: 11/10/16					
Mercury	0.00244	0.00050	0.000041	mg/L	2.5000E-3	ND	98	75-125			
Matrix Spike Dup (6110259-MSD1)						Source: AZK0200-02 Prepared & Analyzed: 11/10/16					
Mercury	0.00251	0.00050	0.000041	mg/L	2.5000E-3	ND	100	75-125	3	20	
Post Spike (6110259-PS1)						Source: AZK0200-02 Prepared & Analyzed: 11/10/16					
Mercury	1.75			ug/L	1.6667	-0.0167	105	80-120			
Batch 6110260 - EPA 7470A											
Blank (6110260-BLK1)						Prepared & Analyzed: 11/10/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6110260-BS1)						Prepared & Analyzed: 11/10/16					
Mercury	0.00246	0.00050	0.000041	mg/L	2.5000E-3		98	80-120			
Matrix Spike (6110260-MS1)						Source: AZK0288-05 Prepared & Analyzed: 11/10/16					
Mercury	0.00227	0.00050	0.000041	mg/L	2.5000E-3	ND	91	75-125			
Matrix Spike Dup (6110260-MSD1)						Source: AZK0288-05 Prepared & Analyzed: 11/10/16					
Mercury	0.00231	0.00050	0.000041	mg/L	2.5000E-3	ND	92	75-125	2	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110260 - EPA 7470A											
Post Spike (6110260-PS1)			Source: AZK0288-05			Prepared & Analyzed: 11/10/16					
Mercury	1.61			ug/L	1.6667	-0.0143	96	80-120			
Batch 6110266 - EPA 3005A											
Blank (6110266-BLK1)			Prepared: 11/10/16 Analyzed: 11/11/16								
Antimony	0.0008	0.0030	0.0008	mg/L							J
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6110266-BS1)											
Prepared: 11/10/16 Analyzed: 11/11/16											
Antimony	0.0994	0.0030	0.0008	mg/L	0.10000		99	80-120			
Arsenic	0.0990	0.0050	0.0016	mg/L	0.10000		99	80-120			
Barium	0.0984	0.0100	0.0004	mg/L	0.10000		98	80-120			
Beryllium	0.0924	0.0030	0.00008	mg/L	0.10000		92	80-120			
Boron	0.998	0.0400	0.0064	mg/L	1.0000		100	80-120			
Cadmium	0.0986	0.0010	0.00007	mg/L	0.10000		99	80-120			
Calcium	1.01	0.500	0.0311	mg/L	1.0000		101	80-120			
Chromium	0.101	0.0100	0.0009	mg/L	0.10000		101	80-120			
Cobalt	0.0985	0.0100	0.0005	mg/L	0.10000		98	80-120			
Copper	0.100	0.0250	0.0005	mg/L	0.10000		100	80-120			
Lead	0.0979	0.0050	0.0001	mg/L	0.10000		98	80-120			
Molybdenum	0.0988	0.0100	0.0017	mg/L	0.10000		99	80-120			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000		101	80-120			
Selenium	0.0956	0.0100	0.0010	mg/L	0.10000		96	80-120			
Silver	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110266 - EPA 3005A											
LCS (6110266-BS1)						Prepared: 11/10/16 Analyzed: 11/11/16					
Thallium	0.0986	0.0010	0.0002	mg/L	0.10000		99	80-120			
Vanadium	0.0994	0.0100	0.0071	mg/L	0.10000		99	80-120			
Zinc	0.0990	0.0100	0.0021	mg/L	0.10000		99	80-120			
Lithium	0.0955	0.0500	0.0021	mg/L	0.10000		96	80-120			
Matrix Spike (6110266-MS1)						Source: AZK0229-01 Prepared: 11/10/16 Analyzed: 11/11/16					
Antimony	0.101	0.0030	0.0008	mg/L	0.10000	0.0022	98	75-125			
Arsenic	0.0982	0.0050	0.0016	mg/L	0.10000	ND	98	75-125			
Barium	0.103	0.0100	0.0004	mg/L	0.10000	0.0047	98	75-125			
Beryllium	0.0918	0.0030	0.00008	mg/L	0.10000	ND	92	75-125			
Boron	0.967	0.0400	0.0064	mg/L	1.0000	0.0138	95	75-125			
Cadmium	0.0962	0.0010	0.00007	mg/L	0.10000	0.0001	96	75-125			
Calcium	2.53	0.500	0.0311	mg/L	1.0000	1.65	88	75-125			
Chromium	0.0998	0.0100	0.0009	mg/L	0.10000	ND	100	75-125			
Cobalt	0.0993	0.0100	0.0005	mg/L	0.10000	0.0044	95	75-125			
Copper	0.0984	0.0250	0.0005	mg/L	0.10000	ND	98	75-125			
Lead	0.0969	0.0050	0.0001	mg/L	0.10000	ND	97	75-125			
Molybdenum	0.0964	0.0100	0.0017	mg/L	0.10000	ND	96	75-125			
Nickel	0.104	0.0100	0.0006	mg/L	0.10000	0.0035	100	75-125			
Selenium	0.0928	0.0100	0.0010	mg/L	0.10000	ND	93	75-125			
Silver	0.0997	0.0100	0.0005	mg/L	0.10000	ND	100	75-125			
Thallium	0.0979	0.0010	0.0002	mg/L	0.10000	ND	98	75-125			
Vanadium	0.0984	0.0100	0.0071	mg/L	0.10000	ND	98	75-125			
Zinc	0.0997	0.0100	0.0021	mg/L	0.10000	0.0043	95	75-125			
Lithium	0.0948	0.0500	0.0021	mg/L	0.10000	ND	95	75-125			
Matrix Spike Dup (6110266-MSD1)						Source: AZK0229-01 Prepared: 11/10/16 Analyzed: 11/11/16					
Antimony	0.105	0.0030	0.0008	mg/L	0.10000	0.0022	103	75-125	4	20	
Arsenic	0.0972	0.0050	0.0016	mg/L	0.10000	ND	97	75-125	1	20	
Barium	0.105	0.0100	0.0004	mg/L	0.10000	0.0047	101	75-125	2	20	
Beryllium	0.0946	0.0030	0.00008	mg/L	0.10000	ND	95	75-125	3	20	
Boron	1.01	0.0400	0.0064	mg/L	1.0000	0.0138	100	75-125	5	20	
Cadmium	0.0975	0.0010	0.00007	mg/L	0.10000	0.0001	97	75-125	1	20	
Calcium	2.61	0.500	0.0311	mg/L	1.0000	1.65	97	75-125	3	20	
Chromium	0.0988	0.0100	0.0009	mg/L	0.10000	ND	99	75-125	1	20	
Cobalt	0.100	0.0100	0.0005	mg/L	0.10000	0.0044	96	75-125	0.8	20	
Copper	0.0986	0.0250	0.0005	mg/L	0.10000	ND	99	75-125	0.2	20	
Lead	0.0968	0.0050	0.0001	mg/L	0.10000	ND	97	75-125	0.05	20	
Molybdenum	0.103	0.0100	0.0017	mg/L	0.10000	ND	103	75-125	7	20	
Nickel	0.101	0.0100	0.0006	mg/L	0.10000	0.0035	97	75-125	3	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0288

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110266 - EPA 3005A											
Matrix Spike Dup (6110266-MSD1)			Source: AZK0229-01			Prepared: 11/10/16 Analyzed: 11/11/16					
Selenium	0.0936	0.0100	0.0010	mg/L	0.10000	ND	94	75-125	0.9	20	
Silver	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125	5	20	
Thallium	0.0988	0.0010	0.0002	mg/L	0.10000	ND	99	75-125	0.9	20	
Vanadium	0.0981	0.0100	0.0071	mg/L	0.10000	ND	98	75-125	0.3	20	
Zinc	0.0979	0.0100	0.0021	mg/L	0.10000	0.0043	94	75-125	2	20	
Lithium	0.0983	0.0500	0.0021	mg/L	0.10000	ND	98	75-125	4	20	
Post Spike (6110266-PS1)			Source: AZK0229-01			Prepared: 11/10/16 Analyzed: 11/11/16					
Antimony	92.0			ug/L	100.00	2.25	90	80-120			
Arsenic	96.3			ug/L	100.00	-0.204	96	80-120			
Barium	105			ug/L	100.00	4.68	100	80-120			
Beryllium	95.1			ug/L	100.00	0.0410	95	80-120			
Boron	989			ug/L	1000.0	13.8	98	80-120			
Cadmium	97.8			ug/L	100.00	0.124	98	80-120			
Calcium	2570			ug/L	1000.0	1650	92	80-120			
Chromium	96.6			ug/L	100.00	0.293	96	80-120			
Cobalt	102			ug/L	100.00	4.37	97	80-120			
Copper	96.0			ug/L	100.00	0.237	96	80-120			
Lead	95.6			ug/L	100.00	0.104	96	80-120			
Molybdenum	99.7			ug/L	100.00	0.193	100	80-120			
Nickel	99.8			ug/L	100.00	3.50	96	80-120			
Selenium	97.0			ug/L	100.00	0.965	96	80-120			
Silver	101			ug/L	100.00	0.0213	101	80-120			
Thallium	97.0			ug/L	100.00	0.139	97	80-120			
Vanadium	98.0			ug/L	100.00	-0.333	98	80-120			
Zinc	97.6			ug/L	100.00	4.31	93	80-120			
Lithium	98.5			ug/L	100.00	1.22	97	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME Georgis Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty Heath McConkie		PROJECT NAME/STATE Plant Yates AP		PROJECT # Phase 2 OCR	
REQUESTED COMPLETION DATE		PO # laburch@southernco.com		CONTAINER TYPE PRESERVATION		ANALYSIS REQUESTED		CONTAINER TYPE PRESERVATION	
Collection DATE MM/DD/YY	Collection TIME	MATRIX CODE	SAMPLE IDENTIFICATION	Matrix App III & IV (EPA 6020/7470)	C ¹⁴ SO ₄ & TDS (EPA 300 D & SM 2540C)	Radium 226 & 228 (SM-846 9315/9320)	P P P P	P P P P	L A B I D N U M B E R
11-7-16	1040	GW	YGWLC-27I	1	1	2	3	3	7
11-7-16	1215	GW	YGWLC-27S	1	1	1	1	1	3
11-7-16	1420	GW	YGWLC-26E	1	1	1	1	1	3
11-7-16	1520	GW	YGWLC-26S	1	1	1	1	1	3
11-7-16	1035	GW	YGWLC-29I	1	1	1	1	1	3
11-7-16	1700	GW	YGWLC-28S	1	1	1	1	1	3
11-7-16	-	GW	DUP-2	1	1	1	1	1	3

SAMPLED BY AND TITLE C. Parker, R. Walker (Acc)	DATE/TIME 11-8-16 1200	RELINQUISHED BY [Signature]	DATE/TIME 11-8-16 1655
RECEIVED BY [Signature]	DATE/TIME 11-8-16 1645	RELINQUISHED BY [Signature]	DATE/TIME 11-8-16 1655

LABORATORY Pace Analytical	DATE/TIME 11-8-16 1645	SAMPLE SHIPPED VIA UPS	FED-EX	USPS	COURIER	CLIENT	OTHER	FS
Check: [Signature]	Temperature: 10°C	Label: [Signature]	Breakish	Not Present	# of Coolers	Cooler ID:		

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 11/17/2016 8:24:48AM

Attn: Mr. Jeju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 11/08/16 16:45

Work Order: AZK0288

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 7

#Containers: 22

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

December 15, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30202155

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on November 10, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30202155

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates

Pace Project No.: 30202155

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30202155001	YGWC-27I	Water	11/07/16 10:40	11/10/16 10:10
30202155002	YGWC-27S	Water	11/07/16 12:15	11/10/16 10:10
30202155003	YGWC-26I	Water	11/07/16 14:20	11/10/16 10:10
30202155004	YGWC-26S	Water	11/07/16 15:20	11/10/16 10:10
30202155005	YGWC-29I	Water	11/07/16 10:35	11/10/16 10:10
30202155006	YGWC-28S	Water	11/07/16 17:00	11/10/16 10:10
30202155007	Dup-2	Water	11/07/16 00:00	11/10/16 10:10

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30202155

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30202155001	YGWC-27I	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202155002	YGWC-27S	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202155003	YGWC-26I	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202155004	YGWC-26S	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202155005	YGWC-29I	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202155006	YGWC-28S	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1
30202155007	Dup-2	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202155

Sample: YGWC-271		Lab ID: 30202155001	Collected: 11/07/16 10:40	Received: 11/10/16 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.84 ± 0.523 (0.314) C:85% T:NA	pCi/L	12/06/16 08:30	13982-63-3	
Radium-228	EPA 9320	0.822 ± 0.424 (0.723) C:65% T:82%	pCi/L	12/13/16 18:54	15262-20-1	
Total Radium	Total Radium Calculation	2.66 ± 0.947 (1.04)	pCi/L	12/15/16 07:11	7440-14-4	

Sample: YGWC-27S		Lab ID: 30202155002	Collected: 11/07/16 12:15	Received: 11/10/16 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.148 ± 0.177 (0.351) C:77% T:NA	pCi/L	12/06/16 08:30	13982-63-3	
Radium-228	EPA 9320	0.729 ± 0.429 (0.766) C:61% T:87%	pCi/L	12/13/16 18:55	15262-20-1	
Total Radium	Total Radium Calculation	0.877 ± 0.606 (1.12)	pCi/L	12/15/16 07:11	7440-14-4	

Sample: YGWC-26I		Lab ID: 30202155003	Collected: 11/07/16 14:20	Received: 11/10/16 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.125 ± 0.172 (0.365) C:86% T:NA	pCi/L	12/06/16 08:30	13982-63-3	
Radium-228	EPA 9320	0.648 ± 0.530 (1.01) C:50% T:90%	pCi/L	12/13/16 18:55	15262-20-1	
Total Radium	Total Radium Calculation	0.773 ± 0.702 (1.38)	pCi/L	12/15/16 07:11	7440-14-4	

Sample: YGWC-26S		Lab ID: 30202155004	Collected: 11/07/16 15:20	Received: 11/10/16 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0717 ± 0.142 (0.329) C:89% T:NA	pCi/L	12/06/16 08:30	13982-63-3	
Radium-228	EPA 9320	0.575 ± 0.398 (0.733) C:61% T:90%	pCi/L	12/13/16 18:55	15262-20-1	
Total Radium	Total Radium Calculation	0.647 ± 0.540 (1.06)	pCi/L	12/15/16 07:11	7440-14-4	

Sample: YGWC-29I		Lab ID: 30202155005	Collected: 11/07/16 10:35	Received: 11/10/16 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.343 ± 0.230 (0.347) C:83% T:NA	pCi/L	12/06/16 08:30	13982-63-3	
Radium-228	EPA 9320	0.820 ± 0.402 (0.670) C:63% T:86%	pCi/L	12/13/16 18:55	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202155

Sample: YGWC-29I		Lab ID: 30202155005	Collected: 11/07/16 10:35	Received: 11/10/16 10:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	1.16 ± 0.632	(1.02)	pCi/L	12/15/16 07:11	7440-14-4	

Sample: YGWC-28S		Lab ID: 30202155006	Collected: 11/07/16 17:00	Received: 11/10/16 10:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.198 ± 0.207	(0.410)	pCi/L	12/06/16 08:30	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	0.411 ± 0.442	(0.870)	pCi/L	12/13/16 18:55	15262-20-1	
		C:57% T:87%					
Total Radium	Total Radium Calculation	0.609 ± 0.649	(1.28)	pCi/L	12/15/16 07:11	7440-14-4	

Sample: Dup-2		Lab ID: 30202155007	Collected: 11/07/16 00:00	Received: 11/10/16 10:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.461 ± 0.251	(0.317)	pCi/L	12/06/16 08:30	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	0.385 ± 0.396	(0.776)	pCi/L	12/13/16 18:55	15262-20-1	
		C:62% T:87%					
Total Radium	Total Radium Calculation	0.846 ± 0.647	(1.09)	pCi/L	12/15/16 07:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202155

QC Batch:	242653	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30202155001, 30202155002, 30202155003, 30202155004, 30202155005, 30202155006, 30202155007		

METHOD BLANK:	1192645	Matrix:	Water
Associated Lab Samples:	30202155001, 30202155002, 30202155003, 30202155004, 30202155005, 30202155006, 30202155007		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.240 ± 0.394 (0.801) C:60% T:86%	pCi/L	12/13/16 18:52	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202155

QC Batch: 241710

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30202155001, 30202155002, 30202155003, 30202155004, 30202155005, 30202155006, 30202155007

METHOD BLANK: 1188124

Matrix: Water

Associated Lab Samples: 30202155001, 30202155002, 30202155003, 30202155004, 30202155005, 30202155006, 30202155007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0538 ± 0.0610 (0.254) C:125% T:NA	pCi/L	12/06/16 08:30	

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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30202155

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30202155



Results Requested By: 12/13/2016

Chain of Custody

Workorder: AZK0288
 Workorder Name: Plant Yates
 Subcontract To: Pace - Pittsburgh
 1638 Roseytown Road
 Stes. 2,3,4
 Greensburg, PA 15601
 Phone (724) 850-5600

Owner Received Date:

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers		Date/Time	Comments
						NO	YES		
1	YGWC-271	G	11/7/2016 10:40	AZK0288-01	GW	2			
2	YGWC-275	G	11/7/2016 12:15	AZK0288-02	GW	1			
3	YGWC-261	G	11/7/2016 14:20	AZK0288-03	GW	1			
4	YGWC-265	G	11/7/2016 15:20	AZK0288-04	GW	1			
5	YGWC-291	G	11/7/2016 10:35	AZK0288-05	GW	1			
6	YGWC-285	G	11/7/2016 17:00	AZK0288-06	GW	1			
7	Dup-2	G	11/7/2016 0:00	AZK0288-07	GW	1			
8									
9									
10									
Transfers Released By								Date/Time	Comments
1								11-06-10	
2									
3									

Radium 226, 228, Total

LAB USE ONLY

001

002

003

004

005

006

007

Received By: *Michael EmLoet*

Cooler Temperature on Receipt NA °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200; FAX (770) 734-4201; www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Reipth McGill Blvd SE B-0185 Atlanta, GA 30308 404-505-7239
 REPORT TO: Lauren Petty
 CC: Maria Padilla
 Heatn McCorkle
 PO#: laburch@southemco.com
 PROJECT NAME/STATE: Plant Yates AP
 PROJECT #: Phase 2 CCR

CONTAINER TYPE: P - PLASTIC
 A - AMBER GLASS
 G - CLEAR GLASS
 V - VOA VIAL
 S - STERILE
 O - OTHER
 PRESERVATION: 1 - HCl, 56°C
 2 - H2SO4, 56°C
 3 - HNO3
 4 - NaOH, 56°C
 5 - NaOH/znAc, 56°C
 6 - Na2S2O5, 56°C
 7 - 56°C not frozen

MATRIX CODES:
 DW - DRINKING WATER
 WW - WASTEWATER
 GW - GROUNDWATER
 SW - SURFACE WATER
 W - WATER
 S - SOIL
 SL - SLUDGE
 SD - SOLID
 A - AIR
 L - LIQUID
 P - PRODUCT

Collection DATE m/d/yyyy	Collection TIME	MATRIX CODE*	SAMPLE IDENTIFICATION	ANALYSIS REQUESTED				RELINQUISHED BY	DATE/TIME
				P	F	P	P		
11-7-16	1040	GW	YGWLC-27I	3	7	3		11-8-16 1655	
11-7-16	1215	GW	YGWLC-27S	1	1	1		11-8-16 1655	
11-7-16	1420	GW	YGWLC-26I	1	1	1		11-8-16 1655	
11-7-16	1520	GW	YGWLC-26S	1	1	1		11-8-16 1655	
11-7-16	1035	GW	YGWLC-29I	1	1	1		11-8-16 1655	
11-7-16	1700	GW	YGWLC-28S	1	1	1		11-8-16 1655	
11-7-16	-	GW	DUP-2	1	1	1		11-8-16 1655	

SAMPLED BY AND TITLE: C. Walker (Acc)
 RECEIVED BY: C. Walker (Acc)
 DATE/TIME: 11-8-16 1200
 RELINQUISHED BY: [Signature]
 DATE/TIME: 11-8-16 1655
 SAMPLE SHIPPED VIA: UPS
 RELINQUISHED BY: [Signature]
 DATE/TIME: 11-8-16 1645
 RECEIVED BY LAB: [Signature]
 pH checked: [Signature]
 Yes () No ()

CONTAINER TYPE: P - PLASTIC
 A - AMBER GLASS
 G - CLEAR GLASS
 V - VOA VIAL
 S - STERILE
 O - OTHER
 PRESERVATION: 1 - HCl, 56°C
 2 - H2SO4, 56°C
 3 - HNO3
 4 - NaOH, 56°C
 5 - NaOH/znAc, 56°C
 6 - Na2S2O5, 56°C
 7 - 56°C not frozen

MATRIX CODES:
 DW - DRINKING WATER
 WW - WASTEWATER
 GW - GROUNDWATER
 SW - SURFACE WATER
 W - WATER
 S - SOIL
 SL - SLUDGE
 SD - SOLID
 A - AIR
 L - LIQUID
 P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

LAB #: 1740288
 Entered into LIMS: [Signature]
 Tracking #: [Signature]

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace GA

Project # 30202155

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5100 3304

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: ML 11-10-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: <u>W</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.	X			13.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PH < 2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed <u>ML</u> Date/time of preservation _____
				Lot # of added preservative _____
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:		X		15.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr	X			Initial when completed: <u>ML</u> Date: <u>11-10-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JAL
Date: 12/9/2016
Worklist: 32862
Matrix: DW

Method Blank Assessment	
MB Sample ID	1192645
MB concentration:	0.240
M/B Counting Uncertainty:	0.392
MB MDC:	0.801
MB Numerical Performance Indicator:	1.20
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSID (Y or N)?	LCSID32862
Count Date:	12/13/2016
Spike I.D.:	16-027
Spike Concentration (pCi/mL):	25.832
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.806
Target Conc. (pCi/L, g, F):	6.414
Uncertainty (Calculated):	0.462
Result (pCi/L, g, F):	6.672
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.640
Numerical Performance Indicator:	0.64
Percent Recovery:	104.02%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30202155001
Duplicate Sample I.D.:	30202155001DUP
Sample Result (pCi/L, g, F):	0.822
Sample Duplicate Result (pCi/L, g, F):	0.398
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	1.045
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.774
Duplicate RPD:	23.89%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

John A. Kline

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):	
MSD Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate 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:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
Duplicate Status vs Numerical Indicator:	
Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 12/5/2016
Worklist: 32685
Matrix: DW

Method Blank Assessment	
MB Sample ID	1188124
MB concentration:	-0.054
M/B Counting Uncertainty:	0.060
MB MDC:	0.254
MB Numerical Performance Indicator:	-1.74
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCS (Y or N)?	N
		LCS32685	LCS32685
Count Date:	12/6/2016		
Spike I.D.:	16-026		
Spike Concentration (pCi/mL):	44.673		
Volume Used (mL):	0.10		
Aliquot Volume (L, g, F):	0.502		
Target Conc. (pCi/L, g, F):	8.907		
Uncertainty (Calculated):	0.419		
Result (pCi/L, g, F):	7.322		
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.834		
Numerical Performance Indicator:	-3.33		
Percent Recovery:	82.20%		
Status vs Numerical Indicator:	N/A		
Status vs Recovery:	Pass		

Duplicate Sample Assessment	
Sample I.D.:	30202155001
Duplicate Sample I.D.:	30202155001DUP
Sample Result (pCi/L, g, F):	1.842
Sample Result Counting Uncertainty (pCi/L, g, F):	0.450
Sample Duplicate Result (pCi/L, g, F):	2.205
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.510
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.045
Duplicate RPD:	17.91%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

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):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample 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:	

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:	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Handwritten signature/initials



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZK0289

November 17, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-28S (Filtered)	AZK0289-01	Ground Water	11/07/16 17:00	11/08/16 16:45



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 17, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0289

Project: CCR Event

Client ID: YGWC-28S (Filtered)

Lab Number ID: AZK0289-01

Date/Time Sampled: 11/7/2016 5:00:00PM

Date/Time Received: 11/8/2016 4:45:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Metals, Dissolved											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Barium	0.232	0.0100	0.0004	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Boron	2.75	0.200	0.0321	mg/L	EPA 6020B	B-01	5	11/11/16 09:00	11/15/16 16:33	6110303	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Calcium	26.4	2.50	0.155	mg/L	EPA 6020B		5	11/11/16 09:00	11/15/16 16:33	6110303	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Cobalt	0.0009	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/11/16 09:00	11/15/16 16:28	6110303	CSW
Mercury	ND	0.0005	0.00004	mg/L	EPA 7470A		1	11/10/16 09:10	11/10/16 14:41	6110263	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0289

Metals, Dissolved - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110263 - EPA 7470A											
Blank (6110263-BLK1)						Prepared & Analyzed: 11/10/16					
Mercury	ND	0.0005	0.00004	mg/L							
LCS (6110263-BS1)						Prepared & Analyzed: 11/10/16					
Mercury	0.0024	0.0005	0.00004	mg/L	2.5000E-3		95	80-120			
Matrix Spike (6110263-MS1)						Source: AZK0289-01 Prepared & Analyzed: 11/10/16					
Mercury	0.0021	0.0005	0.00004	mg/L	2.5000E-3	ND	82	75-125			
Matrix Spike Dup (6110263-MSD1)						Source: AZK0289-01 Prepared & Analyzed: 11/10/16					
Mercury	0.0020	0.0005	0.00004	mg/L	2.5000E-3	ND	82	75-125	0.7	20	
Post Spike (6110263-PS1)						Source: AZK0289-01 Prepared & Analyzed: 11/10/16					
Mercury	1.50			ug/L	1.6667	-0.0278	90	80-120			
Batch 6110303 - EPA 3005A											
Blank (6110303-BLK1)						Prepared: 11/11/16 Analyzed: 11/15/16					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	0.0152	0.0400	0.0064	mg/L							J
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0289

Metals, Dissolved - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6110303 - EPA 3005A

LCS (6110303-BS1)

Prepared: 11/11/16 Analyzed: 11/15/16

Antimony	0.119	0.0030	0.0008	mg/L	0.10000		119	80-120			
Arsenic	0.104	0.0050	0.0016	mg/L	0.10000		104	80-120			
Barium	0.108	0.0100	0.0004	mg/L	0.10000		108	80-120			
Beryllium	0.110	0.0030	0.00008	mg/L	0.10000		110	80-120			
Boron	1.11	0.0400	0.0064	mg/L	1.0000		111	80-120			
Cadmium	0.107	0.0010	0.00007	mg/L	0.10000		107	80-120			
Calcium	1.07	0.500	0.0311	mg/L	1.0000		107	80-120			
Chromium	0.105	0.0100	0.0009	mg/L	0.10000		105	80-120			
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Copper	0.106	0.0250	0.0005	mg/L	0.10000		106	80-120			
Lead	0.108	0.0050	0.0001	mg/L	0.10000		108	80-120			
Molybdenum	0.104	0.0100	0.0017	mg/L	0.10000		104	80-120			
Nickel	0.107	0.0100	0.0006	mg/L	0.10000		107	80-120			
Selenium	0.104	0.0100	0.0010	mg/L	0.10000		104	80-120			
Silver	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Thallium	0.107	0.0010	0.0002	mg/L	0.10000		107	80-120			
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000		103	80-120			
Zinc	0.107	0.0100	0.0021	mg/L	0.10000		107	80-120			
Lithium	0.113	0.0500	0.0021	mg/L	0.10000		113	80-120			

Matrix Spike (6110303-MS1)

Source: AZK0289-01

Prepared: 11/11/16 Analyzed: 11/15/16

Antimony	0.118	0.0030	0.0008	mg/L	0.10000	ND	118	75-125			
Arsenic	0.107	0.0050	0.0016	mg/L	0.10000	ND	107	75-125			
Barium	0.346	0.0100	0.0004	mg/L	0.10000	0.232	115	75-125			
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000	ND	102	75-125			
Boron	3.43	0.200	0.0321	mg/L	1.0000	2.75	68	75-125			QM-02
Cadmium	0.106	0.0010	0.00007	mg/L	0.10000	ND	106	75-125			
Calcium	26.3	2.50	0.155	mg/L	1.0000	26.4	NR	75-125			QM-02
Chromium	0.105	0.0100	0.0009	mg/L	0.10000	ND	105	75-125			
Cobalt	0.109	0.0100	0.0005	mg/L	0.10000	0.0009	108	75-125			
Copper	0.103	0.0250	0.0005	mg/L	0.10000	ND	103	75-125			
Lead	0.107	0.0050	0.0001	mg/L	0.10000	ND	107	75-125			
Molybdenum	0.109	0.0100	0.0017	mg/L	0.10000	ND	109	75-125			
Nickel	0.109	0.0100	0.0006	mg/L	0.10000	0.0018	107	75-125			
Selenium	0.107	0.0100	0.0010	mg/L	0.10000	ND	107	75-125			
Silver	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125			
Thallium	0.105	0.0010	0.0002	mg/L	0.10000	ND	105	75-125			
Vanadium	0.107	0.0100	0.0071	mg/L	0.10000	ND	107	75-125			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000	ND	102	75-125			
Lithium	0.101	0.0500	0.0021	mg/L	0.10000	ND	101	75-125			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Report No.: AZK0289

Metals, Dissolved - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110303 - EPA 3005A											
Matrix Spike Dup (6110303-MSD1)			Source: AZK0289-01			Prepared: 11/11/16 Analyzed: 11/15/16					
Antimony	0.121	0.0030	0.0008	mg/L	0.10000	ND	121	75-125	3	20	
Arsenic	0.105	0.0050	0.0016	mg/L	0.10000	ND	105	75-125	1	20	
Barium	0.364	0.0100	0.0004	mg/L	0.10000	0.232	133	75-125	5	20	QM-02
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000	ND	102	75-125	0.4	20	
Boron	3.47	0.200	0.0321	mg/L	1.0000	2.75	72	75-125	1	20	QM-02
Cadmium	0.107	0.0010	0.00007	mg/L	0.10000	ND	107	75-125	1	20	
Calcium	26.9	2.50	0.155	mg/L	1.0000	26.4	53	75-125	2	20	QM-02
Chromium	0.106	0.0100	0.0009	mg/L	0.10000	ND	106	75-125	0.7	20	
Cobalt	0.108	0.0100	0.0005	mg/L	0.10000	0.0009	107	75-125	1	20	
Copper	0.105	0.0250	0.0005	mg/L	0.10000	ND	105	75-125	2	20	
Lead	0.106	0.0050	0.0001	mg/L	0.10000	ND	106	75-125	0.7	20	
Molybdenum	0.111	0.0100	0.0017	mg/L	0.10000	ND	111	75-125	1	20	
Nickel	0.108	0.0100	0.0006	mg/L	0.10000	0.0018	106	75-125	0.7	20	
Selenium	0.103	0.0100	0.0010	mg/L	0.10000	ND	103	75-125	4	20	
Silver	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125	1	20	
Thallium	0.105	0.0010	0.0002	mg/L	0.10000	ND	105	75-125	0.3	20	
Vanadium	0.108	0.0100	0.0071	mg/L	0.10000	ND	108	75-125	1	20	
Zinc	0.110	0.0100	0.0021	mg/L	0.10000	ND	110	75-125	8	20	
Lithium	0.100	0.0500	0.0021	mg/L	0.10000	ND	100	75-125	1	20	
Post Spike (6110303-PS1)											
Source: AZK0289-01			Prepared: 11/11/16 Analyzed: 11/15/16								
Antimony	0.118	0.0030	0.0008	mg/L	0.10000	ND	118	80-120			
Arsenic	0.108	0.0050	0.0016	mg/L	0.10000	ND	108	80-120			
Barium	0.343	0.0100	0.0004	mg/L	0.10000	0.232	111	80-120			
Beryllium	0.103	0.0030	0.00008	mg/L	0.10000	ND	103	80-120			
Boron	3.51	0.200	0.0321	mg/L	1.0000	2.75	76	80-120			QM-02
Cadmium	0.104	0.0010	0.00007	mg/L	0.10000	ND	104	80-120			
Calcium	25.8	2.50	0.155	mg/L	1.0000	26.4	NR	80-120			QM-02
Chromium	0.103	0.0100	0.0009	mg/L	0.10000	ND	103	80-120			
Cobalt	0.104	0.0100	0.0005	mg/L	0.10000	0.0009	103	80-120			
Copper	0.101	0.0250	0.0005	mg/L	0.10000	ND	101	80-120			
Lead	0.106	0.0050	0.0001	mg/L	0.10000	ND	106	80-120			
Molybdenum	0.108	0.0100	0.0017	mg/L	0.10000	ND	108	80-120			
Nickel	0.105	0.0100	0.0006	mg/L	0.10000	0.0018	104	80-120			
Selenium	0.102	0.0100	0.0010	mg/L	0.10000	ND	102	80-120			
Silver	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	80-120			
Thallium	0.104	0.0010	0.0002	mg/L	0.10000	ND	104	80-120			
Vanadium	0.107	0.0100	0.0071	mg/L	0.10000	ND	107	80-120			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000	ND	102	80-120			
Lithium	0.102	0.0500	0.0021	mg/L	0.10000	ND	102	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 17, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239 REPORT TO: Lauren Petty CC: Maria Padilla, Heath McCorkle REQUESTED COMPLETION DATE: PO #: laburch@southernco.com PROJECT NAME/STATE: Plant Yates AP			CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION: 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen		
PROJECT #: Phase 2 CCR Collection DATE: 11-7-16 Collection TIME: 1700 MATRIX CODE: GW COMPARISON: <input checked="" type="checkbox"/> G <input type="checkbox"/> R <input type="checkbox"/> A <input type="checkbox"/> B ANALYSIS REQUESTED: Metals App. III & IV (EPA 6020/470) * (Disseminated) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-846 9315/9320)			CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION: 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen		
PREPARED BY AND TITLE: Ryan Walker (Acc) RECEIVED BY: Heather Hendry			REMARKS/ADDITIONAL INFORMATION: * Field Filtered		
DATE/TIME: 11-8-16 17:00 DATE/TIME:			DATE/TIME: 11-8-16 1645 DATE/TIME:		
RELINQUISHED BY:			RELINQUISHED BY:		
SAMPLE SHIPPED VIA: UPS Custody Seal: Intact			SAMPLE SHIPPED VIA: COURIER # of Coolers:		
LAB #: AZK0289 Entered into LIMS: Tracking #:			FOR LAB USE ONLY: CLIENT:		

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 11/17/2016 12:12:15PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 11/08/16 16:45

Work Order: AZK0289

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 1

#Containers: 1

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AZK0417

November 22, 2016

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-23S	AZK0417-01	Ground Water	11/08/16 14:55	11/11/16 09:40
YGWC-24S	AZK0417-02	Ground Water	11/08/16 12:50	11/11/16 09:40
YGWC-28I	AZK0417-03	Ground Water	11/08/16 11:25	11/11/16 09:40
FB-3-11-8-16	AZK0417-04	Water	11/08/16 15:30	11/11/16 09:40
YGWC-19S	AZK0417-05	Ground Water	11/09/16 10:10	11/11/16 09:40
YGWC-22S	AZK0417-06	Ground Water	11/09/16 12:10	11/11/16 09:40
YGWC-32S	AZK0417-07	Ground Water	11/09/16 15:05	11/11/16 09:40
YGWC-34I	AZK0417-08	Ground Water	11/09/16 14:45	11/11/16 09:40
Dup-3	AZK0417-09	Ground Water	11/09/16 00:00	11/11/16 09:40
YGWC-32I	AZK0417-10	Ground Water	11/10/16 10:25	11/11/16 09:40
FB-4-11-10-16	AZK0417-11	Water	11/10/16 10:50	11/11/16 09:40
EB-4-11-10-16	AZK0417-12	Water	11/10/16 09:45	11/11/16 09:40



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: YGWC-23S

Lab Number ID: AZK0417-01

Date/Time Sampled: 11/8/2016 2:55:00PM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	146	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	2.8	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 18:25	6110330	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 18:25	6110330	RLC
Sulfate	79	5.0	0.26	mg/L	EPA 300.0		5	11/11/16 13:46	11/17/16 02:34	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Barium	0.0540	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Boron	1.50	0.0400	0.0064	mg/L	EPA 6020B	B-01	1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Cadmium	0.00007	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Calcium	8.60	0.500	0.0311	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Selenium	0.0521	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Lithium	0.0024	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 14:18	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:07	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: YGWC-24S

Lab Number ID: AZK0417-02

Date/Time Sampled: 11/8/2016 12:50:00PM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	58	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	6.4	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 18:45	6110330	RLC
Fluoride	0.02	0.30	0.02	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 18:45	6110330	RLC
Sulfate	0.39	1.0	0.05	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 18:45	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Barium	0.0191	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Boron	0.0121	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Calcium	1.77	0.500	0.0311	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:24	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:09	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: YGWC-28I

Lab Number ID: AZK0417-03

Date/Time Sampled: 11/8/2016 11:25:00AM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	229	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 20:28	6110330	RLC
Fluoride	0.24	0.30	0.02	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 20:28	6110330	RLC
Sulfate	8.3	1.0	0.05	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 20:28	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Barium	0.0886	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Boron	2.44	0.200	0.0321	mg/L	EPA 6020B	B-01	5	11/15/16 08:15	11/16/16 13:23	6110361	CSW
Cadmium	0.00009	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Calcium	33.8	2.50	0.155	mg/L	EPA 6020B		5	11/15/16 08:15	11/19/16 13:23	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Lithium	0.0072	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 14:29	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:12	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: FB-3-11-8-16

Lab Number ID: AZK0417-04

Date/Time Sampled: 11/8/2016 3:30:00PM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	0.16	0.25	0.01	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 21:30	6110330	RLC
Fluoride	0.04	0.30	0.02	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 21:30	6110330	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 21:30	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Boron	0.0110	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:35	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:14	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: YGWC-19S

Lab Number ID: AZK0417-05

Date/Time Sampled: 11/9/2016 10:10:00AM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	40	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	3.0	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 21:51	6110330	RLC
Fluoride	0.02	0.30	0.02	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 21:51	6110330	RLC
Sulfate	0.39	1.0	0.05	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 21:51	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Barium	0.0074	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Boron	0.0085	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Calcium	1.07	0.500	0.0311	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:41	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:21	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: YGWC-22S

Lab Number ID: AZK0417-06

Date/Time Sampled: 11/9/2016 12:10:00PM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	505	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	25	2.5	0.14	mg/L	EPA 300.0		10	11/11/16 13:46	11/17/16 02:56	6110330	RLC
Fluoride	0.06	0.30	0.02	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 22:12	6110330	RLC
Sulfate	320	10	0.51	mg/L	EPA 300.0		10	11/11/16 13:46	11/17/16 02:56	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Barium	0.0182	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Beryllium	0.0007	0.0030	0.00008	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Boron	5.11	0.200	0.0321	mg/L	EPA 6020B	B-01	5	11/15/16 08:15	11/19/16 13:29	6110361	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Calcium	47.5	2.50	0.155	mg/L	EPA 6020B		5	11/15/16 08:15	11/19/16 13:29	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Cobalt	0.0012	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Selenium	0.0209	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:47	6110361	CSW
Mercury	0.00007	0.00050	0.000041	mg/L	EPA 7470A	J	1	11/15/16 08:50	11/15/16 15:23	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: YGWC-32S

Lab Number ID: AZK0417-07

Date/Time Sampled: 11/9/2016 3:05:00PM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	552	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	16	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 22:32	6110330	RLC
Fluoride	0.40	0.30	0.02	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 22:32	6110330	RLC
Sulfate	360	10	0.51	mg/L	EPA 300.0		10	11/11/16 13:46	11/17/16 03:18	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Barium	0.0230	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Beryllium	0.0023	0.0030	0.00008	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Boron	2.14	0.200	0.0321	mg/L	EPA 6020B	B-01	5	11/15/16 08:15	11/19/16 13:36	6110361	CSW
Cadmium	0.0005	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Calcium	106	25.0	1.55	mg/L	EPA 6020B		50	11/15/16 08:15	11/19/16 14:06	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Cobalt	0.0044	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Selenium	0.0531	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 14:52	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:26	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: YGWC-34I

Lab Number ID: AZK0417-08

Date/Time Sampled: 11/9/2016 2:45:00PM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	514	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	15	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 22:53	6110330	RLC
Fluoride	0.47	0.30	0.02	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 22:53	6110330	RLC
Sulfate	170	10	0.51	mg/L	EPA 300.0		10	11/11/16 13:46	11/17/16 03:40	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Barium	0.0230	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Beryllium	0.0007	0.0030	0.00008	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Boron	4.25	0.400	0.0642	mg/L	EPA 6020B	B-01	10	11/15/16 08:15	11/19/16 13:52	6110361	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Calcium	92.7	5.00	0.311	mg/L	EPA 6020B		10	11/15/16 08:15	11/19/16 13:52	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Cobalt	0.0049	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Molybdenum	0.0261	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Selenium	0.0814	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Thallium	0.0002	0.0010	0.0002	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Lithium	0.0026	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:09	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:28	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: Dup-3

Lab Number ID: AZK0417-09

Date/Time Sampled: 11/9/2016 12:00:00AM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	51	25	10	mg/L	SM 2540 C		1	11/14/16 16:20	11/14/16 16:20	6110342	JPT
Inorganic Anions											
Chloride	3.1	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 23:34	6110330	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	11/11/16 13:46	11/11/16 23:34	6110330	RLC
Sulfate	0.51	1.0	0.05	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/11/16 23:34	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Barium	0.0076	0.0100	0.0004	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Boron	0.0219	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Calcium	1.13	0.500	0.0311	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:15	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:31	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: YGWC-32I

Lab Number ID: AZK0417-10

Date/Time Sampled: 11/10/2016 10:25:00AM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	741	25	10	mg/L	SM 2540 C		1	11/15/16 13:55	11/15/16 13:55	6110386	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/12/16 01:18	6110330	RLC
Fluoride	0.09	0.30	0.02	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/12/16 01:18	6110330	RLC
Sulfate	480	10	0.51	mg/L	EPA 300.0		10	11/11/16 13:46	11/17/16 04:01	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Barium	0.0245	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Boron	3.59	0.200	0.0321	mg/L	EPA 6020B	B-01	5	11/15/16 08:15	11/16/16 15:38	6110361	CSW
Cadmium	0.0007	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Calcium	90.1	5.00	0.311	mg/L	EPA 6020B		10	11/15/16 08:15	11/19/16 13:59	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Cobalt	0.0015	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Selenium	0.0016	0.0100	0.0010	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Lithium	0.0033	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:21	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:33	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

November 22, 2016

Attention: Mr. Joju Abraham

Report No.: AZK0417

Project: CCR Event

Client ID: FB-4-11-10-16

Lab Number ID: AZK0417-11

Date/Time Sampled: 11/10/2016 10:50:00AM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	11/15/16 13:55	11/15/16 13:55	6110386	JPT
Inorganic Anions											
Chloride	0.06	0.25	0.01	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/12/16 01:38	6110330	RLC
Fluoride	0.04	0.30	0.02	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/12/16 01:38	6110330	RLC
Sulfate	0.13	1.0	0.05	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/12/16 01:38	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Boron	0.0197	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:27	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/15/16 08:50	11/15/16 15:35	6110368	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417

Project: CCR Event

Client ID: EB-4-11-10-16

Lab Number ID: AZK0417-12

Date/Time Sampled: 11/10/2016 9:45:00AM

Date/Time Received: 11/11/2016 9:40:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	11/15/16 13:55	11/15/16 13:55	6110386	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	11/11/16 13:46	11/12/16 01:59	6110330	RLC
Fluoride	0.03	0.30	0.02	mg/L	EPA 300.0	J	1	11/11/16 13:46	11/12/16 01:59	6110330	RLC
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	11/11/16 13:46	11/12/16 01:59	6110330	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Boron	0.0106	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Calcium	0.0410	0.500	0.0311	mg/L	EPA 6020B	J	1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/15/16 08:15	11/16/16 15:32	6110361	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 14:42	6110442	MTC



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110342 - SM 2540 C											
Blank (6110342-BLK1)						Prepared & Analyzed: 11/14/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6110342-BS1)						Prepared & Analyzed: 11/14/16					
Total Dissolved Solids	385	25	10	mg/L	400.00		96	84-108			
Duplicate (6110342-DUP1)						Source: AZK0348-03 Prepared & Analyzed: 11/14/16					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (6110342-DUP2)						Source: AZK0417-02 Prepared & Analyzed: 11/14/16					
Total Dissolved Solids	58	25	10	mg/L		58			0	10	
Batch 6110386 - SM 2540 C											
Blank (6110386-BLK1)						Prepared & Analyzed: 11/15/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6110386-BS1)						Prepared & Analyzed: 11/15/16					
Total Dissolved Solids	423	25	10	mg/L	400.00		106	84-108			
Duplicate (6110386-DUP1)						Source: AZK0417-11 Prepared & Analyzed: 11/15/16					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (6110386-DUP2)						Source: AZK0463-02 Prepared & Analyzed: 11/15/16					
Total Dissolved Solids	1220	25	10	mg/L		1170			4	10	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110330 - EPA 300.0											
Blank (6110330-BLK1)						Prepared & Analyzed: 11/11/16					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6110330-BS1)						Prepared & Analyzed: 11/11/16					
Chloride	10.5	0.25	0.01	mg/L	10.010		105	90-110			
Fluoride	10.6	0.30	0.02	mg/L	10.020		106	90-110			
Sulfate	10.3	1.0	0.05	mg/L	10.020		103	90-110			
Matrix Spike (6110330-MS1)						Source: AZK0417-03 Prepared & Analyzed: 11/11/16					
Chloride	25.8	0.25	0.01	mg/L	10.010	18.5	73	90-110			QM-02
Fluoride	11.4	0.30	0.02	mg/L	10.020	0.24	112	90-110			QM-05
Sulfate	17.9	1.0	0.05	mg/L	10.020	8.28	96	90-110			
Matrix Spike (6110330-MS2)						Source: AZK0417-08 Prepared & Analyzed: 11/11/16					
Chloride	22.9	0.25	0.01	mg/L	10.010	15.3	76	90-110			QM-02
Fluoride	11.5	0.30	0.02	mg/L	10.020	0.47	110	90-110			
Sulfate	218	1.0	0.05	mg/L	10.020	229	NR	90-110			QM-02
Matrix Spike Dup (6110330-MSD1)						Source: AZK0417-03 Prepared & Analyzed: 11/11/16					
Chloride	25.5	0.25	0.01	mg/L	10.010	18.5	70	90-110	1	15	QM-02
Fluoride	11.1	0.30	0.02	mg/L	10.020	0.24	108	90-110	3	15	
Sulfate	17.8	1.0	0.05	mg/L	10.020	8.28	95	90-110	0.06	15	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110361 - EPA 3005A											
Blank (6110361-BLK1)											
						Prepared: 11/15/16 Analyzed: 11/16/16					
Antimony	0.0009	0.0030	0.0008	mg/L							J
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	0.00009	0.0030	0.00008	mg/L							J
Boron	0.0092	0.0400	0.0064	mg/L							J
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (6110361-BS1)											
						Prepared: 11/15/16 Analyzed: 11/16/16					
Antimony	0.106	0.0030	0.0008	mg/L	0.10000		106	80-120			
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000		101	80-120			
Barium	0.0974	0.0100	0.0004	mg/L	0.10000		97	80-120			
Beryllium	0.103	0.0030	0.00008	mg/L	0.10000		103	80-120			
Boron	1.06	0.0400	0.0064	mg/L	1.0000		106	80-120			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000		101	80-120			
Calcium	1.04	0.500	0.0311	mg/L	1.0000		104	80-120			
Chromium	0.104	0.0100	0.0009	mg/L	0.10000		104	80-120			
Cobalt	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Copper	0.105	0.0250	0.0005	mg/L	0.10000		105	80-120			
Lead	0.102	0.0050	0.0001	mg/L	0.10000		102	80-120			
Molybdenum	0.103	0.0100	0.0017	mg/L	0.10000		103	80-120			
Nickel	0.104	0.0100	0.0006	mg/L	0.10000		104	80-120			
Selenium	0.107	0.0100	0.0010	mg/L	0.10000		107	80-120			
Silver	0.102	0.0100	0.0005	mg/L	0.10000		102	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.102	0.0100	0.0071	mg/L	0.10000		102	80-120			
Zinc	0.106	0.0100	0.0021	mg/L	0.10000		106	80-120			
Lithium	0.0993	0.0500	0.0021	mg/L	0.10000		99	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110361 - EPA 3005A											
Matrix Spike (6110361-MS1)			Source: AZK0348-01				Prepared: 11/15/16 Analyzed: 11/16/16				
Antimony	0.111	0.0030	0.0008	mg/L	0.10000	0.0097	101	75-125			
Arsenic	0.104	0.0050	0.0016	mg/L	0.10000	ND	104	75-125			
Barium	0.115	0.0100	0.0004	mg/L	0.10000	0.0171	98	75-125			
Beryllium	0.0942	0.0030	0.00008	mg/L	0.10000	0.0001	94	75-125			
Boron	0.980	0.0400	0.0064	mg/L	1.0000	0.0149	97	75-125			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125			
Calcium	29.1	2.50	0.155	mg/L	1.0000	27.9	115	75-125			
Chromium	0.105	0.0100	0.0009	mg/L	0.10000	0.0011	104	75-125			
Cobalt	0.107	0.0100	0.0005	mg/L	0.10000	ND	107	75-125			
Copper	0.105	0.0250	0.0005	mg/L	0.10000	0.0009	104	75-125			
Lead	0.0982	0.0050	0.0001	mg/L	0.10000	0.0004	98	75-125			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125			
Nickel	0.104	0.0100	0.0006	mg/L	0.10000	0.0010	103	75-125			
Selenium	0.105	0.0100	0.0010	mg/L	0.10000	ND	105	75-125			
Silver	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125			
Thallium	0.0992	0.0010	0.0002	mg/L	0.10000	ND	99	75-125			
Vanadium	0.110	0.0100	0.0071	mg/L	0.10000	ND	110	75-125			
Zinc	0.107	0.0100	0.0021	mg/L	0.10000	0.0039	103	75-125			
Lithium	0.0985	0.0500	0.0021	mg/L	0.10000	ND	98	75-125			
Matrix Spike Dup (6110361-MSD1)			Source: AZK0348-01				Prepared: 11/15/16 Analyzed: 11/16/16				
Antimony	0.110	0.0030	0.0008	mg/L	0.10000	0.0097	100	75-125	1	20	
Arsenic	0.103	0.0050	0.0016	mg/L	0.10000	ND	103	75-125	0.9	20	
Barium	0.111	0.0100	0.0004	mg/L	0.10000	0.0171	94	75-125	3	20	
Beryllium	0.0961	0.0030	0.00008	mg/L	0.10000	0.0001	96	75-125	2	20	
Boron	0.953	0.0400	0.0064	mg/L	1.0000	0.0149	94	75-125	3	20	
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000	ND	101	75-125	1	20	
Calcium	28.4	2.50	0.155	mg/L	1.0000	27.9	47	75-125	2	20	QM-02
Chromium	0.103	0.0100	0.0009	mg/L	0.10000	0.0011	102	75-125	2	20	
Cobalt	0.0981	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	9	20	
Copper	0.104	0.0250	0.0005	mg/L	0.10000	0.0009	103	75-125	1	20	
Lead	0.0978	0.0050	0.0001	mg/L	0.10000	0.0004	97	75-125	0.4	20	
Molybdenum	0.101	0.0100	0.0017	mg/L	0.10000	ND	101	75-125	1	20	
Nickel	0.102	0.0100	0.0006	mg/L	0.10000	0.0010	101	75-125	2	20	
Selenium	0.109	0.0100	0.0010	mg/L	0.10000	ND	109	75-125	4	20	
Silver	0.0980	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	4	20	
Thallium	0.0992	0.0010	0.0002	mg/L	0.10000	ND	99	75-125	0.02	20	
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000	ND	103	75-125	7	20	
Zinc	0.108	0.0100	0.0021	mg/L	0.10000	0.0039	104	75-125	0.6	20	
Lithium	0.101	0.0500	0.0021	mg/L	0.10000	ND	101	75-125	3	20	



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110361 - EPA 3005A											
Post Spike (6110361-PS1)		Source: AZK0348-01				Prepared: 11/15/16 Analyzed: 11/16/16					
Antimony	102			ug/L	100.00	9.66	92	80-120			
Arsenic	101			ug/L	100.00	0.639	100	80-120			
Barium	115			ug/L	100.00	17.1	98	80-120			
Beryllium	97.0			ug/L	100.00	0.0962	97	80-120			
Boron	976			ug/L	1000.0	14.9	96	80-120			
Cadmium	102			ug/L	100.00	0.0508	102	80-120			
Calcium	29400			ug/L	1000.0	27900	143	80-120			QM-02
Chromium	106			ug/L	100.00	1.06	105	80-120			
Cobalt	102			ug/L	100.00	0.430	102	80-120			
Copper	103			ug/L	100.00	0.906	102	80-120			
Lead	99.1			ug/L	100.00	0.356	99	80-120			
Molybdenum	104			ug/L	100.00	1.12	103	80-120			
Nickel	105			ug/L	100.00	0.973	104	80-120			
Selenium	106			ug/L	100.00	0.627	105	80-120			
Silver	101			ug/L	100.00	0.0277	101	80-120			
Thallium	101			ug/L	100.00	0.133	101	80-120			
Vanadium	110			ug/L	100.00	0.520	109	80-120			
Zinc	105			ug/L	100.00	3.89	101	80-120			
Lithium	94.9			ug/L	100.00	1.38	94	80-120			

Batch 6110368 - EPA 7470A

Blank (6110368-BLK1)				Prepared & Analyzed: 11/15/16							
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6110368-BS1)				Prepared & Analyzed: 11/15/16							
Mercury	0.00256	0.00050	0.000041	mg/L	2.5000E-3		102	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110368 - EPA 7470A											
Duplicate (6110368-DUP1)			Source: AZK0134-11RE1			Prepared & Analyzed: 11/15/16					
Mercury	0.00285	0.00050	0.000041	mg/L		0.00316			10	20	
Matrix Spike (6110368-MS1)			Source: AZK0348-02			Prepared & Analyzed: 11/15/16					
Mercury	0.00253	0.00050	0.000041	mg/L	2.5000E-3	ND	101	75-125			
Matrix Spike Dup (6110368-MSD1)			Source: AZK0348-02			Prepared & Analyzed: 11/15/16					
Mercury	0.00251	0.00050	0.000041	mg/L	2.5000E-3	ND	100	75-125	0.9	20	
Post Spike (6110368-PS1)			Source: AZK0348-02			Prepared & Analyzed: 11/15/16					
Mercury	1.74			ug/L	1.6667	0.0214	103	80-120			
Batch 6110442 - EPA 7470A											
Blank (6110442-BLK1)						Prepared & Analyzed: 11/17/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6110442-BS1)						Prepared & Analyzed: 11/17/16					
Mercury	0.00252	0.00050	0.000041	mg/L	2.5000E-3		101	80-120			
Matrix Spike (6110442-MS1)			Source: AZK0448-02			Prepared & Analyzed: 11/17/16					
Mercury	0.00244	0.00050	0.000041	mg/L	2.5000E-3	ND	98	75-125			
Matrix Spike Dup (6110442-MSD1)			Source: AZK0448-02			Prepared & Analyzed: 11/17/16					
Mercury	0.00244	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125	0.2	20	
Post Spike (6110442-PS1)			Source: AZK0448-02			Prepared & Analyzed: 11/17/16					
Mercury	1.71			ug/L	1.6667	-0.0198	103	80-120			



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

November 22, 2016

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME:		ANALYSIS REQUESTED		CONTAINER TYPE		PRESERVATION	
Georgia Power		P P P P P		P - PLASTIC		1 - HCl, ≤6°C	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:		P P P P P		A - AMBER GLASS		2 - H ₂ SO ₄ , ≤6°C	
241 Ralph McGill Blvd SE B10185		3 7 3		G - CLEAR GLASS		3 - HNO ₃	
Atlanta, GA 30308				V - VOA VIAL		4 - NaOH, ≤6°C	
404-506-7239				S - STERILE		5 - NaOH/ZnAc, ≤6°C	
REPORT TO:				O - OTHER		6 - Na ₂ S ₂ O ₃ , ≤6°C	
Lauren Petty						7 - ≤6°C not frozen	
CC: Maria Pacilla							
Heath McCorkle							
PO #:							
laburch@southernco.com							
PROJECT NAME/STATE:							
Plant Yates AP							
PROJECT #:							
Phase 2 CCR							
Collection DATE M-D-Y	Collection TIME	MATRIX CODE*	COMB	G R A B	SAMPLE IDENTIFICATION	CONTAINER TYPE	PRESERVATION
11-8-16	1125	W			EB-3-11-8-16		
11-8-16	1455	GW			Y6WC-23S		
11-8-16	1250	GW			Y6WC-24S		
11-8-16	1125	GW			Y6WC-28I		
11-8-16	1530	W			FB-3-11-8-16		
RELINQUISHED BY:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:	
C. Walker, B. Walker (acc)		11-9-16 1000		[Signature]		11-11-16 0940	
RECEIVED BY:		DATE/TIME:		RECEIVED BY:		DATE/TIME:	
[Signature]		11-9-16 1000		[Signature]		11-11-16 0940	
LAB #:		FOR LAB USE ONLY		LAB #:		FOR LAB USE ONLY	
AZK0417		AZK0417		AZK0417		AZK0417	
Entered into LIS:		Tracking #:		Entered into LIS:		Tracking #:	
[Signature]		[Signature]		[Signature]		[Signature]	

Plant Yates COC Ash Ponds.xlsx



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Health McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR	
Collection DATE M-D-Y	Collection TIME	MATRIX CODE*	COMPARISON C O R A B	SAMPLE IDENTIFICATION	CONTAINER TYPE: PRESERVATION # of
11-9-16	1010	GW	✓	Y6WC-19S	3
11-9-16	1210	GW	✓	Y6WC-22S	3
11-9-16	1505	GW	✓	Y6WC-32S	3
11-9-16	1445	GW	✓	Y6WC-34I	4
11-9-16	---	GW	✓	DUP-3	3

CONTAINER TYPE	ANALYSIS REQUESTED	DATE/TIME	RELINQUISHED BY:	DATE/TIME
3	Metals App. III & IV (EPA 6020/7470)	11-11-16 0940	[Signature]	11-11-16 0940
7	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)			
3	Radium 226 & 228 (SM-646 9315/9320)			

CONTAINER TYPE	ANALYSIS REQUESTED	DATE/TIME	RELINQUISHED BY:	DATE/TIME
3	Metals App. III & IV (EPA 6020/7470)	11-11-16 0940	[Signature]	11-11-16 0940
7	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)			
3	Radium 226 & 228 (SM-646 9315/9320)			

LAB #	FOR LAB USE ONLY
0940	AZK0917

Plant Yates COC Ash Ponds.xlsx



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Georgia Power
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239
 REPORT TO: Lauren Petty
 CC: Maria Padilla Heath McCorkle
 REQUESTED COMPLETION DATE: laburch@southernmco.com
 PROJECT NAME/STATE: Plant Yates AP
 PROJECT #: Phase 2 CCR

CONTAINER TYPE	ANALYSIS REQUESTED			CONTAINER NUMBER	PRESERVATION
	P	P	P		
3	7	3		10	
# of				11	
				12	

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C
G - CLEAR GLASS	3 - HNO ₃
V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C
	7 - ≤6°C not frozen

MATRIX CODES:	REMARKS/ADDITIONAL INFORMATION
DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
ST - STORM WATER	L - LIQUID
W - WATER	P - PRODUCT

CONTAINER NUMBER	DATE/TIME	RELINQUISHED BY:	DATE/TIME
10	11-11-16	[Signature]	0940
11			
12			

Collection DATE	Collection TIME	MATRIX CODE*	CO M P	SAMPLE IDENTIFICATION	DATE/TIME	RELINQUISHED BY:	DATE/TIME
11-10-16	1025	GW	✓	YGC-32 I	11-10-16	[Signature]	1410
11-10-16	1050	W	✓	FB-4-11-10-16			
11-10-16	0945	W	✓	EB-4-11-10-16			

LAB #: AZKQ417
 Entered into LIMS: [Signature]
 Tracking #: [Signature]
 SAMPLE SHIPPED VIA: UPS, FED-EX, USPS, COURIER, CLIENT, OTHER, FS
 Temperature: [Signature] No. NA, Yes. No. NA
 Broken: [Signature] Not Present
 # of Coolers: [Signature]
 Order ID: [Signature]
 Plant Yates COC Ash Ponds.xlsx
 Page 24 of 24



PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 11/22/2016 3:29:30PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 11/11/16 09:40

Work Order: AZK0417

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 12

#Containers: 37

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

December 16, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30202498

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on November 14, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30202498

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates

Pace Project No.: 30202498

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30202498001	YGWC-23S	Water	11/08/16 14:55	11/14/16 09:45
30202498002	YGWC-24S	Water	11/08/16 12:50	11/14/16 09:45
30202498003	YGWC-28I	Water	11/08/16 11:25	11/14/16 09:45
30202498004	FB-3-11-8-16	Water	11/08/16 15:30	11/14/16 09:45
30202498005	YGWC-19S	Water	11/09/16 10:10	11/14/16 09:45
30202498006	YGWC-22S	Water	11/09/16 12:10	11/14/16 09:45
30202498007	YGWC-32S	Water	11/09/16 15:05	11/14/16 09:45
30202498008	YGWC-34I	Water	11/09/16 14:45	11/14/16 09:45
30202498009	Dup-3	Water	11/09/16 00:00	11/14/16 09:45
30202498010	YGWC-32I	Water	11/10/16 10:25	11/14/16 09:45
30202498011	FB-4-11-10-16	Water	11/10/16 10:50	11/14/16 09:45
30202498012	EB-4-11-10-16	Water	11/10/16 09:45	11/14/16 09:45

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30202498

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30202498001	YGWC-23S	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498002	YGWC-24S	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498003	YGWC-28I	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498004	FB-3-11-8-16	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498005	YGWC-19S	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498006	YGWC-22S	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498007	YGWC-32S	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498008	YGWC-34I	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498009	Dup-3	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498010	YGWC-32I	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498011	FB-4-11-10-16	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202498012	EB-4-11-10-16	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202498

Sample: YGWC-23S		Lab ID: 30202498001	Collected: 11/08/16 14:55	Received: 11/14/16 09:45	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0259 ± 0.174 (0.447)		pCi/L	12/06/16 08:16	13982-63-3	
		C:95% T:NA					
Radium-228	EPA 9320	0.194 ± 0.354 (0.723)		pCi/L	12/15/16 19:06	15262-20-1	
		C:63% T:88%					
Total Radium	Total Radium Calculation	0.220 ± 0.528 (1.17)		pCi/L	12/16/16 09:44	7440-14-4	

Sample: YGWC-24S		Lab ID: 30202498002	Collected: 11/08/16 12:50	Received: 11/14/16 09:45	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0484 ± 0.141 (0.347)		pCi/L	12/06/16 08:16	13982-63-3	
		C:93% T:NA					
Radium-228	EPA 9320	0.385 ± 0.387 (0.755)		pCi/L	12/15/16 19:06	15262-20-1	
		C:64% T:86%					
Total Radium	Total Radium Calculation	0.433 ± 0.528 (1.10)		pCi/L	12/16/16 09:44	7440-14-4	

Sample: YGWC-28I		Lab ID: 30202498003	Collected: 11/08/16 11:25	Received: 11/14/16 09:45	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0589 ± 0.151 (0.365)		pCi/L	12/06/16 08:16	13982-63-3	
		C:88% T:NA					
Radium-228	EPA 9320	0.186 ± 0.374 (0.769)		pCi/L	12/15/16 19:07	15262-20-1	
		C:58% T:88%					
Total Radium	Total Radium Calculation	0.245 ± 0.525 (1.13)		pCi/L	12/16/16 09:44	7440-14-4	

Sample: FB-3-11-8-16		Lab ID: 30202498004	Collected: 11/08/16 15:30	Received: 11/14/16 09:45	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0114 ± 0.144 (0.402)		pCi/L	12/06/16 08:16	13982-63-3	
		C:92% T:NA					
Radium-228	EPA 9320	0.294 ± 0.292 (0.565)		pCi/L	12/15/16 19:07	15262-20-1	
		C:65% T:88%					
Total Radium	Total Radium Calculation	0.294 ± 0.436 (0.967)		pCi/L	12/16/16 09:44	7440-14-4	

Sample: YGWC-19S		Lab ID: 30202498005	Collected: 11/09/16 10:10	Received: 11/14/16 09:45	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0543 ± 0.136 (0.329)		pCi/L	12/06/16 09:58	13982-63-3	
		C:93% T:NA					
Radium-228	EPA 9320	-0.0553 ± 0.324 (0.706)		pCi/L	12/15/16 19:07	15262-20-1	
		C:57% T:94%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202498

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-19S Lab ID: 30202498005 Collected: 11/09/16 10:10 Received: 11/14/16 09:45 Matrix: Water PWS: Site ID: Sample Type:						
Total Radium	Total Radium Calculation	0.0543 ± 0.460 (1.04)	pCi/L	12/16/16 09:44	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-22S Lab ID: 30202498006 Collected: 11/09/16 12:10 Received: 11/14/16 09:45 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	-0.162 ± 0.123 (0.464) C:91% T:NA	pCi/L	12/06/16 10:02	13982-63-3	
Radium-228	EPA 9320	0.0765 ± 0.390 (0.823) C:55% T:90%	pCi/L	12/15/16 19:07	15262-20-1	
Total Radium	Total Radium Calculation	0.0765 ± 0.513 (1.29)	pCi/L	12/16/16 09:44	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-32S Lab ID: 30202498007 Collected: 11/09/16 15:05 Received: 11/14/16 09:45 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.0355 ± 0.134 (0.343) C:92% T:NA	pCi/L	12/06/16 10:02	13982-63-3	
Radium-228	EPA 9320	-0.264 ± 0.415 (0.917) C:57% T:85%	pCi/L	12/15/16 19:07	15262-20-1	
Total Radium	Total Radium Calculation	0.0355 ± 0.549 (1.26)	pCi/L	12/16/16 09:44	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-34I Lab ID: 30202498008 Collected: 11/09/16 14:45 Received: 11/14/16 09:45 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	-0.0137 ± 0.133 (0.379) C:97% T:NA	pCi/L	12/06/16 10:02	13982-63-3	
Radium-228	EPA 9320	0.218 ± 0.342 (0.694) C:61% T:93%	pCi/L	12/15/16 19:07	15262-20-1	
Total Radium	Total Radium Calculation	0.218 ± 0.475 (1.07)	pCi/L	12/16/16 09:44	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: Dup-3 Lab ID: 30202498009 Collected: 11/09/16 00:00 Received: 11/14/16 09:45 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.0149 ± 0.115 (0.316) C:96% T:NA	pCi/L	12/06/16 10:02	13982-63-3	
Radium-228	EPA 9320	0.256 ± 0.371 (0.748) C:58% T:84%	pCi/L	12/15/16 19:07	15262-20-1	
Total Radium	Total Radium Calculation	0.271 ± 0.486 (1.06)	pCi/L	12/16/16 09:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202498

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.103 ± 0.177 (0.398) C:96% T:NA	pCi/L	12/06/16 10:02	13982-63-3	
Radium-228		EPA 9320	0.870 ± 0.459 (0.798) C:61% T:87%	pCi/L	12/15/16 19:07	15262-20-1	
Total Radium		Total Radium Calculation	0.973 ± 0.636 (1.20)	pCi/L	12/16/16 09:55	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	-0.00848 ± 0.109 (0.328) C:97% T:NA	pCi/L	12/06/16 10:02	13982-63-3	
Radium-228		EPA 9320	-0.580 ± 0.532 (1.21) C:60% T:87%	pCi/L	12/15/16 19:07	15262-20-1	
Total Radium		Total Radium Calculation	0.000 ± 0.641 (1.54)	pCi/L	12/16/16 09:55	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	-0.0866 ± 0.0955 (0.369) C:90% T:NA	pCi/L	12/06/16 10:02	13982-63-3	
Radium-228		EPA 9320	0.214 ± 0.313 (0.630) C:64% T:89%	pCi/L	12/15/16 19:08	15262-20-1	
Total Radium		Total Radium Calculation	0.214 ± 0.409 (0.999)	pCi/L	12/16/16 09:55	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202498

QC Batch: 241711

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30202498006, 30202498007, 30202498008, 30202498009, 30202498010, 30202498011, 30202498012

METHOD BLANK: 1188125

Matrix: Water

Associated Lab Samples: 30202498006, 30202498007, 30202498008, 30202498009, 30202498010, 30202498011, 30202498012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0212 ± 0.122 (0.323) C:95% T:NA	pCi/L	12/06/16 10:01	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202498

QC Batch: 241710

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30202498001, 30202498002, 30202498003, 30202498004, 30202498005

METHOD BLANK: 1188124

Matrix: Water

Associated Lab Samples: 30202498001, 30202498002, 30202498003, 30202498004, 30202498005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0538 ± 0.0610 (0.254) C:125% T:NA	pCi/L	12/06/16 08:30	

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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30202498

QC Batch:	242655	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30202498001, 30202498002, 30202498003, 30202498004, 30202498005, 30202498006, 30202498007, 30202498008, 30202498009, 30202498010, 30202498011, 30202498012		

METHOD BLANK:	1192646	Matrix:	Water
Associated Lab Samples:	30202498001, 30202498002, 30202498003, 30202498004, 30202498005, 30202498006, 30202498007, 30202498008, 30202498009, 30202498010, 30202498011, 30202498012		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0459 ± 0.369 (0.798) C:58% T:87%	pCi/L	12/15/16 19:06	

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

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30202498

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30202498



30202498

Chain of Custody



Workorder: AZK0417

Workorder Name: Plant Yates

Owner Received Date:

Results Requested By: 12/14/2016

Report To:

Betsy McDaniel
Pace Analytical Atlanta
110 Technology Parkway
Peachtree Corners, GA 30092
Phone (770)-734-4200

Subcontract To:

Pace - Pittsburgh
1638 Roseytown Road
Stes. 2,3,4
Greensburg, PA 15601
Phone (724) 850-5600

Requested Analysis

Radium 226, 228, Total

Preserved Containers

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers			Date/Time	Comments
						H	N	O		
1	YGWC-23S	G	11/8/2016 14:55	AZK0417-01	GW	1			X	001
2	YGWC-24S	G	11/8/2016 12:50	AZK0417-02	GW	1			X	002
3	YGWC-28I	G	11/8/2016 11:25	AZK0417-03	GW	1			X	003
4	FB-3-11-8-16	G	11/8/2016 15:30	AZK0417-04	W	1			X	004
5	YGWC-19S	G	11/9/2016 10:10	AZK0417-05	GW	1			X	005
6	YGWC-22S	G	11/9/2016 12:10	AZK0417-06	GW	1			X	004
7	YGWC-32S	G	11/9/2016 15:05	AZK0417-07	GW	1			X	007
8	YGWC-34I	G	11/9/2016 14:45	AZK0417-08	GW	2			X	008
9	Dup-3	G	11/9/2016 0:00	AZK0417-09	GW	1			X	009
10	YGWC-32I	G	11/10/2016 10:25	AZK0417-10	GW	1			X	010

Transfers Released By	Date/Time	Received By	Date/Time	Comments
		Karen Hill	11-14-04:45	

Cooler Temperature on Receipt N/A °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Friday, June 17, 2016 11:01:34 AM

FMT-ALL-C-002rev.00 24March2009

Page 1 of 2

30202498

Chain of Custody



Results Requested By: 12/14/2016

Owner Received Date:

Workorder Name: Plant Yates

Workorder Number: AZK0417

Report To:		Subcontract To:				Requested Analysis	
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200		Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600				Radium 226, 228, Total	
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	LAB USE ONLY
11	FB-4-11-10-16	G	11/10/2016 10:50	AZK0417-11	W	1	011
12	EB-4-11-10-16	G	11/10/2016 9:45	AZK0417-12	W	1	012
13							
14							
15							
16							
17							
18							
19							
20							
Transfers	Released By	Date/Time	Received By	Date/Time	Comments		
1			<i>Xium Hu</i>	11-14-16 09:45			
2							
3							

Cooler Temperature on Receipt NA °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

30202498

PAGE: 1 OF 1

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com



CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 404-506-7239
REPORT TO: Lauren Peity
 CC: Maria Padilla
 Heath McCorkle
REQUESTED COMPLETION DATE:
 PO #: laburch@southernmco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE			DATE/TIME	DATE/TIME
		P	P	P		
3	Metals App. III & IV (EPA 6020/7470)	1	1	1	11-11-16	0940
3	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)	1	1	1	11-11-16	0940
3	Radium 226 & 228 (SW-846 9315/9320)	1	1	1	11-11-16	0940
3		1	1	1	11-11-16	0940
3		1	1	1	11-11-16	0940

CONTAINER TYPE
 P - PLASTIC
 A - AMBER GLASS
 G - CLEAR GLASS
 V - VOA VIAL
 S - STERILE
 O - OTHER

PRESEVATION
 1 - HCl, 56°C
 2 - H₂SO₄, 56°C
 3 - HNO₃
 4 - NaOH, 56°C
 5 - NaOH/ZnAc, 56°C
 6 - Na₂S₂O₃, 56°C
 7 - 56°C not frozen

MATRIX CODES:
 DW - DRINKING WATER S - SOIL
 WW - WASTEWATER SL - SLUDGE
 GW - GROUNDWATER SD - SOLID
 SW - SURFACE WATER A - AIR
 ST - STORM WATER L - LIQUID
 W - WATER P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

FOR LAB USE ONLY
 LAB #:
 Entered into LIMS:
 Tracks #:

SAMPLED BY AND TITLE: C. Walker, B. Walker (RSC)
RECEIVED BY:
DATE/TIME: 11-9-16 1000
DATE/TIME:
RECEIVED BY LAB: R. Alexander
DATE/TIME: 11/11/16 0940
TEMPERATURE: 10 AM
STATUS: Yes No NA (RSC) No NA
SHIPMENT: Broken Not Present
CLIENT: OTHER FS
COOLERS: # of Coolers
COOLER ID:

Plant Yates COC Ash Ponds.xlsx

30202498



CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc. 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CLIENT NAME: Georgia Power
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239
 REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle PO #: laburch@southernco.com
 PROJECT NAME/STATE: Plant Yates AF
 PROJECT #: Phase 2 CCR

Collection DATE M-D-Y	Collection TIME	MATRIX CODE	C O M P	G R A B	SAMPLE IDENTIFICATION	ANALYSIS REQUESTED			CONTAINER TYPE PRESERVATION	# of CONTAINERS	RELINQUISHED BY: DATE/TIME	RELINQUISHED BY: DATE/TIME
						P	P	P				
11-9-16	1010	GW			Y6WC-19S	1	1	1	CL, T, SO ₄ & TDS (EPA 300.0 & SM 2640C)	3	John Pan	11-11-16 0940
11-9-16	1210	GW			Y6WC-22S	1	1	1	Radium 226 & 228 (SW-846 9315/9320)	3		
11-9-16	1505	GW			Y6WC-32S	1	1	1		3		
11-9-16	1445	GW			Y6WC-34I	1	1	2		4		
11-9-16	—	GW			DUP-3	1	1	1		3		

CONTAINER TYPE PRESERVATION: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER. 1 - HCl, 56°C, 2 - H₂SO₄, 56°C, 3 - HNO₃, 4 - NaOH, 56°C, 5 - NaOH/ZnAc, 56°C, 6 - Na₂S₂O₃, 56°C, 7 - 56°C, not frozen.

MATRIX CODES: DW - DRINKING WATER, WW - WASTEWATER, GW - GROUNDWATER, ST - STORM WATER, W - WATER, S - SOIL, SL - SLUDGE, SD - SOLID, A - AIR, L - LIQUID, P - PRODUCT.

REMARKS/ADDITIONAL INFORMATION:

LAB # A2K0417 FOR LAB USE ONLY
 Entered into LIMS Tracking #

RELINQUISHED BY: John Pan DATE/TIME: 11-10-16 0900
 RELINQUISHED BY: DATE/TIME:
 SAMPLE SHIPPED VIA: UPS DATE/TIME: 11-10-16 0940
 # of Coolers: 0
 Courier: Client
 Other: FS

RECEIVED BY LAB: R. Latham DATE/TIME: 11-11-16 1010
 RECEIVED BY: R. Latham DATE/TIME: 11-10-16 0900
 Temperature: 10°C
 Yes/No: Yes/No

Plant Yates COC Ash Ponds.xlsx



CHAIN OF CUSTODY RECORD

30202498
 Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30082
 (770) 734-4200 : FAX (770) 734-4201 : www.ashiab.com

PAGE: 1 OF 1

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty Health McCarikle		REQUESTED COMPLETION DATE: laburch@southernmco.com		PROJECT NAME/STATE: Plant Yates AP		PROJECT #: Phase 2 CCR	
Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMPARISON	SAMPLE IDENTIFICATION	CONTAINER TYPE	ANALYSIS REQUESTED	RELINQUISHED BY:	DATE/TIME	RELINQUISHED BY:	DATE/TIME	REMARKS/ADDITIONAL INFORMATION
11-10-16	1025	GW	✓	YGWC-32 I	3	Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2549C) Radium 226 & 228 (SW-846 9315/9320)	R. Walker (Acc)	11-10-16 1410	R. Walker (Acc)	11-10-16 1410	10
11-10-16	1050	W	✓	FB-4-11-10-16	3						11
11-10-16	0945	W	✓	EB-4-11-10-16	3						12

CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER	PRESERVATION 1 - HCl, 56°C 2 - H ₂ SO ₄ , 56°C 3 - HNO ₃ 4 - NaOH, 56°C 5 - NaOH/ZnAc, 56°C 6 - Na ₂ S ₂ O ₃ , 56°C 7 - 56°C not frozen
MATRIX CODES: DW - DRINKING WATER WW - WASTEWATER GW - GROUNDWATER SW - SURFACE WATER W - WATER S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT	REMARKS/ADDITIONAL INFORMATION
LAB #: A2K9417	FOR LAB USE ONLY Entered into LIMS: Tracking #
DATE/TIME: 11-11-16 0940	DATE/TIME:
RELINQUISHED BY: R. Walker	RELINQUISHED BY:
SAMPLE SHIPPED VIA: UPS Fed-Ex USPS	COURIER # of Coolers # of Present
INITIALS: R. Walker	DATE/TIME: 11-11-16 0940
TEMPERATURE: 1°C	TEMPERATURE: 1°C

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace Georgia

Project # 30202498

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5100 3830

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KSH 11-14-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID/Analysis Matrix: <u>W+</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. <u>PH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics	Initial when completed: <u>KSH</u>		Date/time of preservation	
	Lot # of added preservative			
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KSH</u> Date: <u>11-14-16</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



www.paceitbc.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 12/5/2016
Worklist: 32686
Matrix: DW

Method Blank Assessment	
MB Sample ID	1188125
MB Concentration:	0.021
M/B Counting Uncertainty:	0.122
MB MDC:	0.323
MB Numerical Performance Indicator:	0.34
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS/LCSD Count Date:	12/6/2016
LCS/LCSD Spike I.D.:	16-026
LCS/LCSD Spike Concentration (pCi/mL):	44.673
LCS/LCSD Volume Used (mL):	0.10
LCS/LCSD Aliquot Volume (L, g, F):	0.502
LCS/LCSD Target Conc. (pCi/L, g, F):	8.900
LCS/LCSD Uncertainty (Calculated):	0.419
LCS/LCSD Result (pCi/L, g, F):	8.003
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.944
LCS/LCSD Numerical Performance Indicator:	-1.70
LCS/LCSD Percent Recovery:	89.92%
LCS/LCSD Status vs Numerical Indicator:	N/A
LCS/LCSD Status vs Recovery:	Pass

Duplicate Sample Assessment	
Duplicate Sample I.D.:	30202498008
Duplicate Sample I.D.:	30202498008DUP
Duplicate Result (pCi/L, g, F):	-0.014
Sample Result Counting Uncertainty (pCi/L, g, F):	0.133
Sample Duplicate Result (pCi/L, g, F):	0.351
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.210
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-2.878
Duplicate RPD:	216.23%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample 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):	
MSD Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
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:	

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:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 12/5/2016
Worklist: 32685
Matrix: DW



Method Blank Assessment	
MB Sample ID	1188124
MB concentration:	-0.054
MB Counting Uncertainty:	0.060
MB MDC:	0.254
MB Numerical Performance Indicator:	-1.74
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS32685	N
LCS32685	LCS032685
Count Date:	12/6/2016
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.673
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.502
Target Conc. (pCi/L, g, F):	8.907
Uncertainty (Calculated):	7.322
Result (pCi/L, g, F):	0.834
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	-3.33
Numerical Performance Indicator:	82.20%
Percent Recovery:	N/A
Status vs Numerical Indicator:	Pass
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30202155001
Duplicate Sample I.D.:	30202155001DUP
Sample Result (pCi/L, g, F):	1.842
Sample Duplicate Result (pCi/L, g, F):	0.450
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	2.205
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.510
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.045
Duplicate RPD:	17.91%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

Jan 12/16/16

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.
Sample MS 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):	Spike uncertainty (calculated):
Sample Result:	Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:	Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:
MS Numerical Performance Indicator:	MS Numerical Performance Indicator:
MS Percent Recovery:	MSD Percent Recovery:
MS Status vs Numerical Indicator:	MS Status vs Numerical Indicator:
MS Status vs Recovery:	MSD Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample I.D.:
Sample MS I.D.:	Sample MS I.D.:
Sample Matrix Spike Result:	Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:	MS/MSD Duplicate Status vs RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JAL
Date: 12/12/2016
Worklist: 32863
Matrix: DW

Method Blank Assessment	
MB Sample ID	1192646
MB concentration:	-0.046
M/B Counting Uncertainty:	0.389
MB MDC:	0.798
MB Numerical Performance Indicator:	-0.24
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	12/15/2016
Spike I.D.:	16-027
Spike Concentration (pCi/mL):	25.815
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.814
Target Conc. (pCi/L, g, F):	6.341
Uncertainty (Calculated):	0.457
Result (pCi/L, g, F):	8.217
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.681
Numerical Performance Indicator:	4.49
Percent Recovery:	129.59%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30202498008
Duplicate Sample I.D.:	30202498008DUP
Sample Result (pCi/L, g, F):	0.218
Sample Result Counting Uncertainty (pCi/L, g, F):	0.340
Sample Duplicate Result (pCi/L, g, F):	0.143
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.372
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	0.291
Duplicate RPD:	41.51%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Handwritten signature/initials

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

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

Product Name: Low-Flow System

Date: 2016-11-04 11:24:47

Project Information:

Operator Name Brandon Reynolds
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 14.3"
Longitude -84° 52' -28.64"
Sonde SN 408206
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 55 ft

Pump placement from TOC 48 ft

Well Information:

Well ID YGWA-11
Well diameter 2 in
Well Total Depth 53.83 ft
Screen Length 10 ft
Depth to Water 38.80 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 1.679525 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 9.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000
Last 5	11:01:31	10234.60	18.48	6.31	72.10	6.31	39.50	4.51	97.87
Last 5	11:06:31	10534.60	18.66	6.29	71.51	6.57	39.50	4.47	97.64
Last 5	11:11:34	10837.57	19.40	6.30	71.35	6.22	39.50	4.50	97.69
Last 5	11:16:35	11138.57	20.39	6.30	70.60	6.74	39.50	4.50	98.03
Last 5	11:21:37	11440.57	20.85	6.29	70.01	6.60	39.50	4.44	98.85
Variance 0			0.75	0.01	-0.16			0.03	0.05
Variance 1			0.99	-0.00	-0.75			-0.00	0.34
Variance 2			0.45	-0.01	-0.59			-0.06	0.82

Notes

63 degrees and clear. Sampled at 1125. Also Purged well previous day in an effort to reduce turbidity.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-01 16:29:07

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 11.19"
Longitude -84° -54' -33.14"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length ft
Pump placement from TOC ft

Well Information:

Well ID YGWA-1D
Well diameter 2 in
Well Total Depth 75.7 ft
Screen Length 10 ft
Depth to Water 52.82 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.485 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.3 in
Total Volume Pumped 7.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	16:04:02	2101.01	18.17	7.23	159.01	6.90	53.10	0.38	-109.18
Last 5	16:09:03	2401.98	18.30	7.24	158.82	6.10	53.10	0.37	-109.36
Last 5	16:14:03	2701.98	18.63	7.24	157.99	5.60	53.10	0.36	-110.38
Last 5	16:19:03	3001.98	18.61	7.24	157.50	5.10	53.10	0.36	-111.31
Last 5	16:24:03	3301.97	18.81	7.24	156.85	4.68	53.10	0.36	-113.15
Variance 0			0.33	-0.00	-0.84			-0.01	-1.03
Variance 1			-0.02	0.00	-0.49			0.00	-0.93
Variance 2			0.19	-0.00	-0.65			0.00	-1.84

Notes

Sunny, 80's no precipitation. Sample has slight odor and color.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-04 14:18:02

Project Information:

Operator Name Brandon Reynolds
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 14.3"
Longitude -84° 52' -28.64"
Sonde SN 408206
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 58 ft

Pump placement from TOC 60 ft

Well Information:

Well ID YGWA-2I
Well diameter 2 in
Well Total Depth 65.77 ft
Screen Length 10 ft
Depth to Water 45.88 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.744681 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 2.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000
Last 5	13:53:48	900.03	22.13	7.00	245.15	1.89	46.60	0.75	-115.93
Last 5	13:58:49	1201.03	22.05	7.04	245.91	2.26	46.80	0.66	-118.50
Last 5	14:03:49	1501.03	22.03	7.08	244.67	1.73	46.90	0.59	-120.79
Last 5	14:08:49	1801.04	21.88	7.10	244.24	2.12	47.00	0.54	-122.45
Last 5	14:13:50	2102.04	21.83	7.12	243.34	1.66	47.00	0.51	-123.32
Variance 0			-0.02	0.04	-1.25			-0.08	-2.28
Variance 1			-0.15	0.02	-0.43			-0.05	-1.67
Variance 2			-0.05	0.02	-0.90			-0.03	-0.86

Notes

73 degrees and clear. Sampled at 1415

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-01 13:41:30

Project Information:

Operator Name Brandon Reynolds
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 6.73"
Longitude -84° -54' -10.16"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 130 ft

Pump placement from TOC 132 ft

Well Information:

Well ID YGWA-3D
Well diameter 2 in
Well Total Depth 137.10 ft
Screen Length 10 ft
Depth to Water 31.77 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 3.308424 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:18:28	900.00	17.54	7.70	224.53	1.46	31.90	0.18	-53.53
Last 5	13:23:28	1200.00	17.56	7.73	224.91	1.22	31.90	0.17	-53.58
Last 5	13:28:28	1500.00	18.30	7.73	227.81	1.40	31.90	0.22	-57.71
Last 5	13:33:28	1799.99	18.70	7.74	226.13	1.21	31.90	0.22	-58.46
Last 5	13:38:34	2105.99	18.61	7.75	226.16	1.03	31.90	0.23	-58.86
Variance 0			0.74	0.00	2.90			0.05	-4.12
Variance 1			0.40	0.01	-1.68			0.01	-0.76
Variance 2			-0.09	0.01	0.03			0.01	-0.40

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-01 18:38:09

Project Information:

Operator Name Brandon Reynolds
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 34° 0' 45.9"
Longitude -84° -16' -52.61"
Sonde SN 408206
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 53 ft

Pump placement from TOC 55 ft

Well Information:

Well ID YGWA-3I
Well diameter 2 in
Well Total Depth 60 ft
Screen Length 10 ft
Depth to Water 50.51 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.636088 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000
Last 5	18:15:03	7524.18	19.01	7.69	193.04	0.19	51.50	0.68	-121.97
Last 5	18:20:03	7824.18	19.03	7.69	192.87	0.23	51.50	0.69	-123.51
Last 5	18:25:05	8126.18	19.01	7.69	192.24	0.16	51.50	0.76	-123.62
Last 5	18:30:05	8426.18	18.92	7.70	191.98	0.16	51.50	0.67	-123.80
Last 5	18:35:06	8727.18	18.82	7.70	191.53	0.18	51.50	0.64	-121.95
Variance 0			-0.02	-0.00	-0.64			0.07	-0.12
Variance 1			-0.09	0.00	-0.26			-0.10	-0.18
Variance 2			-0.11	0.00	-0.46			-0.03	1.85

Notes

75 degrees and clear. Sampled at 1835

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-02 10:52:23

Project Information:

Operator Name Brandon Reynolds
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 26' 32.65"
Longitude -84° -49' -37.71"
Sonde SN 408206
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 29 ft

Pump placement from TOC 30 ft

Well Information:

Well ID YGWA-14s
Well diameter 2 in
Well Total Depth 35.82 ft
Screen Length 10 ft
Depth to Water 20.78 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.114841 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000
Last 5	10:28:56	899.95	18.61	5.45	66.14	0.34	21.00	6.09	210.86
Last 5	10:33:56	1199.95	18.46	5.43	65.97	0.37	21.00	5.71	212.48
Last 5	10:38:56	1499.95	18.44	5.41	65.88	0.41	21.00	5.54	212.36
Last 5	10:43:56	1799.95	18.44	5.41	65.76	0.41	21.00	5.44	211.27
Last 5	10:48:56	2099.95	18.48	5.41	65.66	0.55	21.00	5.38	210.23
Variance 0			-0.02	-0.02	-0.10			-0.17	-0.13
Variance 1			0.00	-0.00	-0.11			-0.09	-1.09
Variance 2			0.04	-0.00	-0.10			-0.06	-1.04

Notes

70 degrees and cloudy. Sampled at 1050

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-01 13:58:50

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 55 ft

Pump placement from TOC 55 ft

Well Information:

Well ID YGWA-30I
Well diameter 2 in
Well Total Depth 59.65 ft
Screen Length 10 ft
Depth to Water 38.60 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.7304883 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.1 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:32:26	300.07	20.71	5.80	47.68	3.98	38.70	6.58	177.64
Last 5	13:37:26	600.02	20.39	5.58	39.67	3.65	38.70	6.61	132.43
Last 5	13:42:26	900.02	20.19	5.59	38.87	2.81	38.70	6.62	115.65
Last 5	13:47:26	1200.02	20.23	5.61	38.56	1.95	38.70	6.63	108.98
Last 5	13:52:26	1499.99	19.68	5.62	38.33	1.23	38.70	6.62	104.60
Variance 0			-0.20	0.01	-0.80			0.01	-16.78
Variance 1			0.04	0.02	-0.31			0.01	-6.68
Variance 2			-0.55	0.02	-0.23			-0.01	-4.38

Notes

Collected at 1400. Sunny, 80s

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-07 14:18:03

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 39.33"
Longitude -84° 54' -27.33"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 70 ft

Pump placement from TOC 65 ft

Well Information:

Well ID YGWC-26I
Well diameter 2 in
Well Total Depth 69.71 ft
Screen Length 10 ft
Depth to Water 25.55 ft

Pumping Information:

Final Pumping Rate 210 mL/min
Total System Volume 2.005305 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 8.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:54:58	2101.01	20.53	5.92	309.26	6.24	25.80	0.19	89.40
Last 5	13:59:58	2401.01	20.48	5.91	309.24	5.92	25.90	0.18	90.27
Last 5	14:04:58	2700.98	20.24	5.91	309.63	5.39	25.90	0.21	90.71
Last 5	14:09:58	3000.99	20.20	5.91	309.04	4.99	25.90	0.20	91.04
Last 5	14:14:58	3300.99	20.18	5.91	309.43	4.69	25.90	0.19	91.21
Variance 0			-0.24	-0.00	0.38			0.02	0.43
Variance 1			-0.04	-0.00	-0.58			-0.00	0.33
Variance 2			-0.02	-0.00	0.39			-0.01	0.17

Notes

Collected at 1420. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-07 15:20:08

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 39.73"
Longitude -84° 54' -27.43"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 41 ft

Pump placement from TOC 35 ft

Well Information:

Well ID YGWC-26S
Well diameter 2 in
Well Total Depth 40.10 ft
Screen Length 10 ft
Depth to Water 22.42 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.6680003 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 15 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:58:06	600.01	21.37	5.26	288.97	1.71	23.60	1.65	131.18
Last 5	15:03:06	900.01	21.37	5.29	291.80	1.85	23.60	1.61	126.76
Last 5	15:08:06	1200.01	21.45	5.31	294.09	1.84	23.60	1.53	126.05
Last 5	15:13:06	1500.00	21.40	5.34	296.96	1.62	23.60	1.42	125.34
Last 5	15:18:06	1800.00	21.33	5.35	298.01	2.05	23.60	1.35	125.55
Variance 0			0.08	0.02	2.29			-0.08	-0.72
Variance 1			-0.05	0.03	2.87			-0.11	-0.71
Variance 2			-0.07	0.02	1.05			-0.07	0.21

Notes

Collected at 15:20. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-07 10:45:40

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 36.45"
Longitude -84° 54' -29.16"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 80 ft

Pump placement from TOC 75 ft

Well Information:

Well ID YGWC-27 I
Well diameter 2 in
Well Total Depth 79.84 ft
Screen Length 10 ft
Depth to Water 28.85 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.8420739 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 6 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:19:22	600.02	18.57	6.22	311.27	3.87	29.30	1.07	5.57
Last 5	10:24:22	900.02	18.79	6.25	331.99	3.12	29.20	0.54	1.69
Last 5	10:29:22	1200.00	18.83	6.28	334.96	2.27	29.30	0.41	2.62
Last 5	10:34:22	1499.99	18.79	6.29	335.88	2.16	29.30	0.39	4.22
Last 5	10:39:22	1799.99	18.87	6.30	336.83	1.71	29.30	0.29	5.12
Variance 0			0.04	0.03	2.97			-0.13	0.93
Variance 1			-0.04	0.01	0.92			-0.02	1.60
Variance 2			0.08	0.01	0.95			-0.09	0.90

Notes

Collected at 10:40. Sunny 60s

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-07 12:15:48

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 36.49"
Longitude -84° -54' -29.12"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 40 ft

Pump placement from TOC 35 ft

Well Information:

Well ID YGWC-27S
Well diameter 2 in
Well Total Depth 40.26 ft
Screen Length 10 ft
Depth to Water 28.20 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.6635369 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 0 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:54:28	600.01	20.64	6.22	441.03	6.31	28.30	0.43	71.41
Last 5	11:59:28	900.00	20.48	6.22	444.56	7.38	28.30	0.39	73.09
Last 5	12:04:28	1200.01	19.98	6.22	444.26	4.11	28.30	0.27	74.59
Last 5	12:09:28	1500.00	19.45	6.24	433.38	4.24	28.30	0.19	74.78
Last 5	12:14:28	1799.99	19.41	6.25	434.37	4.50	28.30	0.15	74.03
Variance 0			-0.50	0.00	-0.30			-0.12	1.50
Variance 1			-0.53	0.02	-10.87			-0.08	0.19
Variance 2			-0.04	0.01	0.98			-0.04	-0.75

Notes

Collected at 12:15

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-08 11:26:08

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 34.6"
Longitude -84° 54' -30.7"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 64 ft

Pump placement from TOC 64 ft

Well Information:

Well ID YGWC 28I
Well diameter 2 in
Well Total Depth 69.89 ft
Screen Length 10 ft
Depth to Water 25.14 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 1.874993 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 17.52 in
Total Volume Pumped 11.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:03:07	2999.98	19.10	6.36	414.59	0.30	27.50	0.35	70.54
Last 5	11:08:07	3299.97	19.33	6.36	416.30	0.35	27.50	0.27	70.52
Last 5	11:13:07	3599.97	19.55	6.37	415.71	0.25	27.50	0.19	71.95
Last 5	11:18:07	3899.97	19.70	6.37	415.49	0.29	27.60	0.19	74.13
Last 5	11:23:07	4199.96	19.59	6.37	416.42	0.26	27.60	0.19	75.71
Variance 0			0.22	0.00	-0.59			-0.08	1.43
Variance 1			0.15	-0.00	-0.22			-0.00	2.18
Variance 2			-0.11	0.00	0.93			0.00	1.58

Notes

Sample collected at 11:25. Cloudy 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-07 17:10:10

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 34.37"
Longitude -84° -54' -30.73"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 39 ft

Pump placement from TOC 39 ft

Well Information:

Well ID YGWC 28S
Well diameter 2 in
Well Total Depth 44.85 ft
Screen Length 10 ft
Depth to Water 23.70 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 1.332027 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 4 in
Total Volume Pumped 28.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	16:43:01	12017.87	20.62	6.36	434.77	6.30	24.00	0.25	-25.67
Last 5	16:48:01	12317.86	20.35	6.36	435.44	5.83	24.00	0.25	-25.50
Last 5	16:53:01	12617.83	20.16	6.35	435.47	6.18	24.00	0.26	-25.39
Last 5	16:58:02	12918.83	19.98	6.36	436.03	6.47	24.00	0.25	-25.96
Last 5	17:03:02	13218.83	19.85	6.36	436.04	6.52	24.00	0.25	-26.18
Variance 0			-0.19	-0.00	0.02			0.00	0.11
Variance 1			-0.17	0.00	0.57			-0.00	-0.57
Variance 2			-0.13	-0.00	0.00			-0.00	-0.22

Notes

Sample collected at 17:00. Sunny 60's. filtered and unfiltered metals and squat recommended by Brad Filipovich as turbidity was above 5.0 NTU.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-07 10:34:03

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 32.15"
Longitude -84° 54' -32.14"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 35 ft

Pump placement from TOC 35 ft

Well Information:

Well ID YGWC 29I
Well diameter 2 in
Well Total Depth 39.46 ft
Screen Length 10 ft
Depth to Water 27.62 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.245153 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 11 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:11:19	1500.01	20.13	6.11	259.76	0.58	28.50	0.74	89.19
Last 5	10:16:19	1800.01	20.35	6.10	259.49	0.16	28.50	0.60	93.33
Last 5	10:21:21	2102.01	20.53	6.11	259.23	0.15	28.50	0.50	96.79
Last 5	10:26:21	2401.97	20.75	6.10	260.50	0.19	28.50	0.47	100.19
Last 5	10:31:21	2701.97	20.98	6.10	259.55	0.25	28.50	0.47	103.92
Variance 0			0.18	0.00	-0.26			-0.10	3.47
Variance 1			0.22	-0.00	1.27			-0.03	3.39
Variance 2			0.23	-0.00	-0.95			0.00	3.73

Notes

Sample collected at 10:35. Sunny 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-12-15 13:27:02

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 65 ft

Pump placement from TOC 60.5 ft

Well Information:

Well ID YGWA-2I
Well diameter 2 in
Well Total Depth 65.74 ft
Screen Length 10 ft
Depth to Water 46.62 ft

Pumping Information:

Final Pumping Rate 60 mL/min
Total System Volume 0.6801225 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 36 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:04:57	2099.99	11.71	7.20	242.88	3.40	49.10	2.90	-77.28
Last 5	13:09:57	2400.01	11.67	7.23	242.70	3.75	49.30	2.86	-76.67
Last 5	13:14:57	2699.98	11.70	7.24	242.05	3.82	49.50	2.84	-76.47
Last 5	13:19:57	2999.97	11.98	7.24	243.35	3.50	49.60	2.94	-77.49
Last 5	13:25:01	3303.97	12.48	7.24	240.83	3.64	49.70	3.01	-78.23
Variance 0			0.03	0.01	-0.64			-0.02	0.20
Variance 1			0.29	0.00	1.30			0.09	-1.02
Variance 2			0.50	-0.00	-2.52			0.07	-0.74

Notes

Sunny 30s. Collected at 13:30

Grab Samples



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAA0342

January 18, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel". The signature is written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 18, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-14S	AAA0342-01	Ground Water	01/10/17 15:40	01/11/17 17:25
YGWA-17S	AAA0342-02	Ground Water	01/11/17 11:10	01/11/17 17:25
YGWA-18I	AAA0342-03	Ground Water	01/11/17 12:50	01/11/17 17:25
YGWA-18S	AAA0342-04	Ground Water	01/11/17 14:25	01/11/17 17:25
Dup-1	AAA0342-05	Ground Water	01/11/17 00:00	01/11/17 17:25



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 18, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0342

Project: CCR Event

Client ID: YGWA-14S

Lab Number ID: AAA0342-01

Date/Time Sampled: 1/10/2017 3:40:00PM

Date/Time Received: 1/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	45	25	10	mg/L	SM 2540 C		1	01/12/17 16:00	01/12/17 16:00	7010277	JPT
Inorganic Anions											
Chloride	4.1	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 13:35	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 13:35	7010348	RNB
Sulfate	5.9	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 13:35	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Barium	0.0086	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Beryllium	0.0002	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Boron	0.0198	0.0400	0.0064	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Calcium	1.24	0.500	0.0311	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Selenium	0.0012	0.0100	0.0010	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 18:59	7010268	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/16/17 09:30	01/16/17 13:37	7010337	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 18, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0342

Project: CCR Event

Client ID: YGWA-17S

Lab Number ID: AAA0342-02

Date/Time Sampled: 1/11/2017 11:10:00AM

Date/Time Received: 1/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	104	25	10	mg/L	SM 2540 C		1	01/12/17 16:00	01/12/17 16:00	7010277	JPT
Inorganic Anions											
Chloride	4.7	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 14:37	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 14:37	7010348	RNB
Sulfate	5.2	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 14:37	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Barium	0.0142	0.0100	0.0004	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Boron	0.0092	0.0400	0.0064	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Calcium	2.28	0.500	0.0311	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Selenium	0.0014	0.0100	0.0010	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Lithium	0.0035	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:10	7010268	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/16/17 09:30	01/16/17 13:40	7010337	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 18, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0342

Project: CCR Event

Client ID: YGWA-18I

Lab Number ID: AAA0342-03

Date/Time Sampled: 1/11/2017 12:50:00PM

Date/Time Received: 1/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	133	25	10	mg/L	SM 2540 C		1	01/12/17 16:00	01/12/17 16:00	7010277	JPT
Inorganic Anions											
Chloride	6.5	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 14:58	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 14:58	7010348	RNB
Sulfate	0.99	1.0	0.05	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 14:58	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Barium	0.0266	0.0100	0.0004	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Calcium	4.74	0.500	0.0311	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Lithium	0.0052	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:22	7010268	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/16/17 09:30	01/16/17 13:42	7010337	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 18, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0342

Project: CCR Event

Client ID: YGWA-18S

Lab Number ID: AAA0342-04

Date/Time Sampled: 1/11/2017 2:25:00PM

Date/Time Received: 1/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	95	25	10	mg/L	SM 2540 C		1	01/12/17 16:00	01/12/17 16:00	7010277	JPT
Inorganic Anions											
Chloride	6.1	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 15:18	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 15:18	7010348	RNB
Sulfate	1.7	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 15:18	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Barium	0.0162	0.0100	0.0004	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Boron	0.0096	0.0400	0.0064	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Calcium	1.25	0.500	0.0311	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Lithium	0.0025	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:45	7010268	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/16/17 09:30	01/16/17 13:45	7010337	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 18, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0342

Project: CCR Event

Client ID: Dup-1

Lab Number ID: AAA0342-05

Date/Time Sampled: 1/11/2017 12:00:00AM

Date/Time Received: 1/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	104	25	10	mg/L	SM 2540 C		1	01/12/17 16:00	01/12/17 16:00	7010277	JPT
Inorganic Anions											
Chloride	4.5	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 15:39	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 15:39	7010348	RNB
Sulfate	4.9	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 15:39	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Barium	0.0136	0.0100	0.0004	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Boron	0.0087	0.0400	0.0064	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Calcium	2.11	0.500	0.0311	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Selenium	0.0013	0.0100	0.0010	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Lithium	0.0032	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/12/17 12:15	01/16/17 19:56	7010268	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/16/17 09:30	01/16/17 13:47	7010337	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010277 - SM 2540 C											
Blank (7010277-BLK1)						Prepared & Analyzed: 01/12/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7010277-BS1)						Prepared & Analyzed: 01/12/17					
Total Dissolved Solids	410	25	10	mg/L	400.00		102	84-108			
Duplicate (7010277-DUP1)						Source: AAA0342-03 Prepared & Analyzed: 01/12/17					
Total Dissolved Solids	146	25	10	mg/L		133			9	10	
Duplicate (7010277-DUP2)						Source: AAA0345-04 Prepared & Analyzed: 01/12/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010348 - EPA 300.0											
Blank (7010348-BLK1)						Prepared & Analyzed: 01/16/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (7010348-BS1)						Prepared & Analyzed: 01/16/17					
Chloride	10.0	0.25	0.01	mg/L	10.010		100	90-110			
Fluoride	10.2	0.30	0.02	mg/L	10.020		102	90-110			
Sulfate	10.1	1.0	0.05	mg/L	10.020		100	90-110			
Matrix Spike (7010348-MS1)						Source: AAA0342-01 Prepared & Analyzed: 01/16/17					
Chloride	13.1	0.25	0.01	mg/L	10.010	4.09	90	90-110			
Fluoride	9.28	0.30	0.02	mg/L	10.020	ND	93	90-110			
Sulfate	14.5	1.0	0.05	mg/L	10.020	5.94	85	90-110			QM-02
Matrix Spike (7010348-MS2)						Source: AAA0466-02 Prepared & Analyzed: 01/16/17					
Chloride	11.4	0.25	0.01	mg/L	10.010	2.26	91	90-110			
Fluoride	9.54	0.30	0.02	mg/L	10.020	ND	95	90-110			
Sulfate	9.06	1.0	0.05	mg/L	10.020	0.10	89	90-110			QM-02
Matrix Spike Dup (7010348-MSD1)						Source: AAA0342-01 Prepared & Analyzed: 01/16/17					
Chloride	13.5	0.25	0.01	mg/L	10.010	4.09	94	90-110	3	15	
Fluoride	9.77	0.30	0.02	mg/L	10.020	ND	98	90-110	5	15	
Sulfate	14.9	1.0	0.05	mg/L	10.020	5.94	89	90-110	3	15	QM-02



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010268 - EPA 3005A											
Blank (7010268-BLK1)											
						Prepared: 01/12/17 Analyzed: 01/16/17					
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	0.0008	0.0250	0.0005	mg/L							J
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							
LCS (7010268-BS1)											
						Prepared: 01/12/17 Analyzed: 01/16/17					
Antimony	0.108	0.0030	0.0008	mg/L	0.10000		108	80-120			
Arsenic	0.103	0.0050	0.0016	mg/L	0.10000		103	80-120			
Barium	0.101	0.0100	0.0004	mg/L	0.10000		101	80-120			
Beryllium	0.107	0.0030	0.00008	mg/L	0.10000		107	80-120			
Boron	0.967	0.0400	0.0064	mg/L	1.0000		97	80-120			
Cadmium	0.105	0.0010	0.00007	mg/L	0.10000		105	80-120			
Calcium	1.04	0.500	0.0311	mg/L	1.0000		104	80-120			
Chromium	0.101	0.0100	0.0009	mg/L	0.10000		101	80-120			
Cobalt	0.0981	0.0100	0.0005	mg/L	0.10000		98	80-120			
Copper	0.0994	0.0250	0.0005	mg/L	0.10000		99	80-120			
Lead	0.0992	0.0050	0.0001	mg/L	0.10000		99	80-120			
Molybdenum	0.105	0.0100	0.0017	mg/L	0.10000		105	80-120			
Nickel	0.109	0.0100	0.0006	mg/L	0.10000		109	80-120			
Selenium	0.106	0.0100	0.0010	mg/L	0.10000		106	80-120			
Silver	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.104	0.0100	0.0071	mg/L	0.10000		104	80-120			
Zinc	0.106	0.0100	0.0021	mg/L	0.10000		106	80-120			
Lithium	0.103	0.0500	0.0021	mg/L	0.10000		103	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010268 - EPA 3005A											
Matrix Spike (7010268-MS1)			Source: AAA0261-03			Prepared: 01/12/17 Analyzed: 01/16/17					
Antimony	0.108	0.0030	0.0008	mg/L	0.10000	ND	108	75-125			
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125			
Barium	0.115	0.0100	0.0004	mg/L	0.10000	0.0135	101	75-125			
Beryllium	0.106	0.0030	0.00008	mg/L	0.10000	ND	106	75-125			
Boron	0.964	0.0400	0.0064	mg/L	1.0000	ND	96	75-125			
Cadmium	0.105	0.0010	0.00007	mg/L	0.10000	0.0002	105	75-125			
Calcium	29.1	25.0	1.55	mg/L	1.0000	27.6	153	75-125			QM-02
Chromium	0.107	0.0100	0.0009	mg/L	0.10000	ND	107	75-125			
Cobalt	0.107	0.0100	0.0005	mg/L	0.10000	ND	107	75-125			
Copper	0.105	0.0250	0.0005	mg/L	0.10000	ND	105	75-125			
Lead	0.101	0.0050	0.0001	mg/L	0.10000	ND	101	75-125			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000	ND	102	75-125			
Nickel	0.111	0.0100	0.0006	mg/L	0.10000	ND	111	75-125			
Selenium	0.105	0.0100	0.0010	mg/L	0.10000	ND	105	75-125			
Silver	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125			
Thallium	0.105	0.0010	0.0002	mg/L	0.10000	ND	105	75-125			
Vanadium	0.113	0.0100	0.0071	mg/L	0.10000	ND	113	75-125			
Zinc	0.105	0.0100	0.0021	mg/L	0.10000	ND	105	75-125			
Lithium	0.109	0.0500	0.0021	mg/L	0.10000	ND	109	75-125			
Matrix Spike Dup (7010268-MSD1)			Source: AAA0261-03			Prepared: 01/12/17 Analyzed: 01/16/17					
Antimony	0.110	0.0030	0.0008	mg/L	0.10000	ND	110	75-125	2	20	
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000	ND	101	75-125	1	20	
Barium	0.117	0.0100	0.0004	mg/L	0.10000	0.0135	103	75-125	1	20	
Beryllium	0.108	0.0030	0.00008	mg/L	0.10000	ND	108	75-125	3	20	
Boron	0.965	0.0400	0.0064	mg/L	1.0000	ND	96	75-125	0.1	20	
Cadmium	0.104	0.0010	0.00007	mg/L	0.10000	0.0002	104	75-125	0.5	20	
Calcium	28.1	25.0	1.55	mg/L	1.0000	27.6	50	75-125	4	20	QM-02
Chromium	0.108	0.0100	0.0009	mg/L	0.10000	ND	108	75-125	0.6	20	
Cobalt	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125	3	20	
Copper	0.0990	0.0250	0.0005	mg/L	0.10000	ND	99	75-125	6	20	
Lead	0.100	0.0050	0.0001	mg/L	0.10000	ND	100	75-125	0.8	20	
Molybdenum	0.106	0.0100	0.0017	mg/L	0.10000	ND	106	75-125	4	20	
Nickel	0.105	0.0100	0.0006	mg/L	0.10000	ND	105	75-125	6	20	
Selenium	0.0963	0.0100	0.0010	mg/L	0.10000	ND	96	75-125	9	20	
Silver	0.0995	0.0100	0.0005	mg/L	0.10000	ND	99	75-125	3	20	
Thallium	0.103	0.0010	0.0002	mg/L	0.10000	ND	103	75-125	2	20	
Vanadium	0.108	0.0100	0.0071	mg/L	0.10000	ND	108	75-125	5	20	
Zinc	0.105	0.0100	0.0021	mg/L	0.10000	ND	105	75-125	0.6	20	
Lithium	0.109	0.0500	0.0021	mg/L	0.10000	ND	109	75-125	0.5	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010268 - EPA 3005A											
Post Spike (7010268-PS1)			Source: AAA0261-03			Prepared: 01/12/17 Analyzed: 01/16/17					
Antimony	104			ug/L	100.00	0.501	103	80-120			
Arsenic	104			ug/L	100.00	0.616	104	80-120			
Barium	117			ug/L	100.00	13.5	103	80-120			
Beryllium	107			ug/L	100.00	0.0260	107	80-120			
Boron	966			ug/L	1000.0	3.42	96	80-120			
Cadmium	108			ug/L	100.00	0.153	108	80-120			
Calcium	28000			ug/L	1000.0	27600	38	80-120			QM-02
Chromium	109			ug/L	100.00	0.537	108	80-120			
Cobalt	107			ug/L	100.00	0.0216	107	80-120			
Copper	102			ug/L	100.00	0.231	102	80-120			
Lead	101			ug/L	100.00	0.0322	101	80-120			
Molybdenum	109			ug/L	100.00	0.446	109	80-120			
Nickel	110			ug/L	100.00	0.151	110	80-120			
Selenium	104			ug/L	100.00	0.0190	104	80-120			
Silver	104			ug/L	100.00	0.0035	104	80-120			
Thallium	104			ug/L	100.00	0.0334	104	80-120			
Vanadium	112			ug/L	100.00	-0.774	112	80-120			
Zinc	108			ug/L	100.00	1.50	106	80-120			
Lithium	108			ug/L	100.00	0.598	107	80-120			

Batch 7010337 - EPA 7470A

Blank (7010337-BLK1)					Prepared & Analyzed: 01/16/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7010337-BS1)					Prepared & Analyzed: 01/16/17						
Mercury	0.00232	0.00050	0.000041	mg/L	2.5000E-3	93	80-120				



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010337 - EPA 7470A											
Matrix Spike (7010337-MS1)			Source: AAA0440-01			Prepared & Analyzed: 01/16/17					
Mercury	0.00236	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125			
Matrix Spike Dup (7010337-MSD1)			Source: AAA0440-01			Prepared & Analyzed: 01/16/17					
Mercury	0.00236	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125	0.1	20	
Post Spike (7010337-PS1)			Source: AAA0440-01			Prepared & Analyzed: 01/16/17					
Mercury	1.72			ug/L	1.6667	-0.00226	103	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 18, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR	
Collection DATE A-YY-YY	Collection TIME	MATRIX CODE	COM P	GRA B	SAMPLE IDENTIFICATION
1-10-17	1540	GW	✓		YGWA-14S
1-11-17	1110	GW	✓		YGWA-17S
1-11-17	1250	GW	✓		YGWA-18 I
1-11-17	1425	GW	✓		YGWA-18 S
1-11-17		GW	✓		DUP-1

CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	ANALYSIS REQUESTED
3	Metals App. III & IV (EPA 6020/7470)	3	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)
7		7	Radium 226 & 228 (SW-646 9315/9320)
3		3	

CONTAINER TYPE	PRESERVATION	CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C	A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C
G - CLEAR GLASS	3 - HNO ₃	V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	5 - NaOH/ZnAc, ≤6°C	O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C
	7 - ≤6°C not frozen		

MATRIX CODES:	REMARKS/ADDITIONAL INFORMATION
DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
ST - STORM WATER	L - LIQUID
W - WATER	P - PRODUCT

LAB #	DATE/TIME	DATE/TIME
AAA0342	1-11-17 1725	

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 1/12/2017 10:46:44AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 01/11/17 17:25

Work Order: AAA0342

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 5

#Containers: 20

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

February 09, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30207924

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on January 13, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30207924

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates

Pace Project No.: 30207924

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30207924001	YGWA-14S	Water	01/10/17 15:40	01/13/17 09:40
30207924002	YGWA-17S	Water	01/11/17 11:10	01/13/17 09:40
30207924003	YGWA-18I	Water	01/11/17 12:50	01/13/17 09:40
30207924004	YGWA-18S	Water	01/11/17 14:25	01/13/17 09:40
30207924005	Dup-1	Water	01/11/17 00:00	01/13/17 09:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30207924

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30207924001	YGWA-14S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30207924002	YGWA-17S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30207924003	YGWA-18I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30207924004	YGWA-18S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30207924005	Dup-1	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30207924

Sample: YGWA-14S		Lab ID: 30207924001	Collected: 01/10/17 15:40	Received: 01/13/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.00919 ± 0.0665 (0.166) C:86% T:NA	pCi/L	01/22/17 16:02	13982-63-3	
Radium-228	EPA 9320	0.367 ± 0.357 (0.733) C:74% T:86%	pCi/L	02/07/17 12:15	15262-20-1	
Total Radium	Total Radium Calculation	0.376 ± 0.424 (0.899)	pCi/L	02/09/17 16:25	7440-14-4	

Sample: YGWA-17S		Lab ID: 30207924002	Collected: 01/11/17 11:10	Received: 01/13/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0161 ± 0.0752 (0.198) C:89% T:NA	pCi/L	01/22/17 16:02	13982-63-3	
Radium-228	EPA 9320	0.340 ± 0.387 (0.810) C:71% T:92%	pCi/L	02/07/17 14:05	15262-20-1	
Total Radium	Total Radium Calculation	0.340 ± 0.462 (1.01)	pCi/L	02/09/17 16:25	7440-14-4	

Sample: YGWA-18I		Lab ID: 30207924003	Collected: 01/11/17 12:50	Received: 01/13/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0876 ± 0.0847 (0.160) C:91% T:NA	pCi/L	01/22/17 16:02	13982-63-3	
Radium-228	EPA 9320	0.277 ± 0.365 (0.779) C:71% T:88%	pCi/L	02/07/17 12:16	15262-20-1	
Total Radium	Total Radium Calculation	0.365 ± 0.450 (0.939)	pCi/L	02/09/17 16:25	7440-14-4	

Sample: YGWA-18S		Lab ID: 30207924004	Collected: 01/11/17 14:25	Received: 01/13/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0640 ± 0.0462 (0.169) C:92% T:NA	pCi/L	01/22/17 16:02	13982-63-3	
Radium-228	EPA 9320	0.502 ± 0.416 (0.832) C:63% T:90%	pCi/L	02/07/17 12:16	15262-20-1	
Total Radium	Total Radium Calculation	0.502 ± 0.462 (1.00)	pCi/L	02/09/17 16:25	7440-14-4	

Sample: Dup-1		Lab ID: 30207924005	Collected: 01/11/17 00:00	Received: 01/13/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0502 ± 0.104 (0.231) C:92% T:NA	pCi/L	01/22/17 16:02	13982-63-3	
Radium-228	EPA 9320	0.225 ± 0.333 (0.718) C:76% T:90%	pCi/L	02/07/17 12:16	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30207924

Sample: Dup-1 **Lab ID: 30207924005** Collected: 01/11/17 00:00 Received: 01/13/17 09:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.275 ± 0.437 (0.949)	pCi/L	02/09/17 16:25	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30207924

QC Batch: 246909

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30207924001, 30207924002, 30207924003, 30207924004, 30207924005

METHOD BLANK: 1214154

Matrix: Water

Associated Lab Samples: 30207924001, 30207924002, 30207924003, 30207924004, 30207924005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.245 ± 0.436 (0.952) C:77% T:67%	pCi/L	02/07/17 12:14	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30207924

QC Batch: 246911 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30207924001, 30207924002, 30207924003, 30207924004, 30207924005

METHOD BLANK: 1214156 Matrix: Water
Associated Lab Samples: 30207924001, 30207924002, 30207924003, 30207924004, 30207924005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0107 ± 0.0613 (0.153) C:95% T:NA	pCi/L	01/22/17 12:53	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30207924

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

30207924

Chain of Custody



Workorder: AAA0342

Workorder Name: Plant Yates

Owner Received Date:

Results Requested By: 2/3/2017

Report To:

Subcontract To:

Betsy McDaniel
Pace Analytical Atlanta
110 Technology Parkway
Peachtree Corners, GA 30092
Phone (770)-734-4200

Pace - Pittsburgh
1638 Roseytown Road
Stes. 2,3,4
Greensburg, PA 15601
Phone (724) 850-5600

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers		LAB USE ONLY
						CO	HE	
1	YGWA-14S	G	1/10/2017 15:40	AAA0342-01	GW	2		001
2	YGWA-17S	G	1/11/2017 11:10	AAA0342-02	GW	2		002
3	YGWA-18I	G	1/11/2017 12:50	AAA0342-03	GW	2		003
4	YGWA-18S	G	1/11/2017 14:25	AAA0342-04	GW	2		004
5	Dup-1	G	1/11/2017 0:00	AAA0342-05	GW	2		005
6								
7								
8								
9								
10								

WO#: 30207924



30207924

1-13-17 0940

Comments

Received By

Christine Pace

Date/Time

Transfers Released By

Cooler Temperature on Receipt N/A °C

Custody Seal Y or N

Received on Ice Y or N

Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Friday, June 17, 2016 11:01:34 AM

FMT-ALL-C-002rev.00 24March2009

Page 1 of 1



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239
 REPORT TO: Lauren Petty
 CC: Mana Padilla Heath McCorkle
 REQUESTED COMPLETION DATE: PO #: laburgh@southemco.com
 PROJECT NAME/STATE: Plant Yates AP
 PROJECT #: Phase 2 CCR

CONTAINER TYPE PRESERVATION	ANALYSIS REQUESTED			CONTAINER TYPE PRESERVATION	PRESERVATION
	P	P	P		
3	7	3			
CONTAINERS →					
4	1	1	2		
4	1	1	2		
4	1	1	2		
4	1	1	2		
4	1	1	2		
4	1	1	2		
4	1	1	2		
4	1	1	2		

L	A	B	I	D	N	U	M	B	E	R
1	2	3	4	5						

MATRIX CODES:
 DW - DRINKING WATER S - SOIL
 WW - WASTEWATER SL - SLUDGE
 GW - GROUNDWATER SD - SOLID
 SW - SURFACE WATER A - AIR
 ST - STORM WATER L - LIQUID
 W - WATER P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

LAB #:
 Entered into LIMS:
 Tracking #:

Collection DATE	Collection TIME	MATRIX CODE	SAMPLE IDENTIFICATION	RELINQUISHED BY:	DATE/TIME:
1-10-17	1540	GW	YGWA-14S	[Signature]	1-11-17 1600
1-11-17	1110	GW	YGWA-17S	[Signature]	1-11-17 1725
1-11-17	1250	GW	YGWA-18 I	[Signature]	1-11-17 1600
1-11-17	1425	GW	YGWA-18 S	[Signature]	1-11-17 1725
1-11-17	-	GW	DUP-1	[Signature]	1-11-17 1600

SAMPLED BY AND TITLE: [Signature]
 RECEIVED BY: [Signature]
 RECEIVED BY: [Signature]
 DATE/TIME: 1-11-17 1600
 DATE/TIME: 1-11-17 1725
 DATE/TIME: 1-11-17 1600
 DATE/TIME: 1-11-17 1725

FOR LAB USE ONLY
 LAB #: AAA0342
 Entered into LIMS: [Signature]

Sample Condition Upon Receipt Pittsburgh

30207924



Client Name: Pace, GA Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5101 0635

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: UQA 1-13-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15. <u>PHL2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>UQA</u> Date/time of preservation: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>UQA</u> Date: <u>1-13-17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 1/21/2017
Worklist: 33612
Matrix: DW

Method Blank Assessment

MB Sample ID: 1214154
MB concentration: 0.245
MB Counting Uncertainty: 0.433
MB MDC: 0.952
MB Numerical Performance Indicator: 1.11
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCS (Y or N)? N
LCS33612
Count Date: 2/7/2017
Spike I.D.: 16-027
Spike Concentration (pCi/mL): 25.362
Volume Used (mL): 0.20
Aliquot Volume (L, g, F): 0.805
Target Conc. (pCi/L, g, F): 6.303
Uncertainty (Calculated): 0.454
Result (pCi/L, g, F): 4.970
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.627
Numerical Performance Indicator: -3.38
Percent Recovery: 78.84%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

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):
MS Aliquot (L, g, F):
MS Target Conc. (pCi/L, g, F):
MSD Aliquot (L, g, F):
MSD Target Conc. (pCi/L, g, F):
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:

Duplicate Sample Assessment

Sample I.D.: 30208060001
Duplicate Sample I.D.: 30208060001DUP
Sample Result (pCi/L, g, F): 0.265
Sample Result Counting Uncertainty (pCi/L, g, F): 0.333
Sample Duplicate Result (pCi/L, g, F): 0.535
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.434
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -0.967
Duplicate RPD: 67.46%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30208060001
30208060001DUP

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:

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Handwritten signature

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 1/20/2017
Worklist: 33614
Matrix: DW

Method Blank Assessment

MB Sample ID: 1214156
MB Concentration: 0.011
MB Counting Uncertainty: 0.061
MB MDC: 0.153
MB Numerical Performance Indicator: 0.34
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCS (Y or N)? N
LCS# 33614
LCS# 33614

Count Date: 1/22/2017

Spike I.D.: 16-026
Spike Concentration (pCi/mL): 44.671
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.502
Target Conc. (pCi/L, g, F): 8.898
Uncertainty (Calculated): 0.419
Result (pCi/L, g, F): 8.161
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.543
Numerical Performance Indicator: -2.11
Percent Recovery: 91.71%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30208060001
Duplicate Sample I.D.: 30208060001DUP

Sample Result Counting Uncertainty (pCi/L, g, F): 0.125
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.094
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.111
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.087
Are sample and/or duplicate results below MDC? See Below #
Duplicate Numerical Performance Indicator: 0.222
Duplicate RPD: 12.30%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30208060001
30208060001DUP

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

Handwritten signature



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAA0396

January 19, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-1D	AAA0396-01	Ground Water	01/11/17 15:35	01/12/17 17:25
YGWA-3I	AAA0396-02	Ground Water	01/11/17 13:30	01/12/17 17:25
YGWA-3D	AAA0396-03	Ground Water	01/11/17 11:20	01/12/17 17:25
FB-1-1-11-17	AAA0396-04	Water	01/11/17 12:50	01/12/17 17:25
YGWA-5I	AAA0396-05	Ground Water	01/12/17 14:00	01/12/17 17:25
YGWA-5D	AAA0396-06	Ground Water	01/12/17 14:55	01/12/17 17:25
EB-1-1-12-17	AAA0396-07	Water	01/12/17 13:15	01/12/17 17:25



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396

Project: CCR Event

Client ID: YGWA-1D

Lab Number ID: AAA0396-01

Date/Time Sampled: 1/11/2017 3:35:00PM

Date/Time Received: 1/12/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	107	25	10	mg/L	SM 2540 C		1	01/16/17 18:20	01/16/17 18:20	7010344	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 16:00	7010348	RNB
Fluoride	0.05	0.30	0.02	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 16:00	7010348	RNB
Sulfate	3.7	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 16:00	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Arsenic	0.0017	0.0050	0.0016	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Barium	0.0069	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Boron	0.0074	0.0400	0.0064	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Cadmium	0.0002	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Calcium	11.2	5.00	0.311	mg/L	EPA 6020B		10	01/16/17 11:10	01/18/17 13:09	7010326	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Molybdenum	0.0093	0.0100	0.0017	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Lithium	0.0166	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:08	7010326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/17/17 09:10	01/17/17 12:57	7010363	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 19, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0396

Project: CCR Event

Client ID: YGWA-3I

Lab Number ID: AAA0396-02

Date/Time Sampled: 1/11/2017 1:30:00PM

Date/Time Received: 1/12/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	148	25	10	mg/L	SM 2540 C		1	01/16/17 18:20	01/16/17 18:20	7010344	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 17:43	7010348	RNB
Fluoride	0.09	0.30	0.02	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 17:43	7010348	RNB
Sulfate	8.6	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 17:43	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Barium	0.0036	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Cadmium	0.00008	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Calcium	20.3	5.00	0.311	mg/L	EPA 6020B		10	01/16/17 11:10	01/18/17 13:15	7010326	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Molybdenum	0.0033	0.0100	0.0017	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Lithium	0.0085	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:20	7010326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/17/17 09:10	01/17/17 12:59	7010363	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 19, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0396

Project: CCR Event

Client ID: YGWA-3D

Lab Number ID: AAA0396-03

Date/Time Sampled: 1/11/2017 11:20:00AM

Date/Time Received: 1/12/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	159	25	10	mg/L	SM 2540 C		1	01/16/17 18:20	01/16/17 18:20	7010344	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 18:04	7010348	RNB
Fluoride	0.49	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 18:04	7010348	RNB
Sulfate	4.5	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 18:04	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Barium	0.0075	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Calcium	27.5	25.0	1.55	mg/L	EPA 6020B		50	01/16/17 11:10	01/17/17 18:37	7010326	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Molybdenum	0.0093	0.0100	0.0017	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Lithium	0.0177	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:31	7010326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/17/17 09:10	01/17/17 13:02	7010363	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 19, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0396

Project: CCR Event

Client ID: FB-1-1-11-17

Lab Number ID: AAA0396-04

Date/Time Sampled: 1/11/2017 12:50:00PM

Date/Time Received: 1/12/2017 5:25:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	01/16/17 18:20	01/16/17 18:20	7010344	JPT
Inorganic Anions											
Chloride	0.06	0.25	0.01	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 18:24	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 18:24	7010348	RNB
Sulfate	0.27	1.0	0.05	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 18:24	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:43	7010326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/17/17 09:10	01/17/17 13:04	7010363	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 19, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0396

Project: CCR Event

Client ID: YGWA-5I

Lab Number ID: AAA0396-05

Date/Time Sampled: 1/12/2017 2:00:00PM

Date/Time Received: 1/12/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	86	25	10	mg/L	SM 2540 C		1	01/16/17 18:20	01/16/17 18:20	7010344	JPT
Inorganic Anions											
Chloride	3.8	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 18:45	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 18:45	7010348	RNB
Sulfate	1.9	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 18:45	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Barium	0.0199	0.0100	0.0004	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Cadmium	0.00009	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Calcium	2.37	0.500	0.0311	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Lithium	0.0032	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 18:49	7010326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/17/17 09:10	01/17/17 13:06	7010363	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 19, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0396

Project: CCR Event

Client ID: YGWA-5D

Lab Number ID: AAA0396-06

Date/Time Sampled: 1/12/2017 2:55:00PM

Date/Time Received: 1/12/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	202	25	10	mg/L	SM 2540 C		1	01/16/17 18:20	01/16/17 18:20	7010344	JPT
Inorganic Anions											
Chloride	6.8	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 19:06	7010348	RNB
Fluoride	0.04	0.30	0.02	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 19:06	7010348	RNB
Sulfate	19	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 19:06	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Barium	0.0089	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Boron	0.0076	0.0400	0.0064	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Calcium	35.7	25.0	1.55	mg/L	EPA 6020B		50	01/16/17 11:10	01/17/17 19:17	7010326	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Molybdenum	0.0041	0.0100	0.0017	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Lithium	0.0054	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 19:11	7010326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/17/17 09:10	01/17/17 13:09	7010363	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396
Client ID: EB-1-1-12-17
Date/Time Sampled: 1/12/2017 1:15:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAA0396-07
Date/Time Received: 1/12/2017 5:25:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	01/16/17 18:20	01/16/17 18:20	7010344	JPT
Inorganic Anions											
Chloride	0.06	0.25	0.01	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 19:26	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 19:26	7010348	RNB
Sulfate	0.15	1.0	0.05	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 19:26	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Calcium	0.0328	0.500	0.0311	mg/L	EPA 6020B	J	1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/16/17 11:10	01/17/17 19:23	7010326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/17/17 09:10	01/17/17 13:11	7010363	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010344 - SM 2540 C											
Blank (7010344-BLK1)						Prepared & Analyzed: 01/16/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7010344-BS1)						Prepared & Analyzed: 01/16/17					
Total Dissolved Solids	385	25	10	mg/L	400.00		96	84-108			
Duplicate (7010344-DUP1)						Source: AAA0396-04 Prepared & Analyzed: 01/16/17					
Total Dissolved Solids	12	25	10	mg/L		ND				10	J



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010348 - EPA 300.0											
Blank (7010348-BLK1)						Prepared & Analyzed: 01/16/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (7010348-BS1)						Prepared & Analyzed: 01/16/17					
Chloride	10.0	0.25	0.01	mg/L	10.010		100	90-110			
Fluoride	10.2	0.30	0.02	mg/L	10.020		102	90-110			
Sulfate	10.1	1.0	0.05	mg/L	10.020		100	90-110			
Matrix Spike (7010348-MS1)						Source: AAA0342-01 Prepared & Analyzed: 01/16/17					
Chloride	13.1	0.25	0.01	mg/L	10.010	4.09	90	90-110			
Fluoride	9.28	0.30	0.02	mg/L	10.020	ND	93	90-110			
Sulfate	14.5	1.0	0.05	mg/L	10.020	5.94	85	90-110			QM-02
Matrix Spike (7010348-MS2)						Source: AAA0466-02 Prepared & Analyzed: 01/16/17					
Chloride	11.4	0.25	0.01	mg/L	10.010	2.26	91	90-110			
Fluoride	9.54	0.30	0.02	mg/L	10.020	ND	95	90-110			
Sulfate	9.06	1.0	0.05	mg/L	10.020	0.10	89	90-110			QM-02
Matrix Spike Dup (7010348-MSD1)						Source: AAA0342-01 Prepared & Analyzed: 01/16/17					
Chloride	13.5	0.25	0.01	mg/L	10.010	4.09	94	90-110	3	15	
Fluoride	9.77	0.30	0.02	mg/L	10.020	ND	98	90-110	5	15	
Sulfate	14.9	1.0	0.05	mg/L	10.020	5.94	89	90-110	3	15	QM-02



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7010326 - EPA 3005A

Blank (7010326-BLK1)

Prepared: 01/16/17 Analyzed: 01/17/17

Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							

LCS (7010326-BS1)

Prepared: 01/16/17 Analyzed: 01/17/17

Antimony	0.102	0.0030	0.0008	mg/L	0.10000		102	80-120			
Arsenic	0.100	0.0050	0.0016	mg/L	0.10000		100	80-120			
Barium	0.0974	0.0100	0.0004	mg/L	0.10000		97	80-120			
Beryllium	0.0993	0.0030	0.00008	mg/L	0.10000		99	80-120			
Boron	0.985	0.0400	0.0064	mg/L	1.0000		99	80-120			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000		102	80-120			
Calcium	1.02	0.500	0.0311	mg/L	1.0000		102	80-120			
Chromium	0.102	0.0100	0.0009	mg/L	0.10000		102	80-120			
Cobalt	0.0996	0.0100	0.0005	mg/L	0.10000		100	80-120			
Copper	0.0958	0.0250	0.0005	mg/L	0.10000		96	80-120			
Lead	0.0981	0.0050	0.0001	mg/L	0.10000		98	80-120			
Molybdenum	0.0994	0.0100	0.0017	mg/L	0.10000		99	80-120			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000		101	80-120			
Selenium	0.100	0.0100	0.0010	mg/L	0.10000		100	80-120			
Silver	0.0999	0.0100	0.0005	mg/L	0.10000		100	80-120			
Thallium	0.0981	0.0010	0.0002	mg/L	0.10000		98	80-120			
Vanadium	0.101	0.0100	0.0071	mg/L	0.10000		101	80-120			
Zinc	0.0962	0.0100	0.0021	mg/L	0.10000		96	80-120			
Lithium	0.0983	0.0500	0.0021	mg/L	0.10000		98	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010326 - EPA 3005A											
Matrix Spike (7010326-MS1)			Source: AAA0446-03			Prepared: 01/16/17 Analyzed: 01/17/17					
Antimony	0.101	0.0030	0.0008	mg/L	0.10000	ND	101	75-125			
Arsenic	0.100	0.0050	0.0016	mg/L	0.10000	ND	100	75-125			
Barium	0.115	0.0100	0.0004	mg/L	0.10000	0.0150	100	75-125			
Beryllium	0.101	0.0030	0.00008	mg/L	0.10000	ND	101	75-125			
Boron	0.983	0.0400	0.0064	mg/L	1.0000	ND	98	75-125			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000	0.0001	101	75-125			
Calcium	33.5	25.0	1.55	mg/L	1.0000	31.2	227	75-125			QM-02
Chromium	0.105	0.0100	0.0009	mg/L	0.10000	ND	105	75-125			
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125			
Copper	0.0969	0.0250	0.0005	mg/L	0.10000	ND	97	75-125			
Lead	0.101	0.0050	0.0001	mg/L	0.10000	ND	101	75-125			
Molybdenum	0.104	0.0100	0.0017	mg/L	0.10000	ND	104	75-125			
Nickel	0.103	0.0100	0.0006	mg/L	0.10000	ND	103	75-125			
Selenium	0.0978	0.0100	0.0010	mg/L	0.10000	ND	98	75-125			
Silver	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125			
Thallium	0.103	0.0010	0.0002	mg/L	0.10000	ND	103	75-125			
Vanadium	0.108	0.0100	0.0071	mg/L	0.10000	ND	108	75-125			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000	ND	102	75-125			
Lithium	0.101	0.0500	0.0021	mg/L	0.10000	ND	101	75-125			
Matrix Spike Dup (7010326-MSD1)			Source: AAA0446-03			Prepared: 01/16/17 Analyzed: 01/17/17					
Antimony	0.109	0.0030	0.0008	mg/L	0.10000	ND	109	75-125	7	20	
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125	2	20	
Barium	0.117	0.0100	0.0004	mg/L	0.10000	0.0150	102	75-125	2	20	
Beryllium	0.0979	0.0030	0.00008	mg/L	0.10000	ND	98	75-125	3	20	
Boron	0.984	0.0400	0.0064	mg/L	1.0000	ND	98	75-125	0.2	20	
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	0.0001	102	75-125	1	20	
Calcium	34.0	25.0	1.55	mg/L	1.0000	31.2	280	75-125	2	20	QM-02
Chromium	0.109	0.0100	0.0009	mg/L	0.10000	ND	109	75-125	4	20	
Cobalt	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125	1	20	
Copper	0.0980	0.0250	0.0005	mg/L	0.10000	ND	98	75-125	1	20	
Lead	0.0994	0.0050	0.0001	mg/L	0.10000	ND	99	75-125	2	20	
Molybdenum	0.103	0.0100	0.0017	mg/L	0.10000	ND	103	75-125	1	20	
Nickel	0.105	0.0100	0.0006	mg/L	0.10000	ND	105	75-125	1	20	
Selenium	0.0988	0.0100	0.0010	mg/L	0.10000	ND	99	75-125	1	20	
Silver	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125	1	20	
Thallium	0.100	0.0010	0.0002	mg/L	0.10000	ND	100	75-125	3	20	
Vanadium	0.111	0.0100	0.0071	mg/L	0.10000	ND	111	75-125	3	20	
Zinc	0.102	0.0100	0.0021	mg/L	0.10000	ND	102	75-125	0.1	20	
Lithium	0.103	0.0500	0.0021	mg/L	0.10000	ND	103	75-125	1	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010326 - EPA 3005A											
Post Spike (7010326-PS1)			Source: AAA0446-03			Prepared: 01/16/17 Analyzed: 01/17/17					
Antimony	98.3			ug/L	100.00	0.463	98	80-120			
Arsenic	102			ug/L	100.00	0.438	102	80-120			
Barium	118			ug/L	100.00	15.0	103	80-120			
Beryllium	96.2			ug/L	100.00	0.0139	96	80-120			
Boron	1000			ug/L	1000.0	2.54	100	80-120			
Cadmium	97.0			ug/L	100.00	0.148	97	80-120			
Calcium	34400			ug/L	1000.0	31200	320	80-120			QM-02
Chromium	106			ug/L	100.00	0.645	105	80-120			
Cobalt	103			ug/L	100.00	0.0295	103	80-120			
Copper	99.1			ug/L	100.00	0.206	99	80-120			
Lead	99.9			ug/L	100.00	0.0602	100	80-120			
Molybdenum	103			ug/L	100.00	0.299	103	80-120			
Nickel	101			ug/L	100.00	0.180	101	80-120			
Selenium	104			ug/L	100.00	-0.392	104	80-120			
Silver	101			ug/L	100.00	0.0010	101	80-120			
Thallium	100			ug/L	100.00	0.0051	100	80-120			
Vanadium	108			ug/L	100.00	-1.49	108	80-120			
Zinc	102			ug/L	100.00	0.822	101	80-120			
Lithium	99.5			ug/L	100.00	0.568	99	80-120			

Batch 7010363 - EPA 7470A

Blank (7010363-BLK1)					Prepared & Analyzed: 01/17/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7010363-BS1)					Prepared & Analyzed: 01/17/17						
Mercury	0.00240	0.00050	0.000041	mg/L	2.5000E-3		96	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010363 - EPA 7470A											
Matrix Spike (7010363-MS1)			Source: AAA0396-01			Prepared & Analyzed: 01/17/17					
Mercury	0.00240	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125			
Matrix Spike Dup (7010363-MSD1)			Source: AAA0396-01			Prepared & Analyzed: 01/17/17					
Mercury	0.00240	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125	0.08	20	
Post Spike (7010363-PS1)			Source: AAA0396-01			Prepared & Analyzed: 01/17/17					
Mercury	1.71			ug/L	1.6667	-0.00696	103	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 19, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP Phase 2CCR	
CONTAINER TYPE: # of CONTAINERS →	ANALYSIS REQUESTED P 3 P 7 P 3 Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-646 9315/9320)	CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER	PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	MATRIX CODES: DW - DRINKING WATER WW - WASTEWATER GW - GROUNDWATER SW - SURFACE WATER ST - STORM WATER W - WATER S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT	REMARKS/ADDITIONAL INFORMATION
SAMPLED BY AND TITLE: J. Beckford, J. Parker (Acc)	DATE/TIME: 1-12-17 / 1530	RELINQUISHED BY: [Signature]	DATE/TIME: 1-12-17 / 1725	CLIENT: CLIENT	OTHER FS: OTHER FS
RECEIVED BY: [Signature]	DATE/TIME: 1-12-17 / 1725	RECEIVED BY: [Signature]	DATE/TIME: 1-12-17 / 1725	USPS: USPS	COURIER: COURIER
TEMPERATURE: 10 Min, 100 Max	TEMPERATURE: 10 Min, 100 Max	TEMPERATURE: 10 Min, 100 Max	TEMPERATURE: 10 Min, 100 Max	TEMPERATURE: 10 Min, 100 Max	TEMPERATURE: 10 Min, 100 Max

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 1/13/2017 8:41:43AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 01/12/17 17:25

Work Order: AAA0396

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 7

#Containers: 28

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

February 13, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30208062

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on January 16, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30208062

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates

Pace Project No.: 30208062

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30208062001	YGWA-1D	Water	01/11/17 15:35	01/16/17 09:20
30208062002	YGWA-3I	Water	01/11/17 13:30	01/16/17 09:20
30208062003	YGWA-3D	Water	01/11/17 11:20	01/16/17 09:20
30208062004	FB-1-1-11-17	Water	01/11/17 12:50	01/16/17 09:20
30208062005	YGWA-5I	Water	01/12/17 14:00	01/16/17 09:20
30208062006	YGWA-5D	Water	01/12/17 14:55	01/16/17 09:20
30208062007	EB-1-1-12-17	Water	01/12/17 13:15	01/16/17 09:20

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates

Pace Project No.: 30208062

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30208062001	YGWA-1D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208062002	YGWA-3I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208062003	YGWA-3D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208062004	FB-1-1-11-17	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208062005	YGWA-5I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208062006	YGWA-5D	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208062007	EB-1-1-12-17	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208062

Sample: YGWA-1D		Lab ID: 30208062001	Collected: 01/11/17 15:35	Received: 01/16/17 09:20	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.164 ± 0.117 (0.209) C:90% T:NA	pCi/L	01/22/17 16:14	13982-63-3	
Radium-228	EPA 9320	0.541 ± 0.337 (0.609) C:64% T:92%	pCi/L	02/10/17 15:51	15262-20-1	
Total Radium	Total Radium Calculation	0.705 ± 0.454 (0.818)	pCi/L	02/13/17 13:42	7440-14-4	

Sample: YGWA-3I		Lab ID: 30208062002	Collected: 01/11/17 13:30	Received: 01/16/17 09:20	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.399 ± 0.152 (0.177) C:93% T:NA	pCi/L	01/22/17 16:14	13982-63-3	
Radium-228	EPA 9320	0.825 ± 0.461 (0.843) C:69% T:85%	pCi/L	02/10/17 11:36	15262-20-1	
Total Radium	Total Radium Calculation	1.22 ± 0.613 (1.02)	pCi/L	02/13/17 13:42	7440-14-4	

Sample: YGWA-3D		Lab ID: 30208062003	Collected: 01/11/17 11:20	Received: 01/16/17 09:20	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.09 ± 0.270 (0.199) C:92% T:NA	pCi/L	01/22/17 16:14	13982-63-3	
Radium-228	EPA 9320	1.43 ± 0.561 (0.870) C:66% T:85%	pCi/L	02/10/17 11:36	15262-20-1	
Total Radium	Total Radium Calculation	2.52 ± 0.831 (1.07)	pCi/L	02/13/17 13:42	7440-14-4	

Sample: FB-1-1-11-17		Lab ID: 30208062004	Collected: 01/11/17 12:50	Received: 01/16/17 09:20	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0693 ± 0.0956 (0.201) C:93% T:NA	pCi/L	01/22/17 16:14	13982-63-3	
Radium-228	EPA 9320	0.471 ± 0.383 (0.767) C:73% T:90%	pCi/L	02/10/17 11:36	15262-20-1	
Total Radium	Total Radium Calculation	0.540 ± 0.479 (0.968)	pCi/L	02/13/17 13:42	7440-14-4	

Sample: YGWA-5I		Lab ID: 30208062005	Collected: 01/12/17 14:00	Received: 01/16/17 09:20	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.202 ± 0.116 (0.174) C:93% T:NA	pCi/L	01/22/17 16:14	13982-63-3	
Radium-228	EPA 9320	-0.204 ± 0.294 (0.727) C:79% T:87%	pCi/L	02/10/17 11:36	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30208062

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-5I Lab ID: 30208062005 Collected: 01/12/17 14:00 Received: 01/16/17 09:20 Matrix: Water PWS: Site ID: Sample Type:						
Total Radium	Total Radium Calculation	0.202 ± 0.410 (0.901)	pCi/L	02/13/17 13:42	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-5D Lab ID: 30208062006 Collected: 01/12/17 14:55 Received: 01/16/17 09:20 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	3.83 ± 0.671 (0.175) C:94% T:NA	pCi/L	01/22/17 16:15	13982-63-3	
Radium-228	EPA 9320	0.604 ± 0.423 (0.824) C:72% T:87%	pCi/L	02/10/17 11:36	15262-20-1	
Total Radium	Total Radium Calculation	4.43 ± 1.09 (0.999)	pCi/L	02/13/17 13:42	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-1-1-12-17 Lab ID: 30208062007 Collected: 01/12/17 13:15 Received: 01/16/17 09:20 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.0362 ± 0.0932 (0.213) C:95% T:NA	pCi/L	01/22/17 16:15	13982-63-3	
Radium-228	EPA 9320	0.119 ± 0.345 (0.773) C:78% T:83%	pCi/L	02/10/17 11:36	15262-20-1	
Total Radium	Total Radium Calculation	0.155 ± 0.438 (0.986)	pCi/L	02/13/17 13:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30208062

QC Batch: 246910

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30208062001, 30208062002, 30208062003, 30208062004, 30208062005, 30208062006, 30208062007

METHOD BLANK: 1214155

Matrix: Water

Associated Lab Samples: 30208062001, 30208062002, 30208062003, 30208062004, 30208062005, 30208062006, 30208062007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.550 ± 0.410 (0.796) C:63% T:85%	pCi/L	02/10/17 11:45	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30208062

QC Batch: 246912

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30208062001, 30208062002, 30208062003, 30208062004, 30208062005, 30208062006, 30208062007

METHOD BLANK: 1214157

Matrix: Water

Associated Lab Samples: 30208062001, 30208062002, 30208062003, 30208062004, 30208062005, 30208062006, 30208062007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.189 ± 0.137 (0.255) C:95% T:NA	pCi/L	01/22/17 16:14	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30208062

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30208062



Chain of Custody



Workorder: AAA0396

Workorder Name: Plant Yates

Owner Received Date:

Results Requested By: 2/6/2017

Report To:		Subcontract To:		Requested Analysis						
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200		Pace - Pittsburg 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600		Radium 226, 228, Total						
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Date/Time	Received By	Date/Time	Comments
1	YGWA-1D	G	1/11/2017 15:35	AAA0396-01	GW	1				
2	YGWA-3I	G	1/11/2017 13:30	AAA0396-02	GW	1				
3	YGWA-3D	G	1/11/2017 11:20	AAA0396-03	GW	1				
4	FB-1-1-11-17	G	1/11/2017 12:50	AAA0396-04	W	1				
5	YGWA-5I	G	1/12/2017 14:00	AAA0396-05	GW	1				
6	YGWA-5D	G	1/12/2017 14:55	AAA0396-06	GW	1				
7	EB-1-1-12-17	G	1/12/2017 13:15	AAA0396-07	W	1				
8						8/ND				
9						1/12/2017				
10										
Transfers Released By		Date/Time		Received By		Date/Time		Comments		
				Wahleing Pace Pace		1-16-17/0920				
1										
2										
3										

Cooler Temperature on Receipt N/A °C Custody Seal Y of N Received on Ice Y of N Sample Intact Y or N
 ***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

30208062

PAGE: 1 OF 1



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239 REPORT TO: Lauren Peity REQUESTED COMPLETION DATE: PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CGR		CONTAINER TYPE: P PRESERVATION: # of ANALYSIS REQUESTED: P P P P 3 7 3 CONTAINER TYPE: P PRESERVATION: # of ANALYSIS REQUESTED: P P P P 3 7 3		CONTAINER TYPE: P PRESERVATION: # of ANALYSIS REQUESTED: P P P P 3 7 3		CONTAINER TYPE: P PRESERVATION: # of ANALYSIS REQUESTED: P P P P 3 7 3	
REPORT TO: Lauren Peity REQUESTED COMPLETION DATE: PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CGR		CONTAINER TYPE: P PRESERVATION: # of ANALYSIS REQUESTED: P P P P 3 7 3		CONTAINER TYPE: P PRESERVATION: # of ANALYSIS REQUESTED: P P P P 3 7 3		CONTAINER TYPE: P PRESERVATION: # of ANALYSIS REQUESTED: P P P P 3 7 3	
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION	RELINQUISHED BY:	DATE/TIME
1-11-17	1535	GW	✓	✓	Y6WA-1D	<i>[Signature]</i>	1-12-17 / 1530
1-11-17	1330	GW	✓	✓	Y6WA-3E		
1-11-17	1120	GW	✓	✓	Y6WA-3D		
1-11-17	1250	W	✓	✓	FB-1-1-11-17		
1-12-17	1400	GW	✓	✓	Y6WA-5E		
1-12-17	1455	GW	✓	✓	Y6WA-5D		
1-12-17	1315	W	✓	✓	EB-1-1-12-17		
SAMPLED BY AND TITLE: J. Baker, C. Baker (Asst)		RECEIVED BY: DATE/TIME: 1-12-17 / 1530		RELINQUISHED BY: DATE/TIME: 1-12-17 / 1725		RELINQUISHED BY: DATE/TIME: 1-12-17 / 1725	
RECEIVED BY LAB: DATE/TIME: 1-12-17 / 1725		RECEIVED BY: DATE/TIME: 1-12-17 / 1725		RECEIVED BY: DATE/TIME: 1-12-17 / 1725		RECEIVED BY: DATE/TIME: 1-12-17 / 1725	
LAB #: AA0396		ENTERED INTO LIMS: TRACKING #:		LAB #: AA0396		ENTERED INTO LIMS: TRACKING #:	
CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		PRESERVATION: 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen		MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT		REMARKS/ADDITIONAL INFORMATION:	

Sample Condition Upon Receipt Pittsburgh

30208062



Client Name: Pace, GA Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5101 7068

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: Q97A 1-16-17

Comments:

	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				
				Initial when completed: <u>Q97A</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>Q97A</u> Date: <u>1-16-17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 1/21/2017
Worklist: 33613
Matrix: DW

Method Blank Assessment	
MB Sample ID	1214155
MB concentration:	0.550
M/B Counting Uncertainty:	0.398
MB MDC:	0.796
MB Numerical Performance Indicator:	2.71
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	2/10/2017
Spike I.D.:	16-027
Spike Concentration (pCi/mL):	25.337
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.804
Target Conc. (pCi/L, g, F):	6.303
Uncertainty (Calculated):	0.454
Result (pCi/L, g, F):	6.777
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.674
Numerical Performance Indicator:	1.14
Percent Recovery:	107.51%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30208166001
Duplicate Sample I.D.:	30208166001DUP
Sample Result (pCi/L, g, F):	0.430
Sample Result Counting Uncertainty (pCi/L, g, F):	0.309
Sample Duplicate Result (pCi/L, g, F):	0.081
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.314
Are sample and/or duplicate results below MDC?	See Below##
Duplicate Numerical Performance Indicator:	1.552
Duplicate RPD:	136.37%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Opz/13/17

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample 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:	

Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226
Analyst: LAL
Date: 1/20/2017
Worklist: 33615
Matrix: DW

Method Blank Assessment	
MB Sample ID	1214157
MB concentration:	0.189
M/B Counting Uncertainty:	0.134
MB MDC:	0.255
MB Numerical Performance Indicator:	2.76
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS (Y or N)?	N
LCS#	LCS033615
Count Date:	1/22/2017
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.671
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.502
Target Conc. (pCi/L, g, F):	8.907
Uncertainty (Calculated):	0.419
Result (pCi/L, g, F):	7.468
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.532
Numerical Performance Indicator:	-4.16
Percent Recovery:	83.84%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30208166001
Duplicate Sample I.D.:	30208166001DUP
Sample Result (pCi/L, g, F):	0.762
Sample Result Counting Uncertainty (pCi/L, g, F):	0.184
Sample Duplicate Result (pCi/L, g, F):	0.806
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.183
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.331
Duplicate RPD:	5.59%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

Handwritten signature

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):	
Spike uncertainty (calculated):	
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:	
MS 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:	

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:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAA0521

January 27, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-1I	AAA0521-01	Ground Water	01/16/17 11:20	01/17/17 17:12
EB-2-1-16-17	AAA0521-02	Water	01/16/17 12:25	01/17/17 17:12
YGWA-2I	AAA0521-03	Ground Water	01/16/17 14:05	01/17/17 17:12
YGWA-30I	AAA0521-04	Ground Water	01/16/17 10:50	01/17/17 17:12
YGWC-19S	AAA0521-05	Ground Water	01/16/17 12:30	01/17/17 17:12
YGWC-22S	AAA0521-06	Ground Water	01/16/17 15:15	01/17/17 17:12
YGWC-23S	AAA0521-07	Ground Water	01/16/17 13:50	01/17/17 17:12
Dup-2	AAA0521-08	Ground Water	01/16/17 00:00	01/17/17 17:12



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Project: CCR Event

Client ID: YGWA-1I

Lab Number ID: AAA0521-01

Date/Time Sampled: 1/16/2017 11:20:00AM

Date/Time Received: 1/17/2017 5:12:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	65	25	10	mg/L	SM 2540 C		1	01/19/17 13:35	01/19/17 13:35	7010488	JPT
Inorganic Anions											
Chloride	1.4	0.25	0.01	mg/L	EPA 300.0		1	01/18/17 17:07	01/18/17 22:54	7010462	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 17:07	01/18/17 22:54	7010462	RLC
Sulfate	7.9	1.0	0.09	mg/L	EPA 300.0	B-01	1	01/18/17 17:07	01/18/17 22:54	7010462	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Barium	0.0096	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Calcium	2.45	0.500	0.0311	mg/L	EPA 6020B	B-01	1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Cobalt	0.0027	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Molybdenum	0.0086	0.0100	0.0017	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Lithium	0.0023	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:06	7010460	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 13:25	01/23/17 16:54	7010429	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Project: CCR Event

Client ID: EB-2-1-16-17

Lab Number ID: AAA0521-02

Date/Time Sampled: 1/16/2017 12:25:00PM

Date/Time Received: 1/17/2017 5:12:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	01/19/17 13:35	01/19/17 13:35	7010488	JPT
Inorganic Anions											
Chloride	0.06	0.25	0.01	mg/L	EPA 300.0	J	1	01/18/17 17:07	01/18/17 23:56	7010462	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	01/18/17 17:07	01/18/17 23:56	7010462	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	01/18/17 17:07	01/18/17 23:56	7010462	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Calcium	0.0575	0.500	0.0311	mg/L	EPA 6020B	B-01, J	1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:30	7010460	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 13:25	01/23/17 16:56	7010429	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AAA0521-03

Date/Time Sampled: 1/16/2017 2:05:00PM

Date/Time Received: 1/17/2017 5:12:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	180	25	10	mg/L	SM 2540 C		1	01/19/17 13:35	01/19/17 13:35	7010488	JPT
Inorganic Anions											
Chloride	0.98	0.25	0.01	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 00:17	7010462	RLC
Fluoride	0.10	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 17:07	01/19/17 00:17	7010462	RLC
Sulfate	11	1.0	0.09	mg/L	EPA 300.0	B-01	1	01/18/17 17:07	01/19/17 00:17	7010462	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Arsenic	0.0018	0.0050	0.0016	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Barium	0.0049	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Calcium	23.3	5.00	0.311	mg/L	EPA 6020B	B-01	10	01/19/17 13:50	01/23/17 15:15	7010460	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Molybdenum	0.0056	0.0100	0.0017	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Lithium	0.0023	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:36	7010460	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 13:25	01/23/17 16:59	7010429	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Project: CCR Event

Client ID: YGWA-30I

Lab Number ID: AAA0521-04

Date/Time Sampled: 1/16/2017 10:50:00AM

Date/Time Received: 1/17/2017 5:12:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	47	25	10	mg/L	SM 2540 C		1	01/19/17 13:35	01/19/17 13:35	7010488	JPT
Inorganic Anions											
Chloride	1.7	0.25	0.01	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 00:37	7010462	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 00:37	7010462	RLC
Sulfate	1.4	1.0	0.09	mg/L	EPA 300.0	B-01	1	01/18/17 17:07	01/19/17 00:37	7010462	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Barium	0.0071	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Calcium	1.23	0.500	0.0311	mg/L	EPA 6020B	B-01	1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Cobalt	0.0245	0.0100	0.0005	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:47	7010460	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 13:25	01/23/17 17:01	7010429	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 27, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0521

Project: CCR Event

Client ID: YGWC-19S

Lab Number ID: AAA0521-05

Date/Time Sampled: 1/16/2017 12:30:00PM

Date/Time Received: 1/17/2017 5:12:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	47	25	10	mg/L	SM 2540 C		1	01/19/17 13:35	01/19/17 13:35	7010488	JPT
Inorganic Anions											
Chloride	2.5	0.25	0.01	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 00:58	7010462	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 00:58	7010462	RLC
Sulfate	0.39	1.0	0.09	mg/L	EPA 300.0	B-01, J	1	01/18/17 17:07	01/19/17 00:58	7010462	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Barium	0.0082	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Calcium	0.943	0.500	0.0311	mg/L	EPA 6020B	B-01	1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 17:59	7010460	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 13:25	01/23/17 17:03	7010429	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Project: CCR Event

Client ID: YGWC-22S

Lab Number ID: AAA0521-06

Date/Time Sampled: 1/16/2017 3:15:00PM

Date/Time Received: 1/17/2017 5:12:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	507	25	10	mg/L	SM 2540 C		1	01/19/17 13:35	01/19/17 13:35	7010488	JPT
Inorganic Anions											
Chloride	25	0.25	0.01	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 01:19	7010462	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 17:07	01/19/17 01:19	7010462	RLC
Sulfate	310	10	0.92	mg/L	EPA 300.0	B-01	10	01/18/17 17:07	01/24/17 08:52	7010462	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Barium	0.0188	0.0100	0.0004	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Beryllium	0.0007	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Boron	5.90	2.00	0.321	mg/L	EPA 6020B		50	01/19/17 13:50	01/20/17 18:16	7010460	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Calcium	52.0	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/19/17 13:50	01/20/17 18:16	7010460	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Cobalt	0.0011	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Selenium	0.0172	0.0100	0.0010	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:10	7010460	CSW
Mercury	0.000055	0.00050	0.000041	mg/L	EPA 7470A	J	1	01/23/17 13:25	01/23/17 17:11	7010429	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Project: CCR Event

Client ID: YGWC-23S

Lab Number ID: AAA0521-07

Date/Time Sampled: 1/16/2017 1:50:00PM

Date/Time Received: 1/17/2017 5:12:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	194	25	10	mg/L	SM 2540 C		1	01/19/17 13:35	01/19/17 13:35	7010488	JPT
Inorganic Anions											
Chloride	1.8	0.25	0.01	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 01:39	7010462	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 01:39	7010462	RLC
Sulfate	72	5.0	0.46	mg/L	EPA 300.0	B-01	5	01/18/17 17:07	01/25/17 14:51	7010462	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Barium	0.0528	0.0100	0.0004	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Boron	1.67	0.400	0.0642	mg/L	EPA 6020B		10	01/19/17 13:50	01/23/17 15:21	7010460	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Calcium	8.85	0.500	0.0311	mg/L	EPA 6020B	B-01	1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Selenium	0.0469	0.0100	0.0010	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Lithium	0.0022	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 18:22	7010460	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 13:25	01/23/17 17:13	7010429	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Project: CCR Event

Client ID: Dup-2

Lab Number ID: AAA0521-08

Date/Time Sampled: 1/16/2017 12:00:00AM

Date/Time Received: 1/17/2017 5:12:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	65	25	10	mg/L	SM 2540 C		1	01/19/17 13:35	01/19/17 13:35	7010488	JPT
Inorganic Anions											
Chloride	1.7	0.25	0.01	mg/L	EPA 300.0		1	01/18/17 17:07	01/19/17 02:00	7010462	RLC
Fluoride	0.008	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 17:07	01/19/17 02:00	7010462	RLC
Sulfate	1.5	1.0	0.09	mg/L	EPA 300.0	B-01	1	01/18/17 17:07	01/19/17 02:00	7010462	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Barium	0.0073	0.0100	0.0004	mg/L	EPA 6020B	J	1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Calcium	1.26	0.500	0.0311	mg/L	EPA 6020B	B-01	1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Cobalt	0.0247	0.0100	0.0005	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/19/17 13:50	01/20/17 18:45	7010460	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 13:25	01/23/17 17:15	7010429	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010488 - SM 2540 C											
Blank (7010488-BLK1)						Prepared & Analyzed: 01/19/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7010488-BS1)						Prepared & Analyzed: 01/19/17					
Total Dissolved Solids	400	25	10	mg/L	400.00		100	84-108			
Duplicate (7010488-DUP1)						Source: AAA0524-02 Prepared & Analyzed: 01/19/17					
Total Dissolved Solids	162	25	10	mg/L		170			5	10	
Duplicate (7010488-DUP2)						Source: AAA0524-05 Prepared & Analyzed: 01/19/17					
Total Dissolved Solids	14	25	10	mg/L		14			0	10	J



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010462 - EPA 300.0											
Blank (7010462-BLK1)						Prepared & Analyzed: 01/18/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	0.59	1.0	0.09	mg/L							J
LCS (7010462-BS1)						Prepared & Analyzed: 01/18/17					
Chloride	9.82	0.25	0.01	mg/L	10.010		98	90-110			
Fluoride	9.99	0.30	0.004	mg/L	10.020		100	90-110			
Sulfate	10.3	1.0	0.09	mg/L	10.020		103	90-110			
Matrix Spike (7010462-MS1)						Source: AAA0521-01 Prepared & Analyzed: 01/18/17					
Chloride	10.5	0.25	0.01	mg/L	10.010	1.36	91	90-110			
Fluoride	9.29	0.30	0.004	mg/L	10.020	0.03	92	90-110			
Sulfate	16.4	1.0	0.09	mg/L	10.020	7.87	85	90-110			QM-02
Matrix Spike (7010462-MS2)						Source: AAA0524-03 Prepared: 01/18/17 Analyzed: 01/19/17					
Chloride	12.1	0.25	0.01	mg/L	10.010	2.85	93	90-110			
Fluoride	9.61	0.30	0.004	mg/L	10.020	0.02	96	90-110			
Sulfate	11.1	1.0	0.09	mg/L	10.020	1.83	92	90-110			
Matrix Spike Dup (7010462-MSD1)						Source: AAA0521-01 Prepared & Analyzed: 01/18/17					
Chloride	11.1	0.25	0.01	mg/L	10.010	1.36	97	90-110	6	15	
Fluoride	10.1	0.30	0.004	mg/L	10.020	0.03	100	90-110	8	15	
Sulfate	17.1	1.0	0.09	mg/L	10.020	7.87	92	90-110	4	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010429 - EPA 7470A											
Blank (7010429-BLK1) Prepared & Analyzed: 01/23/17											
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7010429-BS1) Prepared & Analyzed: 01/23/17											
Mercury	0.00235	0.00050	0.000041	mg/L	2.5000E-3		94	80-120			
Matrix Spike (7010429-MS1) Source: AAA0521-06 Prepared & Analyzed: 01/23/17											
Mercury	0.00219	0.00050	0.000041	mg/L	2.5000E-3	0.000055	85	75-125			
Matrix Spike Dup (7010429-MSD1) Source: AAA0521-06 Prepared & Analyzed: 01/23/17											
Mercury	0.00218	0.00050	0.000041	mg/L	2.5000E-3	0.000055	85	75-125	0.7	20	
Post Spike (7010429-PS1) Source: AAA0521-06 Prepared & Analyzed: 01/23/17											
Mercury	1.57			ug/L	1.6667	0.0367	92	80-120			
Batch 7010460 - EPA 3005A											
Blank (7010460-BLK1) Prepared: 01/19/17 Analyzed: 01/20/17											
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	0.0749	0.500	0.0311	mg/L							J
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7010460 - EPA 3005A

LCS (7010460-BS1)

Prepared: 01/19/17 Analyzed: 01/20/17

Antimony	0.106	0.0030	0.0008	mg/L	0.10000		106	80-120			
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000		101	80-120			
Barium	0.103	0.0100	0.0004	mg/L	0.10000		103	80-120			
Beryllium	0.103	0.0030	0.00008	mg/L	0.10000		103	80-120			
Boron	1.03	0.0400	0.0064	mg/L	1.0000		103	80-120			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000		101	80-120			
Calcium	1.03	0.500	0.0311	mg/L	1.0000		103	80-120			
Chromium	0.106	0.0100	0.0009	mg/L	0.10000		106	80-120			
Cobalt	0.100	0.0100	0.0005	mg/L	0.10000		100	80-120			
Copper	0.0976	0.0250	0.0005	mg/L	0.10000		98	80-120			
Lead	0.0994	0.0050	0.0001	mg/L	0.10000		99	80-120			
Molybdenum	0.106	0.0100	0.0017	mg/L	0.10000		106	80-120			
Nickel	0.0997	0.0100	0.0006	mg/L	0.10000		100	80-120			
Selenium	0.106	0.0100	0.0010	mg/L	0.10000		106	80-120			
Silver	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Thallium	0.102	0.0010	0.0002	mg/L	0.10000		102	80-120			
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000		103	80-120			
Zinc	0.103	0.0100	0.0021	mg/L	0.10000		103	80-120			
Lithium	0.103	0.0500	0.0021	mg/L	0.10000		103	80-120			

Matrix Spike (7010460-MS1)

Source: AAA0521-01

Prepared: 01/19/17 Analyzed: 01/20/17

Antimony	0.107	0.0030	0.0008	mg/L	0.10000	ND	107	75-125			
Arsenic	0.103	0.0050	0.0016	mg/L	0.10000	ND	103	75-125			
Barium	0.113	0.0100	0.0004	mg/L	0.10000	0.0096	103	75-125			
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000	ND	102	75-125			
Boron	1.03	0.0400	0.0064	mg/L	1.0000	ND	103	75-125			
Cadmium	0.106	0.0010	0.00007	mg/L	0.10000	ND	106	75-125			
Calcium	3.57	0.500	0.0311	mg/L	1.0000	2.45	112	75-125			
Chromium	0.113	0.0100	0.0009	mg/L	0.10000	ND	113	75-125			
Cobalt	0.108	0.0100	0.0005	mg/L	0.10000	0.0027	105	75-125			
Copper	0.0991	0.0250	0.0005	mg/L	0.10000	ND	99	75-125			
Lead	0.101	0.0050	0.0001	mg/L	0.10000	ND	101	75-125			
Molybdenum	0.113	0.0100	0.0017	mg/L	0.10000	0.0086	104	75-125			
Nickel	0.110	0.0100	0.0006	mg/L	0.10000	ND	110	75-125			
Selenium	0.106	0.0100	0.0010	mg/L	0.10000	ND	106	75-125			
Silver	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125			
Thallium	0.102	0.0010	0.0002	mg/L	0.10000	ND	102	75-125			
Vanadium	0.110	0.0100	0.0071	mg/L	0.10000	ND	110	75-125			
Zinc	0.114	0.0100	0.0021	mg/L	0.10000	0.0042	110	75-125			
Lithium	0.101	0.0500	0.0021	mg/L	0.10000	0.0023	98	75-125			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010460 - EPA 3005A											
Matrix Spike Dup (7010460-MSD1)			Source: AAA0521-01				Prepared: 01/19/17 Analyzed: 01/20/17				
Antimony	0.107	0.0030	0.0008	mg/L	0.10000	ND	107	75-125	0.6	20	
Arsenic	0.105	0.0050	0.0016	mg/L	0.10000	ND	105	75-125	1	20	
Barium	0.117	0.0100	0.0004	mg/L	0.10000	0.0096	107	75-125	4	20	
Beryllium	0.105	0.0030	0.00008	mg/L	0.10000	ND	105	75-125	2	20	
Boron	1.01	0.0400	0.0064	mg/L	1.0000	ND	101	75-125	2	20	
Cadmium	0.107	0.0010	0.00007	mg/L	0.10000	ND	107	75-125	1	20	
Calcium	3.62	0.500	0.0311	mg/L	1.0000	2.45	117	75-125	1	20	
Chromium	0.112	0.0100	0.0009	mg/L	0.10000	ND	112	75-125	1	20	
Cobalt	0.112	0.0100	0.0005	mg/L	0.10000	0.0027	109	75-125	4	20	
Copper	0.101	0.0250	0.0005	mg/L	0.10000	ND	101	75-125	2	20	
Lead	0.101	0.0050	0.0001	mg/L	0.10000	ND	101	75-125	0.09	20	
Molybdenum	0.118	0.0100	0.0017	mg/L	0.10000	0.0086	109	75-125	4	20	
Nickel	0.108	0.0100	0.0006	mg/L	0.10000	ND	108	75-125	2	20	
Selenium	0.108	0.0100	0.0010	mg/L	0.10000	ND	108	75-125	1	20	
Silver	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125	0.1	20	
Thallium	0.102	0.0010	0.0002	mg/L	0.10000	ND	102	75-125	0.6	20	
Vanadium	0.110	0.0100	0.0071	mg/L	0.10000	ND	110	75-125	0.2	20	
Zinc	0.112	0.0100	0.0021	mg/L	0.10000	0.0042	108	75-125	2	20	
Lithium	0.104	0.0500	0.0021	mg/L	0.10000	0.0023	102	75-125	4	20	
Post Spike (7010460-PS1)											
Source: AAA0521-01			Prepared: 01/19/17 Analyzed: 01/20/17								
Antimony	94.9			ug/L	100.00	0.496	94	80-120			
Arsenic	98.9			ug/L	100.00	-0.151	99	80-120			
Barium	109			ug/L	100.00	9.62	100	80-120			
Beryllium	97.7			ug/L	100.00	0.0063	98	80-120			
Boron	960			ug/L	1000.0	4.80	96	80-120			
Cadmium	103			ug/L	100.00	0.0231	103	80-120			
Calcium	3610			ug/L	1000.0	2450	115	80-120			
Chromium	102			ug/L	100.00	0.407	102	80-120			
Cobalt	101			ug/L	100.00	2.70	99	80-120			
Copper	93.4			ug/L	100.00	-0.270	93	80-120			
Lead	99.8			ug/L	100.00	-0.0017	100	80-120			
Molybdenum	113			ug/L	100.00	8.60	105	80-120			
Nickel	99.1			ug/L	100.00	0.420	99	80-120			
Selenium	102			ug/L	100.00	-0.343	102	80-120			
Silver	102			ug/L	100.00	0.00	102	80-120			
Thallium	101			ug/L	100.00	0.0402	101	80-120			
Vanadium	102			ug/L	100.00	-1.90	102	80-120			
Zinc	103			ug/L	100.00	4.18	99	80-120			
Lithium	103			ug/L	100.00	2.29	100	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 27, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: () OF ()

CLIENT NAME: Georgia Power				ANALYSIS REQUESTED				CONTAINER TYPE		PRESERVATION	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239				# of				P P P P P		1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
REPORT TO: Lauren Petty				CONTAINERS				P P P P P		*MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT	
REQUESTED COMPLETION DATE: PO #: laburch@southernco.com				C O N T A I N E R S				P P P P P		REMARKS/ADDITIONAL INFORMATION	
PROJECT NAME/STATE: Plant Yates AP				PROJECT #: Phase 2 CCR				P P P P P			
Collection DATE MM-DD-YY	Collection TIME	MATRIX CODE*	COM P	GRA B	SAMPLE IDENTIFICATION	RELINQUISHED BY	DATE/TIME	RELINQUISHED BY	DATE/TIME	LAB #	
1-16-17	1120	GW	✓		YGWA-1 I	Col Pak	1-17-17 / 0850			AAA0571	
1-16-17	1225	W	✓		EB-2-1-16-17						
1-16-17	1405	GW	✓		YGWA-2 I						
1-16-17	1050	GW	✓		YGWA-30 I						
1-16-17	1730	GW	✓		YGWC-19 S						
1-16-17	1515	GW	✓		YGWC-22 S						
1-16-17	1350	GW	✓		YGWC-23 S						
1-16-17	-	GW	✓		Dup-2						

SAMPLED BY AND TITLE: C. Parker, R. Walker Acc		DATE/TIME: 1-17-17 / 0850	RELINQUISHED BY: <i>Col Pak</i>	DATE/TIME: 1-17-17 / 1712	LAB #: AAA0571
RECEIVED BY: <i>Lauren Petty</i>		DATE/TIME: 1-17-17 / 1712	RELINQUISHED BY: <i>Col Pak</i>	DATE/TIME: 1-17-17 / 1712	FOR LAB USE ONLY

SAMPLED BY LAB: <i>Lauren Petty</i>		DATE/TIME: 1-17-17 / 1712	USPS	FED-EX	USPS	COURIER	CLIENT	OTHER	FS
Temp: 10 C Min / 10 C Max									

Entered into LIMS: *1/17/17*
Tracking #: *124*

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 1/18/2017 10:17:58AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 01/17/17 17:12

Work Order: AAA0521

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 8

#Containers: 32

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

February 15, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30208385

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on January 19, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30208385

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30208385

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30208385001	YGWA-1I	Water	01/16/17 11:20	01/19/17 10:00
30208385002	EB-2-1-16-17	Water	01/16/17 12:25	01/19/17 10:00
30208385003	YGWA-2I	Water	01/16/17 14:05	01/19/17 10:00
30208385004	YGWA-30I	Water	01/16/17 10:50	01/19/17 10:00
30208385005	YGWC-19S	Water	01/16/17 12:30	01/19/17 10:00
30208385006	YGWC-22S	Water	01/16/17 15:15	01/19/17 10:00
30208385007	YGWC-23S	Water	01/16/17 13:50	01/19/17 10:00
30208385008	Dup-2	Water	01/16/17 00:01	01/19/17 10:00

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30208385

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30208385001	YGWA-1I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208385002	EB-2-1-16-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208385003	YGWA-2I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208385004	YGWA-30I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208385005	YGWC-19S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208385006	YGWC-22S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208385007	YGWC-23S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208385008	Dup-2	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208385

Sample: YGWA-11		Lab ID: 30208385001	Collected: 01/16/17 11:20	Received: 01/19/17 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0156 ± 0.218	(0.588)	pCi/L	02/01/17 09:24	13982-63-3	
		C:79% T:NA					
Radium-228	EPA 9320	-0.349 ± 0.388	(0.992)	pCi/L	02/12/17 14:04	15262-20-1	
		C:58% T:80%					
Total Radium	Total Radium Calculation	0.000 ± 0.606	(1.58)	pCi/L	02/13/17 14:25	7440-14-4	

Sample: EB-2-1-16-17		Lab ID: 30208385002	Collected: 01/16/17 12:25	Received: 01/19/17 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.102 ± 0.158	(0.343)	pCi/L	02/01/17 09:24	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	0.188 ± 0.554	(1.24)	pCi/L	02/12/17 14:04	15262-20-1	
		C:55% T:75%					
Total Radium	Total Radium Calculation	0.290 ± 0.712	(1.58)	pCi/L	02/13/17 14:25	7440-14-4	

Sample: YGWA-2I		Lab ID: 30208385003	Collected: 01/16/17 14:05	Received: 01/19/17 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.178 ± 0.214	(0.440)	pCi/L	02/01/17 09:24	13982-63-3	
		C:80% T:NA					
Radium-228	EPA 9320	0.262 ± 0.488	(1.07)	pCi/L	02/12/17 14:04	15262-20-1	
		C:55% T:78%					
Total Radium	Total Radium Calculation	0.440 ± 0.702	(1.51)	pCi/L	02/13/17 14:25	7440-14-4	

Sample: YGWA-30I		Lab ID: 30208385004	Collected: 01/16/17 10:50	Received: 01/19/17 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.110 ± 0.134	(0.468)	pCi/L	02/01/17 09:24	13982-63-3	
		C:85% T:NA					
Radium-228	EPA 9320	0.284 ± 0.483	(1.05)	pCi/L	02/12/17 14:04	15262-20-1	
		C:56% T:80%					
Total Radium	Total Radium Calculation	0.284 ± 0.617	(1.52)	pCi/L	02/13/17 14:25	7440-14-4	

Sample: YGWC-19S		Lab ID: 30208385005	Collected: 01/16/17 12:30	Received: 01/19/17 10:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0212 ± 0.128	(0.386)	pCi/L	02/01/17 09:24	13982-63-3	
		C:88% T:NA					
Radium-228	EPA 9320	0.511 ± 0.576	(1.20)	pCi/L	02/12/17 14:04	15262-20-1	
		C:52% T:71%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208385

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium		Total Radium Calculation	0.511 ± 0.704 (1.59)	pCi/L	02/13/17 14:25	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.467 ± 0.282 (0.449) C:91% T:NA	pCi/L	02/01/17 09:24	13982-63-3	
Radium-228		EPA 9320	0.00140 ± 0.384 (0.902) C:65% T:74%	pCi/L	02/12/17 14:04	15262-20-1	
Total Radium		Total Radium Calculation	0.468 ± 0.666 (1.35)	pCi/L	02/13/17 14:25	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.0277 ± 0.163 (0.424) C:85% T:NA	pCi/L	02/01/17 09:25	13982-63-3	
Radium-228		EPA 9320	0.119 ± 0.361 (0.813) C:69% T:81%	pCi/L	02/12/17 14:04	15262-20-1	
Total Radium		Total Radium Calculation	0.147 ± 0.524 (1.24)	pCi/L	02/13/17 14:25	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.119 ± 0.195 (0.432) C:73% T:NA	pCi/L	02/01/17 09:25	13982-63-3	
Radium-228		EPA 9320	0.324 ± 0.529 (1.15) C:47% T:80%	pCi/L	02/12/17 14:04	15262-20-1	
Total Radium		Total Radium Calculation	0.443 ± 0.724 (1.58)	pCi/L	02/13/17 14:25	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30208385

QC Batch: 247684

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30208385001, 30208385002, 30208385003, 30208385004, 30208385005, 30208385006, 30208385007, 30208385008

METHOD BLANK: 1218073

Matrix: Water

Associated Lab Samples: 30208385001, 30208385002, 30208385003, 30208385004, 30208385005, 30208385006, 30208385007, 30208385008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.188 ± 0.415 (0.919) C:69% T:73%	pCi/L	02/12/17 14:02	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30208385

QC Batch: 247678

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30208385001, 30208385002, 30208385003, 30208385004, 30208385005, 30208385006, 30208385007, 30208385008

METHOD BLANK: 1218053

Matrix: Water

Associated Lab Samples: 30208385001, 30208385002, 30208385003, 30208385004, 30208385005, 30208385006, 30208385007, 30208385008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.108 ± 0.139 (0.276) C:96% T:NA	pCi/L	02/01/17 09:14	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30208385

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30208385



Chain of Custody



Workorder: AAA0521

Workorder Name: Pace - Pittsburgh

Plant Yates

Owner Received Date:

Results Requested By: 2/2/2017

Report To:
Betsy McDaniel
Pace Analytical Atlanta
110 Technology Parkway
Peachtree Corners, GA 30092
Phone (770)-734-4200

Subcontract To:
Pace - Pittsburgh
1638 Roseytown Road
Stes. 2,3,4
Greensburg, PA 15601
Phone (724) 850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers		Date/Time	Comments
						CON	H		
1	YGWA-1I	G	1/16/2017 11:20	AAA0521-01	GW	2			
2	EB-2-1-16-17	G	1/16/2017 12:25	AAA0521-02	W	2			
3	YGWA-2I	G	1/16/2017 14:05	AAA0521-03	GW	2			
4	YGWA-30I	G	1/16/2017 10:50	AAA0521-04	GW	2			
5	YGWC-19S	G	1/16/2017 12:30	AAA0521-05	GW	2			
6	YGWC-22S	G	1/16/2017 15:15	AAA0521-06	GW	2			
7	YGWC-23S	G	1/16/2017 13:50	AAA0521-07	GW	2			
8	Dup-2	G	1/16/2017 0:00	AAA0521-08	GW	2			
9									
10									

Radium 226, 228, Total

LAB USE ONLY
001
002
003
004
005
006
007
008

Transfers	Released By	Date/Time	Received By	Date/Time
1	<i>Charles Fowler</i>	1/18/17 17:30	<i>Osleythore Pae</i>	1-19-17/1000
2				
3				

Cooler Temperature on Receipt N/A °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC. This chain of custody is considered complete as is since this information is available in the owner laboratory.



CHAIN OF CUSTODY RECORD

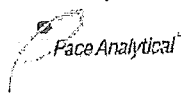
Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 ; FAX (770) 734-4201 ; www.ash-lab.com

30208385
 PAGE: () OF ()

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-508-7239		REPORT TO: Lauren Petty CC: Maria Pacilla Heath McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP Phase 2 CCR	
CONTAINER TYPE: PRESERVATION # of CONTAINERS		ANALYSIS REQUESTED		CONTAINER TYPE PRESERVATION # of CONTAINERS	
DATE M-DD-YY 1-16-17 1-16-17 1-16-17 1-16-17 1-16-17 1-16-17 1-16-17 1-16-17		COLLECTION TIME 1120 1225 1405 1050 1230 1515 1350 —		MATRIX CODE* GW W GW GW GW GW GW GW	
DATE 1-17-17 1-17-17 1-17-17 1-17-17 1-17-17 1-17-17 1-17-17 1-17-17		DATE/TIME 0850 1712 1717 1717 1717 1717 1717 1717		DATE/TIME 1-17-17 / 0850 1-17-17 / 1712 1-17-17 / 1717 1-17-17 / 1717 1-17-17 / 1717 1-17-17 / 1717 1-17-17 / 1717 1-17-17 / 1717	
RECEIVED BY: C. Walker, R. Walker Acc		RECEIVED BY: [Signature]		RECEIVED BY: [Signature]	
DATE/TIME 1-17-17 / 0850		DATE/TIME 1-17-17 / 1712		DATE/TIME 1-17-17 / 1712	
REMARKS/ADDITIONAL INFORMATION		REMARKS/ADDITIONAL INFORMATION		REMARKS/ADDITIONAL INFORMATION	
1 2 3 4 5 6 7 8		1 2 3 4 5 6 7 8		1 2 3 4 5 6 7 8	

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace, GA

Project # 30208385

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5101 7826

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ACHR 1-19-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PHU2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>ACHR</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>ACHR</u> Date: <u>1-19-17</u>

Client Notification/ Resolution: _____ Date/Time: _____ Contacted By: _____

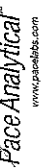
Person Contacted: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 1/31/2017
Worklist: 33727
Matrix: DW

Method Blank Assessment	
MB Sample ID	1218053
MB concentration:	0.108
MB Counting Uncertainty:	0.138
MB MDC:	0.276
MB Numerical Performance Indicator:	1.53
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS(Y or N)?	N
LCS33727	LCS33727
Count Date:	2/1/2017
Spike I.D.:	16-026
Spike Concentration (pCi/mL):	44.670
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.511
Target Conc. (pCi/L, g, F):	8.743
Uncertainty (Calculated):	0.411
Result (pCi/L, g, F):	8.442
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.968
Numerical Performance Indicator:	-0.56
Percent Recovery:	96.56%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30208384001
Duplicate Sample I.D.:	30208384001DUP
Sample Result (pCi/L, g, F):	0.039
Sample Result Counting Uncertainty (pCi/L, g, F):	0.142
Sample Duplicate Result (pCi/L, g, F):	0.195
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.181
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.318
Duplicate RPD:	132.51%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

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):	
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:	

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:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 2/3/2017
Worklist: 33729
Matrix: DW

Method Blank Assessment	
MB Sample ID	1218073
MB concentration:	0.188
M/B Counting Uncertainty:	0.413
MB MDC:	0.919
MB Numerical Performance Indicator:	0.89
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	2/12/2017
Spike I.D.:	16-027
Spike Concentration (pCi/mL):	25.319
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.799
Target Conc. (pCi/L, g, F):	6.339
Uncertainty (Calculated):	0.456
Result (pCi/L, g, F):	7.488
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.973
Numerical Performance Indicator:	2.10
Percent Recovery:	118.14%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30208384001
Duplicate Sample I.D.:	30208384001DUP
Sample Result (pCi/L, g, F):	0.706
Duplicate Result (pCi/L, g, F):	0.527
Sample Duplicate Result (pCi/L, g, F):	0.035
Duplicate Duplicate Result (pCi/L, g, F):	0.414
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	1.962
Duplicate RPD:	181.07%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

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):	
MSD Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample 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:	

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:	
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
Duplicate Duplicate Result Counting Uncertainty (pCi/L, g, F):	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAA0645

January 26, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-26I	AAA0645-01	Ground Water	01/18/17 11:05	01/19/17 16:07
YGWC-26S	AAA0645-02	Ground Water	01/18/17 12:40	01/19/17 16:07
YGWC-27I	AAA0645-03	Ground Water	01/18/17 14:25	01/19/17 16:07
YGWC-28S	AAA0645-04	Ground Water	01/18/17 11:05	01/19/17 16:07
YGWC-28I	AAA0645-05	Ground Water	01/18/17 13:50	01/19/17 16:07
EB-3-1-18-17	AAA0645-06	Water	01/18/17 14:40	01/19/17 16:07
YGWC-27S	AAA0645-07	Ground Water	01/19/17 11:05	01/19/17 16:07
EB-4-1-19-17	AAA0645-08	Water	01/19/17 11:50	01/19/17 16:07
YGWC-29I	AAA0645-09	Ground Water	01/19/17 13:05	01/19/17 16:07
FB-4-1-19-17	AAA0645-10	Water	01/19/17 13:45	01/19/17 16:07
Dup-4	AAA0645-11	Ground Water	01/19/17 00:00	01/19/17 16:07



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: YGWC-26I

Lab Number ID: AAA0645-01

Date/Time Sampled: 1/18/2017 11:05:00AM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	265	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	19	0.25	0.01	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 01:26	7010501	RLC
Fluoride	0.11	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 01:26	7010501	RLC
Sulfate	95	2.0	0.18	mg/L	EPA 300.0		2	01/19/17 17:22	01/24/17 10:17	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Barium	0.0625	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:35	7010563	CSW
Boron	0.972	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Calcium	15.1	5.00	0.311	mg/L	EPA 6020B	B-01	10	01/23/17 14:20	01/25/17 16:14	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:35	7010563	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:35	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Selenium	0.0020	0.0100	0.0010	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:51	7010563	CSW
Lithium	0.0066	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:35	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:06	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

Report No.: AAA0645

Project: CCR Event

Client ID: YGWC-26S

Lab Number ID: AAA0645-02

Date/Time Sampled: 1/18/2017 12:40:00PM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	158	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	17	0.25	0.01	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 01:47	7010501	RLC
Fluoride	0.07	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 01:47	7010501	RLC
Sulfate	100	4.0	0.37	mg/L	EPA 300.0		4	01/19/17 17:22	01/24/17 10:38	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Barium	0.0278	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Beryllium	0.0002	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:41	7010563	CSW
Boron	0.607	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Calcium	11.5	5.00	0.311	mg/L	EPA 6020B	B-01	10	01/23/17 14:20	01/25/17 16:20	7010563	CSW
Chromium	0.0020	0.0100	0.0009	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:41	7010563	CSW
Cobalt	0.0022	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:41	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Selenium	0.0012	0.0100	0.0010	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:03	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:41	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:09	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: YGWC-271

Lab Number ID: AAA0645-03

Date/Time Sampled: 1/18/2017 2:25:00PM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	167	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 02:53	7010501	RLC
Fluoride	0.08	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 02:53	7010501	RLC
Sulfate	3.5	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 02:53	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Barium	0.0645	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Beryllium	0.0002	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:47	7010563	CSW
Boron	1.69	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Calcium	25.6	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 20:20	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:47	7010563	CSW
Cobalt	0.0017	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:47	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:14	7010563	CSW
Lithium	0.0100	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:47	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:11	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: YGWC-28S

Lab Number ID: AAA0645-04

Date/Time Sampled: 1/18/2017 11:05:00AM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	215	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	20	0.25	0.01	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 03:15	7010501	RLC
Fluoride	0.34	0.30	0.004	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 03:15	7010501	RLC
Sulfate	2.7	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 03:15	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Barium	0.213	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:52	7010563	CSW
Boron	2.04	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Calcium	26.1	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 20:20	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:52	7010563	CSW
Cobalt	0.0010	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:52	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:26	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:52	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:14	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: YGWC-28I

Lab Number ID: AAA0645-05

Date/Time Sampled: 1/18/2017 1:50:00PM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	243	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 03:36	7010501	RLC
Fluoride	0.12	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 03:36	7010501	RLC
Sulfate	8.0	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 03:36	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:37	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:58	7010563	CSW
Barium	0.0862	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 20:37	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:58	7010563	CSW
Boron	1.88	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:37	7010563	CSW
Cadmium	0.00009	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 20:37	7010563	CSW
Calcium	33.4	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 20:54	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:58	7010563	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:58	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:37	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:37	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:58	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 20:37	7010563	CSW
Lithium	0.0067	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:58	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:16	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645
Client ID: EB-3-1-18-17
Date/Time Sampled: 1/18/2017 2:40:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAA0645-06
Date/Time Received: 1/19/2017 4:07:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	14	25	10	mg/L	SM 2540 C	J	1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	0.08	0.25	0.01	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 03:58	7010501	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 03:58	7010501	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 03:58	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:04	7010563	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Calcium	0.700	0.500	0.0311	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:04	7010563	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:04	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:04	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:00	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:23	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: YGWC-27S

Lab Number ID: AAA0645-07

Date/Time Sampled: 1/19/2017 11:05:00AM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	215	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	22	0.25	0.01	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 04:20	7010501	RLC
Fluoride	0.25	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 04:20	7010501	RLC
Sulfate	25	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 04:20	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:10	7010563	CSW
Barium	0.102	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Boron	1.15	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Calcium	37.0	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 21:11	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:10	7010563	CSW
Cobalt	0.0024	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 14:10	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:10	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:06	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:25	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: EB-4-1-19-17

Lab Number ID: AAA0645-08

Date/Time Sampled: 1/19/2017 11:50:00AM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	0.06	0.25	0.01	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 04:42	7010501	RLC
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 04:42	7010501	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 04:42	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:33	7010563	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Calcium	0.0505	0.500	0.0311	mg/L	EPA 6020B	B-01, J	1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:33	7010563	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:33	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:33	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:17	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:28	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: YGWC-29I

Lab Number ID: AAA0645-09

Date/Time Sampled: 1/19/2017 1:05:00PM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	145	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 06:31	7010501	RLC
Fluoride	0.06	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 06:31	7010501	RLC
Sulfate	32	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 06:31	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:39	7010563	CSW
Barium	0.0689	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Boron	0.803	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Calcium	12.0	5.00	0.311	mg/L	EPA 6020B	B-01	10	01/23/17 14:20	01/25/17 18:26	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:39	7010563	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:39	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:39	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Lithium	0.0055	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 21:23	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:30	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: FB-4-1-19-17

Lab Number ID: AAA0645-10

Date/Time Sampled: 1/19/2017 1:45:00PM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	0.06	0.25	0.01	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 07:14	7010501	RLC
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 07:14	7010501	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 07:14	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:45	7010563	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Calcium	0.0523	0.500	0.0311	mg/L	EPA 6020B	B-01, J	1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:45	7010563	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:45	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:45	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:34	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 16:33	7010544	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 26, 2017

Attention: Mr. Joju Abraham

Report No.: AAA0645

Project: CCR Event

Client ID: Dup-4

Lab Number ID: AAA0645-11

Date/Time Sampled: 1/19/2017 12:00:00AM

Date/Time Received: 1/19/2017 4:07:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	219	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	22	0.25	0.01	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 07:36	7010501	RLC
Fluoride	0.22	0.30	0.004	mg/L	EPA 300.0	J	1	01/19/17 17:22	01/20/17 07:36	7010501	RLC
Sulfate	25	1.0	0.09	mg/L	EPA 300.0		1	01/19/17 17:22	01/20/17 07:36	7010501	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:50	7010563	CSW
Barium	0.102	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Boron	1.17	0.0400	0.0064	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Calcium	37.4	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 21:46	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:50	7010563	CSW
Cobalt	0.0024	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 14:50	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 14:50	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 21:40	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/25/17 13:45	01/25/17 17:08	7010576	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

Report No.: AAA0645

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010550 - SM 2540 C											
Blank (7010550-BLK1)						Prepared & Analyzed: 01/23/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7010550-BS1)						Prepared & Analyzed: 01/23/17					
Total Dissolved Solids	399	25	10	mg/L	400.00		100	84-108			
Duplicate (7010550-DUP1)						Source: AAA0584-06 Prepared & Analyzed: 01/23/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7010550-DUP2)						Source: AAA0645-04 Prepared & Analyzed: 01/23/17					
Total Dissolved Solids	217	25	10	mg/L		215			0.9	10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

Report No.: AAA0645

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010501 - EPA 300.0											
Blank (7010501-BLK1)						Prepared & Analyzed: 01/19/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7010501-BS1)						Prepared: 01/19/17 Analyzed: 01/20/17					
Chloride	9.74	0.25	0.01	mg/L	10.010		97	90-110			
Fluoride	10.2	0.30	0.004	mg/L	10.020		101	90-110			
Sulfate	10.1	1.0	0.09	mg/L	10.020		100	90-110			
Matrix Spike (7010501-MS1)						Source: AAA0645-02 Prepared: 01/19/17 Analyzed: 01/20/17					
Chloride	25.8	0.25	0.01	mg/L	10.010	16.7	91	90-110			
Fluoride	11.2	0.30	0.004	mg/L	10.020	0.07	111	90-110			QM-05
Sulfate	94.5	1.0	0.09	mg/L	10.020	95.2	NR	90-110			QM-02
Matrix Spike (7010501-MS2)						Source: AAA0645-09 Prepared: 01/19/17 Analyzed: 01/20/17					
Chloride	23.0	0.25	0.01	mg/L	10.010	13.6	94	90-110			
Fluoride	11.1	0.30	0.004	mg/L	10.020	0.06	111	90-110			QM-05
Sulfate	39.3	1.0	0.09	mg/L	10.020	32.3	70	90-110			QM-02
Matrix Spike Dup (7010501-MSD1)						Source: AAA0645-02 Prepared: 01/19/17 Analyzed: 01/20/17					
Chloride	25.8	0.25	0.01	mg/L	10.010	16.7	91	90-110	0.004	15	
Fluoride	11.2	0.30	0.004	mg/L	10.020	0.07	111	90-110	0.6	15	QM-05
Sulfate	94.3	1.0	0.09	mg/L	10.020	95.2	NR	90-110	0.2	15	QM-02



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

Report No.: AAA0645

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010544 - EPA 7470A											
Blank (7010544-BLK1) Prepared & Analyzed: 01/23/17											
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7010544-BS1) Prepared & Analyzed: 01/23/17											
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3		93	80-120			
Matrix Spike (7010544-MS1) Source: AAA0584-01 Prepared & Analyzed: 01/23/17											
Mercury	0.00206	0.00050	0.000041	mg/L	2.5000E-3	ND	82	75-125			
Matrix Spike Dup (7010544-MSD1) Source: AAA0584-01 Prepared & Analyzed: 01/23/17											
Mercury	0.00206	0.00050	0.000041	mg/L	2.5000E-3	ND	82	75-125	0.2	20	
Post Spike (7010544-PS1) Source: AAA0584-01 Prepared & Analyzed: 01/23/17											
Mercury	1.47			ug/L	1.6667	0.0102	88	80-120			
Batch 7010563 - EPA 3005A											
Blank (7010563-BLK1) Prepared: 01/23/17 Analyzed: 01/24/17											
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	0.0028	0.0100	0.0004	mg/L							J
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	0.0471	0.500	0.0311	mg/L							J
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	0.0038	0.0100	0.0021	mg/L							J
Lithium	ND	0.0500	0.0021	mg/L							



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

Report No.: AAA0645

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7010563 - EPA 3005A

LCS (7010563-BS1)

Prepared: 01/23/17 Analyzed: 01/24/17

Antimony	0.108	0.0030	0.0008	mg/L	0.10000		108	80-120			
Arsenic	0.100	0.0050	0.0016	mg/L	0.10000		100	80-120			
Barium	0.0965	0.0100	0.0004	mg/L	0.10000		97	80-120			
Beryllium	0.108	0.0030	0.00008	mg/L	0.10000		108	80-120			
Boron	1.07	0.0400	0.0064	mg/L	1.0000		107	80-120			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000		102	80-120			
Calcium	1.10	0.500	0.0311	mg/L	1.0000		110	80-120			
Chromium	0.0990	0.0100	0.0009	mg/L	0.10000		99	80-120			
Cobalt	0.0985	0.0100	0.0005	mg/L	0.10000		98	80-120			
Copper	0.0989	0.0250	0.0005	mg/L	0.10000		99	80-120			
Lead	0.0987	0.0050	0.0001	mg/L	0.10000		99	80-120			
Molybdenum	0.102	0.0100	0.0017	mg/L	0.10000		102	80-120			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000		101	80-120			
Selenium	0.0979	0.0100	0.0010	mg/L	0.10000		98	80-120			
Silver	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000		101	80-120			
Vanadium	0.104	0.0100	0.0071	mg/L	0.10000		104	80-120			
Zinc	0.102	0.0100	0.0021	mg/L	0.10000		102	80-120			
Lithium	0.103	0.0500	0.0021	mg/L	0.10000		103	80-120			

Matrix Spike (7010563-MS1)

Source: AAA0584-01

Prepared: 01/23/17 Analyzed: 01/24/17

Antimony	0.109	0.0030	0.0008	mg/L	0.10000	ND	109	75-125			
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125			
Barium	0.123	0.0100	0.0004	mg/L	0.10000	0.0247	98	75-125			
Beryllium	0.0999	0.0030	0.00008	mg/L	0.10000	0.0001	100	75-125			
Boron	5.21	2.00	0.321	mg/L	1.0000	4.06	115	75-125			
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000	0.0008	102	75-125			
Calcium	95.2	25.0	1.55	mg/L	1.0000	97.9	NR	75-125			QM-02
Chromium	0.0984	0.0100	0.0009	mg/L	0.10000	ND	98	75-125			
Cobalt	0.0953	0.0100	0.0005	mg/L	0.10000	0.0015	94	75-125			
Copper	0.0937	0.0250	0.0005	mg/L	0.10000	0.0006	93	75-125			
Lead	0.0944	0.0050	0.0001	mg/L	0.10000	ND	94	75-125			
Molybdenum	0.104	0.0100	0.0017	mg/L	0.10000	ND	104	75-125			
Nickel	0.0984	0.0100	0.0006	mg/L	0.10000	0.0056	93	75-125			
Selenium	0.104	0.0100	0.0010	mg/L	0.10000	0.0027	101	75-125			
Silver	0.0937	0.0100	0.0005	mg/L	0.10000	ND	94	75-125			
Thallium	0.0961	0.0010	0.0002	mg/L	0.10000	ND	96	75-125			
Vanadium	0.101	0.0100	0.0071	mg/L	0.10000	ND	101	75-125			
Zinc	0.106	0.0100	0.0021	mg/L	0.10000	0.0094	97	75-125			
Lithium	0.100	0.0500	0.0021	mg/L	0.10000	0.0032	97	75-125			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

Report No.: AAA0645

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010563 - EPA 3005A											
Matrix Spike Dup (7010563-MSD1)			Source: AAA0584-01			Prepared: 01/23/17 Analyzed: 01/24/17					
Antimony	0.111	0.0030	0.0008	mg/L	0.10000	ND	111	75-125	1	20	
Arsenic	0.104	0.0050	0.0016	mg/L	0.10000	ND	104	75-125	2	20	
Barium	0.122	0.0100	0.0004	mg/L	0.10000	0.0247	98	75-125	0.1	20	
Beryllium	0.0987	0.0030	0.00008	mg/L	0.10000	0.0001	99	75-125	1	20	
Boron	5.29	2.00	0.321	mg/L	1.0000	4.06	123	75-125	2	20	
Cadmium	0.0997	0.0010	0.00007	mg/L	0.10000	0.0008	99	75-125	3	20	
Calcium	102	25.0	1.55	mg/L	1.0000	97.9	436	75-125	7	20	QM-02
Chromium	0.100	0.0100	0.0009	mg/L	0.10000	ND	100	75-125	2	20	
Cobalt	0.0979	0.0100	0.0005	mg/L	0.10000	0.0015	96	75-125	3	20	
Copper	0.0925	0.0250	0.0005	mg/L	0.10000	0.0006	92	75-125	1	20	
Lead	0.0973	0.0050	0.0001	mg/L	0.10000	ND	97	75-125	3	20	
Molybdenum	0.106	0.0100	0.0017	mg/L	0.10000	ND	106	75-125	2	20	
Nickel	0.103	0.0100	0.0006	mg/L	0.10000	0.0056	98	75-125	5	20	
Selenium	0.109	0.0100	0.0010	mg/L	0.10000	0.0027	106	75-125	4	20	
Silver	0.0963	0.0100	0.0005	mg/L	0.10000	ND	96	75-125	3	20	
Thallium	0.0994	0.0010	0.0002	mg/L	0.10000	ND	99	75-125	3	20	
Vanadium	0.101	0.0100	0.0071	mg/L	0.10000	ND	101	75-125	0.08	20	
Zinc	0.111	0.0100	0.0021	mg/L	0.10000	0.0094	102	75-125	5	20	
Lithium	0.0985	0.0500	0.0021	mg/L	0.10000	0.0032	95	75-125	2	20	
Post Spike (7010563-PS1)			Source: AAA0584-01			Prepared: 01/23/17 Analyzed: 01/24/17					
Antimony	112			ug/L	100.00	0.0326	112	80-120			
Arsenic	104			ug/L	100.00	0.249	104	80-120			
Barium	124			ug/L	100.00	24.7	100	80-120			
Beryllium	93.3			ug/L	100.00	0.113	93	80-120			
Boron	5360			ug/L	1000.0	4060	131	80-120			QM-02
Cadmium	97.6			ug/L	100.00	0.832	97	80-120			
Calcium	100000			ug/L	1000.0	97900	249	80-120			QM-02
Chromium	96.0			ug/L	100.00	0.236	96	80-120			
Cobalt	94.3			ug/L	100.00	1.48	93	80-120			
Copper	91.6			ug/L	100.00	0.567	91	80-120			
Lead	97.7			ug/L	100.00	0.0195	98	80-120			
Molybdenum	108			ug/L	100.00	0.149	108	80-120			
Nickel	98.9			ug/L	100.00	5.62	93	80-120			
Selenium	106			ug/L	100.00	2.66	103	80-120			
Silver	98.6			ug/L	100.00	0.0298	99	80-120			
Thallium	99.9			ug/L	100.00	0.0588	100	80-120			
Vanadium	101			ug/L	100.00	-0.949	101	80-120			
Zinc	109			ug/L	100.00	9.40	99	80-120			
Lithium	90.9			ug/L	100.00	3.21	88	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

Report No.: AAA0645

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010576 - EPA 7470A											
Blank (7010576-BLK1) Prepared & Analyzed: 01/25/17											
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7010576-BS1) Prepared & Analyzed: 01/25/17											
Mercury	0.00236	0.00050	0.000041	mg/L	2.5000E-3		94	80-120			
Matrix Spike (7010576-MS1) Source: AAA0674-02 Prepared & Analyzed: 01/25/17											
Mercury	0.00233	0.00050	0.000041	mg/L	2.5000E-3	ND	93	75-125			
Matrix Spike Dup (7010576-MSD1) Source: AAA0674-02 Prepared & Analyzed: 01/25/17											
Mercury	0.00238	0.00050	0.000041	mg/L	2.5000E-3	ND	95	75-125	2	20	
Post Spike (7010576-PS1) Source: AAA0674-02 Prepared & Analyzed: 01/25/17											
Mercury	1.73			ug/L	1.6667	0.00472	104	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 26, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Mania Padilla Health McCorkle REQUESTED COMPLETION DATE: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR				
CONTAINER TYPE: PRESERVATION # of CONTAINERS	ANALYSIS REQUESTED P P P P P 3 7 3 Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-846 9315/9320)	ANALYSIS REQUESTED P P P P P 3 7 3	DATE/TIME: 1-19-17/1607	DATE/TIME: 1-19-17/1607	RELINQUISHED BY: <i>[Signature]</i>			
						RELINQUISHED BY: DATE/TIME: 1-19-17/1415		
COLLECTION DATE M-DD-YY	COLLECTION TIME	MATRIX CODE*	SAMPLE IDENTIFICATION	CONTAINER TYPE PRESERVATION	ANALYSIS REQUESTED P P P P P 3 7 3	DATE/TIME: 1-19-17/1607	DATE/TIME: 1-19-17/1607	RELINQUISHED BY: DATE/TIME: 1-19-17/1415
1-18-17	1105	GW	Y6WC-26I	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-18-17	1240	GW	Y6WC-26S	P	7	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-18-17	1425	GW	Y6WC-27I	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-18-17	1105	GW	Y6WC-28S	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-18-17	1350	GW	Y6WC-28I	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-18-17	1440	W	EB-3-1-18-17	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-19-17	1105	GW	Y6WC-27S	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-19-17	1150	W	EB-4-1-19-17	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-19-17	1305	GW	Y6WC-29I	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-19-17	1345	W	EB-4-1-19-17	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>
1-19-17	—	GW	DUP-4	P	3	1-19-17/1607	1-19-17/1607	<i>[Signature]</i>

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 1/20/2017 9:00:55AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 01/19/17 16:07

Work Order: AAA0645

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 11

#Containers: 46

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

February 20, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30208667

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on January 23, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30208667

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Yates

Pace Project No.: 30208667

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30208667001	YGWC-26I	Water	01/18/17 11:05	01/23/17 09:20
30208667002	YGWC-26S	Water	01/18/17 12:40	01/23/17 09:20
30208667003	YGWC-27I	Water	01/18/17 14:25	01/23/17 09:20
30208667004	YGWC-28S	Water	01/18/17 11:05	01/23/17 09:20
30208667005	YGWC-28I	Water	01/18/17 13:50	01/23/17 09:20
30208667006	EB-3-1-18-17	Water	01/18/17 14:40	01/23/17 09:20
30208667007	YGWC-27S	Water	01/19/17 11:05	01/23/17 09:20
30208667008	EB-4-1-19-17	Water	01/19/17 11:50	01/23/17 09:20
30208667009	YGWC-29I	Water	01/19/17 13:05	01/23/17 09:20
30208667010	FB-4-1-19-17	Water	01/19/17 13:45	01/23/17 09:20
30208667011	Dup-4	Water	01/19/17 00:00	01/23/17 09:20

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30208667

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30208667001	YGWC-26I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667002	YGWC-26S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667003	YGWC-27I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667004	YGWC-28S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667005	YGWC-28I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667006	EB-3-1-18-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667007	YGWC-27S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667008	EB-4-1-19-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667009	YGWC-29I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667010	FB-4-1-19-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208667011	Dup-4	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208667

Sample: YGWC-261		Lab ID: 30208667001	Collected: 01/18/17 11:05	Received: 01/23/17 09:20	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.109 ± 0.146 (0.302)		pCi/L	02/01/17 11:41	13982-63-3	
		C:90% T:NA					
Radium-228	EPA 9320	0.154 ± 0.510 (1.09)		pCi/L	02/16/17 17:25	15262-20-1	
		C:54% T:76%					
Total Radium	Total Radium Calculation	0.263 ± 0.656 (1.39)		pCi/L	02/17/17 15:08	7440-14-4	

Sample: YGWC-26S		Lab ID: 30208667002	Collected: 01/18/17 12:40	Received: 01/23/17 09:20	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.164 ± 0.201 (0.419)		pCi/L	02/01/17 11:41	13982-63-3	
		C:93% T:NA					
Radium-228	EPA 9320	0.436 ± 0.457 (0.914)		pCi/L	02/16/17 17:25	15262-20-1	
		C:62% T:75%					
Total Radium	Total Radium Calculation	0.600 ± 0.658 (1.33)		pCi/L	02/17/17 15:08	7440-14-4	

Sample: YGWC-271		Lab ID: 30208667003	Collected: 01/18/17 14:25	Received: 01/23/17 09:20	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	2.36 ± 0.610 (0.333)		pCi/L	02/01/17 11:41	13982-63-3	
		C:90% T:NA					
Radium-228	EPA 9320	1.08 ± 0.535 (0.941)		pCi/L	02/16/17 17:25	15262-20-1	
		C:65% T:84%					
Total Radium	Total Radium Calculation	3.44 ± 1.15 (1.27)		pCi/L	02/17/17 15:08	7440-14-4	

Sample: YGWC-28S		Lab ID: 30208667004	Collected: 01/18/17 11:05	Received: 01/23/17 09:20	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0752 ± 0.125 (0.275)		pCi/L	02/01/17 11:41	13982-63-3	
		C:95% T:NA					
Radium-228	EPA 9320	-0.374 ± 0.506 (1.16)		pCi/L	02/16/17 17:25	15262-20-1	
		C:48% T:84%					
Total Radium	Total Radium Calculation	0.0752 ± 0.631 (1.44)		pCi/L	02/17/17 15:08	7440-14-4	

Sample: YGWC-28I		Lab ID: 30208667005	Collected: 01/18/17 13:50	Received: 01/23/17 09:20	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.105 ± 0.154 (0.329)		pCi/L	02/01/17 11:41	13982-63-3	
		C:95% T:NA					
Radium-228	EPA 9320	0.156 ± 0.451 (1.01)		pCi/L	02/16/17 11:58	15262-20-1	
		C:58% T:85%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208667

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-28I Lab ID: 30208667005 Collected: 01/18/17 13:50 Received: 01/23/17 09:20 Matrix: Water PWS: Site ID: Sample Type:						
Total Radium	Total Radium Calculation	0.261 ± 0.605 (1.34)	pCi/L	02/17/17 15:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-3-1-18-17 Lab ID: 30208667006 Collected: 01/18/17 14:40 Received: 01/23/17 09:20 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	-0.0360 ± 0.0900 (0.312) C:95% T:NA	pCi/L	02/01/17 13:17	13982-63-3	
Radium-228	EPA 9320	-0.138 ± 0.473 (1.13) C:60% T:76%	pCi/L	02/16/17 11:58	15262-20-1	
Total Radium	Total Radium Calculation	0.000 ± 0.563 (1.44)	pCi/L	02/17/17 15:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-27S Lab ID: 30208667007 Collected: 01/19/17 11:05 Received: 01/23/17 09:20 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.242 ± 0.227 (0.436) C:87% T:NA	pCi/L	02/01/17 13:17	13982-63-3	
Radium-228	EPA 9320	0.522 ± 0.458 (0.895) C:57% T:80%	pCi/L	02/16/17 17:24	15262-20-1	
Total Radium	Total Radium Calculation	0.764 ± 0.685 (1.33)	pCi/L	02/17/17 15:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-4-1-19-17 Lab ID: 30208667008 Collected: 01/19/17 11:50 Received: 01/23/17 09:20 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	-0.0455 ± 0.0757 (0.297) C:90% T:NA	pCi/L	02/01/17 13:17	13982-63-3	
Radium-228	EPA 9320	0.280 ± 0.546 (1.14) C:53% T:75%	pCi/L	02/16/17 17:24	15262-20-1	
Total Radium	Total Radium Calculation	0.280 ± 0.622 (1.44)	pCi/L	02/17/17 15:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-29I Lab ID: 30208667009 Collected: 01/19/17 13:05 Received: 01/23/17 09:20 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.154 ± 0.187 (0.377) C:76% T:NA	pCi/L	02/01/17 13:17	13982-63-3	
Radium-228	EPA 9320	0.779 ± 0.589 (1.12) C:48% T:80%	pCi/L	02/16/17 17:24	15262-20-1	
Total Radium	Total Radium Calculation	0.933 ± 0.776 (1.50)	pCi/L	02/17/17 15:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30208667

Sample: FB-4-1-19-17		Lab ID: 30208667010	Collected: 01/19/17 13:45	Received: 01/23/17 09:20	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0669 ± 0.159 (0.382) C:76% T:NA	pCi/L	02/01/17 13:17	13982-63-3	
Radium-228	EPA 9320	-0.0684 ± 0.612 (1.32) C:43% T:72%	pCi/L	02/16/17 17:29	15262-20-1	
Total Radium	Total Radium Calculation	0.0669 ± 0.771 (1.70)	pCi/L	02/17/17 15:15	7440-14-4	

Sample: Dup-4		Lab ID: 30208667011	Collected: 01/19/17 00:00	Received: 01/23/17 09:20	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0749 ± 0.159 (0.374) C:75% T:NA	pCi/L	02/01/17 13:17	13982-63-3	
Radium-228	EPA 9320	0.123 ± 0.398 (0.850) C:67% T:78%	pCi/L	02/16/17 17:24	15262-20-1	
Total Radium	Total Radium Calculation	0.198 ± 0.557 (1.22)	pCi/L	02/17/17 15:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30208667

QC Batch:	247685	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30208667001, 30208667002, 30208667003, 30208667004, 30208667005, 30208667006, 30208667007, 30208667008, 30208667009, 30208667010, 30208667011		

METHOD BLANK:	1218074	Matrix:	Water
Associated Lab Samples:	30208667001, 30208667002, 30208667003, 30208667004, 30208667005, 30208667006, 30208667007, 30208667008, 30208667009, 30208667010, 30208667011		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.468 ± 0.834 (1.70) C:35% T:68%	pCi/L	02/16/17 17:29	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates

Pace Project No.: 30208667

QC Batch: 247679

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30208667001, 30208667002, 30208667003, 30208667004, 30208667005, 30208667006, 30208667007, 30208667008, 30208667009, 30208667010, 30208667011

METHOD BLANK: 1218054

Matrix: Water

Associated Lab Samples: 30208667001, 30208667002, 30208667003, 30208667004, 30208667005, 30208667006, 30208667007, 30208667008, 30208667009, 30208667010, 30208667011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.102 ± 0.171 (0.384) C:92% T:NA	pCi/L	02/01/17 09:25	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30208667

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30208667



30208667

Chain of Custody



Workorder: AAA0645

Workorder Name: Plant Yates

Results Requested By: 2/14/2017

Owner Received Date:

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers			Date/Time	Comments
						CON	H			
1	YGWC-261	G	1/18/2017 11:05	AAA0645-01	GW	2				
2	YGWC-265	G	1/18/2017 12:40	AAA0645-02	GW	2				
3	YGWC-271	G	1/18/2017 14:25	AAA0645-03	GW	4				
4	YGWC-285	G	1/18/2017 11:05	AAA0645-04	GW	2				
5	YGWC-281	G	1/18/2017 13:50	AAA0645-05	GW	2				
6	EB-3-1-18-17	G	1/18/2017 14:40	AAA0645-06	W	2				
7	YGWC-275	G	1/19/2017 11:05	AAA0645-07	GW	2				
8	EB-4-1-19-17	G	1/19/2017 11:50	AAA0645-08	W	2				
9	YGWC-291	G	1/19/2017 13:05	AAA0645-09	GW	2				
10	FB-4-1-19-17	G	1/19/2017 13:45	AAA0645-10	W	2				
Transfers Released By										
1										
2										
3										

Radium 226, 228, Total

Subcontract To:
 Pace - Pittsburgh
 1638 Roseytown Road
 Stes. 2,3,4
 Greensburg, PA 15601
 Phone (724) 850-5600

Report To:
 Betsy McDaniel
 Pace Analytical Atlanta
 110 Technology Parkway
 Peachtree Corners, GA 30092
 Phone (770)-734-4200

Cooler Temperature on Receipt N/A °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

30208667

Chain of Custody



Results Requested By: 2/14/2017

Owner Received Date:

Workorder Name: Plant Yates

Workorder: AAA0645

Report To:		Subcontract To:		Collect Date/Time		Lab ID	Matrix	Preserved Containers		Requested Analysis	
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200		Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600		1/19/2017	0:00	AAA0645-11	GW	3	2	Radium 226, 228, Total	
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Received By	Date/Time	Received By	Date/Time	Comments	LAB USE ONLY
11	Dup-4	G	1/19/2017 0:00	AAA0645-11	GW	Karen Hill	1-23-17 08:20				011
12											
13											
14											
15											
16											
17											
18											
19											
20											
Transfers Released By		Date/Time		Received By		Date/Time		Comments			
1				Karen Hill		1-23-17 08:20					
2											
3											

Cooler Temperature on Receipt NA °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

30208667

PAGE: / OF /

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.ash-lab.com



CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-505-7239		REPORT TO: Lauren Petty CC: Mania Padilla Health McCorkle		REQUESTED COMPLETION DATE: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP	
PROJECT #: Phase 2 CCR		PROJECT #: Phase 2 CCR		PROJECT #: Phase 2 CCR		PROJECT #: Phase 2 CCR		PROJECT #: Phase 2 CCR	
Collection DATE	Collection TIME	MATRIX CODE	SAMPLE IDENTIFICATION	GRA	COMP	RELINQUISHED BY:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:
1-18-17	1105	GW	Y6WC-26I	✓	✓	Cl. F. SO ₄ & TDS (FPA 300.0 & SM 2540C)	1-17-17	Cl. F. SO ₄ & TDS (FPA 6020/7470) Metals App. III & IV	1-19-17/1607
1-18-17	1240	GW	Y6WC-26S	✓	✓	Redium 226 & 228 (SW-846 9315/9320)	1-17-17	Redium 226 & 228 (SW-846 9315/9320)	1-19-17/1607
1-18-17	1425	GW	Y6WC-27I	✓	✓		1-17-17		1-19-17/1607
1-18-17	1105	GW	Y6WC-28S	✓	✓		1-17-17		1-19-17/1607
1-18-17	1350	GW	Y6WC-28I	✓	✓		1-17-17		1-19-17/1607
1-18-17	1440	W	EB-3-1-18-17	✓	✓		1-17-17		1-19-17/1607
1-19-17	1105	GW	Y6WC-27S	✓	✓		1-17-17		1-19-17/1607
1-19-17	1150	W	EB-4-1-19-17	✓	✓		1-17-17		1-19-17/1607
1-19-17	1305	GW	Y6WC-29I	✓	✓		1-17-17		1-19-17/1607
1-19-17	1345	W	FB-4-1-19-17	✓	✓		1-17-17		1-19-17/1607
1-19-17	—	GW	DUP-4	✓	✓		1-17-17		1-19-17/1607
SAMPLED BY AND TITLE: Cl. Facker, R. Walker (see)		DATE/TIME: 1-19-17 1415		DATE/TIME: 1-19-17 1415		DATE/TIME: 1-19-17 1607		DATE/TIME: 1-19-17 1607	
RECEIVED BY: M. Padilla		DATE/TIME: 1-19-17 1607		DATE/TIME: 1-19-17 1607		DATE/TIME: 1-19-17 1607		DATE/TIME: 1-19-17 1607	
RECEIVED BY LAB: Cl. Facker, R. Walker (see)		DATE/TIME: 1-19-17 1607		DATE/TIME: 1-19-17 1607		DATE/TIME: 1-19-17 1607		DATE/TIME: 1-19-17 1607	

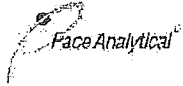
CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESERVATION
P - PLASTIC	P	P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	P	A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C
G - CLEAR GLASS	P	G - CLEAR GLASS	3 - HNO ₃
V - VOA VIAL	P	V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	P	S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	P	O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C
			7 - ≤6°C not frozen

CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESERVATION
P - PLASTIC	P	P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	P	A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C
G - CLEAR GLASS	P	G - CLEAR GLASS	3 - HNO ₃
V - VOA VIAL	P	V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	P	S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	P	O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C
			7 - ≤6°C not frozen

CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESERVATION
P - PLASTIC	P	P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	P	A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C
G - CLEAR GLASS	P	G - CLEAR GLASS	3 - HNO ₃
V - VOA VIAL	P	V - VOA VIAL	4 - NaOH, ≤6°C
S - STERILE	P	S - STERILE	5 - NaOH/ZnAc, ≤6°C
O - OTHER	P	O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C
			7 - ≤6°C not frozen

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace Atlanta

Project # 30208667

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5101 8400, 6812 5101 8432

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 1-23-17

Comments:

	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID Matrix: <u>W+</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Orthophosphate field filtered	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
Organic Samples checked for dechlorination:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
All containers have been checked for preservation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. <u>pH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				
				Initial when completed: <u>KH</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KH</u> Date: <u>1-23-17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JJC2
Date: 1/31/2017
Worklist: 33728
Matrix: DW

Method Blank Assessment

MB Sample ID: 1218054
MB concentration: 0.102
MB Counting Uncertainty: 0.171
MB MDC: 0.384
MB Numerical Performance Indicator: 1.17
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Pass

Laboratory Control Sample Assessment

Count Date:	Sample I.D.:	LCSD (Y or N)?	N
2/1/2017	16-026	LCS33728	LCS33728
Spike I.D.:	44.670		
Spike Concentration (pCi/mL):	0.10		
Volume Used (mL):	0.500		
Aliquot Volume (L, g, F):	8.934		
Target Conc. (pCi/L, g, F):	0.420		
Uncertainty (Calculated):	7.689		
Result (pCi/L, g, F):	0.871		
LCSD/LCSD Counting Uncertainty (pCi/L, g, F):	-2.52		
Numerical Performance Indicator:	86.07%		
Percent Recovery:	N/A		
Status vs Numerical Indicator:	Pass		
Status vs Recovery:	Pass		

Duplicate Sample Assessment

Sample I.D.: 30208662001
Duplicate Sample I.D.: 30208662001DUP
Sample Result (pCi/L, g, F): 0.156
Sample Result Counting Uncertainty (pCi/L, g, F): 0.149
Sample Duplicate Result (pCi/L, g, F): 0.164
Sample Duplicate Counting Uncertainty (pCi/L, g, F): 0.160
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -0.073
Duplicate RPD: 5.12%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30208662001
30208662001DUP

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

Comments:

Q. J. J.

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):
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:

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:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JILW
Date: 2/2/2017
Worklist: 33730
Matrix: DW

Method Blank Assessment

MB Sample ID: 1218074
MB concentration: 0.468
MB Counting Uncertainty: 0.830
MB MDC: 1.702
MB Numerical Performance Indicator: 1.11
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCSD (Y or N)? N
LCSS33730
LCS33730

Count Date: 2/16/2017
Spike I.D.: 16-027
Spike Concentration (pCi/mL): 25.285
Volume Used (mL): 0.20
Aliquot Volume (L, g, F): 0.811
Target Conc. (pCi/L, g, F): 6.235
Uncertainty (Calculated): 0.449
Result (pCi/L, g, F): 5.798
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 1.080
Numerical Performance Indicator: -0.73
Percent Recovery: 93.00%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30208662001
Duplicate Sample I.D. 30208662001DUP
Sample Result (pCi/L, g, F): 0.211
Sample Result Counting Uncertainty (pCi/L, g, F): 0.371
Sample Duplicate Result (pCi/L, g, F): 0.285
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.518
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -0.228
Duplicate RPD: 29.90%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30208662001
30208662001DUP

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):
Spike uncertainty (calculated):

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.
Sample MS I.D.
Sample MSD I.D.
Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

Handwritten signature/initials

Product Name: Low-Flow System

Date: 2017-01-16 11:21:23

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 60 ft

Pump placement from TOC 49 ft

Well Information:

Well ID YGWA-11
Well diameter 2 in
Well Total Depth 54.93 ft
Screen Length 10 ft
Depth to Water 39.52 ft

Pumping Information:

Final Pumping Rate 75 mL/min
Total System Volume 0.7528054 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 10 in
Total Volume Pumped 3.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:57:38	1200.00	15.48	6.64	105.31	3.01	41.20	0.60	-99.08
Last 5	11:02:38	1500.01	15.52	6.56	93.35	2.76	41.30	0.93	-79.82
Last 5	11:07:38	1800.00	15.57	6.46	82.79	2.62	41.30	1.33	-61.00
Last 5	11:12:38	2099.99	15.66	6.38	77.69	2.51	41.40	1.62	-50.21
Last 5	11:17:38	2399.99	15.77	6.29	74.51	2.35	41.40	1.84	-40.09
Variance 0			0.05	-0.10	-10.56			0.40	18.83
Variance 1			0.09	-0.09	-5.11			0.29	10.79
Variance 2			0.11	-0.08	-3.18			0.22	10.11

Notes

Collected at 11:20. Cloudy 60s. EB-2-1-16-17 here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-11 15:57:05

Project Information:

Operator Name JB
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 10.96"
Longitude -84° -54' -33.49"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 108 ft

Pump placement from TOC 103.0 ft

Well Information:

Well ID YGWA-1D
Well diameter 2 in
Well Total Depth 125 ft
Screen Length 50 ft
Depth to Water 53.33 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.527495 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.0125 in
Total Volume Pumped 5.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:35:02	2099.99	16.74	7.34	167.39	2.27	53.50	0.69	-45.23
Last 5	15:40:02	2399.99	16.70	7.33	167.01	2.20	53.50	0.63	-53.77
Last 5	15:45:02	2699.97	16.65	7.32	166.08	2.02	53.50	0.58	-49.71
Last 5	15:50:02	2999.98	16.61	7.31	165.31	1.58	53.50	0.56	-50.46
Last 5	15:55:02	3299.98	16.63	7.30	164.50	1.91	53.50	0.54	-50.45
Variance 0			-0.05	-0.02	-0.94			-0.05	4.05
Variance 1			-0.04	-0.01	-0.77			-0.01	-0.74
Variance 2			0.02	-0.01	-0.81			-0.02	0.01

Notes

66 degrees F, cloudy, sampled at 1555

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-16 14:07:38

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 65 ft

Pump placement from TOC 60 ft

Well Information:

Well ID YGWA-2I
Well diameter 2 in
Well Total Depth 65.74 ft
Screen Length 10 ft
Depth to Water 46.79 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 0.7751225 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 42 in
Total Volume Pumped 3.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:43:30	2400.99	20.30	7.21	244.46	4.34	49.70	0.46	-169.92
Last 5	13:48:30	2700.99	20.34	7.22	242.70	4.57	49.90	0.45	-169.92
Last 5	13:53:30	3000.98	21.29	7.22	244.49	4.21	50.10	0.45	-172.32
Last 5	13:58:30	3300.98	21.21	7.22	243.35	4.01	50.20	0.42	-172.48
Last 5	14:03:35	3605.97	20.84	7.24	241.33	4.15	50.30	0.40	-172.33
Variance 0			0.95	-0.00	1.80			-0.00	-2.40
Variance 1			-0.08	0.00	-1.14			-0.03	-0.15
Variance 2			-0.37	0.02	-2.02			-0.02	0.15

Notes

Collected at 14:05. Cloudy 70s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-11 11:34:10

Project Information:

Operator Name Jordan Berisford
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 6.78"
Longitude -84° -54' -10.37"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 112 ft

Pump placement from TOC 108.5 ft

Well Information:

Well ID YGWA-3D
Well diameter 2 in
Well Total Depth 137.1 ft
Screen Length 50 ft
Depth to Water 32.91 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.566106 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:00:15	1500.02	16.56	7.41	231.59	1.91	33.00	0.62	-40.35
Last 5	11:05:15	1800.02	16.56	7.52	231.73	1.21	33.00	0.60	-47.15
Last 5	11:10:15	2099.99	16.56	7.58	231.54	0.98	33.00	0.56	-50.82
Last 5	11:15:15	2399.98	16.58	7.63	231.73	0.85	33.00	0.56	-52.70
Last 5	11:20:15	2699.97	16.74	7.66	231.71	0.76	33.00	0.54	-54.90
Variance 0			-0.00	0.07	-0.19			-0.05	-3.67
Variance 1			0.02	0.04	0.20			0.00	-1.88
Variance 2			0.16	0.03	-0.02			-0.02	-2.20

Notes

63 degrees cloudy, sample time 1120

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-11 13:35:07

Project Information:

Operator Name JB
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 6.77"
Longitude -84° -54' -10.53"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 60 ft

Pump placement from TOC 55 ft

Well Information:

Well ID YGWA-3I
Well diameter 2 in
Well Total Depth 60 ft
Screen Length 10 ft
Depth to Water 49.73 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.788119 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.17 in
Total Volume Pumped 6.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:10:16	2699.96	16.38	7.45	228.19	0.53	49.90	0.66	-22.70
Last 5	13:15:16	2999.96	16.39	7.48	226.03	0.44	49.90	0.62	-23.79
Last 5	13:20:16	3299.96	16.37	7.50	223.11	0.41	49.90	0.58	-27.64
Last 5	13:25:16	3599.96	16.41	7.51	220.55	0.30	49.90	0.56	-30.41
Last 5	13:30:16	3899.96	16.44	7.53	217.45	0.32	49.90	0.55	-33.04
Variance 0			-0.02	0.02	-2.92			-0.04	-3.85
Variance 1			0.04	0.01	-2.56			-0.02	-2.77
Variance 2			0.03	0.01	-3.10			-0.01	-2.63

Notes

66 degree F, cloudy, sampled at 1130

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-10 15:44:34

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° -53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 35 ft

Pump placement from TOC 30 ft

Well Information:

Well ID YGWA-14S
Well diameter 2 in
Well Total Depth 35.82 ft
Screen Length 10 ft
Depth to Water 20.61 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 1.245153 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 4.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:17:01	600.02	16.65	5.43	70.02	1.45	20.80	5.27	145.74
Last 5	15:22:01	900.00	16.56	5.36	69.93	1.32	20.80	5.17	148.46
Last 5	15:27:01	1200.00	16.56	5.34	69.66	1.30	20.80	5.15	148.92
Last 5	15:32:01	1500.00	16.56	5.37	69.45	1.26	20.80	5.15	147.60
Last 5	15:37:01	1799.99	16.56	5.37	69.42	1.39	20.80	5.15	146.73
Variance 0			0.00	-0.02	-0.27			-0.02	0.46
Variance 1			-0.00	0.03	-0.21			-0.00	-1.32
Variance 2			-0.00	-0.00	-0.03			0.00	-0.87

Notes

Collected at 15:40. Cloudy 50s

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-16 10:47:09

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 26.65"
Longitude -84° -54' -21.56"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 54 ft

Pump placement from TOC 5 ft

Well Information:

Well ID YGWA-30I
Well diameter 2 in
Well Total Depth 59.65 ft
Screen Length 10 ft
Depth to Water 38.38 ft

Pumping Information:

Final Pumping Rate 210 mL/min
Total System Volume 1.657807 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 6.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:24:29	300.13	14.52	6.82	38.25	0.68	38.40	7.90	127.85
Last 5	10:29:29	600.02	16.56	5.87	37.79	1.35	38.40	6.56	117.43
Last 5	10:34:29	900.02	16.88	5.80	38.38	0.60	38.40	6.35	112.57
Last 5	10:39:29	1200.01	16.95	5.77	38.18	0.32	38.40	6.19	111.16
Last 5	10:44:29	1500.01	16.92	5.72	38.26	0.63	38.40	6.10	111.59
Variance 0			0.32	-0.07	0.58			-0.21	-4.86
Variance 1			0.06	-0.03	-0.20			-0.16	-1.41
Variance 2			-0.03	-0.05	0.08			-0.09	0.43

Notes

Sampled at 1050. Cloudy 50's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 11:02:30

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 70 ft

Pump placement from TOC 64.7 ft

Well Information:

Well ID YGWC-26I
Well diameter 2 in
Well Total Depth 69.71 ft
Screen Length 10 ft
Depth to Water 24.90 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 2.005305 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 3.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:38:50	600.01	19.15	5.91	332.11	2.29	25.10	0.43	10.82
Last 5	10:43:50	900.05	19.14	5.85	331.65	2.70	25.10	0.38	21.31
Last 5	10:48:50	1200.02	19.16	5.85	332.73	2.47	25.10	0.36	23.98
Last 5	10:53:50	1500.00	19.19	5.85	333.78	2.41	25.10	0.31	24.96
Last 5	10:58:50	1800.00	19.15	5.84	334.31	2.35	25.10	0.28	26.75
Variance 0			0.02	-0.00	1.09			-0.02	2.67
Variance 1			0.03	-0.00	1.04			-0.05	0.98
Variance 2			-0.05	-0.00	0.53			-0.03	1.79

Notes

Collected at 11:05. Cloudy 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 12:36:59

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 40 ft

Pump placement from TOC 35 ft

Well Information:

Well ID YGWC-26S
Well diameter 2 in
Well Total Depth 40.1 ft
Screen Length 10 ft
Depth to Water 21.45 ft

Pumping Information:

Final Pumping Rate 90 mL/min
Total System Volume 1.353746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 9 in
Total Volume Pumped 4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:12:43	1200.01	19.69	5.14	313.70	2.42	22.40	1.21	75.93
Last 5	12:17:43	1500.02	19.53	5.16	316.16	2.50	22.40	1.19	72.59
Last 5	12:22:43	1800.02	19.50	5.19	319.16	2.33	22.40	1.07	74.08
Last 5	12:27:43	2100.02	19.64	5.20	320.27	2.55	22.30	1.05	77.49
Last 5	12:32:43	2400.02	19.68	5.20	320.57	2.48	22.30	1.09	80.97
Variance 0			-0.03	0.03	3.00			-0.12	1.49
Variance 1			0.14	0.01	1.11			-0.03	3.41
Variance 2			0.03	-0.00	0.30			0.05	3.48

Notes

Collected at 12:40. Cloudy 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 14:24:54

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 80 ft

Pump placement from TOC 74 ft

Well Information:

Well ID YGWC-271
Well diameter 2 in
Well Total Depth 79.84 ft
Screen Length 10 ft
Depth to Water 28.17 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 2.222492 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 6 in
Total Volume Pumped 4.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:56:31	600.02	18.97	6.28	364.61	5.05	28.70	0.50	-70.92
Last 5	14:01:31	900.02	19.10	6.30	365.59	2.95	28.70	0.40	-72.36
Last 5	14:06:31	1200.02	19.10	6.31	366.97	2.43	28.70	0.27	-76.17
Last 5	14:11:31	1500.02	18.92	6.31	367.01	1.90	28.70	0.22	-77.18
Last 5	14:16:31	1800.03	18.79	6.31	365.56	1.59	28.70	0.20	-76.87
Variance 0			-0.00	0.01	1.38			-0.12	-3.81
Variance 1			-0.18	0.00	0.04			-0.06	-1.02
Variance 2			-0.13	0.00	-1.45			-0.02	0.32

Notes

Collected at 14:25. Cloudy 60s. Extra Rad here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-19 11:33:45

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 40 ft

Pump placement from TOC 35 ft

Well Information:

Well ID YGWC-27S
Well diameter 2 in
Well Total Depth 40.26 ft
Screen Length 10 ft
Depth to Water 27.3 ft

Pumping Information:

Final Pumping Rate 230 mL/min
Total System Volume 1.353746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2 in
Total Volume Pumped 7.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:05:33	600.02	18.83	6.21	467.95	5.38	27.40	0.26	13.22
Last 5	11:10:33	900.02	18.92	6.20	469.58	4.86	27.40	0.18	10.31
Last 5	11:15:33	1200.00	18.92	6.20	470.69	4.11	27.40	0.16	9.33
Last 5	11:20:33	1500.00	18.87	6.20	471.54	3.74	27.40	0.15	8.22
Last 5	11:25:33	1800.01	18.88	6.20	471.70	3.55	27.40	0.15	2.94
Variance 0			-0.00	-0.00	1.11			-0.02	-0.98
Variance 1			-0.05	-0.00	0.85			-0.01	-1.11
Variance 2			0.01	0.00	0.16			-0.01	-5.28

Notes

Collected at 11:30. Sunny 60s. DUP 4 here. EB-4 here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 13:46:55

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 34.71"
Longitude -84° -54' -30.62"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 74 ft

Pump placement from TOC 64 ft

Well Information:

Well ID YGWC-28I
Well diameter 2 in
Well Total Depth 69.89 ft
Screen Length 10 ft
Depth to Water 24.30 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 2.09218 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 19.2 in
Total Volume Pumped 13.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:24:54	6310.92	19.03	6.26	413.24	0.11	25.90	1.05	62.43
Last 5	13:29:54	6610.91	19.04	6.26	413.34	0.14	25.90	0.43	62.85
Last 5	13:34:54	6910.91	19.20	6.27	413.81	0.14	25.90	0.26	62.99
Last 5	13:39:54	7210.91	19.33	6.27	413.88	0.12	25.90	0.26	63.58
Last 5	13:44:54	7510.91	19.46	6.27	412.59	0.13	25.90	0.25	64.23
Variance 0			0.16	0.00	0.48			-0.16	0.13
Variance 1			0.13	-0.00	0.07			-0.00	0.60
Variance 2			0.13	-0.00	-1.29			-0.01	0.65

Notes

Sampled at 1350. Cloudy 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 11:03:23

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 34.29"
Longitude -84° -54' -30.77"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 49 ft

Pump placement from TOC 39 ft

Well Information:

Well ID YGWC-28S
Well diameter 2 in
Well Total Depth 44.85 ft
Screen Length 10 ft
Depth to Water 22.68 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 1.549214 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5.04 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:41:19	900.01	18.88	6.18	452.65	6.93	23.10	0.22	-3.40
Last 5	10:46:19	1200.01	18.84	6.20	451.48	4.41	23.10	0.18	-12.33
Last 5	10:51:19	1500.01	18.85	6.21	450.51	3.97	23.10	0.15	-17.50
Last 5	10:56:19	1799.99	18.83	6.22	450.08	4.04	23.10	0.16	-20.55
Last 5	11:01:19	2099.99	18.79	6.23	449.55	3.49	23.10	0.15	-22.65
Variance 0			0.01	0.02	-0.97			-0.02	-5.17
Variance 1			-0.02	0.01	-0.42			0.00	-3.05
Variance 2			-0.04	0.01	-0.53			-0.00	-2.10

Notes

Sampled at 1105. Cloudy 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-19 13:03:39

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 40 ft

Pump placement from TOC 34.4 ft

Well Information:

Well ID YGWC-29I
Well diameter 2 in
Well Total Depth 39.46 ft
Screen Length 10 ft
Depth to Water 26.55 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.353746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 16 in
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:40:06	600.03	19.41	6.24	284.32	0.82	27.80	1.10	-13.75
Last 5	12:45:06	900.03	19.41	6.22	282.93	0.75	27.90	0.67	-13.59
Last 5	12:50:06	1200.03	19.37	6.21	284.46	0.66	27.90	0.49	-12.17
Last 5	12:55:06	1500.01	19.34	6.21	284.62	0.61	27.90	0.41	-11.03
Last 5	13:00:06	1800.02	19.41	6.22	285.01	0.59	27.90	0.35	-10.76
Variance 0			-0.05	-0.01	1.53			-0.17	1.42
Variance 1			-0.02	-0.00	0.16			-0.09	1.14
Variance 2			0.07	0.01	0.39			-0.05	0.27

Notes

Collected at 13:05. Cloudy 70s. FB-4 here.

Grab Samples



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAB0790

March 02, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-30I	AAB0790-01	Ground Water	02/21/17 11:10	02/22/17 17:05
FB-1-2-21-17	AAB0790-02	Water	02/21/17 12:30	02/22/17 17:05
YGWC-28S	AAB0790-03	Ground Water	02/21/17 15:15	02/22/17 17:05
YGWC-26S	AAB0790-04	Ground Water	02/21/17 12:10	02/22/17 17:05
YGWC-26I	AAB0790-05	Ground Water	02/21/17 14:20	02/22/17 17:05
Dup-1	AAB0790-06	Ground Water	02/21/17 00:00	02/22/17 17:05



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Project: CCR Event

Client ID: YGWA-30I

Lab Number ID: AAB0790-01

Date/Time Sampled: 2/21/2017 11:10:00AM

Date/Time Received: 2/22/2017 5:05:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	02/24/17 12:40	02/24/17 12:40	7020729	JPT
Inorganic Anions											
Chloride	1.7	0.25	0.01	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 13:21	7020835	RLC
Fluoride	0.05	0.30	0.004	mg/L	EPA 300.0	J	1	02/28/17 09:53	02/28/17 13:21	7020835	RLC
Sulfate	1.4	1.0	0.09	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 13:21	7020835	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Barium	0.0077	0.0100	0.0004	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Calcium	1.25	0.500	0.0311	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Cobalt	0.0272	0.0100	0.0005	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 18:56	7020699	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/24/17 10:20	02/24/17 15:05	7020714	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Project: CCR Event

Client ID: FB-1-2-21-17

Lab Number ID: AAB0790-02

Date/Time Sampled: 2/21/2017 12:30:00PM

Date/Time Received: 2/22/2017 5:05:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	02/24/17 12:40	02/24/17 12:40	7020729	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 14:23	7020835	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	02/28/17 09:53	02/28/17 14:23	7020835	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 14:23	7020835	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:08	7020699	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/24/17 10:20	02/24/17 15:07	7020714	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Project: CCR Event

Client ID: YGWC-28S

Lab Number ID: AAB0790-03

Date/Time Sampled: 2/21/2017 3:15:00PM

Date/Time Received: 2/22/2017 5:05:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	198	25	10	mg/L	SM 2540 C		1	02/24/17 12:40	02/24/17 12:40	7020729	JPT
Inorganic Anions											
Chloride	19	0.25	0.01	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 14:43	7020835	RLC
Fluoride	0.27	0.30	0.004	mg/L	EPA 300.0	J	1	02/28/17 09:53	02/28/17 14:43	7020835	RLC
Sulfate	3.0	1.0	0.09	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 14:43	7020835	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Barium	0.222	0.0500	0.0022	mg/L	EPA 6020B		5	02/23/17 14:50	02/27/17 14:38	7020699	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Boron	2.29	0.0400	0.0064	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Calcium	29.0	25.0	1.55	mg/L	EPA 6020B		50	02/23/17 14:50	02/25/17 19:19	7020699	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Cobalt	0.0011	0.0100	0.0005	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:13	7020699	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/24/17 10:20	02/24/17 15:09	7020714	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Project: CCR Event

Client ID: YGWC-26S

Lab Number ID: AAB0790-04

Date/Time Sampled: 2/21/2017 12:10:00PM

Date/Time Received: 2/22/2017 5:05:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	137	25	10	mg/L	SM 2540 C		1	02/24/17 12:40	02/24/17 12:40	7020729	JPT
Inorganic Anions											
Chloride	16	0.25	0.01	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 15:04	7020835	RLC
Fluoride	0.11	0.30	0.004	mg/L	EPA 300.0	J	1	02/28/17 09:53	02/28/17 15:04	7020835	RLC
Sulfate	96	5.0	0.46	mg/L	EPA 300.0		5	02/28/17 09:53	03/01/17 13:00	7020835	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Barium	0.0282	0.0100	0.0004	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Beryllium	0.0002	0.0030	0.00008	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Boron	0.624	0.0400	0.0064	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Calcium	11.7	5.00	0.311	mg/L	EPA 6020B		10	02/23/17 14:50	02/27/17 14:44	7020699	CSW
Chromium	0.0019	0.0100	0.0009	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Cobalt	0.0022	0.0100	0.0005	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Selenium	0.0014	0.0100	0.0010	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:25	7020699	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/24/17 10:20	02/24/17 15:17	7020714	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Project: CCR Event

Client ID: YGWC-26I

Lab Number ID: AAB0790-05

Date/Time Sampled: 2/21/2017 2:20:00PM

Date/Time Received: 2/22/2017 5:05:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	158	25	10	mg/L	SM 2540 C		1	02/24/17 12:40	02/24/17 12:40	7020729	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 15:25	7020835	RLC
Fluoride	0.10	0.30	0.004	mg/L	EPA 300.0	J	1	02/28/17 09:53	02/28/17 15:25	7020835	RLC
Sulfate	80	5.0	0.46	mg/L	EPA 300.0		5	02/28/17 09:53	03/01/17 11:14	7020835	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Barium	0.0655	0.0100	0.0004	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Boron	0.972	0.0400	0.0064	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Calcium	14.6	5.00	0.311	mg/L	EPA 6020B		10	02/23/17 14:50	02/27/17 14:50	7020699	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Selenium	0.0018	0.0100	0.0010	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Lithium	0.0067	0.0500	0.0021	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:36	7020699	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/24/17 10:20	02/24/17 15:19	7020714	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Project: CCR Event

Client ID: Dup-1

Lab Number ID: AAB0790-06

Date/Time Sampled: 2/21/2017 12:00:00AM

Date/Time Received: 2/22/2017 5:05:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	171	25	10	mg/L	SM 2540 C		1	02/24/17 12:40	02/24/17 12:40	7020729	JPT
Inorganic Anions											
Chloride	16	0.25	0.01	mg/L	EPA 300.0		1	02/28/17 09:53	02/28/17 15:45	7020835	RLC
Fluoride	0.08	0.30	0.004	mg/L	EPA 300.0	J	1	02/28/17 09:53	02/28/17 15:45	7020835	RLC
Sulfate	98	5.0	0.46	mg/L	EPA 300.0		5	02/28/17 09:53	03/01/17 11:35	7020835	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Barium	0.0271	0.0100	0.0004	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Boron	0.614	0.0400	0.0064	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Cadmium	0.00007	0.0010	0.00007	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Calcium	11.6	2.50	0.155	mg/L	EPA 6020B		5	02/23/17 14:50	02/25/17 20:11	7020699	CSW
Chromium	0.0017	0.0100	0.0009	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Cobalt	0.0022	0.0100	0.0005	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Selenium	0.0010	0.0100	0.0010	mg/L	EPA 6020B	J	1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	02/23/17 14:50	02/25/17 19:59	7020699	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/24/17 10:20	02/24/17 15:21	7020714	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020729 - SM 2540 C											
Blank (7020729-BLK1)						Prepared & Analyzed: 02/24/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7020729-BS1)						Prepared & Analyzed: 02/24/17					
Total Dissolved Solids	357	25	10	mg/L	400.00		89	84-108			
Duplicate (7020729-DUP1)						Source: AAB0789-08 Prepared & Analyzed: 02/24/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7020729-DUP2)						Source: AAB0790-03 Prepared & Analyzed: 02/24/17					
Total Dissolved Solids	208	25	10	mg/L		198			5	10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020835 - EPA 300.0											
Blank (7020835-BLK1)						Prepared & Analyzed: 02/28/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7020835-BS1)						Prepared & Analyzed: 02/28/17					
Chloride	9.78	0.25	0.01	mg/L	10.010		98	90-110			
Fluoride	10.1	0.30	0.004	mg/L	10.020		101	90-110			
Sulfate	9.95	1.0	0.09	mg/L	10.020		99	90-110			
Matrix Spike (7020835-MS1)						Source: AAB0790-01 Prepared & Analyzed: 02/28/17					
Chloride	11.3	0.25	0.01	mg/L	10.010	1.67	97	90-110			
Fluoride	9.89	0.30	0.004	mg/L	10.020	0.05	98	90-110			
Sulfate	11.1	1.0	0.09	mg/L	10.020	1.45	97	90-110			
Matrix Spike (7020835-MS2)						Source: AAB0838-02 Prepared & Analyzed: 02/28/17					
Chloride	15.3	0.25	0.01	mg/L	10.010	5.64	97	90-110			
Fluoride	10.5	0.30	0.004	mg/L	10.020	0.20	103	90-110			
Sulfate	182	1.0	0.09	mg/L	10.020	191	NR	90-110			QM-02
Matrix Spike Dup (7020835-MSD1)						Source: AAB0790-01 Prepared & Analyzed: 02/28/17					
Chloride	11.4	0.25	0.01	mg/L	10.010	1.67	97	90-110	0.2	15	
Fluoride	9.94	0.30	0.004	mg/L	10.020	0.05	99	90-110	0.4	15	
Sulfate	11.2	1.0	0.09	mg/L	10.020	1.45	97	90-110	0.3	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7020699 - EPA 3005A

Blank (7020699-BLK1)

Prepared: 02/23/17 Analyzed: 02/25/17

Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							

LCS (7020699-BS1)

Prepared: 02/23/17 Analyzed: 02/25/17

Antimony	0.107	0.0030	0.0008	mg/L	0.10000		107	80-120			
Arsenic	0.0985	0.0050	0.0016	mg/L	0.10000		98	80-120			
Barium	0.104	0.0100	0.0004	mg/L	0.10000		104	80-120			
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000		102	80-120			
Boron	1.02	0.0400	0.0064	mg/L	1.0000		102	80-120			
Cadmium	0.105	0.0010	0.00007	mg/L	0.10000		105	80-120			
Calcium	0.995	0.500	0.0311	mg/L	1.0000		100	80-120			
Chromium	0.107	0.0100	0.0009	mg/L	0.10000		107	80-120			
Cobalt	0.0980	0.0100	0.0005	mg/L	0.10000		98	80-120			
Copper	0.102	0.0250	0.0005	mg/L	0.10000		102	80-120			
Lead	0.101	0.0050	0.0001	mg/L	0.10000		101	80-120			
Molybdenum	0.109	0.0100	0.0017	mg/L	0.10000		109	80-120			
Nickel	0.103	0.0100	0.0006	mg/L	0.10000		103	80-120			
Selenium	0.0997	0.0100	0.0010	mg/L	0.10000		100	80-120			
Silver	0.106	0.0100	0.0005	mg/L	0.10000		106	80-120			
Thallium	0.103	0.0010	0.0002	mg/L	0.10000		103	80-120			
Vanadium	0.104	0.0100	0.0071	mg/L	0.10000		104	80-120			
Zinc	0.105	0.0100	0.0021	mg/L	0.10000		105	80-120			
Lithium	0.0985	0.0500	0.0021	mg/L	0.10000		98	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020699 - EPA 3005A											
Matrix Spike (7020699-MS1)			Source: AAB0741-01			Prepared: 02/23/17 Analyzed: 02/25/17					
Antimony	0.113	0.0030	0.0008	mg/L	0.10000	0.0057	107	75-125			
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125			
Barium	0.120	0.0100	0.0004	mg/L	0.10000	0.0178	103	75-125			
Beryllium	0.105	0.0030	0.00008	mg/L	0.10000	ND	105	75-125			
Boron	1.06	0.0400	0.0064	mg/L	1.0000	0.0218	104	75-125			
Cadmium	0.104	0.0010	0.00007	mg/L	0.10000	ND	104	75-125			
Calcium	32.4	25.0	1.55	mg/L	1.0000	31.7	70	75-125			QM-02
Chromium	0.105	0.0100	0.0009	mg/L	0.10000	0.0010	104	75-125			
Cobalt	0.0976	0.0100	0.0005	mg/L	0.10000	ND	98	75-125			
Copper	0.104	0.0250	0.0005	mg/L	0.10000	ND	104	75-125			
Lead	0.100	0.0050	0.0001	mg/L	0.10000	ND	100	75-125			
Molybdenum	0.112	0.0100	0.0017	mg/L	0.10000	0.0049	107	75-125			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000	0.0007	101	75-125			
Selenium	0.0984	0.0100	0.0010	mg/L	0.10000	ND	98	75-125			
Silver	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125			
Thallium	0.104	0.0010	0.0002	mg/L	0.10000	ND	104	75-125			
Vanadium	0.109	0.0100	0.0071	mg/L	0.10000	ND	109	75-125			
Zinc	0.106	0.0100	0.0021	mg/L	0.10000	0.0049	101	75-125			
Lithium	0.103	0.0500	0.0021	mg/L	0.10000	ND	103	75-125			
Matrix Spike Dup (7020699-MSD1)			Source: AAB0741-01			Prepared: 02/23/17 Analyzed: 02/25/17					
Antimony	0.113	0.0030	0.0008	mg/L	0.10000	0.0057	108	75-125	0.7	20	
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125	0.4	20	
Barium	0.123	0.0100	0.0004	mg/L	0.10000	0.0178	105	75-125	2	20	
Beryllium	0.109	0.0030	0.00008	mg/L	0.10000	ND	109	75-125	4	20	
Boron	1.02	0.0400	0.0064	mg/L	1.0000	0.0218	100	75-125	4	20	
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000	ND	103	75-125	2	20	
Calcium	32.6	25.0	1.55	mg/L	1.0000	31.7	89	75-125	0.6	20	
Chromium	0.111	0.0100	0.0009	mg/L	0.10000	0.0010	110	75-125	5	20	
Cobalt	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125	4	20	
Copper	0.104	0.0250	0.0005	mg/L	0.10000	ND	104	75-125	0.2	20	
Lead	0.102	0.0050	0.0001	mg/L	0.10000	ND	102	75-125	2	20	
Molybdenum	0.111	0.0100	0.0017	mg/L	0.10000	0.0049	106	75-125	0.8	20	
Nickel	0.103	0.0100	0.0006	mg/L	0.10000	0.0007	103	75-125	2	20	
Selenium	0.100	0.0100	0.0010	mg/L	0.10000	ND	100	75-125	2	20	
Silver	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125	2	20	
Thallium	0.107	0.0010	0.0002	mg/L	0.10000	ND	107	75-125	3	20	
Vanadium	0.114	0.0100	0.0071	mg/L	0.10000	ND	114	75-125	5	20	
Zinc	0.111	0.0100	0.0021	mg/L	0.10000	0.0049	106	75-125	4	20	
Lithium	0.104	0.0500	0.0021	mg/L	0.10000	ND	104	75-125	0.9	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020699 - EPA 3005A											
Post Spike (7020699-PS1)			Source: AAB0741-01			Prepared: 02/23/17 Analyzed: 02/25/17					
Antimony	101			ug/L	100.00	5.71	95	80-120			
Arsenic	107			ug/L	100.00	0.925	106	80-120			
Barium	117			ug/L	100.00	17.8	99	80-120			
Beryllium	112			ug/L	100.00	0.0014	112	80-120			
Boron	1100			ug/L	1000.0	21.8	108	80-120			
Cadmium	104			ug/L	100.00	-0.0021	104	80-120			
Calcium	32700			ug/L	1000.0	31700	104	80-120			
Chromium	111			ug/L	100.00	1.03	110	80-120			
Cobalt	96.9			ug/L	100.00	0.167	97	80-120			
Copper	106			ug/L	100.00	0.267	106	80-120			
Lead	101			ug/L	100.00	0.0835	101	80-120			
Molybdenum	114			ug/L	100.00	4.94	109	80-120			
Nickel	101			ug/L	100.00	0.653	100	80-120			
Selenium	101			ug/L	100.00	0.920	100	80-120			
Silver	102			ug/L	100.00	0.0060	102	80-120			
Thallium	103			ug/L	100.00	0.0169	103	80-120			
Vanadium	113			ug/L	100.00	0.937	112	80-120			
Zinc	122			ug/L	100.00	4.93	118	80-120			
Lithium	107			ug/L	100.00	0.225	107	80-120			

Batch 7020714 - EPA 7470A

Blank (7020714-BLK1)					Prepared & Analyzed: 02/24/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7020714-BS1)					Prepared & Analyzed: 02/24/17						
Mercury	0.00236	0.00050	0.000041	mg/L	2.5000E-3		94	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Report No.: AAB0790

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020714 - EPA 7470A											
Matrix Spike (7020714-MS1)			Source: AAB0789-10			Prepared & Analyzed: 02/24/17					
Mercury	0.00237	0.00050	0.000041	mg/L	2.5000E-3	ND	95	75-125			
Matrix Spike Dup (7020714-MSD1)			Source: AAB0789-10			Prepared & Analyzed: 02/24/17					
Mercury	0.00232	0.00050	0.000041	mg/L	2.5000E-3	ND	93	75-125	2	20	
Post Spike (7020714-PS1)			Source: AAB0789-10			Prepared & Analyzed: 02/24/17					
Mercury	1.67			ug/L	1.6667	-0.0218	100	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 02, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239
 REPORT TO: Lauren Petty
 CC: Maria Padilla Heath McCorkle
 REQUESTED COMPLETION DATE: laburch@southernco.com
 PROJECT NAME/STATE: Plant Yates AP
 PROJECT #: Phase 2 CCR

Collection DATE	Collection TIME	MATRIX CODE*	COMPARISON	SAMPLE IDENTIFICATION	ANALYSIS REQUESTED	CONTAINER TYPE	CONTAINER PRESERVATION
2-21-17	1110	GW	✓	YGWA-30I	Metals App. III & IV (EPA 6020/470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SM-846 9315/9320)	P - PLASTIC	1 - HCl, ≤6°C
2-21-17	1230	W	✓	FB-1-2-21-17		A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C
2-21-17	1515	GW	✓	YGWC-28S		G - CLEAR GLASS	3 - HNO ₃
2-21-17	1210	GW	✓	YGWC-26S		V - VOA VIAL	4 - NaOH, ≤6°C
2-21-17	1420	GW	✓	YGWC-26I		S - STERILE	5 - NaOH/ZnAc, ≤6°C
2-21-17	-	GW	✓	DUP-1		O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C

CONTAINER TYPE: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER
 PRESERVATION: 1 - HCl, ≤6°C, 2 - H₂SO₄, ≤6°C, 3 - HNO₃, 4 - NaOH, ≤6°C, 5 - NaOH/ZnAc, ≤6°C, 6 - Na₂S₂O₃, ≤6°C, 7 - ≤6°C not frozen

*MATRIX CODES:
 DW - DRINKING WATER, S - SOIL, WW - WASTEWATER, SL - SLUDGE, GW - GROUNDWATER, SD - SOLID, SW - SURFACE WATER, A - AIR, ST - STORM WATER, L - LIQUID, W - WATER, P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

LAB #:
 DATE/TIME: 2-22-17 1705
 RELINQUISHED BY: [Signature]
 DATE/TIME: 2-22-17 0900
 RECEIVED BY: [Signature]
 DATE/TIME: 2-22-17 1705
 SAMPLE SHIPPED VIA: UPS
 CUSTODY SEAL: Intact
 BROKEN: No
 PRESENT: Yes
 CLIENT: [Signature]
 COURIER: [Signature]
 OTHER FS: [Signature]
 # of Coolers: [Signature]

ENTERED INTO LIMS: [Signature]
 TRACKING #: [Signature]

Plant Yates COC Ash Ponds



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 2/23/2017 2:00:41PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 02/22/17 17:05

Work Order: AAB0790

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 6

#Containers: 24

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

March 22, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAB0790 Plant Yates
Pace Project No.: 30211815

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on February 24, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAB0790 Plant Yates

Pace Project No.: 30211815

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAB0790 Plant Yates

Pace Project No.: 30211815

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30211815001	YGWA-30I	Water	02/21/17 11:10	02/24/17 12:25
30211815002	FB-1-2-21-17	Water	02/21/17 12:30	02/24/17 12:25
30211815003	YGWC-28S	Water	02/21/17 15:15	02/24/17 12:25
30211815004	YGWC-26S	Water	02/21/17 12:10	02/24/17 12:25
30211815005	YGWC-26I	Water	02/21/17 14:20	02/24/17 12:25
30211815006	Dup-1	Water	02/21/17 00:00	02/24/17 12:25

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAB0790 Plant Yates

Pace Project No.: 30211815

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30211815001	YGWA-30I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30211815002	FB-1-2-21-17	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	RMK	1
30211815003	YGWC-28S	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30211815004	YGWC-26S	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	RMK	1
30211815005	YGWC-26I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	RMK	1
30211815006	Dup-1	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	RMK	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAB0790 Plant Yates

Pace Project No.: 30211815

Sample: YGWA-301		Lab ID: 30211815001	Collected: 02/21/17 11:10	Received: 02/24/17 12:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0411 ± 0.0964 (0.222) C:94% T:NA	pCi/L	03/17/17 09:08	13982-63-3	
Radium-228	EPA 9320	0.462 ± 0.434 (0.888) C:76% T:70%	pCi/L	03/22/17 11:49	15262-20-1	
Total Radium	Total Radium Calculation	0.503 ± 0.530 (1.11)	pCi/L	03/22/17 17:17	7440-14-4	

Sample: FB-1-2-21-17		Lab ID: 30211815002	Collected: 02/21/17 12:30	Received: 02/24/17 12:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0344 ± 0.117 (0.276) C:100% T:NA	pCi/L	03/17/17 09:08	13982-63-3	
Radium-228	EPA 9320	0.407 ± 0.929 (2.07) C:31% T:76%	pCi/L	03/16/17 16:53	15262-20-1	
Total Radium	Total Radium Calculation	0.441 ± 1.05 (2.35)	pCi/L	03/21/17 15:23	7440-14-4	

Sample: YGWC-28S		Lab ID: 30211815003	Collected: 02/21/17 15:15	Received: 02/24/17 12:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.163 ± 0.108 (0.161) C:95% T:NA	pCi/L	03/20/17 08:53	13982-63-3	
Radium-228	EPA 9320	0.241 ± 0.396 (0.860) C:76% T:76%	pCi/L	03/22/17 11:49	15262-20-1	
Total Radium	Total Radium Calculation	0.404 ± 0.504 (1.02)	pCi/L	03/22/17 17:17	7440-14-4	

Sample: YGWC-26S		Lab ID: 30211815004	Collected: 02/21/17 12:10	Received: 02/24/17 12:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0217 ± 0.0768 (0.193) C:92% T:NA	pCi/L	03/20/17 08:53	13982-63-3	
Radium-228	EPA 9320	1.09 ± 0.950 (1.91) C:38% T:70%	pCi/L	03/16/17 16:53	15262-20-1	
Total Radium	Total Radium Calculation	1.11 ± 1.03 (2.10)	pCi/L	03/21/17 15:23	7440-14-4	

Sample: YGWC-26I		Lab ID: 30211815005	Collected: 02/21/17 14:20	Received: 02/24/17 12:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.156 ± 0.119 (0.185) C:74% T:NA	pCi/L	03/20/17 08:53	13982-63-3	
Radium-228	EPA 9320	0.908 ± 0.985 (2.03) C:39% T:78%	pCi/L	03/16/17 20:39	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAB0790 Plant Yates

Pace Project No.: 30211815

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	1.06 ± 1.10 (2.22)	pCi/L	03/21/17 15:23	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0582 ± 0.0866 (0.188) C:93% T:NA	pCi/L	03/20/17 08:53	13982-63-3	
Radium-228	EPA 9320	-1.10 ± 1.14 (2.96) C:34% T:73%	pCi/L	03/16/17 20:39	15262-20-1	
Total Radium	Total Radium Calculation	0.0582 ± 1.23 (3.15)	pCi/L	03/21/17 15:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAB0790 Plant Yates

Pace Project No.: 30211815

QC Batch:	251729	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30211815001, 30211815002, 30211815003, 30211815004, 30211815005, 30211815006		

METHOD BLANK:	1238336	Matrix:	Water
Associated Lab Samples:	30211815001, 30211815002, 30211815003, 30211815004, 30211815005, 30211815006		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0778 ± 0.0850 (0.162) C:88% T:NA	pCi/L	03/17/17 09:05	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAB0790 Plant Yates

Pace Project No.: 30211815

QC Batch:	251825	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30211815001, 30211815002, 30211815003, 30211815004, 30211815005, 30211815006		

METHOD BLANK:	1238956	Matrix:	Water
Associated Lab Samples:	30211815001, 30211815002, 30211815003, 30211815004, 30211815005, 30211815006		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0225 ± 0.967 (2.22) C:20% T:79%	pCi/L	03/16/17 11:27	1c
Radium-228	0.155 ± 0.391 (0.872) C:75% T:70%	pCi/L	03/22/17 11:48	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AAB0790 Plant Yates

Pace Project No.: 30211815

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

ANALYTE QUALIFIERS

1c Method Blank yttrium carrier yield is less than the 30% default minimum acceptable for carrier yield. The MB has been re-ingrowthed and will be re-analyzed on 3/22/2017.

REPORT OF LABORATORY ANALYSIS

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

Chain of Custody



Workorder: AAB0790

Owner Received Date: 3/17/2017

Workorder Name: Plant Yates

Report To: Betsy McDaniel
 Pace Analytical Atlanta
 110 Technology Parkway
 Peachtree Corners, GA 30092
 Phone (770)-734-4200

Subcontract To: Pace - Pittsburgh
 1638 Roseytown Road
 Stes. 2,3,4
 Greensburg, PA 15601
 Phone (724) 850-5600

Requested Analysis: Radium 226, 228, Total

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Date/Time	Received By	Date/Time	Comments	LAB USE ONLY
1	YGWA-30I	G	2/21/2017 11:10	AAB0790-01	GW	2					001
2	FB-1-2-21-17	G	2/21/2017 12:30	AAB0790-02	GW	2	2/21/2017	Karen Hill	2/24/17 12:25		007
3	YGWC-28S	G	2/21/2017 15:15	AAB0790-03	GW	2					003
4	YGWC-26S	G	2/21/2017 12:10	AAB0790-04	GW	2					004
5	YGWC-26I	G	2/21/2017 14:20	AAB0790-05	GW	2					005
6	Dup-1	G	2/21/2017 0:00	AAB0790-06	GW	2					006
7											
8											
9											
10											

WO#: 30211815

30211815

Cooler Temperature on Receipt 41 °C Custody Seal Y of N Received on Ice Y of N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

30211815

PAGE: 1 OF 1



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP		PROJECT #: Phase 2 CCR	
Collection DATE MM-DD-YY	Collection TIME	MATRIX CODE	COMPARISON	ANALYSIS REQUESTED	CONTAINER TYPE: PRESERVATION: # of	CONTAINER TYPE: PRESERVATION: # of	ANALYSIS REQUESTED	CONTAINER TYPE: PRESERVATION: # of	LAB #:
2-21-17	1110	GW	✓	Y6WA-30I	(EPA 6020/7470) Metals App. III & IV Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2640C) Radium 226 & 228 (SM-846 9315/9320)				AA00790
2-21-17	1230	W	✓	FB-1-2-21-17					Entered into LIMS: Tracking #:
2-21-17	1515	GW	✓	Y6WC-28S					
2-21-17	1210	GW	✓	Y6WC-26S					
2-21-17	1420	GW	✓	Y6WC-26I					
2-21-17	---	GW	✓	D4P-1					
SAMPLED BY AND TITLE: L. Petty, H. Lablanc		DATE/TIME: 2-22-17 0900	RELINQUISHED BY: [Signature]		DATE/TIME: 2-22-17 1705	RELINQUISHED BY: [Signature]		DATE/TIME: 2-22-17 1705	FOR LAB USE ONLY
RECEIVED BY: [Signature]		DATE/TIME: 2-22-17 1705	RECEIVED BY: [Signature]		DATE/TIME: 2-22-17 1705	RECEIVED BY: [Signature]		DATE/TIME: 2-22-17 1705	LAB #: AA00790
RECEIVED BY LIMS: [Signature]		DATE/TIME: 2-22-17 1705	RECEIVED BY LIMS: [Signature]		DATE/TIME: 2-22-17 1705	RECEIVED BY LIMS: [Signature]		DATE/TIME: 2-22-17 1705	Entered into LIMS: Tracking #:
RECEIVED BY LIMS: [Signature]		DATE/TIME: 2-22-17 1705	RECEIVED BY LIMS: [Signature]		DATE/TIME: 2-22-17 1705	RECEIVED BY LIMS: [Signature]		DATE/TIME: 2-22-17 1705	Entered into LIMS: Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

30211815

ML



Client Name: Pace Atlanta Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 10812 5102 5695

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp NA °C Correction Factor: NA °C Final Temp: NA °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 2/24/17

Comments:

	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID Matrix: <u>W+</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Orthophosphate field filtered	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
Organic Samples checked for dechlorination:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
All containers have been checked for preservation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. <u>PH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>KH</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>KH</u> Date: <u>2/24/17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JYJ
Date: 3/14/2017
Worklist: 34511
Matrix: DW

Method Blank Assessment

MB Sample ID: 1238956
MB Concentration: -0.022
M/B Counting Uncertainty: 0.967
MB MDC: 2.218
MB Numerical Performance Indicator: -0.05
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

LCS/D (Y or N)?	Y
LCS34511	3/16/2017
LCS34511	17-005
LCS34511	25.026
Count Date:	3/16/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	25.026
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.808
Target Conc. (pCi/L, g, F):	6.231
Uncertainty (Calculated):	0.446
Result (pCi/L, g, F):	7.748
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.318
Numerical Performance Indicator:	2.19
Percent Recovery:	125.14%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment

Sample I.D.: LCS34511
Duplicate Sample I.D.: LCS34511
Sample Result Counting Uncertainty (pCi/L, g, F): 7.748
Sample Duplicate Result (pCi/L, g, F): 1.318
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 6.245
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.971
Are sample and/or duplicate results below MDC? NO
Duplicate Numerical Performance Indicator: 1.799
Duplicate (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD: 22.11%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

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):
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:
Sample Matrix Spike Duplicate 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 Recovery:
MS Status vs Numerical Indicator:
MSD Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

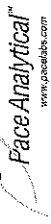
Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
Duplicate (Based on the Percent Recoveries) MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

Handwritten signature/initials

Quality Control Sample Performance Assessment



Analyst *Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-226
 Analyst: LAL
 Date: 3/15/2017
 Worklist: 344493
 Matrix: DW

Method Blank Assessment	
MB Sample ID	1238336
MB concentration:	0.078
MB Counting Uncertainty:	0.084
MB MDC:	0.162
MB Numerical Performance Indicator:	1.81
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		
LCS#	LCSD (Y or N)?	N
34493	LCSD34493	
Count Date:	3/20/2017	
Spike I.D.:	17-003	
Spike Concentration (pCi/mL):	38.230	
Volume Used (mL):	0.25	
Aliquot Volume (L, g, F):	0.501	
Target Conc. (pCi/L, g, F):	19.092	
Uncertainty (Calculated):	0.898	
Result (pCi/L, g, F):	16.544	
LCSD Counting Uncertainty (pCi/L, g, F):	0.905	
Numerical Performance Indicator:	-3.92	
Percent Recovery:	86.65%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment	
Sample I.D.:	30211811002
Duplicate Sample I.D.:	30211811002DUP
Sample Result (pCi/L, g, F):	-0.026
Sample Result Counting Uncertainty (pCi/L, g, F):	0.061
Sample Duplicate Result (pCi/L, g, F):	0.058
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.085
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	*1.574
Duplicate RPD:	524.01%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail**

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

Comments:

** Numerical Indicator is acceptable.*
3/22/17

**Batch must be re-prepped due to unacceptable precision.

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAB0889

March 07, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-29I	AAB0889-01	Ground Water	02/22/17 11:05	02/24/17 15:30
YGWC-28I	AAB0889-02	Ground Water	02/22/17 13:20	02/24/17 15:30
YGWC-27S	AAB0889-03	Ground Water	02/22/17 15:05	02/24/17 15:30
YGWC-27I	AAB0889-04	Ground Water	02/23/17 10:25	02/24/17 15:30



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Project: CCR Event

Client ID: YGWC-29I

Lab Number ID: AAB0889-01

Date/Time Sampled: 2/22/2017 11:05:00AM

Date/Time Received: 2/24/2017 3:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	185	25	10	mg/L	SM 2540 C		1	02/27/17 15:40	02/27/17 15:40	7020794	JPT
Inorganic Anions											
Chloride	13	0.25	0.01	mg/L	EPA 300.0		1	03/01/17 14:00	03/02/17 05:28	7030053	RLC
Fluoride	0.09	0.30	0.004	mg/L	EPA 300.0	J	1	03/01/17 14:00	03/02/17 05:28	7030053	RLC
Sulfate	31	1.0	0.09	mg/L	EPA 300.0		1	03/01/17 14:00	03/02/17 05:28	7030053	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Barium	0.0741	0.0100	0.0004	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Boron	0.855	0.0400	0.0064	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Calcium	11.2	2.50	0.155	mg/L	EPA 6020B		5	03/01/17 09:10	03/06/17 18:48	7020867	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Lithium	0.0063	0.0500	0.0021	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:03	7020867	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	02/28/17 10:00	02/28/17 16:43	7020822	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Project: CCR Event

Client ID: YGWC-28I

Lab Number ID: AAB0889-02

Date/Time Sampled: 2/22/2017 1:20:00PM

Date/Time Received: 2/24/2017 3:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	310	25	10	mg/L	SM 2540 C		1	02/27/17 15:40	02/27/17 15:40	7020794	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	03/01/17 14:00	03/02/17 05:50	7030053	RLC
Fluoride	0.15	0.30	0.004	mg/L	EPA 300.0	J	1	03/01/17 14:00	03/02/17 05:50	7030053	RLC
Sulfate	8.2	1.0	0.09	mg/L	EPA 300.0		1	03/01/17 14:00	03/02/17 05:50	7030053	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Barium	0.0915	0.0100	0.0004	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Boron	2.05	0.0400	0.0064	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Calcium	33.8	25.0	1.55	mg/L	EPA 6020B		50	03/01/17 09:10	03/03/17 20:20	7020867	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Selenium	0.0012	0.0100	0.0010	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Lithium	0.0064	0.0500	0.0021	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:14	7020867	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/01/17 10:40	03/01/17 14:14	7020859	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Project: CCR Event

Client ID: YGWC-27S

Lab Number ID: AAB0889-03

Date/Time Sampled: 2/22/2017 3:05:00PM

Date/Time Received: 2/24/2017 3:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	262	25	10	mg/L	SM 2540 C		1	02/27/17 15:40	02/27/17 15:40	7020794	JPT
Inorganic Anions											
Chloride	21	0.25	0.01	mg/L	EPA 300.0		1	03/01/17 14:00	03/02/17 06:11	7030053	RLC
Fluoride	0.21	0.30	0.004	mg/L	EPA 300.0	J	1	03/01/17 14:00	03/02/17 06:11	7030053	RLC
Sulfate	24	1.0	0.09	mg/L	EPA 300.0		1	03/01/17 14:00	03/02/17 06:11	7030053	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Barium	0.106	0.0100	0.0004	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Boron	1.30	0.0400	0.0064	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Calcium	37.6	25.0	1.55	mg/L	EPA 6020B		50	03/01/17 09:10	03/03/17 20:31	7020867	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Cobalt	0.0023	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:25	7020867	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/01/17 10:40	03/01/17 14:16	7020859	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Project: CCR Event

Client ID: YGWC-271

Lab Number ID: AAB0889-04

Date/Time Sampled: 2/23/2017 10:25:00AM

Date/Time Received: 2/24/2017 3:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	253	25	10	mg/L	SM 2540 C		1	02/27/17 15:40	02/27/17 15:40	7020794	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	03/01/17 14:00	03/02/17 06:33	7030053	RLC
Fluoride	0.08	0.30	0.004	mg/L	EPA 300.0	J	1	03/01/17 14:00	03/02/17 06:33	7030053	RLC
Sulfate	4.9	1.0	0.09	mg/L	EPA 300.0		1	03/01/17 14:00	03/02/17 06:33	7030053	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Barium	0.0728	0.0100	0.0004	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Beryllium	0.0002	0.0030	0.00008	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Boron	1.76	0.0400	0.0064	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Calcium	28.2	25.0	1.55	mg/L	EPA 6020B		50	03/01/17 09:10	03/03/17 20:43	7020867	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Cobalt	0.0020	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Lithium	0.0099	0.0500	0.0021	mg/L	EPA 6020B	J	1	03/01/17 09:10	03/03/17 20:37	7020867	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/01/17 10:40	03/01/17 14:19	7020859	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020794 - SM 2540 C											
Blank (7020794-BLK1)						Prepared & Analyzed: 02/27/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7020794-BS1)						Prepared & Analyzed: 02/27/17					
Total Dissolved Solids	418	25	10	mg/L	400.00		104	84-108			
Duplicate (7020794-DUP1)						Source: AAB0838-02 Prepared & Analyzed: 02/27/17					
Total Dissolved Solids	520	25	10	mg/L		504			3	10	
Duplicate (7020794-DUP2)						Source: AAB0838-08 Prepared & Analyzed: 02/27/17					
Total Dissolved Solids	20	25	10	mg/L		22			10	10	J



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030053 - EPA 300.0											
Blank (7030053-BLK1)											
						Prepared: 03/01/17 Analyzed: 03/02/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7030053-BS1)											
						Prepared: 03/01/17 Analyzed: 03/02/17					
Chloride	9.94	0.25	0.01	mg/L	10.010		99	90-110			
Fluoride	10.4	0.30	0.004	mg/L	10.020		104	90-110			
Sulfate	10.2	1.0	0.09	mg/L	10.020		102	90-110			
Matrix Spike (7030053-MS1)											
						Source: AAB0889-04					
						Prepared: 03/01/17 Analyzed: 03/02/17					
Chloride	22.4	0.25	0.01	mg/L	10.010	13.5	88	90-110			QM-05
Fluoride	10.5	0.30	0.004	mg/L	10.020	0.08	104	90-110			
Sulfate	14.4	1.0	0.09	mg/L	10.020	4.90	95	90-110			
Matrix Spike Dup (7030053-MSD1)											
						Source: AAB0889-04					
						Prepared: 03/01/17 Analyzed: 03/02/17					
Chloride	22.4	0.25	0.01	mg/L	10.010	13.5	88	90-110	0.02	15	QM-05
Fluoride	10.4	0.30	0.004	mg/L	10.020	0.08	103	90-110	0.4	15	
Sulfate	14.4	1.0	0.09	mg/L	10.020	4.90	95	90-110	0.4	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020822 - EPA 7470A											
Blank (7020822-BLK1)						Prepared & Analyzed: 02/28/17					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7020822-BS1)						Prepared & Analyzed: 02/28/17					
Mercury	0.00247	0.00050	0.000041	mg/L	2.5000E-3		99	80-120			
Matrix Spike (7020822-MS1)						Source: AAB0885-01 Prepared & Analyzed: 02/28/17					
Mercury	0.00242	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125			
Matrix Spike Dup (7020822-MSD1)						Source: AAB0885-01 Prepared & Analyzed: 02/28/17					
Mercury	0.00236	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125	2	20	
Post Spike (7020822-PS1)						Source: AAB0885-01 Prepared & Analyzed: 02/28/17					
Mercury	1.76			ug/L	1.6667	-0.00567	106	80-120			
Batch 7020859 - EPA 7470A											
Blank (7020859-BLK1)						Prepared & Analyzed: 03/01/17					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7020859-BS1)						Prepared & Analyzed: 03/01/17					
Mercury	0.00243	0.00050	0.000041	mg/L	2.5000E-3		97	80-120			
Matrix Spike (7020859-MS1)						Source: AAB0889-02 Prepared & Analyzed: 03/01/17					
Mercury	0.00226	0.00050	0.000041	mg/L	2.5000E-3	ND	90	75-125			
Matrix Spike Dup (7020859-MSD1)						Source: AAB0889-02 Prepared & Analyzed: 03/01/17					
Mercury	0.00226	0.00050	0.000041	mg/L	2.5000E-3	ND	91	75-125	0.4	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7020859 - EPA 7470A

Post Spike (7020859-PS1)		Source: AAB0889-02			Prepared & Analyzed: 03/01/17						
Mercury	1.60			ug/L	1.6667	0.0123	95	80-120			

Batch 7020867 - EPA 3005A

Blank (7020867-BLK1)					Prepared: 03/01/17 Analyzed: 03/03/17						
Antimony	ND	0.0030	0.0008	mg/L							
Arsenic	ND	0.0050	0.0016	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00008	mg/L							
Boron	ND	0.0400	0.0064	mg/L							
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	ND	0.0100	0.0009	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0005	mg/L							
Lead	ND	0.0050	0.0001	mg/L							
Molybdenum	ND	0.0100	0.0017	mg/L							
Nickel	ND	0.0100	0.0006	mg/L							
Selenium	ND	0.0100	0.0010	mg/L							
Silver	ND	0.0100	0.0005	mg/L							
Thallium	ND	0.0010	0.0002	mg/L							
Vanadium	ND	0.0100	0.0071	mg/L							
Zinc	ND	0.0100	0.0021	mg/L							
Lithium	ND	0.0500	0.0021	mg/L							

LCS (7020867-BS1)

LCS (7020867-BS1)					Prepared: 03/01/17 Analyzed: 03/03/17						
Antimony	0.112	0.0030	0.0008	mg/L	0.10000		112	80-120			
Arsenic	0.105	0.0050	0.0016	mg/L	0.10000		105	80-120			
Barium	0.107	0.0100	0.0004	mg/L	0.10000		107	80-120			
Beryllium	0.0972	0.0030	0.00008	mg/L	0.10000		97	80-120			
Boron	1.00	0.0400	0.0064	mg/L	1.0000		100	80-120			
Cadmium	0.105	0.0010	0.00007	mg/L	0.10000		105	80-120			
Calcium	1.00	0.500	0.0311	mg/L	1.0000		100	80-120			
Chromium	0.0948	0.0100	0.0009	mg/L	0.10000		95	80-120			
Cobalt	0.0949	0.0100	0.0005	mg/L	0.10000		95	80-120			
Copper	0.0948	0.0250	0.0005	mg/L	0.10000		95	80-120			
Lead	0.105	0.0050	0.0001	mg/L	0.10000		105	80-120			
Molybdenum	0.104	0.0100	0.0017	mg/L	0.10000		104	80-120			
Nickel	0.0946	0.0100	0.0006	mg/L	0.10000		95	80-120			
Selenium	0.109	0.0100	0.0010	mg/L	0.10000		109	80-120			
Silver	0.106	0.0100	0.0005	mg/L	0.10000		106	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020867 - EPA 3005A											
LCS (7020867-BS1)						Prepared: 03/01/17 Analyzed: 03/03/17					
Thallium	0.104	0.0010	0.0002	mg/L	0.10000		104	80-120			
Vanadium	0.0975	0.0100	0.0071	mg/L	0.10000		98	80-120			
Zinc	0.0982	0.0100	0.0021	mg/L	0.10000		98	80-120			
Lithium	0.0924	0.0500	0.0021	mg/L	0.10000		92	80-120			
Matrix Spike (7020867-MS1)						Source: AAB0887-02 Prepared: 03/01/17 Analyzed: 03/03/17					
Antimony	0.111	0.0030	0.0008	mg/L	0.10000	ND	111	75-125			
Arsenic	0.106	0.0050	0.0016	mg/L	0.10000	ND	106	75-125			
Barium	0.155	0.0100	0.0004	mg/L	0.10000	0.0481	107	75-125			
Beryllium	0.101	0.0030	0.00008	mg/L	0.10000	ND	101	75-125			
Boron	1.01	0.0400	0.0064	mg/L	1.0000	0.0192	99	75-125			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125			
Calcium	17.1	2.50	0.155	mg/L	1.0000	16.2	91	75-125			
Chromium	0.0999	0.0100	0.0009	mg/L	0.10000	ND	100	75-125			
Cobalt	0.116	0.0100	0.0005	mg/L	0.10000	0.0184	98	75-125			
Copper	0.0938	0.0250	0.0005	mg/L	0.10000	ND	94	75-125			
Lead	0.104	0.0050	0.0001	mg/L	0.10000	ND	104	75-125			
Molybdenum	0.103	0.0100	0.0017	mg/L	0.10000	ND	103	75-125			
Nickel	0.0983	0.0100	0.0006	mg/L	0.10000	0.0009	97	75-125			
Selenium	0.111	0.0100	0.0010	mg/L	0.10000	0.0015	109	75-125			
Silver	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125			
Thallium	0.104	0.0010	0.0002	mg/L	0.10000	ND	104	75-125			
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000	ND	103	75-125			
Zinc	0.100	0.0100	0.0021	mg/L	0.10000	0.0024	98	75-125			
Lithium	0.0908	0.0500	0.0021	mg/L	0.10000	0.0036	87	75-125			
Matrix Spike Dup (7020867-MSD1)						Source: AAB0887-02 Prepared: 03/01/17 Analyzed: 03/03/17					
Antimony	0.109	0.0030	0.0008	mg/L	0.10000	ND	109	75-125	2	20	
Arsenic	0.103	0.0050	0.0016	mg/L	0.10000	ND	103	75-125	3	20	
Barium	0.152	0.0100	0.0004	mg/L	0.10000	0.0481	104	75-125	2	20	
Beryllium	0.0985	0.0030	0.00008	mg/L	0.10000	ND	99	75-125	3	20	
Boron	0.956	0.0400	0.0064	mg/L	1.0000	0.0192	94	75-125	6	20	
Cadmium	0.103	0.0010	0.00007	mg/L	0.10000	ND	103	75-125	0.4	20	
Calcium	16.6	2.50	0.155	mg/L	1.0000	16.2	43	75-125	3	20	QM-02
Chromium	0.101	0.0100	0.0009	mg/L	0.10000	ND	101	75-125	1	20	
Cobalt	0.118	0.0100	0.0005	mg/L	0.10000	0.0184	99	75-125	1	20	
Copper	0.0995	0.0250	0.0005	mg/L	0.10000	ND	100	75-125	6	20	
Lead	0.104	0.0050	0.0001	mg/L	0.10000	ND	104	75-125	0.4	20	
Molybdenum	0.103	0.0100	0.0017	mg/L	0.10000	ND	103	75-125	0.7	20	
Nickel	0.100	0.0100	0.0006	mg/L	0.10000	0.0009	100	75-125	2	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Report No.: AAB0889

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7020867 - EPA 3005A											
Matrix Spike Dup (7020867-MSD1)			Source: AAB0887-02			Prepared: 03/01/17 Analyzed: 03/03/17					
Selenium	0.108	0.0100	0.0010	mg/L	0.10000	0.0015	107	75-125	2	20	
Silver	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125	0.09	20	
Thallium	0.103	0.0010	0.0002	mg/L	0.10000	ND	103	75-125	0.9	20	
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000	ND	103	75-125	0.1	20	
Zinc	0.103	0.0100	0.0021	mg/L	0.10000	0.0024	100	75-125	3	20	
Lithium	0.0973	0.0500	0.0021	mg/L	0.10000	0.0036	94	75-125	7	20	
Post Spike (7020867-PS1)			Source: AAB0887-02			Prepared: 03/01/17 Analyzed: 03/03/17					
Antimony	104			ug/L	100.00	0.275	104	80-120			
Arsenic	103			ug/L	100.00	0.126	103	80-120			
Barium	156			ug/L	100.00	48.1	108	80-120			
Beryllium	98.8			ug/L	100.00	0.0636	99	80-120			
Boron	983			ug/L	1000.0	19.2	96	80-120			
Cadmium	101			ug/L	100.00	0.0628	100	80-120			
Calcium	16500			ug/L	1000.0	16200	33	80-120			QM-02
Chromium	100			ug/L	100.00	0.425	100	80-120			
Cobalt	117			ug/L	100.00	18.4	98	80-120			
Copper	97.2			ug/L	100.00	0.447	97	80-120			
Lead	103			ug/L	100.00	0.0773	103	80-120			
Molybdenum	105			ug/L	100.00	0.148	105	80-120			
Nickel	96.2			ug/L	100.00	0.867	95	80-120			
Selenium	107			ug/L	100.00	1.45	106	80-120			
Silver	105			ug/L	100.00	0.0205	105	80-120			
Thallium	103			ug/L	100.00	0.0214	103	80-120			
Vanadium	102			ug/L	100.00	1.40	101	80-120			
Zinc	99.1			ug/L	100.00	2.39	97	80-120			
Lithium	101			ug/L	100.00	3.59	97	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 07, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: _____ OF _____

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR	
Collection DATE	Collection TIME	MATRIX CODE*	COMPA	SAMPLE IDENTIFICATION	ANALYSIS REQUESTED
2-22-17	1105	GW	✓	Y6WC-29 I	Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-646 9315/9320)
2-22-17	1320	GW	✓	Y6WC-28 I	
2-22-17	1505	GW	✓	Y6WC-27 S	
2-23-17	1025	GW	✓	Y6WC-27 T	

SAMPLED BY AND TITLE: H. Walker (acc)	DATE/TIME: 2-24-17 / 0900	RELINQUISHED BY: <i>[Signature]</i>	DATE/TIME: 2-24-17 1530
RECEIVED BY: [Signature]	DATE/TIME: 2-24-17 / 0900	RELINQUISHED BY: [Signature]	DATE/TIME: 2-24-17 1530
LAB #: 7 ENTERED INTO LIMS:		LAB #: AAD0889 TRACKING #: MK	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 2/27/2017 10:44:28AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 02/24/17 15:30

Work Order: AAB0889

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 4

#Containers: 16

Minimum Temp(C): 4.0

Maximum Temp(C): 4.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

March 21, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAB0889 Plant Yates
Pace Project No.: 30211899

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on February 27, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAB0889 Plant Yates
Pace Project No.: 30211899

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAB0889 Plant Yates
Pace Project No.: 30211899

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30211899001	YGWC-29I	Water	02/22/17 11:05	02/27/17 09:40
30211899002	YGWC-28I	Water	02/22/17 13:20	02/27/17 09:40
30211899003	YGWC-27S	Water	02/22/17 15:05	02/27/17 09:40
30211899004	YGWC-27I	Water	02/23/17 10:25	02/27/17 09:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAB0889 Plant Yates
Pace Project No.: 30211899

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30211899001	YGWC-29I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30211899002	YGWC-28I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30211899003	YGWC-27S	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	RMK	1
30211899004	YGWC-27I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	RMK	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAB0889 Plant Yates

Pace Project No.: 30211899

Sample: YGWC-29I **Lab ID: 30211899001** Collected: 02/22/17 11:05 Received: 02/27/17 09:40 Matrix: Water

PWS: Site ID: Sample Type:

Comments: • The sampler's signature was not listed on the COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.220 ± 0.132 (0.193) C:91% T:NA	pCi/L	03/20/17 08:35	13982-63-3	
Radium-228	EPA 9320	1.23 ± 0.864 (1.66) C:37% T:74%	pCi/L	03/17/17 17:02	15262-20-1	1c
Total Radium	Total Radium Calculation	1.45 ± 0.996 (1.85)	pCi/L	03/21/17 16:01	7440-14-4	

Sample: YGWC-28I **Lab ID: 30211899002** Collected: 02/22/17 13:20 Received: 02/27/17 09:40 Matrix: Water

PWS: Site ID: Sample Type:

Comments: • The sampler's signature was not listed on the COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.165 ± 0.112 (0.174) C:94% T:NA	pCi/L	03/20/17 08:36	13982-63-3	
Radium-228	EPA 9320	0.351 ± 0.521 (1.12) C:50% T:89%	pCi/L	03/17/17 17:04	15262-20-1	1c
Total Radium	Total Radium Calculation	0.516 ± 0.633 (1.29)	pCi/L	03/21/17 16:01	7440-14-4	

Sample: YGWC-27S **Lab ID: 30211899003** Collected: 02/22/17 15:05 Received: 02/27/17 09:40 Matrix: Water

PWS: Site ID: Sample Type:

Comments: • The sampler's signature was not listed on the COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0979 ± 0.119 (0.250) C:95% T:NA	pCi/L	03/20/17 08:36	13982-63-3	
Radium-228	EPA 9320	1.16 ± 0.726 (1.35) C:43% T:84%	pCi/L	03/18/17 15:45	15262-20-1	
Total Radium	Total Radium Calculation	1.26 ± 0.845 (1.60)	pCi/L	03/21/17 16:01	7440-14-4	

Sample: YGWC-27I **Lab ID: 30211899004** Collected: 02/23/17 10:25 Received: 02/27/17 09:40 Matrix: Water

PWS: Site ID: Sample Type:

Comments: • The sampler's signature was not listed on the COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	2.22 ± 0.480 (0.181) C:93% T:NA	pCi/L	03/20/17 08:36	13982-63-3	
Radium-228	EPA 9320	2.51 ± 0.853 (1.17) C:55% T:82%	pCi/L	03/18/17 15:45	15262-20-1	
Total Radium	Total Radium Calculation	4.73 ± 1.33 (1.35)	pCi/L	03/21/17 16:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAB0889 Plant Yates

Pace Project No.: 30211899

QC Batch: 251731

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30211899003, 30211899004

METHOD BLANK: 1238369

Matrix: Water

Associated Lab Samples: 30211899003, 30211899004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00178 ± 0.0626 (0.181) C:99% T:NA	pCi/L	03/20/17 08:36	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAB0889 Plant Yates

Pace Project No.: 30211899

QC Batch: 251730

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30211899001, 30211899002

METHOD BLANK: 1238368

Matrix: Water

Associated Lab Samples: 30211899001, 30211899002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0746 ± 0.0820 (0.155) C:90% T:NA	pCi/L	03/20/17 08:53	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAB0889 Plant Yates

Pace Project No.: 30211899

QC Batch: 251826

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30211899001, 30211899002

METHOD BLANK: 1238972

Matrix: Water

Associated Lab Samples: 30211899001, 30211899002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	1.30 ± 0.578 (0.877) C:37% T:82%	pCi/L	03/17/17 16:51	1c,2c

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAB0889 Plant Yates

Pace Project No.: 30211899

QC Batch: 251828

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30211899003, 30211899004

METHOD BLANK: 1238974

Matrix: Water

Associated Lab Samples: 30211899003, 30211899004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0635 ± 0.343 (0.815) C:78% T:91%	pCi/L	03/18/17 15:44	

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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AAB0889 Plant Yates
Pace Project No.: 30211899

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Act - Activity
Unc - Uncertainty: 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.

BATCH QUALIFIERS

Batch: 251826

[1] The Ra-228 LCS recovery is high and outside of the default acceptance limit for LCS recovery at 136.77%. The upper limit for Ra-228 LCS recovery is 136%. Samples with results below their associated MDC are reportable without qualification.

ANALYTE QUALIFIERS

1c The Ra-228 LCS recovery is high and outside of the default acceptance limit for LCS recovery at 136.77%. The upper limit for Ra-228 LCS recovery is 136%. Samples with results below their associated MDC are reportable without qualification.
2c The Ra-228 MB result is above the associated MDC and RL of 1.0 pCi/L. Sample results are reportable without qualification if they are below their associated MDC. The MB is has been re-ingrowthed and is being re-analyzed on 3/22/2017, along with samples with results greater than their associated MDC.

REPORT OF LABORATORY ANALYSIS

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

Chain of Custody

WO#: 30211899



30211899



Workorder: AAB0889

Workorder Name: Plant Yates

Owner Received Date:

Results Requested By: 3/20/2017

Report To:	Subcontract To:	Requested Analysis									
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200	Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600	Radium 226, 228, Total									

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers					Radium 226, 228, Total	LAB USE ONLY
						HNO3						
1	YGWC-29I	G	2/22/2017 11:05	AAB0889-01	GW	2					X	001
2	YGWC-28I	G	2/22/2017 13:20	AAB0889-02	GW	2					X	002
3	YGWC-27S	G	2/22/2017 15:05	AAB0889-03	W	2					X	003
4	YGWC-27I	G	2/23/2017 10:25	AAB0889-04	GW	2					X	004
5												
6												
7												
8												
9												
10												

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			R Big Pace	2/27/17	0940
2					
3					

Cooler Temperature on Receipt N/A °C
 Custody Seal Y or N
 Received on Ice Y or N
 Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

30211899

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: _____ OF _____

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239 REPORT TO: Lauren Petty REQUESTED COMPLETION DATE: PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR			CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION: 1 - HCl, 56°C 2 - H ₂ SO ₄ , 56°C 3 - HNO ₃ 4 - NaOH, 56°C 5 - NaOH/ZnAc, 58°C 6 - Na ₂ S ₂ O ₈ , 58°C 7 - 56°C not frozen								
ANALYSIS REQUESTED CONTAINER TYPE: P P P P P PRESERVATION: 3 7 3 # of CONTAINERS → 4 4 4 4 Metals App. III & IV (EPA 6020/7470) Cr, Ni, SO ₄ & TDS (EPA 300.D & SM 2540C) Radium 226 & 228 (SW-846 9315/9320)			CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION 1 - HCl, 56°C 2 - H ₂ SO ₄ , 56°C 3 - HNO ₃ 4 - NaOH, 56°C 5 - NaOH/ZnAc, 58°C 6 - Na ₂ S ₂ O ₈ , 58°C 7 - 56°C not frozen MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT REMARKS/ADDITIONAL INFORMATION								
Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME		
2-22-17	1105	GW	✓		Y6WC-29 I	2-24-17 1530	2-24-17 1530	2-24-17 1530	2-24-17 1530		
2-22-17	1320	GW	✓		Y6WC-28 I						
2-22-17	1505	GW	✓		Y6WC-27 S						
2-23-17	1025	GW	✓		Y6WC-27 T						
SAMPLED BY AND TITLE: A. W. Keel (Acc)			RELINQUISHED BY: [Signature]			DATE/TIME: 2-24-17 / 0900		DATE/TIME: 2-24-17 1530		LAB #: AAB0389 Entered into LIS: MR	
RECEIVED BY: [Signature]			RECEIVED BY: [Signature]			DATE/TIME: 2-24-17 1530		DATE/TIME: 2-24-17 1530		CLIENT: OTHER FS ORDER ID:	
RECEIVED BY: [Signature]			RECEIVED BY: [Signature]			DATE/TIME: 2-24-17 1530		DATE/TIME: 2-24-17 1530		CLIENT: OTHER FS ORDER ID:	

Plant Yates COC Ash Ponds

KET

Sample Condition Upon Receipt Pittsburgh

30211899



Client Name: Pace GA Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Tracking #: 6812 5102 6051

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

Thermometer Used N/A Type of Ice: Wet Blue None
Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: RTB 2/27/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X	X		3. <u>you 2/28/17</u>
Sampler Name & Signature on COC:	X	X		4. <u>Signature missing</u>
Sample Labels match COC:	X			5. <u>you 2/28/17</u>
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15. <u>PHC2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>2/27/17 RTB</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:			X	17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>RTB</u> Date: <u>2/27/17</u>

Client Notification/ Resolution:
Person Contacted: _____ Date/Time: _____ Contacted By: _____
Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLLW
Date: 3/14/2017
Worklist: 34512
Matrix: DW

Method Blank Assessment	
MB Sample ID	1238972
MB concentration:	1.303
M/B Counting Uncertainty:	0.529
MB MDC:	0.877
MB Numerical Performance Indicator:	4.83
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Fail*

Laboratory Control Sample Assessment	
LCSID (Y or N)?	Y
LCS34512	3/17/2017
LCS34512	17-005
LCS34512	25.015
LCS34512	0.20
LCS34512	0.830
LCS34512	6.167
LCS34512	0.444
LCS34512	8.435
LCS34512	1.366
LCS34512	3.09
LCS34512	136.77%
LCS34512	111.43%
LCS34512	N/A
LCS34512	Pass

Duplicate Sample Assessment	
Sample I.D.:	LCS34512
Duplicate Sample I.D.:	LCS34512
Sample Result (pCi/L, g, F):	8.435
Sample Duplicate Result (pCi/L, g, F):	1.366
Sample Result Counting Uncertainty (pCi/L, g, F):	6.718
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.109
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	1.913
Duplicate Percent Recoveries:	20.42%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate 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:	

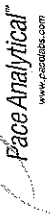
Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
Duplicate Percent Recoveries:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

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

Comments:
*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.
**If all sample results are below MDC, the batch is acceptable, otherwise this batch must be re-prepped due to LCS failure.

Handwritten signature

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
 Analyst: JULY
 Date: 3/13/2017
 Worklist: 34513
 Matrix: DW

Method Blank Assessment	
MB Sample ID	1238974
MB concentration:	-0.064
M/B Counting Uncertainty:	0.343
MB MDC:	0.815
MB Numerical Performance Indicator:	-0.36
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	3/18/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	25.008
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.807
Target Conc. (pCi/L, g, F):	6.198
Uncertainty (Calculated):	0.446
Result (pCi/L, g, F):	4.807
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.605
Numerical Performance Indicator:	-3.63
Percent Recovery:	77.55%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	LCS34513
Duplicate Sample I.D.:	LCS34513
Sample Result (pCi/L, g, F):	4.807
Sample Result Counting Uncertainty (pCi/L, g, F):	0.605
Sample Duplicate Result (pCi/L, g, F):	3.854
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.565
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	2.255
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	22.08%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
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:	

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:	
Sample 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:	

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

Comments:

[Handwritten signature]

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 3/15/2017
Worklist: 34494
Matrix: DW

Method Blank Assessment

MB Sample ID: 1236368
MB concentration: 0.075
MB Counting Uncertainty: 0.081
MB MDC: 0.155
MB Numerical Performance Indicator: 1.80
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCS ID: LCS34494
Count Date: 3/20/2017
Spike ID.: 17-003
Spike Concentration (pCi/mL): 38.230
Volume Used (mL): 0.25
Aliquot Volume (L, g, F): 0.509
Target Conc. (pCi/L, g, F): 18.761
Uncertainty (Calculated): 0.893
Result (pCi/L, g, F): 15.336
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.861
Numerical Performance Indicator: -5.45
Percent Recovery: 81.74%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample ID.: 30211896002
Duplicate Sample ID.: 30211896002DUP
Sample Result (pCi/L, g, F): 0.438
Sample Duplicate Result (pCi/L, g, F): 0.154
Sample Duplicate Result (pCi/L, g, F): 0.382
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.152
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: 0.511
Duplicate RPD: 13.76%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Sample Matrix Spike Control Assessment

Sample Collection Date:
Sample ID:
Sample MS ID:
Sample MSD ID:
Spike ID.:
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):
Spike uncertainty (calculated):
Sample Result:
Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
MS Numerical Performance Indicator:
MSD Numerical Performance Indicator:
MS Percent Recovery:
MS Status vs Numerical Indicator:
MSD Status vs Numerical Indicator:
MS Status vs Recovery:
MSD Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample ID:
Sample MS ID:
Sample MSD ID:
Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

Handwritten signature

Quality Control Sample Performance Assessment



Test: Ra-226
Analyst: LAL
Date: 3/16/2017
Worklist: 34495
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID: 1238369
MB Concentration: -0.002
MB Counting Uncertainty: 0.063
MB MDC: 0.181
MB Numerical Performance Indicator: -0.06
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

Count Date: 3/20/2017
Spike ID: LCS34495
Spike Concentration (pCi/mL): 17.003
Volume Used (mL): 38.230
Aliquot Volume (L, g, F): 0.25
Target Conc. (pCi/L, g, F): 0.501
Uncertainty (Calculated): 19.086
Result (pCi/L, g, F): 16.203
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.961
Numerical Performance Indicator: -4.30
Percent Recovery: 84.90%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30211899003
Duplicate Sample I.D.: 30211899003DUP
Sample Result (pCi/L, g, F): 0.098
Sample Result Counting Uncertainty (pCi/L, g, F): 0.119
Sample Duplicate Result (pCi/L, g, F): 0.123
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.106
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -0.309
Duplicate RPD: 22.69%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

Handwritten signature



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAC0139

March 21, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-34I	AAC0139-01	Ground Water	02/28/17 16:15	03/03/17 14:00
YGWA-3I	AAC0139-02	Ground Water	03/01/17 14:30	03/03/17 14:00
YGWA-18S	AAC0139-03	Ground Water	03/01/17 16:10	03/03/17 14:00
YGWA-18I	AAC0139-04	Ground Water	03/01/17 14:40	03/03/17 14:00
YGWC-32S	AAC0139-05	Ground Water	03/01/17 11:05	03/03/17 14:00
YGWC-32I	AAC0139-06	Ground Water	03/01/17 12:45	03/03/17 14:00
YGWC-33S	AAC0139-07	Ground Water	03/01/17 12:55	03/03/17 14:00
EB-1-3-1-17	AAC0139-08	Water	03/01/17 11:45	03/03/17 14:00
FB-2-3-2-17	AAC0139-09	Water	03/02/17 10:00	03/03/17 14:00
YGWA-3D	AAC0139-10	Ground Water	03/02/17 10:15	03/03/17 14:00
YGWA-1D	AAC0139-11	Ground Water	03/02/17 12:50	03/03/17 14:00
YGWA-1I	AAC0139-12	Ground Water	03/02/17 14:35	03/03/17 14:00
EB-2-3-2-17	AAC0139-13	Water	03/02/17 15:40	03/03/17 14:00
YGWA-6I	AAC0139-14	Ground Water	03/02/17 13:25	03/03/17 14:00
YGWA-17S	AAC0139-15	Ground Water	03/02/17 15:20	03/03/17 14:00
Dup-2	AAC0139-16	Ground Water	03/02/17 00:00	03/03/17 14:00
YGWA-2I	AAC0139-17	Ground Water	03/03/17 11:30	03/03/17 14:00
YGWA-6S	AAC0139-18	Ground Water	03/03/17 10:30	03/03/17 14:00



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Case Narrative

Georgia Power Plant Yates Report AAC0139 3/21/2017
Report revised to include missing analyte (lithium on AAC0139-18, YGWA-6S).



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWC-34I

Lab Number ID: AAC0139-01

Date/Time Sampled: 2/28/2017 4:15:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	563	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 06:56	7030209	RLC
Fluoride	0.24	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 06:56	7030209	RLC
Sulfate	330	20	1.8	mg/L	EPA 300.0		20	03/07/17 17:15	03/09/17 12:23	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Barium	0.0235	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Beryllium	0.0008	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Boron	3.75	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Cadmium	0.0002	0.0010	0.000060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Calcium	98.2	25.0	0.522	mg/L	EPA 6020B		50	03/06/17 16:05	03/08/17 23:10	7030123	CSW
Chromium	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Cobalt	0.0055	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Lead	0.000070	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Molybdenum	0.0289	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Selenium	0.0827	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Thallium	0.0002	0.0010	0.00003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Lithium	0.0031	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:04	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:04	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-3I

Lab Number ID: AAC0139-02

Date/Time Sampled: 3/1/2017 2:30:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	182	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 07:17	7030209	RLC
Fluoride	0.20	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 07:17	7030209	RLC
Sulfate	9.3	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 07:17	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Arsenic	0.0004	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Barium	0.0036	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Boron	0.0063	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Calcium	18.6	2.50	0.0522	mg/L	EPA 6020B		5	03/06/17 16:05	03/09/17 18:30	7030123	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Molybdenum	0.0044	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Lithium	0.0114	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:27	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:07	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-18S

Lab Number ID: AAC0139-03

Date/Time Sampled: 3/1/2017 4:10:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	79	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	6.0	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 07:38	7030209	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 07:38	7030209	RLC
Sulfate	1.6	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 07:38	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Barium	0.0195	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Boron	0.0098	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Calcium	1.26	0.500	0.0104	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Lead	0.0001	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Lithium	0.0029	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:38	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:09	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-18I

Lab Number ID: AAC0139-04

Date/Time Sampled: 3/1/2017 2:40:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	119	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	6.9	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 07:58	7030209	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 07:58	7030209	RLC
Sulfate	1.8	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 07:58	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Barium	0.0275	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Calcium	5.37	0.500	0.0104	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Chromium	0.0012	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Lithium	0.0053	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/08/17 23:50	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:11	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWC-32S

Lab Number ID: AAC0139-05

Date/Time Sampled: 3/1/2017 11:05:00AM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	561	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	15	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 08:19	7030209	RLC
Fluoride	0.22	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 08:19	7030209	RLC
Sulfate	370	20	1.8	mg/L	EPA 300.0		20	03/07/17 17:15	03/09/17 12:44	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Arsenic	0.0008	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Barium	0.0240	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Beryllium	0.0028	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Boron	3.41	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Cadmium	0.0006	0.0010	0.000060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Calcium	111	25.0	0.522	mg/L	EPA 6020B		50	03/06/17 16:05	03/09/17 00:07	7030123	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Cobalt	0.0038	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Lead	0.0002	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Selenium	0.0704	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Thallium	0.00006	0.0010	0.00003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Lithium	0.0012	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:01	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:14	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWC-32I

Lab Number ID: AAC0139-06

Date/Time Sampled: 3/1/2017 12:45:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	772	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	13	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 08:40	7030209	RLC
Fluoride	0.20	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 08:40	7030209	RLC
Sulfate	480	20	1.8	mg/L	EPA 300.0		20	03/07/17 17:15	03/09/17 13:06	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Barium	0.0275	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Boron	3.58	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Cadmium	0.0009	0.0010	0.000060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Calcium	96.7	25.0	0.522	mg/L	EPA 6020B		50	03/06/17 16:05	03/09/17 00:18	7030123	CSW
Chromium	0.0006	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Cobalt	0.0016	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Lead	0.00006	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Selenium	0.0042	0.0100	0.0014	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Thallium	0.00005	0.0010	0.00003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Lithium	0.0036	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:13	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:16	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWC-33S

Lab Number ID: AAC0139-07

Date/Time Sampled: 3/1/2017 12:55:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1160	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	5.5	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 09:42	7030209	RLC
Fluoride	0.33	0.30	0.004	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 09:42	7030209	RLC
Sulfate	850	20	1.8	mg/L	EPA 300.0		20	03/07/17 17:15	03/09/17 13:28	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Arsenic	0.0041	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Barium	0.0142	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Beryllium	0.0150	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Boron	8.61	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Cadmium	0.0031	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Calcium	125	25.0	0.522	mg/L	EPA 6020B		50	03/06/17 16:05	03/09/17 00:41	7030123	CSW
Chromium	0.0014	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Cobalt	0.0125	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Lead	0.0020	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Selenium	0.0151	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Thallium	0.0003	0.0010	0.00003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Lithium	0.0219	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:36	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:18	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: EB-1-3-1-17

Lab Number ID: AAC0139-08

Date/Time Sampled: 3/1/2017 11:45:00AM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 10:02	7030209	RLC
Fluoride	0.05	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 10:02	7030209	RLC
Sulfate	0.32	1.0	0.09	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 10:02	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Boron	0.0090	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Calcium	0.0360	0.500	0.0104	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Lead	0.00005	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:47	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:21	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: FB-2-3-2-17

Lab Number ID: AAC0139-09

Date/Time Sampled: 3/2/2017 10:00:00AM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 17:26	7030209	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 17:26	7030209	RLC
Sulfate	0.10	1.0	0.09	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 17:26	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Calcium	0.0178	0.500	0.0104	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:53	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:23	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-3D

Lab Number ID: AAC0139-10

Date/Time Sampled: 3/2/2017 10:15:00AM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	117	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 17:48	7030209	RLC
Fluoride	0.48	0.30	0.004	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 17:48	7030209	RLC
Sulfate	4.4	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 17:48	7030209	RLC
Metals, Total											
Antimony	0.0008	0.0030	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Barium	0.0090	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Boron	0.0084	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Calcium	27.5	25.0	0.522	mg/L	EPA 6020B		50	03/06/17 16:05	03/09/17 01:04	7030123	CSW
Chromium	0.0006	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Lead	0.0002	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Molybdenum	0.0103	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Lithium	0.0185	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 00:58	7030123	CSW
Mercury	0.00006	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/07/17 10:45	03/07/17 14:25	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-1D

Lab Number ID: AAC0139-11

Date/Time Sampled: 3/2/2017 12:50:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	98	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	1.0	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 18:30	7030209	RLC
Fluoride	0.09	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 18:30	7030209	RLC
Sulfate	4.6	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 18:30	7030209	RLC
Metals, Total											
Antimony	0.0004	0.0030	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Arsenic	0.0014	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Barium	0.0071	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Boron	0.0080	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Calcium	11.0	2.50	0.0522	mg/L	EPA 6020B		5	03/06/17 16:05	03/09/17 18:36	7030123	CSW
Chromium	0.0009	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Lead	0.0001	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Molybdenum	0.0099	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Lithium	0.0159	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:10	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:33	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-1I

Lab Number ID: AAC0139-12

Date/Time Sampled: 3/2/2017 2:35:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	61	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	1.3	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 18:51	7030209	RLC
Fluoride	0.06	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 18:51	7030209	RLC
Sulfate	7.4	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 18:51	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Barium	0.0112	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Calcium	2.57	0.500	0.0104	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Cobalt	0.0022	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Molybdenum	0.0100	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Lithium	0.0025	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:21	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:35	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: EB-2-3-2-17

Lab Number ID: AAC0139-13

Date/Time Sampled: 3/2/2017 3:40:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 19:13	7030209	RLC
Fluoride	0.05	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 19:13	7030209	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 19:13	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Calcium	0.0324	0.500	0.0104	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:44	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:37	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-6I

Lab Number ID: AAC0139-14

Date/Time Sampled: 3/2/2017 1:25:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	165	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	6.6	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 19:34	7030209	RLC
Fluoride	0.05	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 19:34	7030209	RLC
Sulfate	51	5.0	0.46	mg/L	EPA 300.0		5	03/07/17 17:15	03/09/17 13:50	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Arsenic	0.0010	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Barium	0.0284	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Boron	0.0614	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Calcium	9.27	0.500	0.0104	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Chromium	0.0006	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Lead	0.0004	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Molybdenum	0.0010	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Selenium	0.0018	0.0100	0.0014	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Lithium	0.0079	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 01:50	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:40	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-17S

Lab Number ID: AAC0139-15

Date/Time Sampled: 3/2/2017 3:20:00PM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	77	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	4.8	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 19:55	7030209	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/08/17 19:55	7030209	RLC
Sulfate	5.0	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/08/17 19:55	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Barium	0.0155	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Beryllium	0.00008	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Boron	0.0095	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Calcium	2.15	0.500	0.0104	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Chromium	0.0010	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Lead	0.00008	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Selenium	0.0017	0.0100	0.0014	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:01	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:42	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: Dup-2

Lab Number ID: AAC0139-16

Date/Time Sampled: 3/2/2017 12:00:00AM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	90	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	4.5	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/09/17 04:47	7030209	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/09/17 04:47	7030209	RLC
Sulfate	4.7	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/09/17 04:47	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Barium	0.0138	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Beryllium	0.00008	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Boron	0.0089	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Calcium	2.06	0.500	0.0104	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Chromium	0.0012	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:13	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:45	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AAC0139-17

Date/Time Sampled: 3/3/2017 11:30:00AM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	156	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/09/17 05:08	7030209	RLC
Fluoride	0.11	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/09/17 05:08	7030209	RLC
Sulfate	8.8	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/09/17 05:08	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Arsenic	0.0016	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Barium	0.0046	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Calcium	25.1	25.0	0.522	mg/L	EPA 6020B		50	03/06/17 16:05	03/09/17 02:30	7030123	CSW
Chromium	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Molybdenum	0.0049	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Lithium	0.0013	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:24	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:47	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Project: CCR Event

Client ID: YGWA-6S

Lab Number ID: AAC0139-18

Date/Time Sampled: 3/3/2017 10:30:00AM

Date/Time Received: 3/3/2017 2:00:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	97	25	10	mg/L	SM 2540 C		1	03/06/17 15:40	03/06/17 15:40	7030145	JPT
Inorganic Anions											
Chloride	2.7	0.25	0.01	mg/L	EPA 300.0		1	03/07/17 17:15	03/09/17 05:29	7030209	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	03/07/17 17:15	03/09/17 05:29	7030209	RLC
Sulfate	29	1.0	0.09	mg/L	EPA 300.0		1	03/07/17 17:15	03/09/17 05:29	7030209	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Arsenic	ND	0.0100	0.0004	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Barium	0.0212	0.0100	0.0003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Boron	0.0589	0.0400	0.0060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Calcium	5.67	0.500	0.0104	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 18:41	7030123	CSW
Chromium	0.0070	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Molybdenum	0.0004	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/06/17 16:05	03/09/17 02:47	7030123	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/07/17 10:45	03/07/17 14:49	7030166	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030145 - SM 2540 C											
Blank (7030145-BLK1)						Prepared & Analyzed: 03/06/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7030145-BS1)						Prepared & Analyzed: 03/06/17					
Total Dissolved Solids	395	25	10	mg/L	400.00		99	84-108			
Duplicate (7030145-DUP1)						Source: AAC0139-08 Prepared & Analyzed: 03/06/17					
Total Dissolved Solids	14	25	10	mg/L		ND			15	10	J
Duplicate (7030145-DUP2)						Source: AAC0139-11 Prepared & Analyzed: 03/06/17					
Total Dissolved Solids	84	25	10	mg/L		98			15	10	QR-03



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030209 - EPA 300.0											
Blank (7030209-BLK1)											
						Prepared: 03/07/17 Analyzed: 03/08/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7030209-BS1)											
						Prepared: 03/07/17 Analyzed: 03/08/17					
Chloride	9.43	0.25	0.01	mg/L	10.010		94	90-110			
Fluoride	9.82	0.30	0.004	mg/L	10.020		98	90-110			
Sulfate	9.45	1.0	0.09	mg/L	10.020		94	90-110			
Matrix Spike (7030209-MS1)											
						Source: AAC0139-06					
						Prepared: 03/07/17 Analyzed: 03/08/17					
Chloride	21.9	0.25	0.01	mg/L	10.010	13.0	90	90-110			
Fluoride	10.7	0.30	0.004	mg/L	10.020	0.20	104	90-110			
Sulfate	611	1.0	0.09	mg/L	10.020	665	NR	90-110			QM-02
Matrix Spike (7030209-MS2)											
						Source: AAC0139-10					
						Prepared: 03/07/17 Analyzed: 03/08/17					
Chloride	11.1	0.25	0.01	mg/L	10.010	1.19	99	90-110			
Fluoride	10.8	0.30	0.004	mg/L	10.020	0.48	103	90-110			
Sulfate	14.1	1.0	0.09	mg/L	10.020	4.43	97	90-110			
Matrix Spike Dup (7030209-MSD1)											
						Source: AAC0139-06					
						Prepared: 03/07/17 Analyzed: 03/08/17					
Chloride	21.9	0.25	0.01	mg/L	10.010	13.0	89	90-110	0.3	15	QM-05
Fluoride	10.6	0.30	0.004	mg/L	10.020	0.20	104	90-110	0.6	15	
Sulfate	611	1.0	0.09	mg/L	10.020	665	NR	90-110	0.05	15	QM-02



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7030123 - EPA 3005A

Blank (7030123-BLK1)

Prepared: 03/06/17 Analyzed: 03/08/17

Antimony	ND	0.0030	0.0003	mg/L							
Arsenic	ND	0.0050	0.0004	mg/L							
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00007	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.000060	mg/L							
Calcium	ND	0.500	0.0104	mg/L							
Chromium	ND	0.0100	0.0003	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0002	mg/L							
Lead	ND	0.0050	0.00005	mg/L							
Molybdenum	ND	0.0100	0.0002	mg/L							
Nickel	ND	0.0100	0.0003	mg/L							
Selenium	ND	0.0100	0.0014	mg/L							
Silver	ND	0.0100	0.0003	mg/L							
Thallium	ND	0.0010	0.00003	mg/L							
Vanadium	ND	0.0100	0.0014	mg/L							
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0011	mg/L							

LCS (7030123-BS1)

Prepared: 03/06/17 Analyzed: 03/08/17

Antimony	0.109	0.0030	0.0003	mg/L	0.10000		109	80-120			
Arsenic	0.103	0.0050	0.0004	mg/L	0.10000		103	80-120			
Barium	0.108	0.0100	0.0003	mg/L	0.10000		108	80-120			
Beryllium	0.106	0.0030	0.00007	mg/L	0.10000		106	80-120			
Boron	1.11	0.0400	0.0060	mg/L	1.0000		111	80-120			
Cadmium	0.104	0.0010	0.000060	mg/L	0.10000		104	80-120			
Calcium	1.02	0.500	0.0104	mg/L	1.0000		102	80-120			
Chromium	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Cobalt	0.0979	0.0100	0.0005	mg/L	0.10000		98	80-120			
Copper	0.0988	0.0250	0.0002	mg/L	0.10000		99	80-120			
Lead	0.102	0.0050	0.00005	mg/L	0.10000		102	80-120			
Molybdenum	0.107	0.0100	0.0002	mg/L	0.10000		107	80-120			
Nickel	0.0994	0.0100	0.0003	mg/L	0.10000		99	80-120			
Selenium	0.103	0.0100	0.0014	mg/L	0.10000		103	80-120			
Silver	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Thallium	0.105	0.0010	0.00003	mg/L	0.10000		105	80-120			
Vanadium	0.103	0.0100	0.0014	mg/L	0.10000		103	80-120			
Zinc	0.0976	0.0100	0.0013	mg/L	0.10000		98	80-120			
Lithium	0.110	0.0500	0.0011	mg/L	0.10000		110	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030123 - EPA 3005A											
Matrix Spike (7030123-MS1)			Source: AAC0139-01				Prepared: 03/06/17 Analyzed: 03/08/17				
Antimony	0.110	0.0030	0.0003	mg/L	0.10000	ND	110	75-125			
Arsenic	0.112	0.0050	0.0004	mg/L	0.10000	ND	112	75-125			
Barium	0.132	0.0100	0.0003	mg/L	0.10000	0.0235	108	75-125			
Beryllium	0.105	0.0030	0.00007	mg/L	0.10000	0.0008	104	75-125			
Boron	4.83	0.0400	0.0060	mg/L	1.0000	3.75	108	75-125			
Cadmium	0.109	0.0010	0.000060	mg/L	0.10000	0.0002	109	75-125			
Calcium	101	25.0	0.522	mg/L	1.0000	98.2	327	75-125			QM-02
Chromium	0.110	0.0100	0.0003	mg/L	0.10000	0.0005	109	75-125			
Cobalt	0.113	0.0100	0.0005	mg/L	0.10000	0.0055	107	75-125			
Copper	0.103	0.0250	0.0002	mg/L	0.10000	0.0041	99	75-125			
Lead	0.103	0.0050	0.00005	mg/L	0.10000	0.000070	103	75-125			
Molybdenum	0.142	0.0100	0.0002	mg/L	0.10000	0.0289	113	75-125			
Nickel	0.107	0.0100	0.0003	mg/L	0.10000	0.0029	104	75-125			
Selenium	0.192	0.0100	0.0014	mg/L	0.10000	0.0827	109	75-125			
Silver	0.104	0.0100	0.0003	mg/L	0.10000	ND	104	75-125			
Thallium	0.106	0.0010	0.00003	mg/L	0.10000	0.0002	106	75-125			
Vanadium	0.113	0.0100	0.0014	mg/L	0.10000	ND	113	75-125			
Zinc	0.110	0.0100	0.0013	mg/L	0.10000	0.0074	103	75-125			
Lithium	0.107	0.0500	0.0011	mg/L	0.10000	0.0031	104	75-125			
Matrix Spike Dup (7030123-MSD1)			Source: AAC0139-01				Prepared: 03/06/17 Analyzed: 03/08/17				
Antimony	0.109	0.0030	0.0003	mg/L	0.10000	ND	109	75-125	0.6	20	
Arsenic	0.108	0.0050	0.0004	mg/L	0.10000	ND	108	75-125	3	20	
Barium	0.126	0.0100	0.0003	mg/L	0.10000	0.0235	102	75-125	5	20	
Beryllium	0.0993	0.0030	0.00007	mg/L	0.10000	0.0008	99	75-125	5	20	
Boron	4.56	0.0400	0.0060	mg/L	1.0000	3.75	81	75-125	6	20	
Cadmium	0.109	0.0010	0.000060	mg/L	0.10000	0.0002	109	75-125	0.01	20	
Calcium	97.6	25.0	0.522	mg/L	1.0000	98.2	NR	75-125	4	20	QM-02
Chromium	0.109	0.0100	0.0003	mg/L	0.10000	0.0005	109	75-125	0.4	20	
Cobalt	0.109	0.0100	0.0005	mg/L	0.10000	0.0055	103	75-125	3	20	
Copper	0.105	0.0250	0.0002	mg/L	0.10000	0.0041	101	75-125	2	20	
Lead	0.103	0.0050	0.00005	mg/L	0.10000	0.000070	103	75-125	0.2	20	
Molybdenum	0.135	0.0100	0.0002	mg/L	0.10000	0.0289	106	75-125	5	20	
Nickel	0.111	0.0100	0.0003	mg/L	0.10000	0.0029	108	75-125	4	20	
Selenium	0.182	0.0100	0.0014	mg/L	0.10000	0.0827	99	75-125	5	20	
Silver	0.0992	0.0100	0.0003	mg/L	0.10000	ND	99	75-125	4	20	
Thallium	0.107	0.0010	0.00003	mg/L	0.10000	0.0002	107	75-125	1	20	
Vanadium	0.116	0.0100	0.0014	mg/L	0.10000	ND	116	75-125	3	20	
Zinc	0.114	0.0100	0.0013	mg/L	0.10000	0.0074	107	75-125	3	20	
Lithium	0.105	0.0500	0.0011	mg/L	0.10000	0.0031	102	75-125	2	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030123 - EPA 3005A											
Post Spike (7030123-PS1)			Source: AAC0139-01			Prepared: 03/06/17 Analyzed: 03/08/17					
Antimony	112			ug/L	100.00	0.119	112	80-120			
Arsenic	113			ug/L	100.00	0.279	113	80-120			
Barium	135			ug/L	100.00	23.5	111	80-120			
Beryllium	99.6			ug/L	100.00	0.797	99	80-120			
Boron	4490			ug/L	1000.0	3750	73	80-120			QM-02
Cadmium	107			ug/L	100.00	0.196	106	80-120			
Calcium	100000			ug/L	1000.0	98200	202	80-120			QM-02
Chromium	105			ug/L	100.00	0.507	104	80-120			
Cobalt	109			ug/L	100.00	5.46	103	80-120			
Copper	99.2			ug/L	100.00	4.11	95	80-120			
Lead	104			ug/L	100.00	0.0700	103	80-120			
Molybdenum	140			ug/L	100.00	28.9	112	80-120			
Nickel	107			ug/L	100.00	2.86	104	80-120			
Selenium	193			ug/L	100.00	82.7	111	80-120			
Silver	104			ug/L	100.00	0.0228	104	80-120			
Thallium	109			ug/L	100.00	0.243	108	80-120			
Vanadium	109			ug/L	100.00	-0.363	109	80-120			
Zinc	112			ug/L	100.00	7.40	105	80-120			
Lithium	100			ug/L	100.00	3.06	97	80-120			

Batch 7030166 - EPA 7470A

Blank (7030166-BLK1)					Prepared & Analyzed: 03/07/17						
Mercury	0.00008	0.00050	0.000041	mg/L							J
LCS (7030166-BS1)					Prepared & Analyzed: 03/07/17						
Mercury	0.00246	0.00050	0.000041	mg/L	2.5000E-3		98	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Report No.: AAC0139

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030166 - EPA 7470A											
Duplicate (7030166-DUP1)			Source: AAC0043-02RE1			Prepared & Analyzed: 03/07/17					
Mercury	0.00070	0.00050	0.000041	mg/L		0.00035			67	20	QR-01
Duplicate (7030166-DUP2)			Source: AAC0043-03RE1			Prepared & Analyzed: 03/07/17					
Mercury	0.00049	0.00050	0.000041	mg/L		0.00044			11	20	J
Matrix Spike (7030166-MS1)			Source: AAC0139-02			Prepared & Analyzed: 03/07/17					
Mercury	0.00240	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125			
Matrix Spike Dup (7030166-MSD1)			Source: AAC0139-02			Prepared & Analyzed: 03/07/17					
Mercury	0.00243	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125	1	20	
Post Spike (7030166-PS1)			Source: AAC0139-02			Prepared & Analyzed: 03/07/17					
Mercury	1.61			ug/L	1.6667	0.0130	96	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 21, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QR-01** RPD was outside acceptance limits due to sample concentrations near or below the reporting limit.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239

REPORT TO: Lauren Petty
CC: Maria Pacilla
HEALTH: Heath McCorkle
REQUESTED COMPLETION DATE: PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

Collection DATE	Collection TIME	MATRIX CODE*	GRA B	SAMPLE IDENTIFICATION	ANALYSIS REQUESTED		CONTAINER TYPE	PRESERVATION
					CL. F. SO. & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-646 9315/9320)		
2-26-17	1615	GW	✓	Y6WC-34I	1	2	P - PLASTIC	1 - HCl, ≤6°C
3-1-17	1430	GW	✓	Y6WA-3I	1	2	A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C
3-1-17	1610	GW	✓	Y6WA-18S	1	2	G - CLEAR GLASS	3 - HNO ₃
3-1-17	1440	GW	✓	Y6WA-18I	1	2	V - VOA VIAL	4 - NaOH, ≤6°C
3-1-17	1105	GW	✓	Y6WC-32S	1	4	S - STERILE	5 - NaOH/ZnAc, ≤6°C
3-1-17	1245	GW	✓	Y6WC-32I	1	2	O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C
3-1-17	1255	GW	✓	Y6WC-33S	1	2		7 - ≤6°C not frozen
3-1-17	1145	W	✓	EB-1-3-1-17	1	2		

RELINQUISHED BY: <i>gpc</i>	DATE/TIME: 3-3-17 1400
RELINQUISHED BY:	DATE/TIME:
SAMPLE SHIPPED VIA: UPS	COURIER
OTHER FS	

LAB #:
Entered into LIMS:
Tracking #:

Plant Yates COC Ash Ponds



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME:		ADDRESS/PHONE NUMBER/FAX NUMBER:		PRESERVATION					
Georgia Power		241 Ralph McGill Blvd SE B10185		1 - HCl, ≤6°C					
Atlanta, GA 30308		404-506-7239		2 - H ₂ SO ₄ , ≤6°C					
REPORT TO:		CC:		3 - HNO ₃					
Lauren Petty		Maria Padilla		4 - NaOH, ≤6°C					
HEALTH: Health McCorkle		PO #:		5 - NaOH/NaAc, ≤6°C					
REQUESTED COMPLETION DATE:		laburch@southernmco.com		6 - Na ₂ S ₂ O ₃ , ≤6°C					
PROJECT NAME/STATE:		Plant Yates AP		7 - ≤6°C not frozen					
PROJECT #:		Phase 2 CCR		*MATRIX CODES:					
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	SAMPLE IDENTIFICATION	CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESERVATION	
3-2-17	1000	W	✓	FB-2-3-2-17	4	Metals App. III & IV (EPA 60207/470)	P - PLASTIC	1 - HCl, ≤6°C	
3-2-17	1015	GW	✓	Y6WA-3D	4	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)	A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C	
3-2-17	1250	GW	✓	Y6WA-1D	3	Radium 226 & 228 (SW-646 9315/9320)	G - CLEAR GLASS	3 - HNO ₃	
3-2-17	1435	GW	✓	Y6WA-1E	3		V - VOA VIAL	4 - NaOH, ≤6°C	
3-2-17	1540	W	✓	EB-2-3-2-17	3		S - STERILE	5 - NaOH/NaAc, ≤6°C	
3-2-17	1325	GW	✓	Y6WA-6E	4		O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C	
3-2-17	1520	GW	✓	Y6WA-17S	4			7 - ≤6°C not frozen	
3-2-17	—	GW	✓	PUP-Z	3				
3-3-17	1130	GW	✓	Y6WA-2E	3				
3-3-17	1030	GW	✓	Y6WA-6S	4				
REMARKS/ADDITIONAL INFORMATION					LAB #:				
					AACC0139				
					Entered into LIS:				
					Tracking #:				
					MR				

Plant Yates C0C Ash Ponds



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 3/6/2017 7:45:18AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 03/03/17 14:00

Work Order: AAC0139

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 18

#Containers: 69

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

March 24, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAC0139 Plant Yates
Pace Project No.: 30212543

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on March 06, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAC0139 Plant Yates
Pace Project No.: 30212543

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAC0139 Plant Yates

Pace Project No.: 30212543

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30212543001	YGWC-34I	Water	02/28/17 16:15	03/06/17 09:00
30212543002	YGWA-3I	Water	03/01/17 14:30	03/06/17 09:00
30212543003	YGWA-18S	Water	03/01/17 16:10	03/06/17 09:00
30212543004	YGWA-18I	Water	03/01/17 14:40	03/06/17 09:00
30212543005	YGWC-32S	Water	03/01/17 11:05	03/06/17 09:00
30212543006	YGWC-32I	Water	03/01/17 12:45	03/06/17 09:00
30212543007	YGWC-33S	Water	03/01/17 12:55	03/06/17 09:00
30212543008	EB-1-3-1-17	Water	03/01/17 11:45	03/06/17 09:00
30212543009	FB-2-3-2-17	Water	03/02/17 10:00	03/06/17 09:00
30212543010	YGWA-3D	Water	03/02/17 10:15	03/06/17 09:00
30212543011	YGWA-1D	Water	03/02/17 12:50	03/06/17 09:00
30212543012	YGWA-1I	Water	03/02/17 14:35	03/06/17 09:00
30212543013	EB-2-3-2-17	Water	03/02/17 15:40	03/06/17 09:00
30212543014	YGWA-6I	Water	03/02/17 13:25	03/06/17 09:00
30212543015	YGWA-17S	Water	03/02/17 15:20	03/06/17 09:00
30212543016	Dup-2	Water	03/02/17 00:01	03/06/17 09:00
30212543017	YGWA-2I	Water	03/03/17 11:30	03/06/17 09:00
30212543018	YGWA-6S	Water	03/03/17 10:30	03/06/17 09:00

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAC0139 Plant Yates
Pace Project No.: 30212543

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30212543001	YGWC-34I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543002	YGWA-3I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543003	YGWA-18S	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543004	YGWA-18I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543005	YGWC-32S	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543006	YGWC-32I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543007	YGWC-33S	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543008	EB-1-3-1-17	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543009	FB-2-3-2-17	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543010	YGWA-3D	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543011	YGWA-1D	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543012	YGWA-1I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543013	EB-2-3-2-17	EPA 9315	LAL	1

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAC0139 Plant Yates

Pace Project No.: 30212543

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543014	YGWA-6I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543015	YGWA-17S	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543016	Dup-2	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543017	YGWA-2I	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212543018	YGWA-6S	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0139 Plant Yates

Pace Project No.: 30212543

Sample: YGWC-341		Lab ID: 30212543001	Collected: 02/28/17 16:15	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.121 ± 0.0952 (0.144)		pCi/L	03/20/17 10:26	13982-63-3	
		C:97% T:NA					
Radium-228	EPA 9320	0.310 ± 0.418 (0.891)		pCi/L	03/18/17 15:47	15262-20-1	
		C:61% T:85%					
Total Radium	Total Radium Calculation	0.431 ± 0.513 (1.04)		pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-3I		Lab ID: 30212543002	Collected: 03/01/17 14:30	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.406 ± 0.172 (0.169)		pCi/L	03/20/17 10:26	13982-63-3	
		C:94% T:NA					
Radium-228	EPA 9320	0.471 ± 0.408 (0.822)		pCi/L	03/18/17 15:47	15262-20-1	
		C:72% T:88%					
Total Radium	Total Radium Calculation	0.877 ± 0.580 (0.991)		pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-18S		Lab ID: 30212543003	Collected: 03/01/17 16:10	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0293 ± 0.0650 (0.154)		pCi/L	03/20/17 10:26	13982-63-3	
		C:95% T:NA					
Radium-228	EPA 9320	0.173 ± 0.362 (0.800)		pCi/L	03/18/17 15:47	15262-20-1	
		C:72% T:83%					
Total Radium	Total Radium Calculation	0.202 ± 0.427 (0.954)		pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-18I		Lab ID: 30212543004	Collected: 03/01/17 14:40	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0547 ± 0.0774 (0.161)		pCi/L	03/20/17 10:12	13982-63-3	
		C:93% T:NA					
Radium-228	EPA 9320	0.340 ± 0.384 (0.805)		pCi/L	03/18/17 15:47	15262-20-1	
		C:77% T:81%					
Total Radium	Total Radium Calculation	0.395 ± 0.461 (0.966)		pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWC-32S		Lab ID: 30212543005	Collected: 03/01/17 11:05	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.248 ± 0.157 (0.261)		pCi/L	03/20/17 10:12	13982-63-3	
		C:97% T:NA					
Radium-228	EPA 9320	0.0529 ± 0.337 (0.773)		pCi/L	03/18/17 15:48	15262-20-1	
		C:81% T:82%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0139 Plant Yates
Pace Project No.: 30212543

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-32S Lab ID: 30212543005 Collected: 03/01/17 11:05 Received: 03/06/17 09:00 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.301 ± 0.494 (1.03)	pCi/L	03/24/17 09:50	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-32I Lab ID: 30212543006 Collected: 03/01/17 12:45 Received: 03/06/17 09:00 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.157 ± 0.112 (0.165) C:95% T:NA	pCi/L	03/20/17 10:12	13982-63-3	
Radium-228	EPA 9320	0.660 ± 0.402 (0.747) C:76% T:88%	pCi/L	03/18/17 15:48	15262-20-1	
Total Radium	Total Radium Calculation	0.817 ± 0.514 (0.912)	pCi/L	03/24/17 09:50	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-33S Lab ID: 30212543007 Collected: 03/01/17 12:55 Received: 03/06/17 09:00 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.260 ± 0.144 (0.204) C:98% T:NA	pCi/L	03/20/17 10:12	13982-63-3	
Radium-228	EPA 9320	0.866 ± 0.478 (0.845) C:63% T:86%	pCi/L	03/18/17 15:48	15262-20-1	
Total Radium	Total Radium Calculation	1.13 ± 0.622 (1.05)	pCi/L	03/24/17 09:50	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-1-3-1-17 Lab ID: 30212543008 Collected: 03/01/17 11:45 Received: 03/06/17 09:00 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0631 ± 0.0935 (0.203) C:100% T:NA	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	0.480 ± 0.497 (1.03) C:53% T:80%	pCi/L	03/22/17 11:39	15262-20-1	
Total Radium	Total Radium Calculation	0.543 ± 0.591 (1.23)	pCi/L	03/24/17 09:50	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: FB-2-3-2-17 Lab ID: 30212543009 Collected: 03/02/17 10:00 Received: 03/06/17 09:00 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0233 ± 0.0830 (0.209) C:98% T:NA	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	-0.598 ± 0.516 (1.34) C:43% T:77%	pCi/L	03/22/17 11:39	15262-20-1	
Total Radium	Total Radium Calculation	0.0233 ± 0.599 (1.55)	pCi/L	03/24/17 09:50	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0139 Plant Yates

Pace Project No.: 30212543

Sample: YGWA-3D		Lab ID: 30212543010	Collected: 03/02/17 10:15	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.06 ± 0.297 (0.188)		pCi/L	03/20/17 10:13	13982-63-3	
		C:98% T:NA					
Radium-228	EPA 9320	2.07 ± 0.672 (0.906)		pCi/L	03/22/17 11:39	15262-20-1	
		C:63% T:86%					
Total Radium	Total Radium Calculation	3.13 ± 0.969 (1.09)		pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-1D		Lab ID: 30212543011	Collected: 03/02/17 12:50	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0771 ± 0.108 (0.233)		pCi/L	03/20/17 10:13	13982-63-3	
		C:97% T:NA					
Radium-228	EPA 9320	0.174 ± 0.394 (0.874)		pCi/L	03/22/17 11:39	15262-20-1	
		C:63% T:82%					
Total Radium	Total Radium Calculation	0.251 ± 0.502 (1.11)		pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-1I		Lab ID: 30212543012	Collected: 03/02/17 14:35	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0316 ± 0.0567 (0.204)		pCi/L	03/20/17 10:13	13982-63-3	
		C:97% T:NA					
Radium-228	EPA 9320	0.504 ± 0.478 (0.966)		pCi/L	03/22/17 11:40	15262-20-1	
		C:52% T:76%					
Total Radium	Total Radium Calculation	0.504 ± 0.535 (1.17)		pCi/L	03/24/17 09:50	7440-14-4	

Sample: EB-2-3-2-17		Lab ID: 30212543013	Collected: 03/02/17 15:40	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.00746 ± 0.0781 (0.226)		pCi/L	03/20/17 10:13	13982-63-3	
		C:87% T:NA					
Radium-228	EPA 9320	0.518 ± 0.434 (0.862)		pCi/L	03/22/17 11:40	15262-20-1	
		C:55% T:88%					
Total Radium	Total Radium Calculation	0.518 ± 0.512 (1.09)		pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-6I		Lab ID: 30212543014	Collected: 03/02/17 13:25	Received: 03/06/17 09:00	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.38 ± 0.352 (0.228)		pCi/L	03/20/17 10:13	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	0.0193 ± 0.376 (0.883)		pCi/L	03/22/17 11:40	15262-20-1	
		C:58% T:76%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0139 Plant Yates
Pace Project No.: 30212543

Sample: YGWA-6I		Lab ID: 30212543014	Collected: 03/02/17 13:25	Received: 03/06/17 09:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	1.40 ± 0.728 (1.11)	pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-17S		Lab ID: 30212543015	Collected: 03/02/17 15:20	Received: 03/06/17 09:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.103 ± 0.132 (0.284) C:97% T:NA	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	0.643 ± 0.403 (0.737) C:68% T:76%	pCi/L	03/22/17 11:40	15262-20-1	
Total Radium	Total Radium Calculation	0.746 ± 0.535 (1.02)	pCi/L	03/24/17 09:50	7440-14-4	

Sample: Dup-2		Lab ID: 30212543016	Collected: 03/02/17 00:01	Received: 03/06/17 09:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Comments: • Low volume, client notified. Container arrived leaking.						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0639 ± 0.165 (0.360) C:97% T:NA	pCi/L	03/20/17 10:14	13982-63-3	
Radium-228	EPA 9320	0.502 ± 0.458 (0.928) C:94% T:81%	pCi/L	03/22/17 11:40	15262-20-1	
Total Radium	Total Radium Calculation	0.566 ± 0.623 (1.29)	pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-2I		Lab ID: 30212543017	Collected: 03/03/17 11:30	Received: 03/06/17 09:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.208 ± 0.140 (0.217) C:83% T:NA	pCi/L	03/20/17 10:14	13982-63-3	
Radium-228	EPA 9320	0.240 ± 0.345 (0.739) C:67% T:75%	pCi/L	03/22/17 11:40	15262-20-1	
Total Radium	Total Radium Calculation	0.448 ± 0.485 (0.956)	pCi/L	03/24/17 09:50	7440-14-4	

Sample: YGWA-6S		Lab ID: 30212543018	Collected: 03/03/17 10:30	Received: 03/06/17 09:00	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.310 ± 0.163 (0.216) C:88% T:NA	pCi/L	03/20/17 10:14	13982-63-3	
Radium-228	EPA 9320	0.153 ± 0.406 (0.910) C:63% T:74%	pCi/L	03/22/17 11:40	15262-20-1	
Total Radium	Total Radium Calculation	0.463 ± 0.569 (1.13)	pCi/L	03/24/17 09:50	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0139 Plant Yates

Pace Project No.: 30212543

QC Batch: 251731

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30212543001, 30212543002, 30212543003, 30212543004, 30212543005, 30212543006, 30212543007

METHOD BLANK: 1238369

Matrix: Water

Associated Lab Samples: 30212543001, 30212543002, 30212543003, 30212543004, 30212543005, 30212543006, 30212543007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00178 ± 0.0626 (0.181) C:99% T:NA	pCi/L	03/20/17 08:36	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0139 Plant Yates
Pace Project No.: 30212543

QC Batch:	251732	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30212543008, 30212543009, 30212543010, 30212543011, 30212543012, 30212543013, 30212543014, 30212543015, 30212543016, 30212543017, 30212543018		

METHOD BLANK:	1238370	Matrix:	Water
Associated Lab Samples:	30212543008, 30212543009, 30212543010, 30212543011, 30212543012, 30212543013, 30212543014, 30212543015, 30212543016, 30212543017, 30212543018		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00606 ± 0.0894 (0.244) C:99% T:NA	pCi/L	03/20/17 10:13	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0139 Plant Yates

Pace Project No.: 30212543

QC Batch:	251829	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30212543008, 30212543009, 30212543010, 30212543011, 30212543012, 30212543013, 30212543014, 30212543015, 30212543016, 30212543017, 30212543018		

METHOD BLANK:	1238975	Matrix:	Water
Associated Lab Samples:	30212543008, 30212543009, 30212543010, 30212543011, 30212543012, 30212543013, 30212543014, 30212543015, 30212543016, 30212543017, 30212543018		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.280 ± 0.356 (0.724) C:50% T:80%	pCi/L	03/22/17 11:28	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0139 Plant Yates

Pace Project No.: 30212543

QC Batch: 251828

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30212543001, 30212543002, 30212543003, 30212543004, 30212543005, 30212543006, 30212543007

METHOD BLANK: 1238974

Matrix: Water

Associated Lab Samples: 30212543001, 30212543002, 30212543003, 30212543004, 30212543005, 30212543006, 30212543007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0635 ± 0.343 (0.815) C:78% T:91%	pCi/L	03/18/17 15:44	

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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AAC0139 Plant Yates

Pace Project No.: 30212543

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30212543



30212543

Chain of Custody



Results Requested By: 3/28/2017

Owner Received Date:

Workorder Name: Plant Yates

Workorder: AAC0139

Report To:	Subcontract To:	Requested Analysis								
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200	Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600	Radium 226, 228, Total								
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Date/Time	Received By	Date/Time	Comments
1	YGWC-341	G	2/28/2017 16:15	AAC0139-01	GW	2				
2	YGWA-31	G	3/1/2017 14:30	AAC0139-02	GW	2				
3	YGWA-185	G	3/1/2017 16:10	AAC0139-03	GW	2				
4	YGWA-181	G	3/1/2017 14:40	AAC0139-04	GW	2				
5	YGWC-325	G	3/1/2017 11:05	AAC0139-05	GW	4				
6	YGWC-321	G	3/1/2017 12:45	AAC0139-06	GW	2				
7	YGWC-335	G	3/1/2017 12:55	AAC0139-07	GW	2				
8	EB-1-3-1-17	G	3/1/2017 11:45	AAC0139-08	W	2				
9	FB-2-3-2-17	G	3/2/2017 10:00	AAC0139-09	W	2				
10	YGWA-3D	G	3/2/2017 10:15	AAC0139-10	GW	2				
Transfers Released By										
1								Chalsthorpe	3-6-17-0900	
2										
3										

LAB A 3-6-1

Cooler Temperature on Receipt N/A °C Custody Seal Y of N Received on Ice Y of N Sample Intact Y of N
 ***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

30212543

Chain of Custody



Results Requested By: 3/28/2017

Owner Received Date:

Workorder Name: Plant Yates

Workorder: AAC0139

Report To:	Subcontract To:		Matrix		Preserved Containers		Requested Analysis	
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200	Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600		Lab ID	Matrix	EN	ON		
Item	Sample Type	Collect Date/Time	Lab ID	Matrix	Radium 226, 228, Total			
11	YGWA-1D	3/2/2017 12:50	AAC0139-11	GW	1		X	011
12	YGWA-1I	3/2/2017 14:35	AAC0139-12	GW	1		X	012
13	EB-2-3-2-17	3/2/2017 15:40	AAC0139-13	W	1		X	013
14	YGWA-6I	3/2/2017 13:25	AAC0139-14	GW	2		X	014
15	YGWA-17S	3/2/2017 15:20	AAC0139-15	GW	2		X	015
16	Dup-2	3/2/2017 0:00	AAC0139-16	GW	1		X	016
17	YGWA-2I	3/3/2017 11:30	AAC0139-17	GW	1		X	017
18	YGWA-6S	3/3/2017 10:30	AAC0139-18	GW	2		X	018
19								
20								
Transfers	Released By	Date/Time	Received By	Date/Time	Comments			
1			Walter Rove	3-6-17/0900				
2								
3								

Cooler Temperature on Receipt N/A °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Friday, June 17, 2016 11:01:34 AM

FMT-ALL-C-002rev.00 24March2009

Page 2 of 2

Page 16 of 23

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace, GA

Project # 30212543

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5102 7768

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: QNTA 3-6-17

Comments:

	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9. <u>Low Volume Dup-2</u>
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:		X		11. <u>Received Dup-2 open/leaking</u>
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PHL2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>QNTA</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>QNTA</u> Date: <u>3-6-17</u>

only about 600mL remaining

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

30212543

PAGE: 1 OF 2

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com



CHAIN OF CUSTODY RECORD

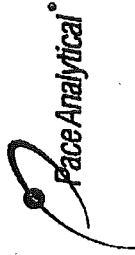
CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Pelty Health McCorkle laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP		PROJECT #: Phase 2 CCR	
CONTAINER TYPE: PRESERVATION # of	ANALYSIS REQUESTED P 3 P 7 P 3 Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (GW-846 9315/9320)	CONTAINERS 4 4 4 4 6 4 4 4	RELINQUISHED BY: RELINQUISHED BY:	DATE/TIME: DATE/TIME:	SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER OTHER FS Priority Seal: <input type="checkbox"/> Insured: <input type="checkbox"/> Broken: <input type="checkbox"/> Not Present: <input type="checkbox"/> # of Coolers:	CLIENT ID:	CLIENT OTHER FS	RELINQUISHED BY:	DATE/TIME:
MATRIX CODES: DW - DRINKING WATER S - SOIL MW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT									
REMARKS/ADDITIONAL INFORMATION									
ID NUMBER 1 2 3 4 5 6 7 8 extra Rad									
SAMPLED BY AND TITLE: B. Walker (acc)		DATE/TIME: 3-2-17 0830		RECEIVED BY:		DATE/TIME:		RECEIVED BY LAB: M. R. Man... Temperature: 72 Min. Max: 28	
LAB #:		FOR LAB USE ONLY: AAC0109		ENTERED INTO LIMS:		TRACKING #:		PLANT YATES COC ASH PONDS	

30212543

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 2 OF 2



CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239 REPORT TO: Lauren Peby REQUESTED COMPLETION DATE: laburch@southerncco.com PROJECT NAME/STATE: Plant Yates AP		ANALYSIS REQUESTED P 3 P 7 P 3 (FPA 6020/7470) Metals App. III & IV (FPA 300.0 & SM 2540C) Cl, F, SO, & TDS (Radium 226 & 228 (GW-946 9315/9320))	
CONTAINER TYPE: # of CONTAINERS →		CONTAINER TYPE P 3 P 7 P 3	
PROJECT #: Phase 2 CCR		CONTAINER TYPE: P 3 P 7 P 3	
Collection DATE # - dd - yy	Collection TIME	MATRIX CODE*	SAMPLE IDENTIFICATION
3-2-17	1000	W	FB-2-3-2-17
3-2-17	1015	GW	YGWA-3D
3-2-17	1250	GW	YGWA-1D
3-2-17	1435	GW	YGWA-1E
3-2-17	1540	W	FB-2-3-2-17
3-2-17	1325	GW	YGWA-6E
3-2-17	1520	GW	YGWA-17S
3-2-17	-	GW	PUP-Z
3-3-17	1130	GW	YGWA-2I
3-3-17	1030	GW	YGWA-6S
SAMPLED BY AND TITLE: C. Burch, R. W. Lutz		RELINQUISHED BY: [Signature]	DATE/TIME: 3-3-17 1220
RECEIVED BY: [Signature]		RELINQUISHED BY: [Signature]	DATE/TIME: 3-3-17 1400
RECEIVED BY LAB: [Signature]		DATE/TIME: 3/3/17 1400	
Yes No NA	Yes No NA	Broken Not Present	CLIENT OTHER (Client ID)
Temperature: 22°C		# of Coolers	# of Coolers
pH: 7.5		Broken Not Present	CLIENT OTHER (Client ID)
Lab: [Signature]		Broken Not Present	CLIENT OTHER (Client ID)
Yes No NA		Broken Not Present	CLIENT OTHER (Client ID)

Plant Yates COC Ash Ponds

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 3/16/2017
Worklist: 34495
Matrix: DW

Method Blank Assessment	
MB Sample ID	1238369
MB concentration:	-0.002
M/B Counting Uncertainty:	0.063
MB MDC:	0.181
MB Numerical Performance Indicator:	-0.06
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	3/20/2017
Spike I.D.:	17-003
Spike Concentration (pCi/mL):	38.230
Volume Used (mL):	0.25
Aliquot Volume (L, g, F):	0.501
Target Conc. (pCi/L, g, F):	19.086
Uncertainty (Calculated):	0.898
Result (pCi/L, g, F):	16.203
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.961
Numerical Performance Indicator:	-4.30
Percent Recovery:	84.90%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30211899003
Duplicate Sample I.D.:	30211899003DUP
Sample Result (pCi/L, g, F):	0.098
Sample Result Counting Uncertainty (pCi/L, g, F):	0.119
Sample Duplicate Result (pCi/L, g, F):	0.123
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.106
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.309
Duplicate RPD:	22.69%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

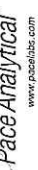
Comments:

Handwritten signature and initials

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



www.paceanalytical.com

Test: Ra-226
Analyst: LAL
Date: 3/16/2017
Worklist: 34496
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID: 1238370
 MB concentration: -0.006
 MB Counting Uncertainty: 0.089
 MB MDC: 0.244
 MB Numerical Performance Indicator: -0.13
 MB Status vs Numerical Indicator: N/A
 MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCSID (Y or N)?	N
LCS34496	LCS34496
Count Date:	3/20/2017
Spike I.D.:	17-003
Spike Concentration (pCi/mL):	38.230
Volume Used (mL):	0.25
Aliquot Volume (L, g, F):	0.503
Target Conc. (pCi/L, g, F):	19.016
Uncertainty (Calculated):	0.894
Result (pCi/L, g, F):	16.505
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.006
Numerical Performance Indicator:	-3.66
Percent Recovery:	86.80%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment

Sample I.D.: 30212543008
 Duplicate Sample I.D.: 30212543008DUP
 Sample Result (pCi/L, g, F): 0.063
 Sample Result Counting Uncertainty (pCi/L, g, F): 0.093
 Sample Duplicate Result (pCi/L, g, F): 0.040
 Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.115
 Are sample and/or duplicate results below MDC? See Below ##
 Duplicate Numerical Performance Indicator: 0.302
 Duplicate RPD: 44.14%
 Duplicate Status vs Numerical Indicator: N/A
 Duplicate Status vs RPD: Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

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):
 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:

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:
 MS/MSD Duplicate Status vs Numerical Indicator:
 MS/MSD Duplicate Status vs RPD:

Handwritten signature and date: 3/23/2017

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JYJ
Date: 3/13/2017
Worklist: 34513
Matrix: DW

Method Blank Assessment

MB Sample ID: 1238974
MB concentration: -0.064
M/B Counting Uncertainty: 0.343
MB MDC: 0.815
MB Numerical Performance Indicator: -0.36
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCSD (Y or N)?	Y
LCSD34513	3/18/2017
Count Date:	17-005
Spike I.D.:	25.008
Spike Concentration (pCi/mL):	0.20
Volume Used (mL):	0.806
Aliquot Volume (L, g, F):	6.204
Target Conc. (pCi/L, g, F):	0.447
Uncertainty (Calculated):	3.854
Result (pCi/L, g, F):	0.565
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	-6.39
Numerical Performance Indicator:	62.13%
Percent Recovery:	N/A
Status vs Numerical Indicator:	Pass
Status vs Recovery:	Pass

Duplicate Sample Assessment

Sample I.D.:	LCSD34513
Duplicate Sample I.D.:	LCSD34513
Sample Result (pCi/L, g, F):	4.807
Sample Duplicate Result (pCi/L, g, F):	0.605
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	3.854
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.565
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	2.255
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	22.08%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below:

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

Comments:

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):
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:

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:
Sample 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:

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JULY
Date: 3/16/2017
Worklist: 34514
Matrix: DW

Method Blank Assessment

MB Sample ID	1238975
MB concentration:	0.280
M/B Counting Uncertainty:	0.353
MB MDC:	0.724
MB Numerical Performance Indicator:	1.56
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

LCSD (Y or N)?	Y
LCS34514	LCS34514
Count Date:	3/22/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	24.976
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.801
Target Conc. (pCi/L, g, F):	6.125
Uncertainty (Calculated):	0.441
Result (pCi/L, g, F):	5.155
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.600
Numerical Performance Indicator:	-2.56
Percent Recovery:	84.16%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment

Sample I.D.:	LCS34514
Duplicate Sample I.D.:	LCS34514
Sample Result (pCi/L, g, F):	5.155
Sample Result Counting Uncertainty (pCi/L, g, F):	0.600
Sample Duplicate Result (pCi/L, g, F):	6.807
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.805
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	-3.226
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	25.91%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment

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



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAC0372

March 17, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-14S	AAC0372-01	Ground Water	03/08/17 10:05	03/09/17 14:55
YGWC-24S	AAC0372-02	Ground Water	03/08/17 11:50	03/09/17 14:55
YGWC-22S	AAC0372-03	Ground Water	03/08/17 13:25	03/09/17 14:55
FB-4-3-9-17	AAC0372-04	Water	03/09/17 10:20	03/09/17 14:55
YGWC-23S	AAC0372-05	Ground Water	03/09/17 10:40	03/09/17 14:55
YGWC-19S	AAC0372-06	Ground Water	03/09/17 12:40	03/09/17 14:55
EB-4-3-9-17	AAC0372-07	Water	03/09/17 13:05	03/09/17 14:55
Dup-4	AAC0372-08	Ground Water	03/09/17 00:00	03/09/17 14:55



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Project: CCR Event

Client ID: YGWA-14S

Lab Number ID: AAC0372-01

Date/Time Sampled: 3/8/2017 10:05:00AM

Date/Time Received: 3/9/2017 2:55:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	178	25	10	mg/L	SM 2540 C		1	03/13/17 15:35	03/13/17 15:35	7030372	JPT
Inorganic Anions											
Chloride	4.2	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 04:24	7030348	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 04:24	7030348	RLC
Sulfate	7.0	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 04:24	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Barium	0.0088	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Beryllium	0.0002	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Boron	0.0189	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Cadmium	0.00007	0.0010	0.000060	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Calcium	1.21	0.500	0.0104	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Chromium	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Lead	0.0001	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:10	7030305	CSW
Mercury	0.00012	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:09	7030374	DDN



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Project: CCR Event

Client ID: YGWC-24S

Lab Number ID: AAC0372-02

Date/Time Sampled: 3/8/2017 11:50:00AM

Date/Time Received: 3/9/2017 2:55:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	192	25	10	mg/L	SM 2540 C		1	03/13/17 15:35	03/13/17 15:35	7030372	JPT
Inorganic Anions											
Chloride	5.4	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 05:07	7030348	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 05:07	7030348	RLC
Sulfate	0.29	1.0	0.09	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 05:07	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Barium	0.0189	0.0100	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Calcium	1.77	0.500	0.0104	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Chromium	0.0010	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:22	7030305	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:12	7030374	DDN



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Project: CCR Event

Client ID: YGWC-22S

Lab Number ID: AAC0372-03

Date/Time Sampled: 3/8/2017 1:25:00PM

Date/Time Received: 3/9/2017 2:55:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	676	25	10	mg/L	SM 2540 C		1	03/13/17 15:35	03/13/17 15:35	7030372	JPT
Inorganic Anions											
Chloride	24	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 05:28	7030348	RLC
Fluoride	0.09	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 05:28	7030348	RLC
Sulfate	310	20	1.8	mg/L	EPA 300.0		20	03/10/17 17:37	03/14/17 21:58	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Arsenic	0.0005	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Barium	0.0183	0.0100	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Beryllium	0.0008	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Boron	6.57	2.00	0.302	mg/L	EPA 6020B		50	03/10/17 12:30	03/14/17 02:39	7030305	CSW
Cadmium	0.00009	0.0010	0.000060	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Calcium	51.7	25.0	0.522	mg/L	EPA 6020B		50	03/10/17 12:30	03/14/17 02:39	7030305	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Cobalt	0.0013	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Lead	0.0001	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Selenium	0.0171	0.0100	0.0014	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Thallium	0.00004	0.0010	0.00003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Lithium	0.0017	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:33	7030305	CSW
Mercury	0.00018	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:14	7030374	DDN



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Project: CCR Event

Client ID: FB-4-3-9-17

Lab Number ID: AAC0372-04

Date/Time Sampled: 3/9/2017 10:20:00AM

Date/Time Received: 3/9/2017 2:55:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	03/13/17 15:35	03/13/17 15:35	7030372	JPT
Inorganic Anions											
Chloride	0.07	0.25	0.01	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 05:49	7030348	RLC
Fluoride	0.06	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 05:49	7030348	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 05:49	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Calcium	ND	0.500	0.0104	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:45	7030305	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:16	7030374	DDN



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Project: CCR Event

Client ID: YGWC-23S

Lab Number ID: AAC0372-05

Date/Time Sampled: 3/9/2017 10:40:00AM

Date/Time Received: 3/9/2017 2:55:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	288	25	10	mg/L	SM 2540 C		1	03/13/17 15:35	03/13/17 15:35	7030372	JPT
Inorganic Anions											
Chloride	1.7	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 06:10	7030348	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 06:10	7030348	RLC
Sulfate	69	10	0.92	mg/L	EPA 300.0		10	03/10/17 17:37	03/14/17 08:37	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Barium	0.0469	0.0100	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Boron	1.44	0.0400	0.0060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Calcium	8.40	2.50	0.0522	mg/L	EPA 6020B		5	03/10/17 12:30	03/16/17 14:51	7030305	CSW
Chromium	0.0008	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Selenium	0.0437	0.0100	0.0014	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Lithium	0.0025	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 02:50	7030305	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:19	7030374	DDN



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Project: CCR Event

Client ID: YGWC-19S

Lab Number ID: AAC0372-06

Date/Time Sampled: 3/9/2017 12:40:00PM

Date/Time Received: 3/9/2017 2:55:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	306	25	10	mg/L	SM 2540 C		1	03/13/17 15:35	03/13/17 15:35	7030372	JPT
Inorganic Anions											
Chloride	2.4	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 06:31	7030348	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 06:31	7030348	RLC
Sulfate	0.25	1.0	0.09	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 06:31	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Arsenic	0.0005	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Barium	0.0066	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Calcium	0.936	0.500	0.0104	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:13	7030305	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:21	7030374	DDN



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Project: CCR Event

Client ID: EB-4-3-9-17

Lab Number ID: AAC0372-07

Date/Time Sampled: 3/9/2017 1:05:00PM

Date/Time Received: 3/9/2017 2:55:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	03/13/17 15:35	03/13/17 15:35	7030372	JPT
Inorganic Anions											
Chloride	0.03	0.25	0.01	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 06:53	7030348	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 06:53	7030348	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 06:53	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Calcium	ND	0.500	0.0104	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Chromium	0.0006	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:25	7030305	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:24	7030374	DDN



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Project: CCR Event

Client ID: Dup-4

Lab Number ID: AAC0372-08

Date/Time Sampled: 3/9/2017 12:00:00AM

Date/Time Received: 3/9/2017 2:55:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	265	25	10	mg/L	SM 2540 C		1	03/13/17 15:35	03/13/17 15:35	7030372	JPT
Inorganic Anions											
Chloride	1.8	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 07:14	7030348	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 07:14	7030348	RLC
Sulfate	68	10	0.92	mg/L	EPA 300.0		10	03/10/17 17:37	03/14/17 10:20	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Barium	0.0456	0.0100	0.0003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Boron	1.42	0.400	0.0604	mg/L	EPA 6020B		10	03/10/17 12:30	03/16/17 14:57	7030305	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Calcium	8.63	2.50	0.0522	mg/L	EPA 6020B		5	03/10/17 12:30	03/14/17 03:42	7030305	CSW
Chromium	0.0008	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Selenium	0.0439	0.0100	0.0014	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Lithium	0.0023	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/10/17 12:30	03/14/17 03:30	7030305	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:26	7030374	DDN



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030372 - SM 2540 C											
Blank (7030372-BLK1)						Prepared & Analyzed: 03/13/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7030372-BS1)						Prepared & Analyzed: 03/13/17					
Total Dissolved Solids	384	25	10	mg/L	400.00		96	84-108			
Duplicate (7030372-DUP1)						Source: AAC0372-03 Prepared & Analyzed: 03/13/17					
Total Dissolved Solids	660	25	10	mg/L		676			2	10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030348 - EPA 300.0											
Blank (7030348-BLK1)						Prepared & Analyzed: 03/10/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7030348-BS1)						Prepared & Analyzed: 03/10/17					
Chloride	9.96	0.25	0.01	mg/L	10.010		100	90-110			
Fluoride	10.2	0.30	0.004	mg/L	10.020		102	90-110			
Sulfate	10.1	1.0	0.09	mg/L	10.020		101	90-110			
Matrix Spike (7030348-MS1)						Source: AAC0316-02 Prepared: 03/10/17 Analyzed: 03/11/17					
Chloride	11.7	0.25	0.01	mg/L	10.010	2.11	96	90-110			
Fluoride	10.2	0.30	0.004	mg/L	10.020	0.09	101	90-110			
Sulfate	13.9	1.0	0.09	mg/L	10.020	4.54	93	90-110			
Matrix Spike (7030348-MS2)						Source: AAC0372-01 Prepared: 03/10/17 Analyzed: 03/11/17					
Chloride	13.7	0.25	0.01	mg/L	10.010	4.25	95	90-110			
Fluoride	10.7	0.30	0.004	mg/L	10.020	0.04	106	90-110			
Sulfate	16.2	1.0	0.09	mg/L	10.020	7.01	91	90-110			
Matrix Spike Dup (7030348-MSD1)						Source: AAC0316-02 Prepared: 03/10/17 Analyzed: 03/11/17					
Chloride	11.8	0.25	0.01	mg/L	10.010	2.11	97	90-110	0.5	15	
Fluoride	10.1	0.30	0.004	mg/L	10.020	0.09	100	90-110	0.9	15	
Sulfate	13.8	1.0	0.09	mg/L	10.020	4.54	92	90-110	0.7	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7030305 - EPA 3005A

Blank (7030305-BLK1)

Prepared: 03/10/17 Analyzed: 03/14/17

Antimony	ND	0.0030	0.0003	mg/L							
Arsenic	ND	0.0050	0.0004	mg/L							
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00007	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.000060	mg/L							
Calcium	ND	0.500	0.0104	mg/L							
Chromium	ND	0.0100	0.0003	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0002	mg/L							
Lead	ND	0.0050	0.00005	mg/L							
Molybdenum	ND	0.0100	0.0002	mg/L							
Nickel	ND	0.0100	0.0003	mg/L							
Selenium	ND	0.0100	0.0014	mg/L							
Silver	ND	0.0100	0.0003	mg/L							
Thallium	ND	0.0010	0.00003	mg/L							
Vanadium	ND	0.0100	0.0014	mg/L							
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0011	mg/L							

LCS (7030305-BS1)

Prepared: 03/10/17 Analyzed: 03/14/17

Antimony	0.116	0.0030	0.0003	mg/L	0.10000		116	80-120			
Arsenic	0.105	0.0050	0.0004	mg/L	0.10000		105	80-120			
Barium	0.102	0.0100	0.0003	mg/L	0.10000		102	80-120			
Beryllium	0.115	0.0030	0.00007	mg/L	0.10000		115	80-120			
Boron	1.07	0.0400	0.0060	mg/L	1.0000		107	80-120			
Cadmium	0.110	0.0010	0.000060	mg/L	0.10000		110	80-120			
Calcium	1.04	0.500	0.0104	mg/L	1.0000		104	80-120			
Chromium	0.113	0.0100	0.0003	mg/L	0.10000		113	80-120			
Cobalt	0.111	0.0100	0.0005	mg/L	0.10000		111	80-120			
Copper	0.111	0.0250	0.0002	mg/L	0.10000		111	80-120			
Lead	0.105	0.0050	0.00005	mg/L	0.10000		105	80-120			
Molybdenum	0.106	0.0100	0.0002	mg/L	0.10000		106	80-120			
Nickel	0.111	0.0100	0.0003	mg/L	0.10000		111	80-120			
Selenium	0.102	0.0100	0.0014	mg/L	0.10000		102	80-120			
Silver	0.106	0.0100	0.0003	mg/L	0.10000		106	80-120			
Thallium	0.106	0.0010	0.00003	mg/L	0.10000		106	80-120			
Vanadium	0.111	0.0100	0.0014	mg/L	0.10000		111	80-120			
Zinc	0.112	0.0100	0.0013	mg/L	0.10000		112	80-120			
Lithium	0.115	0.0500	0.0011	mg/L	0.10000		115	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030305 - EPA 3005A											
Matrix Spike (7030305-MS1)			Source: AAC0372-06				Prepared: 03/10/17 Analyzed: 03/14/17				
Antimony	0.109	0.0030	0.0003	mg/L	0.10000	ND	109	75-125			
Arsenic	0.101	0.0050	0.0004	mg/L	0.10000	0.0005	100	75-125			
Barium	0.102	0.0100	0.0003	mg/L	0.10000	0.0066	95	75-125			
Beryllium	0.111	0.0030	0.00007	mg/L	0.10000	ND	111	75-125			
Boron	1.05	0.0400	0.0060	mg/L	1.0000	ND	105	75-125			
Cadmium	0.104	0.0010	0.000060	mg/L	0.10000	ND	104	75-125			
Calcium	1.92	0.500	0.0104	mg/L	1.0000	0.936	99	75-125			
Chromium	0.115	0.0100	0.0003	mg/L	0.10000	0.0004	115	75-125			
Cobalt	0.111	0.0100	0.0005	mg/L	0.10000	ND	111	75-125			
Copper	0.111	0.0250	0.0002	mg/L	0.10000	0.0003	111	75-125			
Lead	0.103	0.0050	0.00005	mg/L	0.10000	ND	103	75-125			
Molybdenum	0.104	0.0100	0.0002	mg/L	0.10000	ND	104	75-125			
Nickel	0.112	0.0100	0.0003	mg/L	0.10000	ND	112	75-125			
Selenium	0.0956	0.0100	0.0014	mg/L	0.10000	ND	96	75-125			
Silver	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125			
Thallium	0.101	0.0010	0.00003	mg/L	0.10000	ND	101	75-125			
Vanadium	0.116	0.0100	0.0014	mg/L	0.10000	ND	116	75-125			
Zinc	0.110	0.0100	0.0013	mg/L	0.10000	0.0014	109	75-125			
Lithium	0.112	0.0500	0.0011	mg/L	0.10000	ND	112	75-125			
Matrix Spike Dup (7030305-MSD1)											
Matrix Spike Dup (7030305-MSD1)			Source: AAC0372-06				Prepared: 03/10/17 Analyzed: 03/14/17				
Antimony	0.111	0.0030	0.0003	mg/L	0.10000	ND	111	75-125	2	20	
Arsenic	0.101	0.0050	0.0004	mg/L	0.10000	0.0005	100	75-125	0.2	20	
Barium	0.104	0.0100	0.0003	mg/L	0.10000	0.0066	97	75-125	2	20	
Beryllium	0.113	0.0030	0.00007	mg/L	0.10000	ND	113	75-125	2	20	
Boron	1.10	0.0400	0.0060	mg/L	1.0000	ND	110	75-125	5	20	
Cadmium	0.103	0.0010	0.000060	mg/L	0.10000	ND	103	75-125	1	20	
Calcium	1.84	0.500	0.0104	mg/L	1.0000	0.936	91	75-125	4	20	
Chromium	0.113	0.0100	0.0003	mg/L	0.10000	0.0004	113	75-125	2	20	
Cobalt	0.109	0.0100	0.0005	mg/L	0.10000	ND	109	75-125	1	20	
Copper	0.110	0.0250	0.0002	mg/L	0.10000	0.0003	110	75-125	0.8	20	
Lead	0.104	0.0050	0.00005	mg/L	0.10000	ND	104	75-125	1	20	
Molybdenum	0.105	0.0100	0.0002	mg/L	0.10000	ND	105	75-125	0.4	20	
Nickel	0.108	0.0100	0.0003	mg/L	0.10000	ND	108	75-125	3	20	
Selenium	0.0998	0.0100	0.0014	mg/L	0.10000	ND	100	75-125	4	20	
Silver	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125	0.6	20	
Thallium	0.104	0.0010	0.00003	mg/L	0.10000	ND	104	75-125	3	20	
Vanadium	0.118	0.0100	0.0014	mg/L	0.10000	ND	118	75-125	2	20	
Zinc	0.108	0.0100	0.0013	mg/L	0.10000	0.0014	106	75-125	2	20	
Lithium	0.113	0.0500	0.0011	mg/L	0.10000	ND	113	75-125	0.3	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030305 - EPA 3005A											
Post Spike (7030305-PS1)			Source: AAC0372-06			Prepared: 03/10/17 Analyzed: 03/14/17					
Antimony	108			ug/L	100.00	0.230	107	80-120			
Arsenic	102			ug/L	100.00	0.478	102	80-120			
Barium	103			ug/L	100.00	6.64	97	80-120			
Beryllium	113			ug/L	100.00	0.0274	113	80-120			
Boron	1060			ug/L	1000.0	5.38	105	80-120			
Cadmium	105			ug/L	100.00	0.0017	105	80-120			
Calcium	1880			ug/L	1000.0	936	95	80-120			
Chromium	112			ug/L	100.00	0.384	112	80-120			
Cobalt	107			ug/L	100.00	0.0152	107	80-120			
Copper	109			ug/L	100.00	0.273	108	80-120			
Lead	101			ug/L	100.00	0.0315	101	80-120			
Molybdenum	108			ug/L	100.00	0.0475	108	80-120			
Nickel	110			ug/L	100.00	0.191	110	80-120			
Selenium	99.7			ug/L	100.00	-0.179	100	80-120			
Silver	103			ug/L	100.00	0.0006	103	80-120			
Thallium	102			ug/L	100.00	0.0306	102	80-120			
Vanadium	114			ug/L	100.00	1.13	113	80-120			
Zinc	108			ug/L	100.00	1.42	106	80-120			
Lithium	104			ug/L	100.00	0.247	103	80-120			

Batch 7030374 - EPA 7470A

Blank (7030374-BLK1)				Prepared: 03/13/17 Analyzed: 03/14/17							
Mercury	0.00012	0.00050	0.000041	mg/L							J
LCS (7030374-BS1)				Prepared: 03/13/17 Analyzed: 03/14/17							
Mercury	0.00262	0.00050	0.000041	mg/L	2.5000E-3		105	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Report No.: AAC0372

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030374 - EPA 7470A											
Matrix Spike (7030374-MS1)			Source: AAC0316-02			Prepared: 03/13/17 Analyzed: 03/14/17					
Mercury	0.00262	0.00050	0.000041	mg/L	2.5000E-3	0.00014	99	75-125			
Matrix Spike Dup (7030374-MSD1)			Source: AAC0316-02			Prepared: 03/13/17 Analyzed: 03/14/17					
Mercury	0.00215	0.00050	0.000041	mg/L	2.5000E-3	0.00014	80	75-125	20	20	
Post Spike (7030374-PS1)			Source: AAC0316-02			Prepared: 03/13/17 Analyzed: 03/14/17					
Mercury	1.92			ug/L	1.6667	0.0914	110	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

March 17, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF

CHAIN OF CUSTODY RECORD

CLIENT NAME:
 Georgia Power
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 404-506-7239
 REPORT TO:
 Lauren Petty
 CC: Maria Padilla
 Heath McCorkle
 REQUESTED COMPLETION DATE:
 PO #: laburch@southernco.com
 PROJECT NAME/STATE:
 Plant Yates AP

CONTAINER TYPE: P P P P
 PRESERVATION: 3 7 3
 ANALYSIS REQUESTED
 # of CONTAINERS →
 Metals App. III & IV (EPA 6020/7470)
 Cl, F, SO₄ & TDS (EPA 300.0 & SM 2540C)
 Radium 226 & 228 (SW-846 9315/9320)

CONTAINER TYPE
 P - PLASTIC
 A - AMBER GLASS
 G - CLEAR GLASS
 V - VOA VIAL
 S - STERILE
 O - OTHER

PRESERVATION
 1 - HCl, ≤6°C
 2 - H₂SO₄, ≤6°C
 3 - HNO₃
 4 - NaOH, ≤6°C
 5 - NaOH/ZnAc, ≤6°C
 6 - Na₂S₂O₃, ≤6°C
 7 - ≤6°C not frozen

MATRIX CODES:
 DW - DRINKING WATER S - SOIL
 WW - WASTEWATER SL - SLUDGE
 GW - GROUNDWATER SD - SOLID
 SW - SURFACE WATER A - AIR
 ST - STORM WATER L - LIQUID
 W - WATER P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

1
 2
 3 extra Rad Pure
 4
 5
 6
 7
 8

PROJECT #: Phase 2 CCR

Collection DATE	Collection TIME	MATRIX CODE*	CGRAMP	SAMPLE IDENTIFICATION
3-8-17	1005	GW	✓	Y6WA-145
3-8-17	1150	GW	✓	Y6WC-245
3-8-17	1325	GW	✓	Y6WC-225
3-9-17	1020	W	✓	FB-4-3-9-17
3-9-17	1040	GW	✓	Y6WC-235
3-9-17	1240	GW	✓	Y6WC-195
3-9-17	1305	W	✓	FB-4-3-9-17
3-9-17	---	GW	✓	DUP-4

SAMPLED BY AND TITLE: Chris Parker
 RECEIVED BY: Lauren Petty
 DATE/TIME: 3-9-17 1300
 RELINQUISHED BY: [Signature]
 DATE/TIME: 3-9-17 1455
 FOR LAB USE ONLY
 LAB #: AA-C0372
 Entered into LIMS: CH
 Tracking #:

Plant Yates COC Ash Ponds



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 3/10/2017 11:52:02AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 03/09/17 14:55

Work Order: AAC0372

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 8

#Containers: 25

Minimum Temp(C): 1.0

Maximum Temp(C): 1.0

Custody Seal(s) Used: N/A

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact NO
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

April 03, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAC0372 Plant Yates
Pace Project No.: 30213029

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on March 10, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAC0372 Plant Yates

Pace Project No.: 30213029

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAC0372 Plant Yates

Pace Project No.: 30213029

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30213029001	YGWA-14S	Water	03/08/17 10:05	03/10/17 11:25
30213029002	YGWC-24S	Water	03/08/17 11:50	03/10/17 11:25
30213029003	YGWC-22S	Water	03/08/17 13:25	03/10/17 11:25
30213029004	FB-4-3-9-17	Water	03/09/17 10:20	03/10/17 11:25
30213029005	YGWC-23S	Water	03/09/17 10:40	03/10/17 11:25
30213029006	YGWC-19S	Water	03/09/17 12:40	03/10/17 11:25
30213029007	EB-4-3-9-17	Water	03/09/17 13:05	03/10/17 11:25
30213029008	Dup-4	Water	03/09/17 00:01	03/10/17 11:25

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAC0372 Plant Yates

Pace Project No.: 30213029

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30213029001	YGWA-14S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30213029002	YGWC-24S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30213029003	YGWC-22S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30213029004	FB-4-3-9-17	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30213029005	YGWC-23S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30213029006	YGWC-19S	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30213029007	EB-4-3-9-17	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30213029008	Dup-4	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0372 Plant Yates

Pace Project No.: 30213029

Sample: YGWA-14S		Lab ID: 30213029001	Collected: 03/08/17 10:05	Received: 03/10/17 11:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0336 ± 0.0792 (0.173) C:88% T:NA	pCi/L	03/29/17 19:32	13982-63-3	
Radium-228	EPA 9320	0.0409 ± 0.256 (0.585) C:96% T:81%	pCi/L	03/31/17 11:27	15262-20-1	
Total Radium	Total Radium Calculation	0.0745 ± 0.335 (0.758)	pCi/L	04/03/17 15:12	7440-14-4	

Sample: YGWC-24S		Lab ID: 30213029002	Collected: 03/08/17 11:50	Received: 03/10/17 11:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0511 ± 0.0772 (0.211) C:78% T:NA	pCi/L	03/29/17 19:32	13982-63-3	
Radium-228	EPA 9320	0.479 ± 0.419 (0.844) C:67% T:83%	pCi/L	03/31/17 11:27	15262-20-1	
Total Radium	Total Radium Calculation	0.479 ± 0.496 (1.06)	pCi/L	04/03/17 15:12	7440-14-4	

Sample: YGWC-22S		Lab ID: 30213029003	Collected: 03/08/17 13:25	Received: 03/10/17 11:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.107 ± 0.127 (0.250) C:66% T:NA	pCi/L	03/29/17 19:32	13982-63-3	
Radium-228	EPA 9320	0.0485 ± 0.344 (0.788) C:67% T:85%	pCi/L	03/31/17 11:27	15262-20-1	
Total Radium	Total Radium Calculation	0.156 ± 0.471 (1.04)	pCi/L	04/03/17 15:12	7440-14-4	

Sample: FB-4-3-9-17		Lab ID: 30213029004	Collected: 03/09/17 10:20	Received: 03/10/17 11:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0198 ± 0.0649 (0.171) C:86% T:NA	pCi/L	03/29/17 19:32	13982-63-3	
Radium-228	EPA 9320	0.424 ± 0.551 (1.18) C:64% T:80%	pCi/L	03/31/17 11:27	15262-20-1	
Total Radium	Total Radium Calculation	0.424 ± 0.616 (1.35)	pCi/L	04/03/17 15:12	7440-14-4	

Sample: YGWC-23S		Lab ID: 30213029005	Collected: 03/09/17 10:40	Received: 03/10/17 11:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0191 ± 0.0971 (0.221) C:75% T:NA	pCi/L	03/29/17 19:32	13982-63-3	
Radium-228	EPA 9320	0.0701 ± 0.351 (0.802) C:69% T:82%	pCi/L	03/31/17 11:27	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0372 Plant Yates
Pace Project No.: 30213029

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-23S Lab ID: 30213029005 Collected: 03/09/17 10:40 Received: 03/10/17 11:25 Matrix: Water PWS: Site ID: Sample Type:						
Total Radium	Total Radium Calculation	0.0892 ± 0.448 (1.02)	pCi/L	04/03/17 15:12	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-19S Lab ID: 30213029006 Collected: 03/09/17 12:40 Received: 03/10/17 11:25 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	-0.0583 ± 0.105 (0.262) C:85% T:NA	pCi/L	03/29/17 19:32	13982-63-3	
Radium-228	EPA 9320	0.279 ± 0.350 (0.744) C:71% T:86%	pCi/L	03/31/17 11:27	15262-20-1	
Total Radium	Total Radium Calculation	0.279 ± 0.455 (1.01)	pCi/L	04/03/17 15:12	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-4-3-9-17 Lab ID: 30213029007 Collected: 03/09/17 13:05 Received: 03/10/17 11:25 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	-0.00281 ± 0.0814 (0.196) C:84% T:NA	pCi/L	03/29/17 19:32	13982-63-3	
Radium-228	EPA 9320	0.216 ± 0.358 (0.779) C:66% T:84%	pCi/L	03/31/17 11:28	15262-20-1	
Total Radium	Total Radium Calculation	0.216 ± 0.439 (0.975)	pCi/L	04/03/17 15:12	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: Dup-4 Lab ID: 30213029008 Collected: 03/09/17 00:01 Received: 03/10/17 11:25 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.100 ± 0.106 (0.204) C:79% T:NA	pCi/L	03/29/17 19:32	13982-63-3	
Radium-228	EPA 9320	0.00103 ± 0.322 (0.750) C:72% T:84%	pCi/L	03/31/17 11:28	15262-20-1	
Total Radium	Total Radium Calculation	0.101 ± 0.428 (0.954)	pCi/L	04/03/17 15:12	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0372 Plant Yates

Pace Project No.: 30213029

QC Batch:	253398	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30213029001, 30213029002, 30213029003, 30213029004, 30213029005, 30213029006, 30213029007, 30213029008		

METHOD BLANK:	1247406	Matrix:	Water
Associated Lab Samples:	30213029001, 30213029002, 30213029003, 30213029004, 30213029005, 30213029006, 30213029007, 30213029008		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0477 ± 0.0516 (0.161) C:88% T:NA	pCi/L	03/29/17 19:32	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0372 Plant Yates

Pace Project No.: 30213029

QC Batch:	253468	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30213029001, 30213029002, 30213029003, 30213029004, 30213029005, 30213029006, 30213029007, 30213029008		

METHOD BLANK:	1247566	Matrix:	Water
Associated Lab Samples:	30213029001, 30213029002, 30213029003, 30213029004, 30213029005, 30213029006, 30213029007, 30213029008		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0995 ± 0.310 (0.697) C:70% T:91%	pCi/L	03/31/17 11:27	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AAC0372 Plant Yates

Pace Project No.: 30213029

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30213029



30213029

Chain of Custody



Workorder: AAC0372 Workorder Name: Plant Yates Owner Received Date: 3/9/2017 Results Requested By: 3/17/2017

Report To: Betsy McDaniel Subcontract To: Pace - Pittsburgh

1638 Roseytown Road
Stes. 2,3,4
Greensburg, PA 15601
Phone (724) 850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	NO3	HNO3	LAB USE ONLY
1	YGWA-14 S	G	3/8/17 1005	AAC0372-01	GW		1		001
2	YGWAC-24 S YGWC-24 S	G	3/8/17 1150	AAC0372-02	GW		1		002
3	YGWC-22 S	G	3/8/17 1325	AAC0372-03	GW		1		003
4	FB-4-3-9-17	G	3/9/17 1020	AAC0372-04	W		1		004
5	YGWC-19 S YGWC-23 S	G	3/9/17 1040	AAC0372-05	GW		1		005
6	YGWC-19 S	G	3/9/17 1240	AAC0372-06	GW		1		006
7	EB-4-3-9-17	G	3/9/17 1305	AAC0372-07	W		1		007
8	Dup-4	G	3/9/17	AAC0372-08	GW		1		008
9									
10									

Transfers Released By: _____ Received By: *Wahle/Hire/Pea* Date/Time: 3-10-17/11:25

Comments: EQUIS deliverable required: N/A
BMD 3/10/17

Cooler Temperature on Receipt: *N/A* °C Custody Seal Y of N: *N* Received on Ice Y of N: *N* Sample Intact Y or N: *Y*

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

30213029



Chain of Custody

Workorder: AAC0372 Workorder Name: Plant Yates Owner Received Date: 3/9/2017 Results Requested By: 3/17/2017
 Report To: Betsy McDaniel Subcontract To: Pace - Pittsburgh
 Pace Analytical Atlanta 1638 Roseytown Road
 110 Technology Parkway Stes. 2,3,4
 Peachtree Corners, GA 30092 Greensburg, PA 15601
 Phone (770)-734-4200 Phone (724) 850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers			Date/Time	Comments
						CON	ONH			
1	YGWA-14 S	G	3/8/17 1005	AAC0372-01	GW	1			X	
2	YGWAC-24 S	G	3/8/17 1150	AAC0372-02	GW	1			X	
3	YGWC-22 S	G	3/8/17 1325	AAC0372-03	GW	1			X	
4	FB-4-3-9-17	G	3/9/17 1020	AAC0372-04	W	1			X	
5	YGWC-19 S	G	3/9/17 1040	AAC0372-05	GW	1			X	
6	YGWC-19 S	G	3/9/17 1240	AAC0372-06	GW	1			X	
7	EB-4-3-9-17	G	3/9/17 1305	AAC0372-07	W	1			X	
8	Dup-4	G	3/9/17	AAC0372-08	GW	1			X	
9										
10										
Transfers Released By										
1										
2										
3										
Radium 226, 228, Total										

Received By: *Abby Rose Pace* Date/Time: 3-16-17/1125
 Comments: EQUIS deliverable required.

Cooler Temperature on Receipt: N/A °C Custody Seal: Y or N Received on Ice: Y or N Sample Intact: Y or N
 ***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

30213029

PAGE: 1 OF

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com



CHAIN OF CUSTODY RECORD

CLIENT NAME Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239 REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle REQUESTED COMPLETION DATE: PO # laburch@southernco.com PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR		ANALYSIS REQUESTED P P P P P 3 7 3 C O N T A I N E R S ↓		CONTAINER TYPE PRESERVATION # of ↓		ANALYSIS REQUESTED P P P P P 3 7 3 C O N T A I N E R S ↓		CONTAINER TYPE PRESERVATION # of ↓		ANALYSIS REQUESTED P P P P P 3 7 3 C O N T A I N E R S ↓		CONTAINER TYPE PRESERVATION # of ↓	
Collection DATE A-B-V	Collection TIME	MATRIX CODE	GRAB	SAMPLE IDENTIFICATION	Relinquished By	Relinquished By	Relinquished By	Relinquished By	Relinquished By	Relinquished By	Relinquished By	Relinquished By	
3-8-17	1005	GW	✓	Y6WA-145	3	3	3	3	3	3	3	3	
3-8-17	1150	GW	✓	Y6WC-245	3	3	3	3	3	3	3	3	
3-8-17	1325	GW	✓	Y6WL-225	4	4	4	4	4	4	4	4	
3-9-17	1020	W	✓	FB-4-3-9-17	3	3	3	3	3	3	3	3	
3-9-17	1040	GW	✓	Y6WC-235	3	3	3	3	3	3	3	3	
3-9-17	1240	GW	✓	Y6WC-195	3	3	3	3	3	3	3	3	
3-9-17	1305	W	✓	EB-4-3-9-17	3	3	3	3	3	3	3	3	
3-9-17	---	GW	✓	Dwp-4	3	3	3	3	3	3	3	3	
SAMPLED BY AND TITLE: Chas. Kelly		DATE/TIME: 3-9-17 1300	RELINQUISHED BY: Chas. Kelly	DATE/TIME: 3-9-17 1455	LAB #: AA-0372	FOR LAB USE ONLY		Entered into LIMS: CH		Tracking #:			
RECEIVED BY: Lauren Petty		DATE/TIME: 3-9-17 1455	RELINQUISHED BY: Lauren Petty	DATE/TIME: 3-9-17 1455	SAMPLE SHIPPED VIA: UPS		COURIER: USPS	CLIENT: Plant Yates AP	OTHER: FS	Custody Seal: Intact			
RECEIVED BY LAB: Lauren Petty		DATE/TIME: 3-9-17 1455	RELINQUISHED BY: Lauren Petty	DATE/TIME: 3-9-17 1455	COURIER: USPS		CLIENT: Plant Yates AP	OTHER: FS	Custody Seal: Intact				

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace, GA Project # 30213029

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6312 5102 8867

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: QNR 3-10-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:		X		
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PHL2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>QNR</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>QNR</u> Date: <u>3-10-17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: LAL
Date: 3/29/2017
Worklist: 34790
Matrix: DW

Method Blank Assessment	
MB Sample ID	1247406
MB concentration:	-0.048
M/B Counting Uncertainty:	0.051
MB MDC:	0.161
MB Numerical Performance Indicator:	-1.83
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCS#	Y or N?	N
		LCS34790		LCS034790
Count Date:	3/29/2017			
Spike I.D.:	17-003			
Spike Concentration (pCi/mL):	38.230			
Volume Used (mL):	0.25			
Aliquot Volume (L, g, F):	0.510			
Target Conc. (pCi/L, g, F):	18.742			
Uncertainty (Calculated):	0.882			
Result (pCi/L, g, F):	17.272			
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.925			
Numerical Performance Indicator:	-2.26			
Percent Recovery:	92.15%			
Status vs Numerical Indicator:	N/A			
Status vs Recovery:	Pass			

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30213029001	30213029001
Duplicate Sample I.D.:	30213029001DUP	30213029001DUP
Sample Result Counting Uncertainty (pCi/L, g, F):	0.034	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.079	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	-0.040	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.184	
Duplicate RPD:	-2373.73%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

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

Comments:

DL 4/3/17

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):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
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:	

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:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 3/29/2017
Worklist: 34833
Matrix: DW

Method Blank Assessment	
MB Sample ID	1247566
MB concentration:	0.099
MB Counting Uncertainty:	0.309
MB MDC:	0.697
MB Numerical Performance Indicator:	0.63
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS (Y or N)?	N
LCS34833	LCS34833
Count Date:	3/31/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	24.902
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.808
Target Conc. (pCi/L, g, F):	6.161
Uncertainty (Calculated):	0.444
Result (pCi/L, g, F):	4.614
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.646
Numerical Performance Indicator:	-3.87
Percent Recovery:	74.89%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30213029003
Duplicate Sample I.D.:	30213029003DUP
Sample Result (pCi/L, g, F):	0.049
Sample Duplicate Result (pCi/L, g, F):	0.344
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.230
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.377
Are sample and/or duplicate results below MDC?	See Below-##
Duplicate Numerical Performance Indicator:	-0.699
Duplicate RPD:	130.43%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30213029003
30213029003DUP

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

Comments:

results < mdc numerical indicator acceptable = 3

Do 4/3/17

***Status must be re-prepped due to unacceptable precision

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):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
I/S 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:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample 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:	

Product Name: Low-Flow System

Date: 2017-03-02 14:37:04

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 53 ft

Pump placement from TOC 49 ft

Well Information:

Well ID YGWA-11
Well diameter 2 in
Well Total Depth 53.8 ft
Screen Length 10 ft
Depth to Water 39.28 ft

Pumping Information:

Final Pumping Rate 60 mL/min
Total System Volume 0.7215614 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 20 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:09:47	1804.02	15.11	6.43	72.82	1.99	40.70	1.57	29.28
Last 5	14:14:47	2104.02	15.03	6.38	70.06	2.13	40.80	1.71	37.49
Last 5	14:19:47	2404.02	15.07	6.33	68.45	1.89	40.90	1.81	44.05
Last 5	14:24:48	2705.02	15.10	6.30	68.43	1.60	40.90	1.81	48.47
Last 5	14:29:48	3005.02	15.13	6.28	68.49	1.52	41.00	1.82	51.86
Variance 0			0.04	-0.05	-1.61			0.09	6.56
Variance 1			0.02	-0.03	-0.02			0.00	4.43
Variance 2			0.03	-0.02	0.06			0.02	3.39

Notes

Collected at 14:35. Sunny 50s. EB-2 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-02 12:50:03

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 105 ft

Pump placement from TOC 103 ft

Well Information:

Well ID YGWA-1D
Well diameter 2 in
Well Total Depth 128.60 ft
Screen Length 10 ft
Depth to Water 52.70 ft

Pumping Information:

Final Pumping Rate 80 mL/min
Total System Volume 2.765458 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 8.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:24:23	3300.00	17.70	7.23	159.03	7.11	52.80	0.33	-56.09
Last 5	12:29:31	3608.05	18.11	7.23	158.97	5.95	52.80	0.32	-56.36
Last 5	12:34:33	3909.99	17.72	7.23	160.31	5.10	52.80	0.30	-56.72
Last 5	12:39:33	4209.99	16.96	7.23	161.01	4.81	52.80	0.31	-54.93
Last 5	12:44:33	4509.95	17.10	7.23	159.10	4.62	52.80	0.31	-53.69
Variance 0			-0.39	0.00	1.34			-0.01	-0.36
Variance 1			-0.77	-0.00	0.70			0.01	1.79
Variance 2			0.14	-0.00	-1.91			-0.00	1.24

Notes

Collected at 12:50. Sunny 50s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-03 11:27:30

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 65 ft

Pump placement from TOC 59 ft

Well Information:

Well ID YGWA-2I
Well diameter 2 in
Well Total Depth 64.30 ft
Screen Length 10 ft
Depth to Water 47.00 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 1.896712 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 21 in
Total Volume Pumped 3.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:03:45	1503.01	16.02	7.20	235.68	2.67	48.10	0.62	-80.11
Last 5	11:08:45	1803.01	16.08	7.21	235.76	2.80	48.30	0.64	-80.99
Last 5	11:13:45	2103.00	16.02	7.23	235.12	2.62	48.40	0.62	-82.18
Last 5	11:18:45	2403.00	15.94	7.20	234.97	1.76	48.50	0.62	-80.35
Last 5	11:23:46	2703.98	16.10	7.22	234.82	1.51	48.60	0.61	-81.56
Variance 0			-0.05	0.02	-0.63			-0.02	-1.19
Variance 1			-0.08	-0.03	-0.16			0.01	1.83
Variance 2			0.16	0.02	-0.15			-0.01	-1.21

Notes

Collected at 11:30 Sunny 50s

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-02 10:16:14

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 115 ft

Pump placement from TOC 112 ft

Well Information:

Well ID YGWA-3D
Well diameter 2 in
Well Total Depth 137.10 ft
Screen Length 50 ft
Depth to Water 32.37 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 2.982644 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:52:31	1500.01	14.86	7.57	231.76	4.52	32.50	0.29	-45.69
Last 5	09:57:31	1800.00	14.97	7.61	231.70	5.35	32.50	0.21	-52.76
Last 5	10:02:31	2099.99	15.00	7.64	231.83	4.96	32.50	0.19	-58.44
Last 5	10:07:31	2399.99	15.07	7.66	231.64	4.90	32.50	0.18	-62.82
Last 5	10:12:31	2699.99	15.24	7.68	231.89	4.75	32.50	0.17	-66.68
Variance 0			0.03	0.03	0.14			-0.02	-5.67
Variance 1			0.07	0.03	-0.19			-0.01	-4.38
Variance 2			0.17	0.02	0.25			-0.00	-3.86

Notes

Collected at 10:15. Sunny 40s. FB-2 here at 10:00

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-01 14:26:31

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 60 ft

Pump placement from TOC 55 ft

Well Information:

Well ID YGWA-3I
Well diameter 2 in
Well Total Depth 60.00 ft
Screen Length 10 ft
Depth to Water 49.40 ft

Pumping Information:

Final Pumping Rate 170 mL/min
Total System Volume 1.788119 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 9 in
Total Volume Pumped 7.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:03:38	1500.01	17.75	7.26	233.94	0.87	50.00	0.70	-26.03
Last 5	14:08:38	1800.01	17.68	7.32	226.90	0.67	50.10	0.65	-34.25
Last 5	14:13:38	2100.00	17.74	7.36	221.08	1.01	50.10	0.57	-41.84
Last 5	14:18:38	2400.00	17.55	7.40	215.78	0.88	50.20	0.52	-48.40
Last 5	14:23:38	2699.99	17.58	7.42	212.00	0.68	50.20	0.46	-54.60
Variance 0			0.06	0.03	-5.81			-0.08	-7.59
Variance 1			-0.19	0.04	-5.31			-0.05	-6.56
Variance 2			0.03	0.02	-3.78			-0.06	-6.20

Notes

Collected at 14:30. Cloudy 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-08 10:02:50

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 35 ft

Pump placement from TOC 30.8 ft

Well Information:

Well ID YGWA-14S
Well diameter 2 in
Well Total Depth 35.82 ft
Screen Length 10 ft
Depth to Water 17.63 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 1.245153 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 4 in
Total Volume Pumped 4.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:37:45	600.03	16.64	5.49	69.00	2.06	17.90	5.71	137.04
Last 5	09:42:45	900.03	16.74	5.47	68.87	1.65	17.90	5.56	139.45
Last 5	09:47:45	1200.03	16.72	5.44	68.85	1.50	17.90	5.44	142.56
Last 5	09:52:45	1499.98	16.83	5.41	68.98	1.29	17.90	5.40	144.63
Last 5	09:57:45	1799.98	17.13	5.41	68.62	1.42	17.90	5.33	144.78
Variance 0			-0.02	-0.04	-0.02			-0.13	3.10
Variance 1			0.11	-0.03	0.13			-0.03	2.07
Variance 2			0.30	0.00	-0.36			-0.07	0.15

Notes

Collected at 10:05. Sunny 50s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-21 11:14:23

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 60 ft

Pump placement from TOC 54.6 ft

Well Information:

Well ID YGWA-30I
Well diameter 2 in
Well Total Depth 59.65 ft
Screen Length 10 ft
Depth to Water 38.30 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.788119 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:48:36	1201.03	17.08	5.83	40.79	7.19	38.50	6.61	121.26
Last 5	10:53:36	1501.02	17.10	5.76	40.84	5.95	38.50	6.48	120.34
Last 5	10:58:36	1801.02	17.12	5.72	40.84	5.12	38.50	6.46	121.87
Last 5	11:03:36	2101.02	17.15	5.69	40.73	4.71	38.50	6.36	122.31
Last 5	11:08:36	2401.02	17.14	5.67	40.78	3.88	38.50	6.30	122.89
Variance 0			0.02	-0.04	0.00			-0.01	1.53
Variance 1			0.03	-0.03	-0.12			-0.10	0.44
Variance 2			-0.01	-0.01	0.05			-0.06	0.58

Notes

Collected at 11:10. Cloudy 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-21 14:16:34

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 39.53"
Longitude -84° 54' -27.55"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 64 ft

Pump placement from TOC 3 ft

Well Information:

Well ID YGWC-26I
Well diameter 2 in
Well Total Depth 69.71 ft
Screen Length 10 ft
Depth to Water 24.43 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 1.874993 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3.24 in
Total Volume Pumped 6.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:54:38	2100.00	19.37	5.80	299.20	5.37	24.60	0.26	127.01
Last 5	13:59:38	2400.00	19.37	5.80	299.49	4.99	24.60	0.25	126.28
Last 5	14:04:38	2700.00	19.23	5.79	299.47	4.23	24.60	0.30	125.96
Last 5	14:09:38	2999.97	19.19	5.80	299.82	4.09	24.60	0.30	124.92
Last 5	14:14:38	3299.97	19.15	5.79	299.73	3.68	24.60	0.28	124.55
Variance 0			-0.14	-0.01	-0.02			0.05	-0.32
Variance 1			-0.04	0.01	0.35			0.00	-1.04
Variance 2			-0.04	-0.01	-0.09			-0.02	-0.37

Notes

Rainy 60's. Sampled at 14:20

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-21 12:07:46

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 39.66"
Longitude -84° -54' -27.62"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 35 ft

Pump placement from TOC 3 ft

Well Information:

Well ID YGWC-26S
Well diameter 2 in
Well Total Depth 40.1 ft
Screen Length 10 ft
Depth to Water 24.48 ft

Pumping Information:

Final Pumping Rate 90 mL/min
Total System Volume 1.245153 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2.64 in
Total Volume Pumped 8.1 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:46:17	4200.96	19.24	5.13	284.93	6.33	21.70	0.65	115.44
Last 5	11:51:17	4500.96	19.33	5.13	284.70	5.91	21.70	0.68	115.90
Last 5	11:56:17	4800.96	19.54	5.15	286.45	4.86	21.70	0.60	116.17
Last 5	12:01:17	5100.93	20.57	5.14	284.65	5.04	21.70	0.60	116.40
Last 5	12:06:17	5400.93	20.93	5.14	284.07	4.81	21.70	0.60	117.40
Variance 0			0.22	0.01	1.75			-0.08	0.27
Variance 1			1.03	-0.01	-1.80			0.01	0.23
Variance 2			0.36	0.00	-0.58			-0.01	1.00

Notes

Cloudy 70's. sampled at 12:10.

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-23 10:22:51

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 36.55"
Longitude -84° -54' -29.06"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 84 ft

Pump placement from TOC 74 ft

Well Information:

Well ID YGWC-271
Well diameter 2 in
Well Total Depth 79.84 ft
Screen Length 10 ft
Depth to Water 27.45 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 2.309366 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5.4 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:57:58	300.12	17.34	6.14	315.54	7.72	27.90	3.12	62.73
Last 5	10:02:58	600.02	17.68	6.14	326.37	3.41	27.90	1.16	61.25
Last 5	10:07:58	900.02	17.85	6.16	326.88	2.26	27.90	0.95	55.43
Last 5	10:12:58	1200.01	17.89	6.16	328.51	2.46	27.90	0.71	50.34
Last 5	10:17:58	1500.01	17.90	6.18	330.00	2.21	27.90	0.45	45.04
Variance 0			0.18	0.02	0.51			-0.21	-5.81
Variance 1			0.03	0.00	1.63			-0.24	-5.09
Variance 2			0.01	0.01	1.50			-0.26	-5.30

Notes

Cloudy 50's. Sampled at 10:25

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-22 15:02:59

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 36.15"
Longitude -84° -54' -29.28"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 35 ft

Pump placement from TOC 3 ft

Well Information:

Well ID YGWC-27S
Well diameter 2 in
Well Total Depth 40.26 ft
Screen Length 10 ft
Depth to Water 26.87 ft

Pumping Information:

Final Pumping Rate 220 mL/min
Total System Volume 1.245153 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.36 in
Total Volume Pumped 13.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:37:08	2100.00	19.12	6.12	417.45	6.18	26.90	0.19	113.21
Last 5	14:42:10	2402.00	19.08	6.12	417.89	4.30	26.90	0.18	113.40
Last 5	14:47:10	2702.00	19.18	6.14	417.67	3.73	26.90	0.17	113.78
Last 5	14:52:10	3001.98	19.33	6.14	417.66	3.02	26.90	0.16	113.81
Last 5	14:57:10	3301.98	19.42	6.14	417.62	2.18	26.90	0.16	114.07
Variance 0			0.10	0.02	-0.21			-0.01	0.38
Variance 1			0.15	0.00	-0.01			-0.01	0.03
Variance 2			0.09	-0.00	-0.04			-0.00	0.26

Notes

Cloudy 60's. Sampled at 15:05

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-22 13:15:50

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 34.47"
Longitude -84° -54' -30.71"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 64 ft

Pump placement from TOC 3 ft

Well Information:

Well ID YGWC-28I
Well diameter 2 in
Well Total Depth 69.89 ft
Screen Length 10 ft
Depth to Water 23.78 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 1.874993 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8.64 in
Total Volume Pumped 7.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:53:40	2100.00	18.35	6.33	390.95	0.62	25.40	0.36	89.43
Last 5	12:58:40	2400.00	18.44	6.34	391.95	0.75	25.40	0.32	89.28
Last 5	13:03:40	2700.00	18.49	6.34	392.99	0.74	25.40	0.27	89.54
Last 5	13:08:40	3000.00	18.54	6.34	394.20	0.59	25.40	0.26	90.08
Last 5	13:13:40	3299.97	18.61	6.35	394.81	0.56	24.50	0.26	90.04
Variance 0			0.06	0.00	1.04			-0.04	0.26
Variance 1			0.05	-0.00	1.22			-0.01	0.54
Variance 2			0.07	0.01	0.61			-0.01	-0.04

Notes

Cloudy 60's. Sampled at 13:20.

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-21 15:17:11

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 45 ft

Pump placement from TOC 40 ft

Well Information:

Well ID YGWC-28S
Well diameter 2 in
Well Total Depth 44.85 ft
Screen Length 10 ft
Depth to Water 22.52 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.462339 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2 in
Total Volume Pumped 27 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:51:18	9300.88	18.72	6.42	450.76	5.52	22.70	0.21	-48.85
Last 5	14:56:18	9600.88	18.65	6.42	450.94	5.24	22.70	0.22	-48.60
Last 5	15:01:19	9900.91	18.55	6.42	450.63	5.08	22.70	0.23	-48.20
Last 5	15:06:18	10200.87	18.39	6.42	449.79	4.89	22.70	0.23	-48.18
Last 5	15:11:18	10500.87	18.18	6.42	450.23	--	--	0.22	-47.72
Variance 0			-0.10	-0.00	-0.31			0.01	0.40
Variance 1			-0.16	0.00	-0.84			-0.00	0.03
Variance 2			-0.21	0.00	0.45			-0.00	0.46

Notes

Collected at 15:15. Light rain, 60s. FB-1 here at 12:30

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-22 11:00:04

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 32.1"
Longitude -84° 54' -32.11"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 34 ft

Pump placement from TOC 3 ft

Well Information:

Well ID YGWC-29I
Well diameter 2 in
Well Total Depth 39.46 ft
Screen Length 10 ft
Depth to Water 25.96 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.223434 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 13.14 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:37:04	2700.98	17.67	6.12	251.71	0.54	27.10	0.54	101.29
Last 5	10:42:04	3000.99	17.67	6.12	251.77	0.54	27.10	0.50	100.82
Last 5	10:47:04	3300.98	17.68	6.12	251.97	0.52	27.10	0.43	100.19
Last 5	10:52:04	3600.96	17.72	6.12	252.12	0.35	27.10	0.42	99.73
Last 5	10:57:04	3900.95	17.72	6.12	252.17	0.39	27.10	0.41	98.95
Variance 0			0.00	0.00	0.20			-0.06	-0.62
Variance 1			0.04	-0.00	0.16			-0.02	-0.46
Variance 2			0.00	0.00	0.04			-0.01	-0.78

Notes

Cloudy 60's. Sampled at 11:05.

Grab Samples



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAD0922

May 04, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EB-1-4-26-17	AAD0922-01	Water	04/26/17 09:40	04/27/17 10:45
YGWA-14S	AAD0922-02	Ground Water	04/26/17 10:30	04/27/17 10:45
YGWA-30I	AAD0922-03	Ground Water	04/26/17 12:00	04/27/17 10:45
YGWA-3D	AAD0922-04	Ground Water	04/26/17 13:30	04/27/17 10:45
YGWA-3I	AAD0922-05	Ground Water	04/26/17 15:10	04/27/17 10:45
YGWA-18I	AAD0922-06	Ground Water	04/26/17 13:20	04/27/17 10:45
YGWA-20S	AAD0922-07	Ground Water	04/26/17 12:05	04/27/17 10:45
YGWA-21I	AAD0922-08	Ground Water	04/26/17 10:25	04/27/17 10:45
Dup-1	AAD0922-09	Ground Water	04/26/17 00:00	04/27/17 10:45



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Project: CCR Event

Client ID: EB-1-4-26-17

Lab Number ID: AAD0922-01

Date/Time Sampled: 4/26/2017 9:40:00AM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 12:38	7040864	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 12:38	7040864	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 12:38	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Arsenic	0.0007	0.0050	0.0004	mg/L	EPA 6020B	J, B-01	1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Calcium	0.0141	0.500	0.0104	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:18	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 15:48	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Project: CCR Event

Client ID: YGWA-14S

Lab Number ID: AAD0922-02

Date/Time Sampled: 4/26/2017 10:30:00AM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	52	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	4.1	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 12:59	7040864	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 12:59	7040864	RLC
Sulfate	7.0	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 12:59	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Arsenic	0.0007	0.0050	0.0004	mg/L	EPA 6020B	J, B-01	1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Barium	0.0085	0.0100	0.0003	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Beryllium	0.0002	0.0030	0.00007	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Boron	0.0161	0.0400	0.0060	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Calcium	1.14	0.500	0.0104	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:24	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 15:50	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Project: CCR Event

Client ID: YGWA-30I

Lab Number ID: AAD0922-03

Date/Time Sampled: 4/26/2017 12:00:00PM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	55	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	1.7	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 14:00	7040864	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 14:00	7040864	RLC
Sulfate	1.4	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 14:00	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B	B-01	1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Barium	0.0074	0.0100	0.0003	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Calcium	1.03	0.500	0.0104	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Chromium	0.0016	0.0100	0.0003	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Cobalt	0.0244	0.0100	0.0005	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:36	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 15:53	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Project: CCR Event

Client ID: YGWA-3D

Lab Number ID: AAD0922-04

Date/Time Sampled: 4/26/2017 1:30:00PM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	181	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 14:21	7040864	RLC
Fluoride	0.48	0.30	0.004	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 14:21	7040864	RLC
Sulfate	5.1	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 14:21	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Arsenic	0.0009	0.0050	0.0004	mg/L	EPA 6020B	B-01, J	1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Barium	0.0078	0.0100	0.0003	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Calcium	30.4	25.0	0.522	mg/L	EPA 6020B		50	04/28/17 08:10	05/01/17 23:53	7040859	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Molybdenum	0.0100	0.0100	0.0006	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Lithium	0.0183	0.0500	0.0011	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/01/17 23:47	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 15:55	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 04, 2017

Attention: Mr. Joju Abraham

Report No.: AAD0922

Project: CCR Event

Client ID: YGWA-3I

Lab Number ID: AAD0922-05

Date/Time Sampled: 4/26/2017 3:10:00PM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	92	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 14:42	7040864	RLC
Fluoride	0.08	0.30	0.004	mg/L	EPA 300.0	J	1	04/27/17 18:19	04/28/17 14:42	7040864	RLC
Sulfate	11	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 14:42	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Arsenic	0.0014	0.0050	0.0004	mg/L	EPA 6020B	B-01, J	1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Barium	0.0038	0.0100	0.0003	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Calcium	25.6	25.0	0.522	mg/L	EPA 6020B		50	04/28/17 08:10	05/02/17 00:16	7040859	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Molybdenum	0.0075	0.0100	0.0006	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Lithium	0.0092	0.0500	0.0011	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:10	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 15:57	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 04, 2017

Attention: Mr. Joju Abraham

Report No.: AAD0922

Project: CCR Event

Client ID: YGWA-18I

Lab Number ID: AAD0922-06

Date/Time Sampled: 4/26/2017 1:20:00PM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	162	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	7.0	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 15:02	7040864	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 15:02	7040864	RLC
Sulfate	1.6	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 15:02	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Arsenic	0.0008	0.0050	0.0004	mg/L	EPA 6020B	B-01, J	1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Barium	0.0240	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Calcium	4.28	0.500	0.0104	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Chromium	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Lithium	0.0041	0.0500	0.0011	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:21	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:00	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Project: CCR Event

Client ID: YGWA-20S

Lab Number ID: AAD0922-07

Date/Time Sampled: 4/26/2017 12:05:00PM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	34	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	2.0	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 15:23	7040864	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 15:23	7040864	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 15:23	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Barium	0.0177	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Calcium	2.30	0.500	0.0104	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Chromium	0.0007	0.0100	0.0003	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:33	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:02	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Project: CCR Event

Client ID: YGWA-211

Lab Number ID: AAD0922-08

Date/Time Sampled: 4/26/2017 10:25:00AM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	50	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	2.1	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 15:44	7040864	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	04/27/17 18:19	04/28/17 15:44	7040864	RLC
Sulfate	4.9	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 15:44	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Arsenic	0.0017	0.0050	0.0004	mg/L	EPA 6020B	B-01, J	1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Barium	0.0110	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Calcium	6.65	0.500	0.0104	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Cobalt	0.0090	0.0100	0.0005	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Molybdenum	0.0008	0.0100	0.0006	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Lithium	0.0054	0.0500	0.0011	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:44	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:04	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Project: CCR Event

Client ID: Dup-1

Lab Number ID: AAD0922-09

Date/Time Sampled: 4/26/2017 12:00:00AM

Date/Time Received: 4/27/2017 10:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	76	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	7.1	0.25	0.01	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 17:27	7040864	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 17:27	7040864	RLC
Sulfate	1.8	1.0	0.09	mg/L	EPA 300.0		1	04/27/17 18:19	04/28/17 17:27	7040864	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Barium	0.0244	0.0100	0.0003	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Calcium	4.36	0.500	0.0104	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Lithium	0.0042	0.0500	0.0011	mg/L	EPA 6020B	J	1	04/28/17 08:10	05/02/17 00:56	7040859	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:07	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050015 - SM 2540 C											
Blank (7050015-BLK1)						Prepared & Analyzed: 05/01/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7050015-BS1)						Prepared & Analyzed: 05/01/17					
Total Dissolved Solids	394	25	10	mg/L	400.00		98	84-108			
Duplicate (7050015-DUP1)						Source: AAD0922-01 Prepared & Analyzed: 05/01/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7050015-DUP2)						Source: AAD1012-03 Prepared & Analyzed: 05/01/17					
Total Dissolved Solids	96	25	10	mg/L		116			19	10	QR-03



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7040864 - EPA 300.0											
Blank (7040864-BLK1)											
						Prepared: 04/27/17 Analyzed: 04/28/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7040864-BS1)											
						Prepared: 04/27/17 Analyzed: 04/28/17					
Chloride	9.91	0.25	0.01	mg/L	10.010		99	90-110			
Fluoride	10.0	0.30	0.004	mg/L	10.020		100	90-110			
Sulfate	10.1	1.0	0.09	mg/L	10.020		100	90-110			
Matrix Spike (7040864-MS1)											
						Source: AAD0922-02			Prepared: 04/27/17 Analyzed: 04/28/17		
Chloride	14.2	0.25	0.01	mg/L	10.010	4.14	100	90-110			
Fluoride	10.4	0.30	0.004	mg/L	10.020	ND	104	90-110			
Sulfate	16.2	1.0	0.09	mg/L	10.020	7.02	92	90-110			
Matrix Spike Dup (7040864-MSD1)											
						Source: AAD0922-02			Prepared: 04/27/17 Analyzed: 04/28/17		
Chloride	14.3	0.25	0.01	mg/L	10.010	4.14	102	90-110	0.9	15	
Fluoride	10.8	0.30	0.004	mg/L	10.020	ND	108	90-110	4	15	
Sulfate	16.7	1.0	0.09	mg/L	10.020	7.02	97	90-110	3	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7040859 - EPA 3005A

Blank (7040859-BLK1)

Prepared: 04/28/17 Analyzed: 05/01/17

Antimony	ND	0.0030	0.0003	mg/L							
Arsenic	0.0005	0.0050	0.0004	mg/L							J
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00007	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.00006	mg/L							
Calcium	ND	0.500	0.0104	mg/L							
Chromium	ND	0.0100	0.0003	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0006	mg/L							
Nickel	ND	0.0100	0.0003	mg/L							
Selenium	ND	0.0100	0.0014	mg/L							
Silver	ND	0.0100	0.0003	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	0.0014	0.0100	0.0014	mg/L							J
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0011	mg/L							

LCS (7040859-BS1)

Prepared: 04/28/17 Analyzed: 05/01/17

Antimony	0.107	0.0030	0.0003	mg/L	0.10000		107	80-120			
Arsenic	0.103	0.0050	0.0004	mg/L	0.10000		103	80-120			
Barium	0.105	0.0100	0.0003	mg/L	0.10000		105	80-120			
Beryllium	0.117	0.0030	0.00007	mg/L	0.10000		117	80-120			
Boron	1.18	0.0400	0.0060	mg/L	1.0000		118	80-120			
Cadmium	0.106	0.0010	0.00006	mg/L	0.10000		106	80-120			
Calcium	1.04	0.500	0.0104	mg/L	1.0000		104	80-120			
Chromium	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Cobalt	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Copper	0.104	0.0250	0.0003	mg/L	0.10000		104	80-120			
Lead	0.104	0.0050	0.00007	mg/L	0.10000		104	80-120			
Molybdenum	0.112	0.0100	0.0006	mg/L	0.10000		112	80-120			
Nickel	0.106	0.0100	0.0003	mg/L	0.10000		106	80-120			
Selenium	0.104	0.0100	0.0014	mg/L	0.10000		104	80-120			
Silver	0.108	0.0100	0.0003	mg/L	0.10000		108	80-120			
Thallium	0.102	0.0010	0.00005	mg/L	0.10000		102	80-120			
Vanadium	0.110	0.0100	0.0014	mg/L	0.10000		110	80-120			
Zinc	0.105	0.0100	0.0013	mg/L	0.10000		105	80-120			
Lithium	0.118	0.0500	0.0011	mg/L	0.10000		118	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7040859 - EPA 3005A											
Matrix Spike (7040859-MS1)			Source: AAD0922-02			Prepared: 04/28/17 Analyzed: 05/01/17					
Antimony	0.145	0.0030	0.0003	mg/L	0.10000	ND	145	75-125			QM-05
Arsenic	0.138	0.0050	0.0004	mg/L	0.10000	0.0007	137	75-125			QM-05
Barium	0.147	0.0100	0.0003	mg/L	0.10000	0.0085	139	75-125			QM-05
Beryllium	0.134	0.0030	0.00007	mg/L	0.10000	0.0002	134	75-125			QM-05
Boron	1.35	0.0400	0.0060	mg/L	1.0000	0.0161	133	75-125			QM-05
Cadmium	0.139	0.0010	0.00006	mg/L	0.10000	ND	139	75-125			QM-05
Calcium	2.33	0.500	0.0104	mg/L	1.0000	1.14	119	75-125			
Chromium	0.142	0.0100	0.0003	mg/L	0.10000	ND	142	75-125			QM-05
Cobalt	0.138	0.0100	0.0005	mg/L	0.10000	ND	138	75-125			QM-05
Copper	0.136	0.0250	0.0003	mg/L	0.10000	ND	136	75-125			
Lead	0.134	0.0050	0.00007	mg/L	0.10000	ND	134	75-125			QM-05
Molybdenum	0.144	0.0100	0.0006	mg/L	0.10000	ND	144	75-125			QM-05
Nickel	0.140	0.0100	0.0003	mg/L	0.10000	ND	140	75-125			QM-05
Selenium	0.136	0.0100	0.0014	mg/L	0.10000	ND	136	75-125			QM-05
Silver	0.137	0.0100	0.0003	mg/L	0.10000	ND	137	75-125			
Thallium	0.135	0.0010	0.00005	mg/L	0.10000	ND	135	75-125			QM-05
Vanadium	0.147	0.0100	0.0014	mg/L	0.10000	0.0023	145	75-125			
Zinc	0.137	0.0100	0.0013	mg/L	0.10000	0.0014	135	75-125			QM-05
Lithium	0.135	0.0500	0.0011	mg/L	0.10000	ND	135	75-125			QM-05
Matrix Spike Dup (7040859-MSD1)											
Matrix Spike Dup (7040859-MSD1)			Source: AAD0922-02			Prepared: 04/28/17 Analyzed: 05/01/17					
Antimony	0.106	0.0030	0.0003	mg/L	0.10000	ND	106	75-125	31	20	QM-06
Arsenic	0.0998	0.0050	0.0004	mg/L	0.10000	0.0007	99	75-125	32	20	QM-06
Barium	0.110	0.0100	0.0003	mg/L	0.10000	0.0085	102	75-125	29	20	QM-06
Beryllium	0.105	0.0030	0.00007	mg/L	0.10000	0.0002	105	75-125	25	20	QM-06
Boron	1.07	0.0400	0.0060	mg/L	1.0000	0.0161	105	75-125	23	20	QM-06
Cadmium	0.105	0.0010	0.00006	mg/L	0.10000	ND	105	75-125	28	20	QM-06
Calcium	2.11	0.500	0.0104	mg/L	1.0000	1.14	97	75-125	10	20	
Chromium	0.105	0.0100	0.0003	mg/L	0.10000	ND	105	75-125	30	20	QM-06
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125	29	20	QM-06
Copper	0.103	0.0250	0.0003	mg/L	0.10000	ND	103	75-125	28	20	
Lead	0.0984	0.0050	0.00007	mg/L	0.10000	ND	98	75-125	30	20	QM-06
Molybdenum	0.108	0.0100	0.0006	mg/L	0.10000	ND	108	75-125	28	20	QM-06
Nickel	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125	30	20	QM-06
Selenium	0.101	0.0100	0.0014	mg/L	0.10000	ND	101	75-125	29	20	QM-06
Silver	0.101	0.0100	0.0003	mg/L	0.10000	ND	101	75-125	31	20	
Thallium	0.101	0.0010	0.00005	mg/L	0.10000	ND	101	75-125	29	20	QM-06
Vanadium	0.108	0.0100	0.0014	mg/L	0.10000	0.0023	106	75-125	30	20	
Zinc	0.104	0.0100	0.0013	mg/L	0.10000	0.0014	103	75-125	27	20	QM-06
Lithium	0.107	0.0500	0.0011	mg/L	0.10000	ND	107	75-125	23	20	QM-06



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7040859 - EPA 3005A											
Post Spike (7040859-PS1)			Source: AAD0922-02			Prepared: 04/28/17 Analyzed: 05/01/17					
Antimony	106			ug/L	100.00	-0.0129	106	80-120			
Arsenic	104			ug/L	100.00	0.711	103	80-120			
Barium	112			ug/L	100.00	8.49	104	80-120			
Beryllium	104			ug/L	100.00	0.171	104	80-120			
Boron	1100			ug/L	1000.0	16.1	108	80-120			
Cadmium	106			ug/L	100.00	0.0354	106	80-120			
Calcium	2110			ug/L	1000.0	1140	97	80-120			
Chromium	107			ug/L	100.00	0.125	107	80-120			
Cobalt	105			ug/L	100.00	0.0086	105	80-120			
Copper	103			ug/L	100.00	0.0654	103	80-120			
Lead	101			ug/L	100.00	0.0077	101	80-120			
Molybdenum	111			ug/L	100.00	0.0956	110	80-120			
Nickel	107			ug/L	100.00	0.0020	107	80-120			
Selenium	104			ug/L	100.00	1.04	103	80-120			
Silver	105			ug/L	100.00	-0.0004	105	80-120			
Thallium	102			ug/L	100.00	-0.0019	102	80-120			
Vanadium	110			ug/L	100.00	2.34	108	80-120			
Zinc	104			ug/L	100.00	1.44	102	80-120			
Lithium	104			ug/L	100.00	0.263	104	80-120			

Batch 7050028 - EPA 7470A

Blank (7050028-BLK1)					Prepared & Analyzed: 05/02/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7050028-BS1)					Prepared & Analyzed: 05/02/17						
Mercury	0.00235	0.00050	0.000041	mg/L	2.5000E-3		94	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050028 - EPA 7470A											
Matrix Spike (7050028-MS1)			Source: AAD0922-05			Prepared & Analyzed: 05/02/17					
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125			
Matrix Spike Dup (7050028-MSD1)			Source: AAD0922-05			Prepared & Analyzed: 05/02/17					
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	ND	93	75-125	0.4	20	
Post Spike (7050028-PS1)			Source: AAD0922-05			Prepared & Analyzed: 05/02/17					
Mercury	1.72			ug/L	1.6667	-0.0239	103	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 04, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-06** Due to suspected matrix interference, RPD and Percent Recovery values for the MS and/or MSD were outside control limits. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: _____ OF _____

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239 REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle REQUESTED COMPLETION DATE: laburch@southernmco.com PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2CCR		ANALYSIS REQUESTED CONTAINER TYPE: P P P P P P P P PRESERVATION: 3 7 3 # of CONTAINERS: 4 4 4 4 4 4 4 4 4 Metals App. III & IV (EPA 60207/470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-846 9315/9320)		CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT REMARKS/ADDITIONAL INFORMATION	
Collection DATE 4/26/17 4/26/17 4/26/17 4/26/17 4/26/17 4/26/17 4/26/17 4/26/17 4/26/17	Collection TIME 0940 1030 1200 1330 1510 1320 1205 1225 —	MATRIX CODE* W GW GW GW GW GW GW GW GW	GRAAB ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	SAMPLE IDENTIFICATION EB-1-4-26-17 Y6WA-14S Y6WA-30I Y6WA-3D Y6WA-3I Y6WA-1BI Y6WA-20S Y6WA-2II DUP-1	LAB #: AAD0922 Entered into LIMS: MK Tracking #:
SAMPLED BY AND TITLE: Gilbert R. Ke (ACC) RECEIVED BY:		DATE/TIME: 4-26-17 1615 DATE/TIME:	RELINQUISHED BY: [Signature] RELINQUISHED BY:	DATE/TIME: 4-27-17 1045 DATE/TIME:	FOR LAB USE ONLY LAB #: Entered into LIMS: Tracking #: CLIENT: FS COURIER: # of Coolers OTHER: FS

Plant Yates COC Ash Ponds



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 4/28/2017 9:41:38AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 04/27/17 10:45

Work Order: AAD0922

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 9

#Containers: 36

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

May 19, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAD0922 Plant Yates
Pace Project No.: 30217522

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on April 29, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAD0922 Plant Yates
Pace Project No.: 30217522

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAD0922 Plant Yates

Pace Project No.: 30217522

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30217522001	EB-1-4-26-17	Water	04/26/17 09:40	04/29/17 10:15
30217522002	YGWA-14S	Water	04/26/17 10:30	04/29/17 10:15
30217522003	YGWA-30I	Water	04/26/17 12:00	04/29/17 10:15
30217522004	YGWA-3D	Water	04/26/17 13:30	04/29/17 10:15
30217522005	YGWA-3I	Water	04/26/17 15:10	04/29/17 10:15
30217522006	YGWA-18I	Water	04/26/17 13:20	04/29/17 10:15
30217522007	YGWA-20S	Water	04/26/17 12:05	04/29/17 10:15
30217522008	YGWA-21I	Water	04/26/17 10:25	04/29/17 10:15
30217522009	Dup-1	Water	04/26/17 00:00	04/29/17 10:15

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAD0922 Plant Yates
Pace Project No.: 30217522

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30217522001	EB-1-4-26-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217522002	YGWA-14S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217522003	YGWA-30I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217522004	YGWA-3D	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217522005	YGWA-3I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217522006	YGWA-18I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217522007	YGWA-20S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217522008	YGWA-21I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217522009	Dup-1	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAD0922 Plant Yates

Pace Project No.: 30217522

Sample: EB-1-4-26-17		Lab ID: 30217522001	Collected: 04/26/17 09:40	Received: 04/29/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.00368 ± 0.154 (0.435) C:59% T:NA	pCi/L	05/11/17 08:55	13982-63-3	
Radium-228	EPA 9320	0.210 ± 0.298 (0.637) C:77% T:76%	pCi/L	05/10/17 10:59	15262-20-1	
Total Radium	Total Radium Calculation	0.210 ± 0.452 (1.07)	pCi/L	05/18/17 17:26	7440-14-4	

Sample: YGWA-14S		Lab ID: 30217522002	Collected: 04/26/17 10:30	Received: 04/29/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0314 ± 0.149 (0.378) C:80% T:NA	pCi/L	05/11/17 08:55	13982-63-3	
Radium-228	EPA 9320	0.251 ± 0.381 (0.824) C:81% T:70%	pCi/L	05/10/17 14:27	15262-20-1	
Total Radium	Total Radium Calculation	0.282 ± 0.530 (1.20)	pCi/L	05/18/17 17:26	7440-14-4	

Sample: YGWA-30I		Lab ID: 30217522003	Collected: 04/26/17 12:00	Received: 04/29/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0334 ± 0.171 (0.478) C:78% T:NA	pCi/L	05/11/17 08:55	13982-63-3	
Radium-228	EPA 9320	0.204 ± 0.350 (0.764) C:78% T:82%	pCi/L	05/10/17 14:27	15262-20-1	
Total Radium	Total Radium Calculation	0.204 ± 0.521 (1.24)	pCi/L	05/18/17 17:26	7440-14-4	

Sample: YGWA-3D		Lab ID: 30217522004	Collected: 04/26/17 13:30	Received: 04/29/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.817 ± 0.326 (0.355) C:80% T:NA	pCi/L	05/11/17 08:55	13982-63-3	
Radium-228	EPA 9320	1.53 ± 0.510 (0.688) C:79% T:79%	pCi/L	05/10/17 14:27	15262-20-1	
Total Radium	Total Radium Calculation	2.35 ± 0.836 (1.04)	pCi/L	05/18/17 17:26	7440-14-4	

Sample: YGWA-3I		Lab ID: 30217522005	Collected: 04/26/17 15:10	Received: 04/29/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.222 ± 0.186 (0.320) C:78% T:NA	pCi/L	05/11/17 08:55	13982-63-3	
Radium-228	EPA 9320	0.450 ± 0.373 (0.740) C:77% T:70%	pCi/L	05/10/17 14:27	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAD0922 Plant Yates
Pace Project No.: 30217522

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-3I Lab ID: 30217522005 Collected: 04/26/17 15:10 Received: 04/29/17 10:15 Matrix: Water						
PWS: Site ID: Sample Type:						
Total Radium	Total Radium Calculation	0.672 ± 0.559 (1.06)	pCi/L	05/18/17 17:26	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-18I Lab ID: 30217522006 Collected: 04/26/17 13:20 Received: 04/29/17 10:15 Matrix: Water						
PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.129 ± 0.162 (0.333) C:82% T:NA	pCi/L	05/11/17 09:37	13982-63-3	
Radium-228	EPA 9320	0.378 ± 0.359 (0.735) C:79% T:75%	pCi/L	05/10/17 14:30	15262-20-1	
Total Radium	Total Radium Calculation	0.507 ± 0.521 (1.07)	pCi/L	05/18/17 17:26	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-20S Lab ID: 30217522007 Collected: 04/26/17 12:05 Received: 04/29/17 10:15 Matrix: Water						
PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.159 ± 0.156 (0.289) C:84% T:NA	pCi/L	05/11/17 08:56	13982-63-3	
Radium-228	EPA 9320	0.123 ± 0.349 (0.783) C:79% T:80%	pCi/L	05/10/17 15:11	15262-20-1	
Total Radium	Total Radium Calculation	0.282 ± 0.505 (1.07)	pCi/L	05/18/17 17:01	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-21I Lab ID: 30217522008 Collected: 04/26/17 10:25 Received: 04/29/17 10:15 Matrix: Water						
PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.489 ± 0.254 (0.364) C:83% T:NA	pCi/L	05/11/17 08:56	13982-63-3	
Radium-228	EPA 9320	0.644 ± 0.424 (0.806) C:80% T:77%	pCi/L	05/10/17 15:11	15262-20-1	
Total Radium	Total Radium Calculation	1.13 ± 0.678 (1.17)	pCi/L	05/18/17 17:01	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: Dup-1 Lab ID: 30217522009 Collected: 04/26/17 00:00 Received: 04/29/17 10:15 Matrix: Water						
PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.144 ± 0.167 (0.339) C:83% T:NA	pCi/L	05/11/17 08:56	13982-63-3	
Radium-228	EPA 9320	0.101 ± 0.357 (0.808) C:78% T:75%	pCi/L	05/10/17 15:11	15262-20-1	
Total Radium	Total Radium Calculation	0.245 ± 0.524 (1.15)	pCi/L	05/18/17 17:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAD0922 Plant Yates

Pace Project No.: 30217522

QC Batch:	257322	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30217522001, 30217522002, 30217522003, 30217522004, 30217522005, 30217522006, 30217522007, 30217522008, 30217522009		

METHOD BLANK:	1267402	Matrix:	Water
Associated Lab Samples:	30217522001, 30217522002, 30217522003, 30217522004, 30217522005, 30217522006, 30217522007, 30217522008, 30217522009		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.702 ± 0.377 (0.661) C:79% T:77%	pCi/L	05/10/17 10:58	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAD0922 Plant Yates

Pace Project No.: 30217522

QC Batch:	257831	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30217522001, 30217522002, 30217522003, 30217522004, 30217522005, 30217522006, 30217522007, 30217522008, 30217522009		

METHOD BLANK:	1269948	Matrix:	Water
Associated Lab Samples:	30217522001, 30217522002, 30217522003, 30217522004, 30217522005, 30217522006, 30217522007, 30217522008, 30217522009		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00725 ± 0.136 (0.382) C:84% T:NA	pCi/L	05/11/17 08:55	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AAD0922 Plant Yates

Pace Project No.: 30217522

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

30217522

Chain of Custody



Results Requested By: 5/22/2017

Owner Received Date:

Workorder Name: Plant Yates

Report To:		Subcontract To:		Requested Analysis			
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200		Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600		Radium 226, 228, Total			
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	LAB USE ONLY
1	EB-1-4-26-17	G	4/26/2017 9:40	AAD0922-01	W	2	001
2	YGWA-14S	G	4/26/2017 10:30	AAD0922-02	GW	2	002
3	YGWA-30I	G	4/26/2017 12:00	AAD0922-03	GW	2	003
4	YGWA-3D	G	4/26/2017 13:30	AAD0922-04	GW	2	004
5	YGWA-3I	G	4/26/2017 15:10	AAD0922-05	GW	2	005
6	YGWA-18I	G	4/26/2017 13:20	AAD0922-06	GW	2	006
7	YGWA-20S	G	4/26/2017 12:05	AAD0922-07	GW	2	007
8	YGWA-21I	G	4/26/2017 10:25	AAD0922-08	GW	2	008
9	Dup-1	G	4/26/2017 0:00	AAD0922-09	GW	2	009
10							
Transfers	Released By	Date/Time	Received By	Date/Time	Comments		
1	Maximilian	4/27/17	Raymond K. Vucobry	4/29/17 10:15			
2							
3							

Cooler Temperature on Receipt N/A °C Custody Seal Y of N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

30217522

PAGE: OF



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty		CC: Maria Padilla Heath McCorkle		PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP	
PROJECT #: Phase 2 CCR		Collection DATE 4/26/17		Collection TIME 0940		MATRIX CODE W		SAMPLE IDENTIFICATION EB-1-4-26-17		CONTAINER TYPE: PRESERVATION	
Collection DATE 4/26/17		Collection TIME 1030		MATRIX CODE BW		SAMPLE IDENTIFICATION Y6WA-14S		CONTAINER TYPE: PRESERVATION		CONTAINER TYPE: PRESERVATION	
Collection DATE 4/26/17		Collection TIME 1200		MATRIX CODE BW		SAMPLE IDENTIFICATION Y6WA-30I		CONTAINER TYPE: PRESERVATION		CONTAINER TYPE: PRESERVATION	
Collection DATE 4/26/17		Collection TIME 1330		MATRIX CODE BW		SAMPLE IDENTIFICATION Y6WA-3D		CONTAINER TYPE: PRESERVATION		CONTAINER TYPE: PRESERVATION	
Collection DATE 4/26/17		Collection TIME 1510		MATRIX CODE BW		SAMPLE IDENTIFICATION Y6WA-3I		CONTAINER TYPE: PRESERVATION		CONTAINER TYPE: PRESERVATION	
Collection DATE 4/26/17		Collection TIME 1320		MATRIX CODE BW		SAMPLE IDENTIFICATION Y6WA-18I		CONTAINER TYPE: PRESERVATION		CONTAINER TYPE: PRESERVATION	
Collection DATE 4/26/17		Collection TIME 1205		MATRIX CODE BW		SAMPLE IDENTIFICATION Y6WA-20S		CONTAINER TYPE: PRESERVATION		CONTAINER TYPE: PRESERVATION	
Collection DATE 4/26/17		Collection TIME 1225		MATRIX CODE BW		SAMPLE IDENTIFICATION Y6WA-21I		CONTAINER TYPE: PRESERVATION		CONTAINER TYPE: PRESERVATION	
Collection DATE 4/26/17		Collection TIME ---		MATRIX CODE BW		SAMPLE IDENTIFICATION DUP-1		CONTAINER TYPE: PRESERVATION		CONTAINER TYPE: PRESERVATION	

CONTAINER TYPE: PRESERVATION	ANALYSIS REQUESTED	CONTAINER TYPE:		ANALYSIS REQUESTED		DATE/TIME	DATE/TIME
		P	P	P	P		
3	Metals App. III & IV (FPA 6020/7470)	1	1	2	2	4-21-17	1042
	Q, F, SO ₄ & TDS (FPA 300.0 & SM 2540C)	1	1	2	2		
	Radium 226 & 228 (SW-846 9315/9320)	1	1	2	2		

CONTAINER TYPE	ANALYSIS REQUESTED	DATE/TIME	DATE/TIME
P - PLASTIC			
A - AMBER GLASS			
G - CLEAR GLASS			
V - VOA VIAL			
S - STERILE			
O - OTHER			

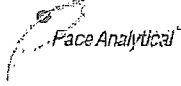
MATRIX CODES:	REMARKS/ADDITIONAL INFORMATION
DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
ST - STORM WATER	L - LIQUID
W - WATER	P - PRODUCT

LAB #:	ENTERED INTO LIMS:
AAD0922	MR
TRACKING #:	

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

302175223



Client Name: Pace GA

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681291039349

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ARM 4/29/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	/			1.
Chain of Custody Filled Out:	/			2.
Chain of Custody Relinquished:	/			3.
Sampler Name & Signature on COC:	/			4.
Sample Labels match COC:	/			5.
-Includes date/time/ID Matrix: <u>N/A</u>				
Samples Arrived within Hold Time:	/			6.
Short Hold Time Analysis (<72hr remaining):	/			7.
Rush Turn Around Time Requested:	/			8.
Sufficient Volume:	/			9.
Correct Containers Used:	/			10.
-Pace Containers Used:	/			
Containers Intact:	/			11.
Orthophosphate field filtered			/	12.
Organic Samples checked for dechlorination:			/	13.
Filtered volume received for Dissolved tests			/	14.
All containers have been checked for preservation.	/			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	/			<u>PHL2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>ARM</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			/	16.
Trip Blank Present:			/	17.
Trip Blank Custody Seals Present			/	
Rad Aqueous Samples Screened > 0.5 mrem/hr			/	Initial when completed: <u>ARM</u> Date: <u>4/29/17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 5/9/2017
Worklist: 35555
Matrix: DW



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):
MS Aliquot (L, g, F):
MS Target Conc. (pCi/L, g, F):
MSD Aliquot (L, g, F):
MSD Target Conc. (pCi/L, g, F):
Spike uncertainty (calculated):

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:
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:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.
Sample MS I.D.
Sample MSD I.D.
Sample Matrix Spike Result:
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

Method Blank Assessment

MB Sample ID: 1269948
MB concentration: -0.007
MB Counting Uncertainty: 0.136
MB MDC: 0.382
MB Numerical Performance Indicator: -0.10
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Pass

Laboratory Control Sample Assessment

LCSD (Y or N)? N
LCS35555 LCSD35555

Count Date: 5/11/2017
Spike I.D.: 11-054
Spike Concentration (pCi/mL): 5.963
Volume Used (mL): 2.00
Aliquot Volume (L, g, F): 0.501
Target Conc. (pCi/L, g, F): 23.804
Uncertainty (Calculated): 1.120
Result (pCi/L, g, F): 20.370
LCSD Counting Uncertainty (pCi/L, g, F): 1.304
Numerical Performance Indicator: -3.92
Percent Recovery: 85.57%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30217522001
Duplicate Sample I.D.: 30217522001DUP
Sample Result (pCi/L, g, F): -0.004
Sample Result Counting Uncertainty (pCi/L, g, F): 0.154
Sample Duplicate Result (pCi/L, g, F): -0.027
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.076
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: 0.271
Duplicate RPD: -152.59%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30217522001
30217522001DUP

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

Comments:

Opn 5/16/17

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JILW
Date: 5/8/2017
Worklist: 35453
Matrix: DW



Method Blank Assessment	
MB Sample ID	1267402
MB concentration:	0.702
M/B Counting Uncertainty:	0.356
MB MDC:	0.661
MB Numerical Performance Indicator:	3.87
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	
Count Date:	5/10/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	24.575
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.810
Target Conc. (pCi/L, g, F):	6.068
Uncertainty (Calculated):	0.437
Result (pCi/L, g, F):	6.480
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.741
Numerical Performance Indicator:	0.94
Percent Recovery:	106.79%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	LCS35453
Duplicate Sample I.D.:	LCS35453
Sample Result (pCi/L, g, F):	6.480
Sample Result Counting Uncertainty (pCi/L, g, F):	0.741
Sample Duplicate Result (pCi/L, g, F):	8.183
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.798
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	-3.065
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	23.31%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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.

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample MS I.D.
Sample MS I.D.:	Sample MSD I.D.
Sample MSD I.D.:	Sample Matrix Spike Result:
Sample Matrix Spike Result:	Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result:	Duplicate Numerical Performance Indicator:
Duplicate Numerical Performance Indicator:	(Based on the Percent Recoveries) MS/MSD Duplicate RPD:
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:
MS/MSD Duplicate Status vs RPD:	

Handwritten signature/initials



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAD1012

May 08, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GWA-18S	AAD1012-01	Ground Water	04/26/17 18:50	04/29/17 11:40
YGWA-1I	AAD1012-02	Ground Water	04/27/17 15:45	04/29/17 11:40
YGWA-1D	AAD1012-03	Ground Water	04/27/17 17:35	04/29/17 11:40
FB-1-4-28-17	AAD1012-04	Water	04/28/17 09:30	04/29/17 11:40
YGWA-2I	AAD1012-05	Ground Water	04/28/17 11:20	04/29/17 11:40
EB-2-4-28-17	AAD1012-06	Water	04/28/17 12:50	04/29/17 11:40



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Project: CCR Event

Client ID: GWA-18S

Lab Number ID: AAD1012-01

Date/Time Sampled: 4/26/2017 6:50:00PM

Date/Time Received: 4/29/2017 11:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	36	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	6.5	0.25	0.01	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 15:46	7050071	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 15:46	7050071	SLH
Sulfate	1.9	1.0	0.09	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 15:46	7050071	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Barium	0.0182	0.0100	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Boron	0.0091	0.0400	0.0060	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Calcium	1.05	0.500	0.0104	mg/L	EPA 6020B	B-01	1	05/03/17 13:20	05/05/17 17:30	7050110	CSW
Chromium	0.0003	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Lithium	0.0019	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 20:42	7050110	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:16	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Project: CCR Event

Client ID: YGWA-1I

Lab Number ID: AAD1012-02

Date/Time Sampled: 4/27/2017 3:45:00PM

Date/Time Received: 4/29/2017 11:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	31	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	1.3	0.25	0.01	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 16:48	7050071	SLH
Fluoride	0.01	0.30	0.004	mg/L	EPA 300.0	J	1	05/02/17 11:00	05/02/17 16:48	7050071	SLH
Sulfate	7.4	1.0	0.09	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 16:48	7050071	SLH
Metals, Total											
Antimony	0.0017	0.0030	0.0003	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Barium	0.0106	0.0100	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Calcium	2.38	0.500	0.0104	mg/L	EPA 6020B	B-01	1	05/03/17 13:20	05/05/17 17:35	7050110	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Cobalt	0.0018	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Molybdenum	0.0101	0.0100	0.0006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Lithium	0.0027	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 20:53	7050110	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:19	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Project: CCR Event

Client ID: YGWA-1D

Lab Number ID: AAD1012-03

Date/Time Sampled: 4/27/2017 5:35:00PM

Date/Time Received: 4/29/2017 11:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	116	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	1.0	0.25	0.01	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 17:08	7050071	SLH
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	05/02/17 11:00	05/02/17 17:08	7050071	SLH
Sulfate	5.2	1.0	0.09	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 17:08	7050071	SLH
Metals, Total											
Antimony	0.0004	0.0030	0.0003	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Arsenic	0.0018	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Barium	0.0064	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Boron	0.0066	0.0400	0.0060	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Calcium	11.1	2.50	0.0522	mg/L	EPA 6020B	B-01	5	05/03/17 13:20	05/05/17 17:41	7050110	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Molybdenum	0.0103	0.0100	0.0006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Lithium	0.0137	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:05	7050110	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:21	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Project: CCR Event

Client ID: FB-1-4-28-17

Lab Number ID: AAD1012-04

Date/Time Sampled: 4/28/2017 9:30:00AM

Date/Time Received: 4/29/2017 11:40:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	0.03	0.25	0.01	mg/L	EPA 300.0	J	1	05/02/17 11:00	05/02/17 18:52	7050071	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 18:52	7050071	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 18:52	7050071	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Barium	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Calcium	0.0752	0.500	0.0104	mg/L	EPA 6020B	B-01, J	1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:16	7050110	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:23	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AAD1012-05

Date/Time Sampled: 4/28/2017 11:20:00AM

Date/Time Received: 4/29/2017 11:40:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	130	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	0.91	0.25	0.01	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 19:12	7050071	SLH
Fluoride	0.06	0.30	0.004	mg/L	EPA 300.0	J	1	05/02/17 11:00	05/02/17 19:12	7050071	SLH
Sulfate	10	1.0	0.09	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 19:12	7050071	SLH
Metals, Total											
Antimony	0.0015	0.0030	0.0003	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Arsenic	0.0020	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Barium	0.0039	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Calcium	30.7	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/03/17 13:20	05/05/17 17:47	7050110	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Molybdenum	0.0040	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Lithium	0.0031	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:22	7050110	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:26	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012
Client ID: EB-2-4-28-17
Date/Time Sampled: 4/28/2017 12:50:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAD1012-06
Date/Time Received: 4/29/2017 11:40:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	05/01/17 16:15	05/01/17 16:15	7050015	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 19:33	7050071	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 19:33	7050071	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	05/02/17 11:00	05/02/17 19:33	7050071	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Calcium	0.0713	0.500	0.0104	mg/L	EPA 6020B	B-01, J	1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Lead	0.00007	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/03/17 13:20	05/03/17 21:33	7050110	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/02/17 11:20	05/02/17 16:28	7050028	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050015 - SM 2540 C											
Blank (7050015-BLK1)						Prepared & Analyzed: 05/01/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7050015-BS1)						Prepared & Analyzed: 05/01/17					
Total Dissolved Solids	394	25	10	mg/L	400.00		98	84-108			
Duplicate (7050015-DUP1)						Source: AAD0922-01 Prepared & Analyzed: 05/01/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7050015-DUP2)						Source: AAD1012-03 Prepared & Analyzed: 05/01/17					
Total Dissolved Solids	96	25	10	mg/L		116			19	10	QR-03



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050071 - EPA 300.0											
Blank (7050071-BLK1)						Prepared & Analyzed: 05/02/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7050071-BS1)						Prepared & Analyzed: 05/02/17					
Chloride	9.88	0.25	0.01	mg/L	10.010		99	90-110			
Fluoride	10.0	0.30	0.004	mg/L	10.020		100	90-110			
Sulfate	9.97	1.0	0.09	mg/L	10.020		99	90-110			
Matrix Spike (7050071-MS1)						Source: AAD1012-01 Prepared & Analyzed: 05/02/17					
Chloride	16.5	0.25	0.01	mg/L	10.010	6.47	100	90-110			
Fluoride	10.5	0.30	0.004	mg/L	10.020	ND	105	90-110			
Sulfate	11.8	1.0	0.09	mg/L	10.020	1.94	98	90-110			
Matrix Spike Dup (7050071-MSD1)						Source: AAD1012-01 Prepared & Analyzed: 05/02/17					
Chloride	16.6	0.25	0.01	mg/L	10.010	6.47	101	90-110	0.2	15	
Fluoride	10.4	0.30	0.004	mg/L	10.020	ND	104	90-110	0.8	15	
Sulfate	11.6	1.0	0.09	mg/L	10.020	1.94	96	90-110	2	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050028 - EPA 7470A											
Blank (7050028-BLK1) Prepared & Analyzed: 05/02/17											
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7050028-BS1) Prepared & Analyzed: 05/02/17											
Mercury	0.00235	0.00050	0.000041	mg/L	2.5000E-3		94	80-120			
Matrix Spike (7050028-MS1) Source: AAD0922-05 Prepared & Analyzed: 05/02/17											
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125			
Matrix Spike Dup (7050028-MSD1) Source: AAD0922-05 Prepared & Analyzed: 05/02/17											
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	ND	93	75-125	0.4	20	
Post Spike (7050028-PS1) Source: AAD0922-05 Prepared & Analyzed: 05/02/17											
Mercury	1.72			ug/L	1.6667	-0.0239	103	80-120			
Batch 7050110 - EPA 3005A											
Blank (7050110-BLK1) Prepared & Analyzed: 05/03/17											
Antimony	ND	0.0030	0.0003	mg/L							
Arsenic	ND	0.0050	0.0004	mg/L							
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00007	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.00006	mg/L							
Calcium	0.0559	0.500	0.0104	mg/L							J
Chromium	ND	0.0100	0.0003	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0006	mg/L							
Nickel	ND	0.0100	0.0003	mg/L							
Selenium	ND	0.0100	0.0014	mg/L							
Silver	ND	0.0100	0.0003	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0014	mg/L							
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0011	mg/L							



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050110 - EPA 3005A											
LCS (7050110-BS1)						Prepared & Analyzed: 05/03/17					
Antimony	0.115	0.0030	0.0003	mg/L	0.10000		115	80-120			
Arsenic	0.103	0.0050	0.0004	mg/L	0.10000		103	80-120			
Barium	0.110	0.0100	0.0003	mg/L	0.10000		110	80-120			
Beryllium	0.104	0.0030	0.00007	mg/L	0.10000		104	80-120			
Boron	1.01	0.0400	0.0060	mg/L	1.0000		101	80-120			
Cadmium	0.109	0.0010	0.00006	mg/L	0.10000		109	80-120			
Calcium	1.13	0.500	0.0104	mg/L	1.0000		113	80-120			
Chromium	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Cobalt	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Copper	0.104	0.0250	0.0003	mg/L	0.10000		104	80-120			
Lead	0.106	0.0050	0.00007	mg/L	0.10000		106	80-120			
Molybdenum	0.109	0.0100	0.0006	mg/L	0.10000		109	80-120			
Nickel	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Selenium	0.107	0.0100	0.0014	mg/L	0.10000		107	80-120			
Silver	0.105	0.0100	0.0003	mg/L	0.10000		105	80-120			
Thallium	0.107	0.0010	0.00005	mg/L	0.10000		107	80-120			
Vanadium	0.105	0.0100	0.0014	mg/L	0.10000		105	80-120			
Zinc	0.104	0.0100	0.0013	mg/L	0.10000		104	80-120			
Lithium	0.106	0.0500	0.0011	mg/L	0.10000		106	80-120			
Matrix Spike (7050110-MS1)											
Source: AAD1012-02						Prepared & Analyzed: 05/03/17					
Antimony	0.116	0.0030	0.0003	mg/L	0.10000	0.0017	114	75-125			
Arsenic	0.102	0.0050	0.0004	mg/L	0.10000	ND	102	75-125			
Barium	0.118	0.0100	0.0003	mg/L	0.10000	0.0106	108	75-125			
Beryllium	0.102	0.0030	0.00007	mg/L	0.10000	ND	102	75-125			
Boron	0.963	0.0400	0.0060	mg/L	1.0000	ND	96	75-125			
Cadmium	0.108	0.0010	0.00006	mg/L	0.10000	ND	108	75-125			
Calcium	3.43	0.500	0.0104	mg/L	1.0000	2.38	105	75-125			
Chromium	0.108	0.0100	0.0003	mg/L	0.10000	ND	108	75-125			
Cobalt	0.100	0.0100	0.0005	mg/L	0.10000	0.0018	98	75-125			
Copper	0.103	0.0250	0.0003	mg/L	0.10000	0.0003	102	75-125			
Lead	0.108	0.0050	0.00007	mg/L	0.10000	ND	108	75-125			
Molybdenum	0.119	0.0100	0.0006	mg/L	0.10000	0.0101	109	75-125			
Nickel	0.101	0.0100	0.0003	mg/L	0.10000	0.0004	101	75-125			
Selenium	0.105	0.0100	0.0014	mg/L	0.10000	ND	105	75-125			
Silver	0.105	0.0100	0.0003	mg/L	0.10000	ND	105	75-125			
Thallium	0.110	0.0010	0.00005	mg/L	0.10000	ND	110	75-125			
Vanadium	0.109	0.0100	0.0014	mg/L	0.10000	ND	109	75-125			
Zinc	0.107	0.0100	0.0013	mg/L	0.10000	0.0049	102	75-125			
Lithium	0.102	0.0500	0.0011	mg/L	0.10000	0.0027	99	75-125			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report No.: AAD1012

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050110 - EPA 3005A											
Matrix Spike Dup (7050110-MSD1)			Source: AAD1012-02				Prepared & Analyzed: 05/03/17				
Antimony	0.116	0.0030	0.0003	mg/L	0.10000	0.0017	115	75-125	0.5	20	
Arsenic	0.107	0.0050	0.0004	mg/L	0.10000	ND	107	75-125	5	20	
Barium	0.119	0.0100	0.0003	mg/L	0.10000	0.0106	109	75-125	0.7	20	
Beryllium	0.0984	0.0030	0.00007	mg/L	0.10000	ND	98	75-125	3	20	
Boron	0.934	0.0400	0.0060	mg/L	1.0000	ND	93	75-125	3	20	
Cadmium	0.111	0.0010	0.00006	mg/L	0.10000	ND	111	75-125	2	20	
Calcium	3.34	0.500	0.0104	mg/L	1.0000	2.38	96	75-125	3	20	QM-02
Chromium	0.111	0.0100	0.0003	mg/L	0.10000	ND	111	75-125	2	20	
Cobalt	0.110	0.0100	0.0005	mg/L	0.10000	0.0018	108	75-125	9	20	
Copper	0.107	0.0250	0.0003	mg/L	0.10000	0.0003	107	75-125	5	20	
Lead	0.107	0.0050	0.00007	mg/L	0.10000	ND	107	75-125	1	20	
Molybdenum	0.122	0.0100	0.0006	mg/L	0.10000	0.0101	112	75-125	2	20	
Nickel	0.107	0.0100	0.0003	mg/L	0.10000	0.0004	106	75-125	5	20	
Selenium	0.108	0.0100	0.0014	mg/L	0.10000	ND	108	75-125	3	20	
Silver	0.106	0.0100	0.0003	mg/L	0.10000	ND	106	75-125	2	20	
Thallium	0.108	0.0010	0.00005	mg/L	0.10000	ND	108	75-125	1	20	
Vanadium	0.113	0.0100	0.0014	mg/L	0.10000	ND	113	75-125	4	20	
Zinc	0.113	0.0100	0.0013	mg/L	0.10000	0.0049	108	75-125	5	20	
Lithium	0.100	0.0500	0.0011	mg/L	0.10000	0.0027	97	75-125	2	20	
Post Spike (7050110-PS1)			Source: AAD1012-02				Prepared & Analyzed: 05/03/17				
Antimony	115			ug/L	100.00	1.69	114	80-120			
Arsenic	110			ug/L	100.00	0.209	110	80-120			
Barium	124			ug/L	100.00	10.6	113	80-120			
Beryllium	104			ug/L	100.00	-0.0032	104	80-120			
Boron	991			ug/L	1000.0	4.55	99	80-120			
Cadmium	110			ug/L	100.00	0.0289	110	80-120			
Calcium	3440			ug/L	1000.0	2380	106	80-120			
Chromium	112			ug/L	100.00	0.285	112	80-120			
Cobalt	108			ug/L	100.00	1.85	107	80-120			
Copper	108			ug/L	100.00	0.332	108	80-120			
Lead	106			ug/L	100.00	0.0595	105	80-120			
Molybdenum	119			ug/L	100.00	10.1	109	80-120			
Nickel	110			ug/L	100.00	0.439	109	80-120			
Selenium	111			ug/L	100.00	0.204	111	80-120			
Silver	109			ug/L	100.00	0.0011	109	80-120			
Thallium	110			ug/L	100.00	0.0202	110	80-120			
Vanadium	114			ug/L	100.00	1.07	113	80-120			
Zinc	110			ug/L	100.00	4.88	105	80-120			
Lithium	105			ug/L	100.00	2.71	103	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 08, 2017

Report Notes

The sample listed as GWA-18S was labeled YGWA-18S. The COC was used for login purposes. CFH

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 1



CLIENT NAME: Georgia Power
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
 241 Ralph McGill Blvd SE B10185
 Atlanta, GA 30308
 404-506-7239

REPORT TO: Lauren Petty
 CC: Maria Padilla
 Heath McCorkle

REQUESTED COMPLETION DATE: PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

CONTAINER TYPE	ANALYSIS REQUESTED			CONTAINER TYPE	PRESERVATION	# of		
	P	P	P					
(EPA 6020/7470) Metals App. III & IV	1	1	2	(EPA 300.0 & SM 2540C) Cl, F, SO ₄ & TDS	3	7	3	(SW-846 9315/9320) Radium 226 & 228

L A B I D N U M B E R →	CONTAINER TYPE	PRESERVATION
1	P - PLASTIC	1 - HCl, ≤6°C
2	A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C
3	G - CLEAR GLASS	3 - HNO ₃
4	V - VOA VIAL	4 - NaOH, ≤6°C
5	S - STERILE	5 - NaOH/ZnAc, ≤6°C
6	O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C
7		7 - ≤6°C not frozen

DW - DRINKING WATER	S - SOIL
WW - WASTEWATER	SL - SLUDGE
GW - GROUNDWATER	SD - SOLID
SW - SURFACE WATER	A - AIR
ST - STORM WATER	L - LIQUID
W - WATER	P - PRODUCT

Collection DATE	Collection TIME	MATRIX CODE	COMPL	GRA	SAMPLE IDENTIFICATION	RELINQUISHED BY	DATE/TIME
4-26-17	1850	GW	✓		6WA-1B5	<i>[Signature]</i>	4-28-17 1300
4-27-17	1545	GW	✓		Y6WA-1I		
4-27-17	1735	GW	✓		Y6WA-1D		
4-28-17	0930	W	✓		FB-1-4-28-17		
4-28-17	1120	GW	✓		Y6WA-2I		
4-28-17	1250	W	✓		EB-2-4-28-17		

RELINQUISHED BY: *[Signature]* DATE/TIME: 4-29-17 1140

RELINQUISHED BY: *[Signature]* DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present # of Coolers: *W/K*

DATE/TIME: 4-29-17 1140

LAB #: *AAV1012*

Entered into LIMS: *OFF*

Tracking #:

Plant Yates COC Ash Ponds



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 5/1/2017 12:25:01PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 04/29/17 11:40

Work Order: AAD1012

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 6

#Containers: 24

Minimum Temp(C): 5.5

Maximum Temp(C): 5.5

Custody Seal(s) Used: N/A

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	NO
Custody seal Intact	N/A
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

The sample listed as GWA-18S was labeled YGWA-18S. The COC was used for login purposes. CFH

May 19, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAD1012 Plant Yates
Pace Project No.: 30217674

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on May 02, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAD1012 Plant Yates
Pace Project No.: 30217674

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAD1012 Plant Yates

Pace Project No.: 30217674

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30217674001	GWA-18S	Water	04/26/17 18:50	05/02/17 11:30
30217674002	YGWA-1I	Water	04/27/17 15:45	05/02/17 11:30
30217674003	YGWA-1D	Water	04/27/17 17:35	05/02/17 11:30
30217674004	FB-1-4-28-17	Water	04/28/17 09:30	05/02/17 11:30
30217674005	YGWA-2I	Water	04/28/17 11:20	05/02/17 11:30
30217674006	EB-2-4-28-17	Water	04/28/17 12:50	05/02/17 11:30

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAD1012 Plant Yates

Pace Project No.: 30217674

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30217674001	GWA-18S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217674002	YGWA-1I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217674003	YGWA-1D	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217674004	FB-1-4-28-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217674005	YGWA-2I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217674006	EB-2-4-28-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAD1012 Plant Yates

Pace Project No.: 30217674

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.208 ± 0.162 (0.266) C:87% T:NA	pCi/L	05/11/17 08:56	13982-63-3	
Radium-228		EPA 9320	0.0563 ± 0.395 (0.910) C:77% T:67%	pCi/L	05/10/17 15:11	15262-20-1	
Total Radium		Total Radium Calculation	0.264 ± 0.557 (1.18)	pCi/L	05/18/17 17:33	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.151 ± 0.202 (0.430) C:68% T:NA	pCi/L	05/11/17 08:56	13982-63-3	
Radium-228		EPA 9320	0.442 ± 0.460 (0.956) C:81% T:69%	pCi/L	05/10/17 15:11	15262-20-1	
Total Radium		Total Radium Calculation	0.593 ± 0.662 (1.39)	pCi/L	05/18/17 17:33	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.0397 ± 0.111 (0.277) C:79% T:NA	pCi/L	05/11/17 08:44	13982-63-3	
Radium-228		EPA 9320	1.04 ± 0.466 (0.759) C:75% T:76%	pCi/L	05/10/17 14:30	15262-20-1	
Total Radium		Total Radium Calculation	1.08 ± 0.577 (1.04)	pCi/L	05/18/17 17:33	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.0640 ± 0.119 (0.270) C:87% T:NA	pCi/L	05/11/17 08:44	13982-63-3	
Radium-228		EPA 9320	0.238 ± 0.292 (0.614) C:81% T:76%	pCi/L	05/10/17 14:31	15262-20-1	
Total Radium		Total Radium Calculation	0.302 ± 0.411 (0.884)	pCi/L	05/18/17 17:33	7440-14-4	

Parameters		Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		EPA 9315	0.425 ± 0.311 (0.491) C:45% T:NA	pCi/L	05/11/17 08:44	13982-63-3	
Radium-228		EPA 9320	0.123 ± 0.334 (0.751) C:79% T:66%	pCi/L	05/10/17 14:31	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAD1012 Plant Yates

Pace Project No.: 30217674

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.548 ± 0.645 (1.24)	pCi/L	05/18/17 17:33	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.186 ± 0.167 (0.298) C:83% T:NA	pCi/L	05/11/17 08:44	13982-63-3	
Radium-228	EPA 9320	0.219 ± 0.333 (0.720) C:80% T:75%	pCi/L	05/10/17 14:31	15262-20-1	
Total Radium	Total Radium Calculation	0.405 ± 0.500 (1.02)	pCi/L	05/18/17 17:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAD1012 Plant Yates

Pace Project No.: 30217674

QC Batch: 257322 Analysis Method: EPA 9320

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

Associated Lab Samples: 30217674001, 30217674002, 30217674003, 30217674004, 30217674005, 30217674006

METHOD BLANK: 1267402 Matrix: Water

Associated Lab Samples: 30217674001, 30217674002, 30217674003, 30217674004, 30217674005, 30217674006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.702 ± 0.377 (0.661) C:79% T:77%	pCi/L	05/10/17 10:58	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAD1012 Plant Yates

Pace Project No.: 30217674

QC Batch: 257831 Analysis Method: EPA 9315

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

Associated Lab Samples: 30217674001, 30217674002, 30217674003, 30217674004, 30217674005, 30217674006

METHOD BLANK: 1269948 Matrix: Water

Associated Lab Samples: 30217674001, 30217674002, 30217674003, 30217674004, 30217674005, 30217674006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00725 ± 0.136 (0.382) C:84% T:NA	pCi/L	05/11/17 08:55	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AAD1012 Plant Yates
Pace Project No.: 30217674

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30217674



Chain of Custody



Workorder: AAD1012 Workorder Name: Pace - Pittsburgh Owner Received Date: Results Requested By: 5/24/2017
 Report To: Betsy McDaniel Subcontract To: 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (770)-734-4200
 Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers		Date/Time	Comments
						CO	NO		
1	GWA-18S	G	4/26/2017 18:50	AAD1012-01	GW	2		X	Radium 226, 228, Total
2	YGWA-1I	G	4/27/2017 15:45	AAD1012-02	GW	2		X	
3	YGWA-1D	G	4/27/2017 17:35	AAD1012-03	GW	2		X	
4	FB-1-4-28-17	G	4/28/2017 9:30	AAD1012-04	W	2		X	
5	YGWA-2I	G	4/28/2017 11:20	AAD1012-05	GW	2		X	
6	EB-2-4-28-17	G	4/28/2017 12:50	AAD1012-06	W	2		X	
7									
8									
9									
10									

Transfers	Released By	Date/Time	Received By	Date/Time
1	M. A. ...	05/01/17	...	5-2-17/180
2				
3				

Cooler Temperature on Receipt MP °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N
 ***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace, GA

Project # 30217674

KEH

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 5812 5104 0014

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

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: Dark 5-2-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PHL2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>Dark</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>Dark</u> Date: <u>5-2-17</u>

Client Notification/ Resolution:
 Person Contacted: _____ Date/Time: _____ Contacted By: _____
 Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 5/9/2017
Worklist: 35555
Matrix: DW

Method Blank Assessment	
MB Sample ID	1269948
MB concentration:	-0.007
M/B Counting Uncertainty:	0.136
MB MDC:	0.382
MB Numerical Performance Indicator:	-0.10
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCSID (Y or N)?	N
		LCS35555	LCS35555
Count Date:	5/11/2017		
Spike ID.:	11-054		
Spike Concentration (pCi/mL):	5.963		
Volume Used (mL):	2.00		
Aliquot Volume (L, g, F):	0.501		
Target Conc. (pCi/L, g, F):	23.804		
Uncertainty (Calculated):	1.120		
Result (pCi/L, g, F):	20.370		
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.304		
Numerical Performance Indicator:	-3.92		
Percent Recovery:	85.57%		
Status vs Numerical Indicator:	N/A		
Status vs Recovery:	Pass		

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample ID.:	30217522001	30217522001
Duplicate Sample ID.:	30217522001DUP	30217522001DUP
Sample Result (pCi/L, g, F):	-0.004	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.154	
Sample Duplicate Result (pCi/L, g, F):	-0.027	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.075	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	0.271	
Duplicate RPD:	-152.59%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

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

Comments:

Handwritten signature

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):	
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:	

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:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 5/8/2017
Worklist: 35453
Matrix: DW

Method Blank Assessment	
MB Sample ID	1267402
MB concentration:	0.702
MB Counting Uncertainty:	0.356
MB MDC:	0.661
MB Numerical Performance Indicator:	3.87
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	
Count Date:	5/10/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	24.575
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.810
Target Conc. (pCi/L, g, F):	6.068
Uncertainty (Calculated):	0.437
Result (pCi/L, g, F):	6.480
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.741
Numerical Performance Indicator:	0.94
Percent Recovery:	106.79%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	LCS35453
Duplicate Sample I.D.:	LCS035453
Sample Result (pCi/L, g, F):	6.480
Sample Result Counting Uncertainty (pCi/L, g, F):	0.741
Sample Duplicate Result (pCi/L, g, F):	8.183
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.798
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	-3.065
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	23.31%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.:	
Sample MS I.D.:	
Sample I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (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):	
Spike uncertainty (calculated):	
Sample Result:	
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:	

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:	

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.

Handwritten signature/initials



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAE0238

May 12, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-26S	AAE0238-01	Ground Water	05/03/17 15:05	05/05/17 15:40
YGWC-32S	AAE0238-02	Ground Water	05/03/17 12:30	05/05/17 15:40
YGWC-32I	AAE0238-03	Ground Water	05/03/17 13:30	05/05/17 15:40
YGWC-33S	AAE0238-04	Ground Water	05/03/17 12:50	05/05/17 15:40
EB-3-5-3-17	AAE0238-05	Water	05/03/17 09:35	05/05/17 15:40
Dup-3	AAE0238-06	Ground Water	05/03/17 00:00	05/05/17 15:40
YGWC-28S	AAE0238-07	Ground Water	05/05/17 12:35	05/05/17 15:40
YGWC-28I	AAE0238-08	Ground Water	05/05/17 13:30	05/05/17 15:40



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238

Project: CCR Event

Client ID: YGWC-26S

Lab Number ID: AAE0238-01

Date/Time Sampled: 5/3/2017 3:05:00PM

Date/Time Received: 5/5/2017 3:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	269	25	10	mg/L	SM 2540 C		1	05/08/17 19:17	05/08/17 19:17	7050239	JPT
Inorganic Anions											
Chloride	17	0.25	0.01	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 12:33	7050236	RLC
Fluoride	0.16	0.30	0.004	mg/L	EPA 300.0	J	1	05/08/17 10:31	05/08/17 12:33	7050236	RLC
Sulfate	100	5.0	0.46	mg/L	EPA 300.0		5	05/08/17 10:31	05/11/17 20:14	7050236	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Barium	0.0282	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Beryllium	0.0002	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Boron	0.676	0.0400	0.0060	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Calcium	11.9	5.00	0.522	mg/L	EPA 6020B	B-01	50	05/09/17 13:45	05/09/17 22:48	7050306	CSW
Chromium	0.0037	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Cobalt	0.0020	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:42	7050306	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/09/17 12:00	05/09/17 16:31	7050279	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 12, 2017

Attention: Mr. Joju Abraham

Report No.: AAE0238

Project: CCR Event

Client ID: YGWC-32S

Lab Number ID: AAE0238-02

Date/Time Sampled: 5/3/2017 12:30:00PM

Date/Time Received: 5/5/2017 3:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	713	25	10	mg/L	SM 2540 C		1	05/08/17 19:17	05/08/17 19:17	7050239	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 13:35	7050236	RLC
Fluoride	0.36	0.30	0.004	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 13:35	7050236	RLC
Sulfate	360	50	4.6	mg/L	EPA 300.0		50	05/08/17 10:31	05/11/17 20:34	7050236	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Arsenic	0.0004	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Barium	0.0208	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Beryllium	0.0026	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Boron	4.99	2.00	0.302	mg/L	EPA 6020B		50	05/09/17 13:45	05/09/17 22:59	7050306	CSW
Cadmium	0.0006	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Calcium	118	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/09/17 13:45	05/09/17 22:59	7050306	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Cobalt	0.0042	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Selenium	0.0716	0.0100	0.0014	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Thallium	0.00006	0.0010	0.00005	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Lithium	0.0011	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 22:54	7050306	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/09/17 12:00	05/09/17 16:33	7050279	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 12, 2017

Attention: Mr. Joju Abraham

Report No.: AAE0238

Project: CCR Event

Client ID: YGWC-32I

Lab Number ID: AAE0238-03

Date/Time Sampled: 5/3/2017 1:30:00PM

Date/Time Received: 5/5/2017 3:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	864	25	10	mg/L	SM 2540 C		1	05/08/17 19:17	05/08/17 19:17	7050239	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 13:56	7050236	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	05/08/17 10:31	05/08/17 13:56	7050236	RLC
Sulfate	490	50	4.6	mg/L	EPA 300.0		50	05/08/17 10:31	05/11/17 20:55	7050236	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Barium	0.0257	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Boron	4.84	2.00	0.302	mg/L	EPA 6020B		50	05/09/17 13:45	05/09/17 23:11	7050306	CSW
Cadmium	0.0007	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Calcium	99.8	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/09/17 13:45	05/09/17 23:11	7050306	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Cobalt	0.0016	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Selenium	0.0022	0.0100	0.0014	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Lithium	0.0034	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:05	7050306	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/09/17 12:00	05/09/17 16:40	7050279	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238

Project: CCR Event

Client ID: YGWC-33S

Lab Number ID: AAE0238-04

Date/Time Sampled: 5/3/2017 12:50:00PM

Date/Time Received: 5/5/2017 3:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1280	25	10	mg/L	SM 2540 C		1	05/08/17 19:17	05/08/17 19:17	7050239	JPT
Inorganic Anions											
Chloride	6.1	0.25	0.01	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 14:16	7050236	RLC
Fluoride	0.20	0.30	0.004	mg/L	EPA 300.0	J	1	05/08/17 10:31	05/08/17 14:16	7050236	RLC
Sulfate	800	50	4.6	mg/L	EPA 300.0		50	05/08/17 10:31	05/11/17 21:16	7050236	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Arsenic	0.0037	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Barium	0.0151	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Beryllium	0.0154	0.0030	0.00007	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Boron	13.4	2.00	0.302	mg/L	EPA 6020B		50	05/09/17 13:45	05/09/17 23:22	7050306	CSW
Cadmium	0.0031	0.0010	0.00006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Calcium	129	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/09/17 13:45	05/09/17 23:22	7050306	CSW
Chromium	0.0009	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Cobalt	0.0151	0.0100	0.0005	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Lead	0.0017	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Selenium	0.0120	0.0100	0.0014	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Thallium	0.0002	0.0010	0.00005	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Lithium	0.0217	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:16	7050306	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/09/17 12:00	05/09/17 16:42	7050279	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 12, 2017

Attention: Mr. Joju Abraham

Report No.: AAE0238

Project: CCR Event

Client ID: EB-3-5-3-17

Lab Number ID: AAE0238-05

Date/Time Sampled: 5/3/2017 9:35:00AM

Date/Time Received: 5/5/2017 3:40:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	05/08/17 19:17	05/08/17 19:17	7050239	JPT
Inorganic Anions											
Chloride	0.21	0.25	0.01	mg/L	EPA 300.0	J	1	05/08/17 10:31	05/08/17 14:37	7050236	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 14:37	7050236	RLC
Sulfate	2.4	1.0	0.09	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 14:37	7050236	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Barium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Boron	0.0153	0.0400	0.0060	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Calcium	0.0474	0.500	0.0104	mg/L	EPA 6020B	B-01, J	1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Lead	0.0007	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:28	7050306	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/09/17 12:00	05/09/17 16:45	7050279	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 12, 2017

Attention: Mr. Joju Abraham

Report No.: AAE0238

Project: CCR Event

Client ID: Dup-3

Lab Number ID: AAE0238-06

Date/Time Sampled: 5/3/2017 12:00:00AM

Date/Time Received: 5/5/2017 3:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1340	25	10	mg/L	SM 2540 C		1	05/08/17 19:17	05/08/17 19:17	7050239	JPT
Inorganic Anions											
Chloride	6.1	0.25	0.01	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 14:58	7050236	RLC
Fluoride	0.19	0.30	0.004	mg/L	EPA 300.0	J	1	05/08/17 10:31	05/08/17 14:58	7050236	RLC
Sulfate	820	50	4.6	mg/L	EPA 300.0		50	05/08/17 10:31	05/11/17 22:59	7050236	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Arsenic	0.0038	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Barium	0.0152	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Beryllium	0.0166	0.0030	0.00007	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Boron	13.4	2.00	0.302	mg/L	EPA 6020B		50	05/09/17 13:45	05/09/17 23:51	7050306	CSW
Cadmium	0.0029	0.0010	0.00006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Calcium	125	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/09/17 13:45	05/09/17 23:51	7050306	CSW
Chromium	0.0009	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Cobalt	0.0159	0.0100	0.0005	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Lead	0.0018	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Selenium	0.0158	0.0100	0.0014	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Thallium	0.0002	0.0010	0.00005	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Lithium	0.0233	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:45	7050306	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/09/17 12:00	05/09/17 16:47	7050279	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 12, 2017

Attention: Mr. Joju Abraham

Report No.: AAE0238

Project: CCR Event

Client ID: YGWC-28S

Lab Number ID: AAE0238-07

Date/Time Sampled: 5/5/2017 12:35:00PM

Date/Time Received: 5/5/2017 3:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	347	25	10	mg/L	SM 2540 C		1	05/08/17 19:17	05/08/17 19:17	7050239	JPT
Inorganic Anions											
Chloride	21	0.25	0.01	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 15:18	7050236	RLC
Fluoride	0.20	0.30	0.004	mg/L	EPA 300.0	J	1	05/08/17 10:31	05/08/17 15:18	7050236	RLC
Sulfate	4.7	1.0	0.09	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 15:18	7050236	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Barium	0.219	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Boron	3.41	2.00	0.302	mg/L	EPA 6020B		50	05/09/17 13:45	05/10/17 00:02	7050306	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Calcium	28.1	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/09/17 13:45	05/10/17 00:02	7050306	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Cobalt	0.0012	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Lead	0.00009	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Molybdenum	0.0007	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/09/17 13:45	05/09/17 23:57	7050306	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/09/17 12:00	05/09/17 16:50	7050279	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 12, 2017

Attention: Mr. Joju Abraham

Report No.: AAE0238

Project: CCR Event

Client ID: YGWC-28I

Lab Number ID: AAE0238-08

Date/Time Sampled: 5/5/2017 1:30:00PM

Date/Time Received: 5/5/2017 3:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	289	25	10	mg/L	SM 2540 C		1	05/08/17 19:17	05/08/17 19:17	7050239	JPT
Inorganic Anions											
Chloride	19	0.25	0.01	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 16:00	7050236	RLC
Fluoride	0.08	0.30	0.004	mg/L	EPA 300.0	J	1	05/08/17 10:31	05/08/17 16:00	7050236	RLC
Sulfate	8.4	1.0	0.09	mg/L	EPA 300.0		1	05/08/17 10:31	05/08/17 16:00	7050236	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Barium	0.0891	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Boron	3.01	2.00	0.302	mg/L	EPA 6020B		50	05/09/17 13:45	05/10/17 00:14	7050306	CSW
Cadmium	0.00009	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Calcium	33.5	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/09/17 13:45	05/10/17 00:14	7050306	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Molybdenum	0.0014	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Lithium	0.0070	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/09/17 13:45	05/10/17 00:08	7050306	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/09/17 12:00	05/09/17 16:52	7050279	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050239 - SM 2540 C											
Blank (7050239-BLK1)						Prepared & Analyzed: 05/08/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7050239-BS1)						Prepared & Analyzed: 05/08/17					
Total Dissolved Solids	397	25	10	mg/L	400.00		99	84-108			
Duplicate (7050239-DUP1)						Source: AAE0238-07 Prepared & Analyzed: 05/08/17					
Total Dissolved Solids	346	25	10	mg/L		347			0.3	10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050236 - EPA 300.0											
Blank (7050236-BLK1)						Prepared & Analyzed: 05/08/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7050236-BS1)						Prepared & Analyzed: 05/08/17					
Chloride	10.1	0.25	0.01	mg/L	10.010		101	90-110			
Fluoride	10.2	0.30	0.004	mg/L	10.020		102	90-110			
Sulfate	10.2	1.0	0.09	mg/L	10.020		101	90-110			
Matrix Spike (7050236-MS1)						Source: AAE0238-01 Prepared & Analyzed: 05/08/17					
Chloride	25.9	0.25	0.01	mg/L	10.010	16.6	93	90-110			
Fluoride	10.6	0.30	0.004	mg/L	10.020	0.16	104	90-110			
Sulfate	93.6	1.0	0.09	mg/L	10.020	93.7	NR	90-110			QM-02
Matrix Spike Dup (7050236-MSD1)						Source: AAE0238-01 Prepared & Analyzed: 05/08/17					
Chloride	25.9	0.25	0.01	mg/L	10.010	16.6	93	90-110	0.004	15	
Fluoride	10.7	0.30	0.004	mg/L	10.020	0.16	105	90-110	0.5	15	
Sulfate	93.6	1.0	0.09	mg/L	10.020	93.7	NR	90-110	0.03	15	QM-02



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050279 - EPA 7470A											
Blank (7050279-BLK1) Prepared & Analyzed: 05/09/17											
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7050279-BS1) Prepared & Analyzed: 05/09/17											
Mercury	0.00224	0.00050	0.000041	mg/L	2.5000E-3		90	80-120			
Matrix Spike (7050279-MS1) Source: AAE0238-01 Prepared & Analyzed: 05/09/17											
Mercury	0.00229	0.00050	0.000041	mg/L	2.5000E-3	ND	92	75-125			
Matrix Spike Dup (7050279-MSD1) Source: AAE0238-01 Prepared & Analyzed: 05/09/17											
Mercury	0.00227	0.00050	0.000041	mg/L	2.5000E-3	ND	91	75-125	1	20	
Post Spike (7050279-PS1) Source: AAE0238-01 Prepared & Analyzed: 05/09/17											
Mercury	1.61			ug/L	1.6667	-0.0182	97	80-120			
Batch 7050306 - EPA 3005A											
Blank (7050306-BLK1) Prepared & Analyzed: 05/09/17											
Antimony	ND	0.0030	0.0003	mg/L							
Arsenic	ND	0.0050	0.0004	mg/L							
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00007	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.00006	mg/L							
Calcium	0.0152	0.500	0.0104	mg/L							J
Chromium	ND	0.0100	0.0003	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0006	mg/L							
Nickel	ND	0.0100	0.0003	mg/L							
Selenium	ND	0.0100	0.0014	mg/L							
Silver	ND	0.0100	0.0003	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0014	mg/L							
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0011	mg/L							



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7050306 - EPA 3005A

LCS (7050306-BS1)

Prepared & Analyzed: 05/09/17

Antimony	0.104	0.0030	0.0003	mg/L	0.10000		104	80-120			
Arsenic	0.103	0.0050	0.0004	mg/L	0.10000		103	80-120			
Barium	0.102	0.0100	0.0003	mg/L	0.10000		102	80-120			
Beryllium	0.102	0.0030	0.00007	mg/L	0.10000		102	80-120			
Boron	1.07	0.0400	0.0060	mg/L	1.0000		107	80-120			
Cadmium	0.102	0.0010	0.00006	mg/L	0.10000		102	80-120			
Calcium	1.08	0.500	0.0104	mg/L	1.0000		108	80-120			
Chromium	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Cobalt	0.100	0.0100	0.0005	mg/L	0.10000		100	80-120			
Copper	0.109	0.0250	0.0003	mg/L	0.10000		109	80-120			
Lead	0.101	0.0050	0.00007	mg/L	0.10000		101	80-120			
Molybdenum	0.101	0.0100	0.0006	mg/L	0.10000		101	80-120			
Nickel	0.105	0.0100	0.0003	mg/L	0.10000		105	80-120			
Selenium	0.0972	0.0100	0.0014	mg/L	0.10000		97	80-120			
Silver	0.100	0.0100	0.0003	mg/L	0.10000		100	80-120			
Thallium	0.101	0.0010	0.00005	mg/L	0.10000		101	80-120			
Vanadium	0.101	0.0100	0.0014	mg/L	0.10000		101	80-120			
Zinc	0.109	0.0100	0.0013	mg/L	0.10000		109	80-120			
Lithium	0.115	0.0500	0.0011	mg/L	0.10000		115	80-120			

Matrix Spike (7050306-MS1)

Source: AAE0238-08

Prepared & Analyzed: 05/09/17

Antimony	0.106	0.0030	0.0003	mg/L	0.10000	ND	106	75-125			
Arsenic	0.102	0.0050	0.0004	mg/L	0.10000	ND	102	75-125			
Barium	0.198	0.0100	0.0003	mg/L	0.10000	0.0891	109	75-125			
Beryllium	0.108	0.0030	0.00007	mg/L	0.10000	ND	108	75-125			
Boron	4.18	2.00	0.302	mg/L	1.0000	3.01	117	75-125			
Cadmium	0.0994	0.0010	0.00006	mg/L	0.10000	0.00009	99	75-125			
Calcium	36.1	25.0	0.522	mg/L	1.0000	33.5	254	75-125			QM-02
Chromium	0.111	0.0100	0.0003	mg/L	0.10000	ND	111	75-125			
Cobalt	0.108	0.0100	0.0005	mg/L	0.10000	ND	108	75-125			
Copper	0.108	0.0250	0.0003	mg/L	0.10000	0.0011	107	75-125			
Lead	0.104	0.0050	0.00007	mg/L	0.10000	ND	104	75-125			
Molybdenum	0.103	0.0100	0.0006	mg/L	0.10000	0.0014	102	75-125			
Nickel	0.115	0.0100	0.0003	mg/L	0.10000	0.0033	111	75-125			
Selenium	0.100	0.0100	0.0014	mg/L	0.10000	ND	100	75-125			
Silver	0.0988	0.0100	0.0003	mg/L	0.10000	ND	99	75-125			
Thallium	0.105	0.0010	0.00005	mg/L	0.10000	ND	105	75-125			
Vanadium	0.114	0.0100	0.0014	mg/L	0.10000	ND	114	75-125			
Zinc	0.109	0.0100	0.0013	mg/L	0.10000	ND	109	75-125			
Lithium	0.115	0.0500	0.0011	mg/L	0.10000	0.0070	108	75-125			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050306 - EPA 3005A											
Matrix Spike Dup (7050306-MSD1)			Source: AAE0238-08			Prepared & Analyzed: 05/09/17					
Antimony	0.111	0.0030	0.0003	mg/L	0.10000	ND	111	75-125	4	20	
Arsenic	0.101	0.0050	0.0004	mg/L	0.10000	ND	101	75-125	2	20	
Barium	0.208	0.0100	0.0003	mg/L	0.10000	0.0891	118	75-125	5	20	
Beryllium	0.102	0.0030	0.00007	mg/L	0.10000	ND	102	75-125	5	20	
Boron	4.32	2.00	0.302	mg/L	1.0000	3.01	132	75-125	3	20	QM-02
Cadmium	0.0998	0.0010	0.00006	mg/L	0.10000	0.00009	100	75-125	0.4	20	
Calcium	37.2	25.0	0.522	mg/L	1.0000	33.5	370	75-125	3	20	QM-02
Chromium	0.0987	0.0100	0.0003	mg/L	0.10000	ND	99	75-125	12	20	
Cobalt	0.0980	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	10	20	
Copper	0.103	0.0250	0.0003	mg/L	0.10000	0.0011	102	75-125	5	20	
Lead	0.0996	0.0050	0.00007	mg/L	0.10000	ND	100	75-125	5	20	
Molybdenum	0.108	0.0100	0.0006	mg/L	0.10000	0.0014	107	75-125	5	20	
Nickel	0.101	0.0100	0.0003	mg/L	0.10000	0.0033	98	75-125	13	20	
Selenium	0.106	0.0100	0.0014	mg/L	0.10000	ND	106	75-125	5	20	
Silver	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125	4	20	
Thallium	0.104	0.0010	0.00005	mg/L	0.10000	ND	104	75-125	1	20	
Vanadium	0.113	0.0100	0.0014	mg/L	0.10000	ND	113	75-125	0.3	20	
Zinc	0.103	0.0100	0.0013	mg/L	0.10000	ND	103	75-125	6	20	
Lithium	0.106	0.0500	0.0011	mg/L	0.10000	0.0070	99	75-125	8	20	
Post Spike (7050306-PS1)			Source: AAE0238-08			Prepared & Analyzed: 05/09/17					
Antimony	105			ug/L	100.00	-0.0104	105	80-120			
Arsenic	104			ug/L	100.00	-0.268	104	80-120			
Barium	197			ug/L	100.00	89.1	108	80-120			
Beryllium	100			ug/L	100.00	0.0007	100	80-120			
Boron	4230			ug/L	1000.0	3010	122	80-120			QM-02
Cadmium	104			ug/L	100.00	0.0871	103	80-120			
Calcium	32800			ug/L	1000.0	33500	NR	80-120			QM-02
Chromium	103			ug/L	100.00	-0.124	103	80-120			
Cobalt	103			ug/L	100.00	0.234	103	80-120			
Copper	107			ug/L	100.00	1.14	106	80-120			
Lead	103			ug/L	100.00	0.0045	103	80-120			
Molybdenum	104			ug/L	100.00	1.35	102	80-120			
Nickel	105			ug/L	100.00	3.26	102	80-120			
Selenium	107			ug/L	100.00	-1.95	107	80-120			
Silver	103			ug/L	100.00	0.0194	103	80-120			
Thallium	105			ug/L	100.00	0.0010	105	80-120			
Vanadium	111			ug/L	100.00	-0.876	111	80-120			
Zinc	100			ug/L	100.00	-0.321	100	80-120			
Lithium	112			ug/L	100.00	7.01	105	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 12, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 5/8/2017 1:41:15PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 05/05/17 15:40

Work Order: AAE0238

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 8

#Containers: 32

Minimum Temp(C): 2.5

Maximum Temp(C): 2.5

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

May 25, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAE0238 Plant Yates
Pace Project No.: 30218205

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on May 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAE0238 Plant Yates

Pace Project No.: 30218205

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAE0238 Plant Yates

Pace Project No.: 30218205

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30218205001	YGWC-26S	Water	05/03/17 15:05	05/08/17 09:25
30218205002	YGWC-32S	Water	05/03/17 12:30	05/08/17 09:25
30218205003	YGWC-32I	Water	05/03/17 13:30	05/08/17 09:25
30218205004	YGWC-33S	Water	05/03/17 12:50	05/08/17 09:25
30218205005	EB-3-5-3-17	Water	05/03/17 09:35	05/08/17 09:25
30218205006	Dup-3	Water	05/03/17 00:01	05/08/17 09:25
30218205007	YGWC-28S	Water	05/05/17 12:35	05/08/17 09:25
30218205008	YGWC-28I	Water	05/05/17 13:30	05/08/17 09:25

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAE0238 Plant Yates

Pace Project No.: 30218205

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30218205001	YGWC-26S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218205002	YGWC-32S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218205003	YGWC-32I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218205004	YGWC-33S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218205005	EB-3-5-3-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218205006	Dup-3	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218205007	YGWC-28S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218205008	YGWC-28I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0238 Plant Yates

Pace Project No.: 30218205

Sample: YGWC-26S		Lab ID: 30218205001	Collected: 05/03/17 15:05	Received: 05/08/17 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.353 ± 0.236 (0.363) C:91% T:NA	pCi/L	05/16/17 08:46	13982-63-3	
Radium-228	EPA 9320	0.301 ± 0.342 (0.715) C:75% T:79%	pCi/L	05/22/17 11:50	15262-20-1	
Total Radium	Total Radium Calculation	0.654 ± 0.578 (1.08)	pCi/L	05/24/17 14:28	7440-14-4	

Sample: YGWC-32S		Lab ID: 30218205002	Collected: 05/03/17 12:30	Received: 05/08/17 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.308 ± 0.246 (0.433) C:91% T:NA	pCi/L	05/16/17 08:46	13982-63-3	
Radium-228	EPA 9320	0.462 ± 0.333 (0.641) C:78% T:83%	pCi/L	05/22/17 11:50	15262-20-1	
Total Radium	Total Radium Calculation	0.770 ± 0.579 (1.07)	pCi/L	05/24/17 14:28	7440-14-4	

Sample: YGWC-32I		Lab ID: 30218205003	Collected: 05/03/17 13:30	Received: 05/08/17 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.272 ± 0.211 (0.341) C:93% T:NA	pCi/L	05/16/17 08:46	13982-63-3	
Radium-228	EPA 9320	0.0795 ± 0.300 (0.680) C:73% T:92%	pCi/L	05/22/17 11:50	15262-20-1	
Total Radium	Total Radium Calculation	0.352 ± 0.511 (1.02)	pCi/L	05/24/17 14:28	7440-14-4	

Sample: YGWC-33S		Lab ID: 30218205004	Collected: 05/03/17 12:50	Received: 05/08/17 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.416 ± 0.250 (0.374) C:93% T:NA	pCi/L	05/16/17 08:46	13982-63-3	
Radium-228	EPA 9320	0.168 ± 0.344 (0.757) C:75% T:91%	pCi/L	05/22/17 11:45	15262-20-1	
Total Radium	Total Radium Calculation	0.584 ± 0.594 (1.13)	pCi/L	05/24/17 14:28	7440-14-4	

Sample: EB-3-5-3-17		Lab ID: 30218205005	Collected: 05/03/17 09:35	Received: 05/08/17 09:25	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0319 ± 0.147 (0.424) C:90% T:NA	pCi/L	05/16/17 08:46	13982-63-3	
Radium-228	EPA 9320	0.0644 ± 0.379 (0.861) C:75% T:85%	pCi/L	05/22/17 11:46	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0238 Plant Yates
Pace Project No.: 30218205

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-3-5-3-17 Lab ID: 30218205005 Collected: 05/03/17 09:35 Received: 05/08/17 09:25 Matrix: Water PWS: Site ID: Sample Type:						
Total Radium	Total Radium Calculation	0.0644 ± 0.526 (1.29)	pCi/L	05/24/17 14:28	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: Dup-3 Lab ID: 30218205006 Collected: 05/03/17 00:01 Received: 05/08/17 09:25 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.334 ± 0.258 (0.467) C:93% T:NA	pCi/L	05/16/17 08:46	13982-63-3	
Radium-228	EPA 9320	0.871 ± 0.500 (0.904) C:77% T:86%	pCi/L	05/22/17 14:55	15262-20-1	
Total Radium	Total Radium Calculation	1.21 ± 0.758 (1.37)	pCi/L	05/24/17 14:28	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-28S Lab ID: 30218205007 Collected: 05/05/17 12:35 Received: 05/08/17 09:25 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.551 ± 0.286 (0.398) C:95% T:NA	pCi/L	05/16/17 08:46	13982-63-3	
Radium-228	EPA 9320	0.317 ± 0.395 (0.836) C:77% T:91%	pCi/L	05/22/17 14:56	15262-20-1	
Total Radium	Total Radium Calculation	0.868 ± 0.681 (1.23)	pCi/L	05/24/17 14:28	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWC-28I Lab ID: 30218205008 Collected: 05/05/17 13:30 Received: 05/08/17 09:25 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.305 ± 0.227 (0.388) C:93% T:NA	pCi/L	05/16/17 08:47	13982-63-3	
Radium-228	EPA 9320	0.408 ± 0.457 (0.956) C:76% T:90%	pCi/L	05/22/17 14:56	15262-20-1	
Total Radium	Total Radium Calculation	0.713 ± 0.684 (1.34)	pCi/L	05/24/17 14:28	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0238 Plant Yates

Pace Project No.: 30218205

QC Batch:	258120	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30218205001, 30218205002, 30218205003, 30218205004, 30218205005, 30218205006, 30218205007, 30218205008		

METHOD BLANK:	1271204	Matrix:	Water
Associated Lab Samples:	30218205001, 30218205002, 30218205003, 30218205004, 30218205005, 30218205006, 30218205007, 30218205008		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0555 ± 0.129 (0.308) C:93% T:NA	pCi/L	05/16/17 08:58	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0238 Plant Yates

Pace Project No.: 30218205

QC Batch:	258164	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30218205001, 30218205002, 30218205003, 30218205004, 30218205005, 30218205006, 30218205007, 30218205008		

METHOD BLANK:	1271322	Matrix:	Water
Associated Lab Samples:	30218205001, 30218205002, 30218205003, 30218205004, 30218205005, 30218205006, 30218205007, 30218205008		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0639 ± 0.246 (0.561) C:81% T:89%	pCi/L	05/22/17 11:04	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AAE0238 Plant Yates

Pace Project No.: 30218205

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30218205



Chain of Custody



Results Requested By: 5/30/2017

Owner Received Date:

Workorder Name: Plant Yates

Workorder: AAE0238

Report To:	Subcontract To:	Requested Analysis					
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200	Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600	Radium 226, 228, Total					
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	LAB USE ONLY
1	YGWC-26S	G	5/3/2017 15:05	AAE0238-01	GW	2	001
2	YGWC-32S	G	5/3/2017 12:30	AAE0238-02	GW	2	002
3	YGWC-32I	G	5/3/2017 13:30	AAE0238-03	GW	2	003
4	YGWC-33S	G	5/3/2017 12:50	AAE0238-04	GW	2	004
5	EB-3-5-3-17	G	5/3/2017 9:35	AAE0238-05	W	2	005
6	Dup-3	G	5/3/2017 0:00	AAE0238-06	GW	2	006
7	YGWC-28S	G	5/5/2017 12:35	AAE0238-07	GW	2	007
8	YGWC-28I	G	5/5/2017 13:30	AAE0238-08	GW	2	008
9							
10							
Transfers	Released By	Date/Time	Received By	Date/Time	Comments		
1	McAlman	5/5/17	Michael Johnson	5-8-17 9:25			
2							
3							

Cooler Temperature on Receipt N/A °C Custody Seal Y of N Received on Ice Y of N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.ast-lab.com



CHAIN OF CUSTODY RECORD

CLIENT NAME:		ANALYSIS REQUESTED		CONTAINER TYPE:		PRESERVATION		CONTAINER TYPE		PRESERVATION	
Georgia Power		P P P P P P P P		# of		3 7 3		P - PLASTIC		1 - HCl, 56°C	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:		CONTAINER TYPE:		PRESERVATION:				A - AMBER GLASS		2 - H ₂ SO ₄ , 56°C	
241 Ralph McGill Blvd SE B10185								G - CLEAR GLASS		3 - HNO ₃	
Atlanta, GA 30308								V - VOA VIAL		4 - NaOH, 56°C	
404-506-7239								S - STERILE		5 - NaOH/ZnAc, 56°C	
REPORT TO:		CC: Maria Padilla		CONTAINERS				O - OTHER		6 - Na ₂ S ₂ O ₃ , 56°C	
Lauren Petty		Heath McCorkle		↓						7 - 56°C not frozen	
REQUESTED COMPLETION DATE:		PO #:									
		laburch@southernco.com									
PROJECT NAME/STATE:		Plant Yates AP									
Phase 2 CCR											
Collection DATE	Collection TIME	MATRIX CODE*	SAMPLE IDENTIFICATION	CONTAINER TYPE	PRESERVATION	ANALYSIS REQUESTED	RELINQUISHED BY:	DATE/TIME	DATE/TIME	LAB #	REMARKS/ADDITIONAL INFORMATION
5/3/17	1505	GW	YGWC-26S	4	1 1 2	Metals App. III & IV (EPA 6020/7470)	<i>[Signature]</i>	5/5/17	1540	AAE0208	# Level II report needed
5/3/17	1230	GW	YGWC-32S	4	1 1 2	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)	<i>[Signature]</i>	5/5/17	1540		
5/3/17	1330	GW	YGWC-32I	4	1 1 2	Radium 226 & 228 (GSV-848 9315/9320)	<i>[Signature]</i>	5/5/17	1540		
5/3/17	1250	GW	YGWC-33S	4	1 1 2		<i>[Signature]</i>	5/5/17	1540		
5/3/17	0935	GW	EB-3-5-3-17	4	1 1 2		<i>[Signature]</i>	5/5/17	1540		
5/3/17	—	GW	DUP-3	4	1 1 2		<i>[Signature]</i>	5/5/17	1540		
5/5/17	1235	GW	YGWC-28S	4	1 1 2		<i>[Signature]</i>	5/5/17	1540		
5/5/17	1330	GW	YGWC-28I	4	1 1 2		<i>[Signature]</i>	5/5/17	1540		
SAMPLED BY AND TITLE:		DATE/TIME:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:		FOR LAB USE ONLY	
C. Parker, J. Bowers food		5/5/17 1345		5/5/17 1540		<i>[Signature]</i>		5/5/17 1540		LAB #	
RECEIVED BY:		DATE/TIME:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:		Entered into LIMS	
<i>[Signature]</i>		5/5/17 1345		5/5/17 1540		<i>[Signature]</i>		5/5/17 1540		Tracking #	
RECEIVED BY US:		DATE/TIME:		DATE/TIME:		SAMPLE SHIPPED VIA:		DATE/TIME:		Tracking #	
<i>[Signature]</i>		5/5/17 1345		5/5/17 1540		UPS		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		FED-EX		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		USPS		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		Courier		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		# of Coolers		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		Present		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		Not Present		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		Other		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		Other		5/5/17 1540		Tracking #	
P. R. ...		5/5/17 1345		5/5/17 1540		Other		5/5/17 1540		Tracking #	

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

ANL



Client Name: Pace GA

Project # 30218205

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 681251041864

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp N/A °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ML 5-8-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered		X		12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15.
All containers needing preservation are found to be in compliance with EPA recommendation.				<u>PHC-2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>ML</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>ML</u> Date: <u>5-8-17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.



Test: Ra-226
 Analyst: JC2
 Date: 5/15/2017
 Worklist: 35596
 Matrix: DW

Method Blank Assessment	
MB Sample ID	1271204
MB concentration:	0.055
M/B Counting Uncertainty:	0.128
MB MDC:	0.308
MB Numerical Performance Indicator:	0.85
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	5/16/2017
Sample ID:	11-054
Spike Concentration (pCi/mL):	5.963
Volume Used (mL):	2.00
Aliquot Volume (L, g, F):	0.503
Target Conc. (pCi/L, g, F):	23.714
Uncertainty (Calculated):	1.116
Result (pCi/L, g, F):	18.102
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.395
Numerical Performance Indicator:	-6.16
Percent Recovery:	76.33%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample ID:	30217925005
Duplicate Sample ID:	30217925005DUP
Sample Result (pCi/L, g, F):	3.255
Sample Result Counting Uncertainty (pCi/L, g, F):	0.577
Sample Duplicate Result (pCi/L, g, F):	2.544
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.547
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	1.751
Duplicate RPD:	24.49%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

Handwritten signature

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLLW
Date: 5/17/2017
Worklist: 35627
Matrix: DW

Method Blank Assessment	
MB Sample ID	1271322
MB concentration:	0.064
M/B Counting Uncertainty:	0.246
MB MDC:	0.561
MB Numerical Performance Indicator:	0.51
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSID (Y or N)?	N
LCS35627	LCS35627
Count Date:	5/22/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	24.478
Aliquot Volume (mL):	0.20
Target Conc. (pCi/L, g, F):	0.803
Uncertainty (Calculated):	6.084
Result (pCi/L, g, F):	0.439
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	7.211
Numerical Performance Indicator:	0.712
Percent Recovery:	118.33%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30218398001
Duplicate Sample I.D.:	30218398001/1DUP
Sample Result (pCi/L, g, F):	0.386
Sample Result Counting Uncertainty (pCi/L, g, F):	0.290
Sample Duplicate Result (pCi/L, g, F):	0.725
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.376
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.398
Duplicate RPD:	60.95%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

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):	
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:	

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:	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAE0313

May 18, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-27S	AAE0313-01	Ground Water	05/08/17 09:30	05/09/17 16:30
YGWC-27I	AAE0313-02	Ground Water	05/08/17 10:40	05/09/17 16:30
FB-4-5-8-17	AAE0313-03	Water	05/08/17 11:10	05/09/17 16:30
YGWC-29I	AAE0313-04	Ground Water	05/08/17 12:25	05/09/17 16:30
EB-4-5-8-17	AAE0313-05	Water	05/08/17 12:45	05/09/17 16:30
Dup-4	AAE0313-06	Ground Water	05/08/17 00:00	05/09/17 16:30
YGWC-26I	AAE0313-07	Ground Water	05/08/17 10:25	05/09/17 16:30



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Project: CCR Event

Client ID: YGWC-27S

Lab Number ID: AAE0313-01

Date/Time Sampled: 5/8/2017 9:30:00AM

Date/Time Received: 5/9/2017 4:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	187	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	22	0.25	0.01	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 22:50	7050342	RLC
Fluoride	0.19	0.30	0.004	mg/L	EPA 300.0	J	1	05/10/17 09:46	05/16/17 22:50	7050342	RLC
Sulfate	23	1.0	0.09	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 22:50	7050342	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Barium	0.102	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Boron	1.51	0.400	0.0604	mg/L	EPA 6020B		10	05/11/17 10:35	05/17/17 13:35	7050386	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Calcium	35.7	25.0	0.522	mg/L	EPA 6020B		50	05/11/17 10:35	05/11/17 22:06	7050386	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Cobalt	0.0023	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Thallium	0.0001	0.0010	0.00005	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:01	7050386	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 14:58	7050418	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Project: CCR Event

Client ID: YGWC-271

Lab Number ID: AAE0313-02

Date/Time Sampled: 5/8/2017 10:40:00AM

Date/Time Received: 5/9/2017 4:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	174	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 23:10	7050342	RLC
Fluoride	0.07	0.30	0.004	mg/L	EPA 300.0	J	1	05/10/17 09:46	05/16/17 23:10	7050342	RLC
Sulfate	3.9	1.0	0.09	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 23:10	7050342	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/18/17 10:41	7050386	CSW
Arsenic	0.0006	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Barium	0.0721	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Beryllium	0.0002	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Boron	2.00	0.0400	0.0060	mg/L	EPA 6020B		1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Calcium	27.2	25.0	0.522	mg/L	EPA 6020B		50	05/11/17 10:35	05/17/17 14:15	7050386	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Cobalt	0.0029	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Molybdenum	0.0011	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Lithium	0.0086	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/17/17 14:09	7050386	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:01	7050418	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Project: CCR Event

Client ID: FB-4-5-8-17

Lab Number ID: AAE0313-03

Date/Time Sampled: 5/8/2017 11:10:00AM

Date/Time Received: 5/9/2017 4:30:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 23:31	7050342	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 23:31	7050342	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 23:31	7050342	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Calcium	0.0106	0.500	0.0104	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:24	7050386	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:03	7050418	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 18, 2017

Attention: Mr. Joju Abraham

Report No.: AAE0313

Project: CCR Event

Client ID: YGWC-29I

Lab Number ID: AAE0313-04

Date/Time Sampled: 5/8/2017 12:25:00PM

Date/Time Received: 5/9/2017 4:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	114	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	15	0.25	0.01	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 23:52	7050342	RLC
Fluoride	0.06	0.30	0.004	mg/L	EPA 300.0	J	1	05/10/17 09:46	05/16/17 23:52	7050342	RLC
Sulfate	32	1.0	0.09	mg/L	EPA 300.0		1	05/10/17 09:46	05/16/17 23:52	7050342	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Barium	0.0725	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Boron	0.884	0.200	0.0302	mg/L	EPA 6020B		5	05/11/17 10:35	05/17/17 13:40	7050386	CSW
Cadmium	0.0002	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Calcium	11.2	5.00	0.522	mg/L	EPA 6020B		50	05/11/17 10:35	05/11/17 22:35	7050386	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Lithium	0.0066	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:29	7050386	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:10	7050418	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Project: CCR Event

Client ID: EB-4-5-8-17

Lab Number ID: AAE0313-05

Date/Time Sampled: 5/8/2017 12:45:00PM

Date/Time Received: 5/9/2017 4:30:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	05/10/17 09:46	05/10/17 16:22	7050342	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/10/17 09:46	05/10/17 16:22	7050342	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	05/10/17 09:46	05/10/17 16:22	7050342	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Calcium	0.0621	0.500	0.0104	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:41	7050386	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:12	7050418	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

May 18, 2017

Attention: Mr. Joju Abraham

Report No.: AAE0313

Project: CCR Event

Client ID: Dup-4

Lab Number ID: AAE0313-06

Date/Time Sampled: 5/8/2017 12:00:00AM

Date/Time Received: 5/9/2017 4:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	253	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	19	0.25	0.01	mg/L	EPA 300.0		1	05/10/17 09:46	05/10/17 16:42	7050342	SLH
Fluoride	0.10	0.30	0.004	mg/L	EPA 300.0	J	1	05/10/17 09:46	05/10/17 16:42	7050342	SLH
Sulfate	81	5.0	0.46	mg/L	EPA 300.0		5	05/10/17 09:46	05/17/17 00:12	7050342	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Barium	0.0686	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Boron	0.996	0.200	0.0302	mg/L	EPA 6020B		5	05/11/17 10:35	05/17/17 13:46	7050386	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Calcium	15.5	5.00	0.522	mg/L	EPA 6020B		50	05/11/17 10:35	05/11/17 22:52	7050386	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Selenium	0.0019	0.0100	0.0014	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Lithium	0.0072	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 22:46	7050386	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:15	7050418	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Project: CCR Event

Client ID: YGWC-26I

Lab Number ID: AAE0313-07

Date/Time Sampled: 5/8/2017 10:25:00AM

Date/Time Received: 5/9/2017 4:30:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	207	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	05/10/17 09:46	05/10/17 17:03	7050342	SLH
Fluoride	0.08	0.30	0.004	mg/L	EPA 300.0	J	1	05/10/17 09:46	05/10/17 17:03	7050342	SLH
Sulfate	84	5.0	0.46	mg/L	EPA 300.0		5	05/10/17 09:46	05/17/17 00:33	7050342	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Barium	0.0699	0.0100	0.0003	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Boron	1.05	0.200	0.0302	mg/L	EPA 6020B		5	05/11/17 10:35	05/17/17 13:52	7050386	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Calcium	15.2	5.00	0.522	mg/L	EPA 6020B		50	05/11/17 10:35	05/11/17 23:15	7050386	CSW
Chromium	0.0006	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Lithium	0.0070	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/11/17 10:35	05/11/17 23:09	7050386	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:17	7050418	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050407 - SM 2540 C											
Blank (7050407-BLK1)						Prepared & Analyzed: 05/12/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7050407-BS1)						Prepared & Analyzed: 05/12/17					
Total Dissolved Solids	378	25	10	mg/L	400.00		94	84-108			
Duplicate (7050407-DUP1)						Source: AAE0313-05 Prepared & Analyzed: 05/12/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7050407-DUP2)						Source: AAE0387-09 Prepared & Analyzed: 05/12/17					
Total Dissolved Solids	218	25	10	mg/L		203			7	10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050342 - EPA 300.0											
Blank (7050342-BLK1)						Prepared & Analyzed: 05/10/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7050342-BS1)						Prepared & Analyzed: 05/10/17					
Chloride	10.9	0.25	0.01	mg/L	10.020		108	90-110			
Fluoride	10.9	0.30	0.004	mg/L	10.020		109	90-110			
Sulfate	10.9	1.0	0.09	mg/L	10.050		109	90-110			
Matrix Spike (7050342-MS1)						Source: AAE0313-01RE1 Prepared & Analyzed: 05/10/17					
Chloride	28.0	0.25	0.01	mg/L	10.020	21.7	63	90-110			QM-02
Fluoride	10.1	0.30	0.004	mg/L	10.020	0.19	99	90-110			
Sulfate	29.5	1.0	0.09	mg/L	10.050	23.2	62	90-110			QM-02
Matrix Spike Dup (7050342-MSD1)						Source: AAE0313-01RE1 Prepared & Analyzed: 05/10/17					
Chloride	28.1	0.25	0.01	mg/L	10.020	21.7	64	90-110	0.4	15	QM-02
Fluoride	9.98	0.30	0.004	mg/L	10.020	0.19	98	90-110	1	15	
Sulfate	29.7	1.0	0.09	mg/L	10.050	23.2	65	90-110	0.8	15	QM-02



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050386 - EPA 3005A											
Blank (7050386-BLK1)						Prepared & Analyzed: 05/11/17					
Antimony	ND	0.0030	0.0003	mg/L							
Arsenic	ND	0.0050	0.0004	mg/L							
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00007	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.00006	mg/L							
Calcium	ND	0.500	0.0104	mg/L							
Chromium	ND	0.0100	0.0003	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0006	mg/L							
Nickel	ND	0.0100	0.0003	mg/L							
Selenium	ND	0.0100	0.0014	mg/L							
Silver	ND	0.0100	0.0003	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0014	mg/L							
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0011	mg/L							
LCS (7050386-BS1)						Prepared & Analyzed: 05/11/17					
Antimony	0.108	0.0030	0.0003	mg/L	0.10000		108	80-120			
Arsenic	0.107	0.0050	0.0004	mg/L	0.10000		107	80-120			
Barium	0.107	0.0100	0.0003	mg/L	0.10000		107	80-120			
Beryllium	0.111	0.0030	0.00007	mg/L	0.10000		111	80-120			
Boron	1.11	0.0400	0.0060	mg/L	1.0000		111	80-120			
Cadmium	0.109	0.0010	0.00006	mg/L	0.10000		109	80-120			
Calcium	1.06	0.500	0.0104	mg/L	1.0000		106	80-120			
Chromium	0.111	0.0100	0.0003	mg/L	0.10000		111	80-120			
Cobalt	0.106	0.0100	0.0005	mg/L	0.10000		106	80-120			
Copper	0.107	0.0250	0.0003	mg/L	0.10000		107	80-120			
Lead	0.102	0.0050	0.00007	mg/L	0.10000		102	80-120			
Molybdenum	0.111	0.0100	0.0006	mg/L	0.10000		111	80-120			
Nickel	0.109	0.0100	0.0003	mg/L	0.10000		109	80-120			
Selenium	0.109	0.0100	0.0014	mg/L	0.10000		109	80-120			
Silver	0.101	0.0100	0.0003	mg/L	0.10000		101	80-120			
Thallium	0.103	0.0010	0.00005	mg/L	0.10000		103	80-120			
Vanadium	0.110	0.0100	0.0014	mg/L	0.10000		110	80-120			
Zinc	0.107	0.0100	0.0013	mg/L	0.10000		107	80-120			
Lithium	0.109	0.0500	0.0011	mg/L	0.10000		109	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050386 - EPA 3005A											
Matrix Spike (7050386-MS1)			Source: AAE0313-01				Prepared & Analyzed: 05/11/17				
Antimony	0.107	0.0030	0.0003	mg/L	0.10000	ND	107	75-125			
Arsenic	0.106	0.0050	0.0004	mg/L	0.10000	ND	106	75-125			
Barium	0.203	0.0100	0.0003	mg/L	0.10000	0.102	101	75-125			
Beryllium	0.0999	0.0030	0.00007	mg/L	0.10000	ND	100	75-125			
Boron	2.41	0.0400	0.0060	mg/L	1.0000	1.51	89	75-125			
Cadmium	0.107	0.0010	0.00006	mg/L	0.10000	ND	107	75-125			
Calcium	37.3	25.0	0.522	mg/L	1.0000	35.7	160	75-125			QM-02
Chromium	0.107	0.0100	0.0003	mg/L	0.10000	ND	107	75-125			
Cobalt	0.105	0.0100	0.0005	mg/L	0.10000	0.0023	102	75-125			
Copper	0.102	0.0250	0.0003	mg/L	0.10000	ND	102	75-125			
Lead	0.0981	0.0050	0.00007	mg/L	0.10000	ND	98	75-125			
Molybdenum	0.106	0.0100	0.0006	mg/L	0.10000	ND	106	75-125			
Nickel	0.107	0.0100	0.0003	mg/L	0.10000	0.0012	106	75-125			
Selenium	0.107	0.0100	0.0014	mg/L	0.10000	ND	107	75-125			
Silver	0.0975	0.0100	0.0003	mg/L	0.10000	ND	97	75-125			
Thallium	0.103	0.0010	0.00005	mg/L	0.10000	0.0001	103	75-125			
Vanadium	0.109	0.0100	0.0014	mg/L	0.10000	ND	109	75-125			
Zinc	0.106	0.0100	0.0013	mg/L	0.10000	ND	106	75-125			
Lithium	0.105	0.0500	0.0011	mg/L	0.10000	ND	105	75-125			
Matrix Spike Dup (7050386-MSD1)			Source: AAE0313-01				Prepared & Analyzed: 05/11/17				
Antimony	0.106	0.0030	0.0003	mg/L	0.10000	ND	106	75-125	1	20	
Arsenic	0.105	0.0050	0.0004	mg/L	0.10000	ND	105	75-125	2	20	
Barium	0.205	0.0100	0.0003	mg/L	0.10000	0.102	103	75-125	1	20	
Beryllium	0.0990	0.0030	0.00007	mg/L	0.10000	ND	99	75-125	0.8	20	
Boron	2.44	0.0400	0.0060	mg/L	1.0000	1.51	93	75-125	1	20	
Cadmium	0.108	0.0010	0.00006	mg/L	0.10000	ND	108	75-125	0.4	20	
Calcium	37.1	25.0	0.522	mg/L	1.0000	35.7	140	75-125	0.5	20	QM-02
Chromium	0.106	0.0100	0.0003	mg/L	0.10000	ND	106	75-125	0.9	20	
Cobalt	0.104	0.0100	0.0005	mg/L	0.10000	0.0023	102	75-125	0.7	20	
Copper	0.101	0.0250	0.0003	mg/L	0.10000	ND	101	75-125	1	20	
Lead	0.0976	0.0050	0.00007	mg/L	0.10000	ND	98	75-125	0.6	20	
Molybdenum	0.108	0.0100	0.0006	mg/L	0.10000	ND	108	75-125	2	20	
Nickel	0.104	0.0100	0.0003	mg/L	0.10000	0.0012	102	75-125	3	20	
Selenium	0.108	0.0100	0.0014	mg/L	0.10000	ND	108	75-125	0.8	20	
Silver	0.0974	0.0100	0.0003	mg/L	0.10000	ND	97	75-125	0.1	20	
Thallium	0.101	0.0010	0.00005	mg/L	0.10000	0.0001	101	75-125	2	20	
Vanadium	0.107	0.0100	0.0014	mg/L	0.10000	ND	107	75-125	3	20	
Zinc	0.102	0.0100	0.0013	mg/L	0.10000	ND	102	75-125	4	20	
Lithium	0.102	0.0500	0.0011	mg/L	0.10000	ND	102	75-125	4	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050386 - EPA 3005A											
Post Spike (7050386-PS1)			Source: AAE0313-01			Prepared & Analyzed: 05/11/17					
Antimony	105			ug/L	100.00	-0.0201	105	80-120			
Arsenic	103			ug/L	100.00	-0.0917	103	80-120			
Barium	202			ug/L	100.00	102	100	80-120			
Beryllium	92.9			ug/L	100.00	-0.0029	93	80-120			
Boron	2340			ug/L	1000.0	1510	82	80-120			
Cadmium	100			ug/L	100.00	-0.0113	100	80-120			
Calcium	36300			ug/L	1000.0	35700	62	80-120			QM-02
Chromium	102			ug/L	100.00	0.0456	102	80-120			
Cobalt	98.4			ug/L	100.00	2.27	96	80-120			
Copper	95.5			ug/L	100.00	0.153	95	80-120			
Lead	94.7			ug/L	100.00	0.0277	95	80-120			
Molybdenum	106			ug/L	100.00	0.0532	106	80-120			
Nickel	97.2			ug/L	100.00	1.22	96	80-120			
Selenium	103			ug/L	100.00	0.647	102	80-120			
Silver	97.7			ug/L	100.00	-0.00007	98	80-120			
Thallium	95.7			ug/L	100.00	0.113	96	80-120			
Vanadium	101			ug/L	100.00	-1.14	101	80-120			
Zinc	99.5			ug/L	100.00	0.751	99	80-120			
Lithium	96.4			ug/L	100.00	0.0445	96	80-120			

Batch 7050418 - EPA 7470A

Blank (7050418-BLK1)					Prepared & Analyzed: 05/15/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7050418-BS1)					Prepared & Analyzed: 05/15/17						
Mercury	0.00218	0.00050	0.000041	mg/L	2.5000E-3		87	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Report No.: AAE0313

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050418 - EPA 7470A											
Matrix Spike (7050418-MS1)			Source: AAE0313-03			Prepared & Analyzed: 05/15/17					
Mercury	0.00217	0.00050	0.000041	mg/L	2.5000E-3	ND	87	75-125			
Matrix Spike Dup (7050418-MSD1)			Source: AAE0313-03			Prepared & Analyzed: 05/15/17					
Mercury	0.00215	0.00050	0.000041	mg/L	2.5000E-3	ND	86	75-125	1	20	
Post Spike (7050418-PS1)			Source: AAE0313-03			Prepared & Analyzed: 05/15/17					
Mercury	1.78			ug/L	1.6667	-0.00823	107	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

May 18, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME:		ANALYSIS REQUESTED		CONTAINER TYPE		PRESERVATION	
Georgia Power		P P P P		P P P P		P - PLASTIC	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:		P P P P		P P P P		A - AMBER GLASS	
241 Ralph McGill Blvd SE B10185		P P P P		P P P P		G - CLEAR GLASS	
Atlanta, GA 30308		P P P P		P P P P		V - VOA VIAL	
404-506-7239		P P P P		P P P P		S - STERILE	
REPORT TO:		P P P P		P P P P		O - OTHER	
Lauren Peity		P P P P		P P P P		1 - HCl, ≤6°C	
CC: Maria Padilla		P P P P		P P P P		2 - H ₂ SO ₄ , ≤6°C	
Heath McCorkle		P P P P		P P P P		3 - HNO ₃	
PO #: laburch@southernco.com		P P P P		P P P P		4 - NaOH, ≤6°C	
PROJECT NAME/STATE: Plant Yates AP		P P P P		P P P P		5 - NaOH/ZnAc, ≤6°C	
PROJECT #: Phase 2 CCR		P P P P		P P P P		6 - Na ₂ S ₂ O ₃ , ≤6°C	
		P P P P		P P P P		7 - ≤6°C not frozen	
Collection DATE	Collection TIME	MATRIX CODE*	SAMPLE IDENTIFICATION	# of CONTAINERS	CONTAINER TYPE	PRESERVATION	REMARKS/ADDITIONAL INFORMATION
5/8/17	0930	GW	✓ Y6WC-27 S	6			
5/8/17	1040	GW	✓ Y6WC-27 I	4			
5/8/17	1110	W	✓ FB-4-5-B-17	4			
5/8/17	1225	GW	✓ Y6WC-29 I	4			
5/8/17	1245	W	✓ EB-4-5-B-17	4			
5/8/17	---	GW	✓ D4P-4	4			
5/8/17	1025	GW	✓ Y6WC-26 I	4			
SAMPLED BY AND TITLE:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:	
C. Pacheco, J. Ber's Lead (Ac)		5/8/17 1300		Ch-Lan		5/9/17 1630	
RECEIVED BY:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:	
J. Pacheco		5/8/17 1300					
RECEIVED BY LAB:		DATE/TIME:		SAMPLE SHIPPED VIA:		DATE/TIME:	
J. Pacheco		5/8/17 1300		UPS		5/9/17 1630	
TEMPERATURE:		DATE/TIME:		COURIER:		DATE/TIME:	
21.1		5/8/17 1300		Cocors		5/9/17 1630	
MIN: 21.1		5/8/17 1300		Cocors		5/9/17 1630	
MAX: 21.1		5/8/17 1300		Cocors		5/9/17 1630	
LAB #:		ENTERED INTO LIS:		LABORATORY:		DATE/TIME:	
AAE0313		mdk					

Plant Yates COC Ash Ponds



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 5/10/2017 1:22:22PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 05/09/17 16:30

Work Order: AAE0313

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 7

#Containers: 30

Minimum Temp(C): 2.1

Maximum Temp(C): 2.1

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

May 30, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAE0313 Plant Yates
Pace Project No.: 30218398

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on May 10, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAE0313 Plant Yates

Pace Project No.: 30218398

Pennsylvania Certification IDs

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

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAE0313 Plant Yates

Pace Project No.: 30218398

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30218398001	YGWC-27S	Water	05/08/17 09:30	05/10/17 10:15
30218398002	YGWC-27I	Water	05/08/17 10:40	05/10/17 10:15
30218398003	FB-4-5-8-17	Water	05/08/17 11:10	05/10/17 10:15
30218398004	YGWC-29I	Water	05/08/17 12:25	05/10/17 10:15
30218398005	EB-4-5-8-17	Water	05/08/17 12:45	05/10/17 10:15
30218398006	Dup-4	Water	05/08/17 00:00	05/10/17 10:15
30218398007	YGWC-26I	Water	05/08/17 10:25	05/10/17 10:15

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAE0313 Plant Yates
Pace Project No.: 30218398

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30218398001	YGWC-27S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218398002	YGWC-27I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218398003	FB-4-5-8-17	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218398004	YGWC-29I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218398005	EB-4-5-8-17	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218398006	Dup-4	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218398007	YGWC-26I	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0313 Plant Yates
Pace Project No.: 30218398

Sample: YGWC-27S		Lab ID: 30218398001	Collected: 05/08/17 09:30	Received: 05/10/17 10:15	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.403 ± 0.263	(0.413)	pCi/L	05/16/17 08:47	13982-63-3	
		C:87% T:NA					
Radium-228	EPA 9320	0.386 ± 0.298	(0.584)	pCi/L	05/22/17 11:04	15262-20-1	
		C:78% T:93%					
Total Radium	Total Radium Calculation	0.789 ± 0.561	(0.997)	pCi/L	05/24/17 14:28	7440-14-4	

Sample: YGWC-27I		Lab ID: 30218398002	Collected: 05/08/17 10:40	Received: 05/10/17 10:15	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	2.89 ± 0.686	(0.344)	pCi/L	05/16/17 08:47	13982-63-3	
		C:92% T:NA					
Radium-228	EPA 9320	0.984 ± 0.408	(0.644)	pCi/L	05/22/17 11:04	15262-20-1	
		C:76% T:91%					
Total Radium	Total Radium Calculation	3.87 ± 1.09	(0.988)	pCi/L	05/24/17 14:28	7440-14-4	

Sample: FB-4-5-8-17		Lab ID: 30218398003	Collected: 05/08/17 11:10	Received: 05/10/17 10:15	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0304 ± 0.0625	(0.146)	pCi/L	05/26/17 08:31	13982-63-3	
		C:86% T:NA					
Radium-228	EPA 9320	0.585 ± 0.325	(0.569)	pCi/L	05/22/17 11:05	15262-20-1	
		C:80% T:82%					
Total Radium	Total Radium Calculation	0.615 ± 0.388	(0.715)	pCi/L	05/30/17 07:52	7440-14-4	

Sample: YGWC-29I		Lab ID: 30218398004	Collected: 05/08/17 12:25	Received: 05/10/17 10:15	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.190 ± 0.116	(0.169)	pCi/L	05/26/17 08:31	13982-63-3	
		C:85% T:NA					
Radium-228	EPA 9320	0.0204 ± 0.293	(0.681)	pCi/L	05/22/17 14:31	15262-20-1	
		C:78% T:82%					
Total Radium	Total Radium Calculation	0.210 ± 0.409	(0.850)	pCi/L	05/30/17 07:52	7440-14-4	

Sample: EB-4-5-8-17		Lab ID: 30218398005	Collected: 05/08/17 12:45	Received: 05/10/17 10:15	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0153 ± 0.0617	(0.160)	pCi/L	05/26/17 08:31	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	-0.00925 ± 0.326	(0.762)	pCi/L	05/22/17 14:31	15262-20-1	
		C:75% T:80%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0313 Plant Yates

Pace Project No.: 30218398

Sample: EB-4-5-8-17		Lab ID: 30218398005	Collected: 05/08/17 12:45	Received: 05/10/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.0153 ± 0.388 (0.922)	pCi/L	05/30/17 07:52	7440-14-4	

Sample: Dup-4		Lab ID: 30218398006	Collected: 05/08/17 00:00	Received: 05/10/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.209 ± 0.117 (0.147) C:87% T:NA	pCi/L	05/26/17 08:31	13982-63-3	
Radium-228	EPA 9320	-0.250 ± 0.343 (0.856) C:71% T:77%	pCi/L	05/22/17 14:31	15262-20-1	
Total Radium	Total Radium Calculation	0.208 ± 0.460 (1.00)	pCi/L	05/30/17 07:52	7440-14-4	

Sample: YGWC-26I		Lab ID: 30218398007	Collected: 05/08/17 10:25	Received: 05/10/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0878 ± 0.0883 (0.168) C:89% T:NA	pCi/L	05/26/17 08:31	13982-63-3	
Radium-228	EPA 9320	0.203 ± 0.336 (0.731) C:75% T:78%	pCi/L	05/22/17 14:31	15262-20-1	
Total Radium	Total Radium Calculation	0.291 ± 0.424 (0.899)	pCi/L	05/30/17 07:52	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0313 Plant Yates

Pace Project No.: 30218398

QC Batch: 258120

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30218398001, 30218398002

METHOD BLANK: 1271204

Matrix: Water

Associated Lab Samples: 30218398001, 30218398002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0555 ± 0.129 (0.308) C:93% T:NA	pCi/L	05/16/17 08:58	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0313 Plant Yates

Pace Project No.: 30218398

QC Batch: 258164

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30218398001, 30218398002, 30218398003, 30218398004, 30218398005, 30218398006, 30218398007

METHOD BLANK: 1271322

Matrix: Water

Associated Lab Samples: 30218398001, 30218398002, 30218398003, 30218398004, 30218398005, 30218398006, 30218398007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0639 ± 0.246 (0.561) C:81% T:89%	pCi/L	05/22/17 11:04	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0313 Plant Yates

Pace Project No.: 30218398

QC Batch: 258653

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30218398003, 30218398004, 30218398005, 30218398006, 30218398007

METHOD BLANK: 1274144

Matrix: Water

Associated Lab Samples: 30218398003, 30218398004, 30218398005, 30218398006, 30218398007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0369 ± 0.0667 (0.151) C:89% T:NA	pCi/L	05/26/17 08:31	

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

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

QUALIFIERS

Project: AAE0313 Plant Yates
Pace Project No.: 30218398

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

Chain of Custody



Results Requested By: 6/1/2017

Owner Received Date:

Workorder Name: Plant Yates

Workorder: AAE0313

Report To: Requested Analysis

Betsy McDaniel
 Pace Analytical Atlanta
 110 Technology Parkway
 Peachtree Corners, GA 30092
 Phone (770)-734-4200

Subcontract To:
 Pace - Pittsburgh
 1638 Roseytown Road
 Stes. 2,3,4
 Greensburg, PA 15601
 Phone (724) 850-5600

WO#: 30218398



Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	LAB USE ONLY
1	YGWC-275	G	5/8/2017 9:30	AAE0313-01	GW	4	001
2	YGWC-271	G	5/8/2017 10:40	AAE0313-02	GW	2	002
3	FB-4-5-8-17	G	5/8/2017 11:10	AAE0313-03	W	2	003
4	YGWC-291	G	5/8/2017 12:25	AAE0313-04	GW	2	004
5	EB-4-5-8-17	G	5/8/2017 12:45	AAE0313-05	W	2	005
6	Dup-4	G	5/8/2017 0:00	AAE0313-06	GW	2	006
7	YGWC-261	G	5/8/2017 10:25	AAE0313-07	GW	2	007
8							
9							
10							

Radium 226, 228, Total

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Karen Liu	5/16/17 10:15	
2					
3					

Cooler Temperature on Receipt NA °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

*** In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC. This chain of custody is considered complete as is since this information is available in the owner laboratory.

30218398

PAGE 1 OF 1

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com



CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-508-7239 REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle REQUESTED COMPLETION DATE: PO # laburch@southernmco.com PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR		CONTAINER TYPE: P P P P PRESERVATION: 3 7 3 # of CONTAINERS →		ANALYSIS REQUESTED Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-846 9315/9320)		CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	
Collection DATE 5/8/17 5/8/17 5/8/17 5/8/17 5/8/17 5/8/17 5/8/17	Collection TIME 0930 1040 1110 1225 1245 — 1025	MATRIX CODE* GW GW W GW W GW GW	SAMPLE IDENTIFICATION Y6WC-27S Y6WC-27I FB-4-5-8-17 Y6WC-29I EB-4-5-8-17 D4P-4 Y6WC-26I	C O M P <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	LAB # AAE0313 Entered into LIS Tracking #	REMARKS/ADDITIONAL INFORMATION	
SAMPLED BY AND TITLE: C. Backus, Sr. Ber. & Ford Acc.		DATE/TIME: 5/8/17 1300	RELINQUISHED BY: [Signature]	DATE/TIME: 5/9/17	FOR LAB USE ONLY		
RECEIVED BY: [Signature]		DATE/TIME: 5/8/17 1630	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY LAB: [Signature] Temperature: [] Sealed: [] Inspected: [] Yes [] No []		

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

30218398

KEH



Client Name: Pace Georgia

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5104 2426

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KA 5/10/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	/			1.
Chain of Custody Filled Out:	/			2.
Chain of Custody Relinquished:	/			3.
Sampler Name & Signature on COC:	/			4.
Sample Labels match COC: -Includes date/time/ID Matrix: <u>N/A</u>	/			5.
Samples Arrived within Hold Time:	/			6.
Short Hold Time Analysis (<72hr remaining):		/		7.
Rush Turn Around Time Requested:		/		8.
Sufficient Volume:	/			9.
Correct Containers Used: -Pace Containers Used:	/			10.
Containers Intact:	/			11.
Orthophosphate field filtered			/	12.
Organic Samples checked for dechlorination:			/	13.
Filtered volume received for Dissolved tests			/	14.
All containers have been checked for preservation.	/			15. <u>PH 22</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	/			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>KA</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			/	16.
Trip Blank Present:		/		17.
Trip Blank Custody Seals Present		/		
Rad Aqueous Samples Screened > 0.5 mrem/hr		/		Initial when completed: <u>KA</u> Date: <u>5/10/17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 5/15/2017
Worklist: 35596
Matrix: DW

Method Blank Assessment	
MB Sample ID	1271204
MB concentration:	0.055
M/B Counting Uncertainty:	0.128
MB MDC:	0.308
MB Numerical Performance Indicator:	0.85
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	5/16/2017
Spike I.D.:	11-054
Spike Concentration (pCi/mL):	5.963
Volume Used (mL):	2.00
Aliquot Volume (L, g, F):	0.503
Target Conc. (pCi/L, g, F):	23.714
Uncertainty (Calculated):	1.116
Result (pCi/L, g, F):	18.102
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.395
Numerical Performance Indicator:	-6.16
Percent Recovery:	76.33%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30217925005
Duplicate Sample I.D.:	30217925005DUP
Sample Result Counting Uncertainty (pCi/L, g, F):	3.255
Sample Duplicate Result (pCi/L, g, F):	0.577
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	2.544
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.547
Are sample and/or duplicate results below MDC?	See Below #
Duplicate Numerical Performance Indicator:	1.751
Duplicate RPD:	24.49%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

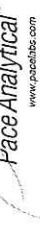
Comments:

Onus/2017

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



www.paceanalytical.com

Test: Ra-226
Analyst: LAL
Date: 5/22/2017
Worklist: 35671
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1274144
MB Concentration:	0.037
M/B Counting Uncertainty:	0.066
MB MDC:	0.151
MB Numerical Performance Indicator:	1.09
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	5/26/2017
Spike I.D.:	13-033
Spike Concentration (pCi/mL):	19.848
Volume Used (mL):	0.40
Aliquot Volume (L, g, F):	0.501
Target Conc. (pCi/L, g, F):	15.854
Uncertainty (Calculated):	0.746
Result (pCi/L, g, F):	13.535
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.772
Numerical Performance Indicator:	-4.23
Percent Recovery:	85.37%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30218700009
Duplicate Sample I.D.:	30218700009DUP
Sample Result Counting Uncertainty (pCi/L, g, F):	0.165
Sample Duplicate Result (pCi/L, g, F):	0.117
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.206
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.112
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.498
Duplicate RPD:	22.23%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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

Comments:

Original

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 5/17/2017
Worklist: 35627
Matrix: DW

Method Blank Assessment	
MB Sample ID	1271322
MB concentration:	0.064
M/B Counting Uncertainty:	0.246
MB MDC:	0.561
MB Numerical Performance Indicator:	0.51
MB Status vs. Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		N
Count Date:	LCS35627	LCS035627
Spike I.D.:	5/22/2017	
Spike Concentration (pCi/mL):	17-005	
Volume Used (mL):	24.478	
Aliquot Volume (L, g, F):	0.20	
Target Conc. (pCi/L, g, F):	0.803	
Uncertainty (Calculated):	6.084	
Result (pCi/L, g, F):	0.439	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	7.211	
Numerical Performance Indicator:	2.62	
Percent Recovery:	118.33%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment	
Sample I.D.:	30218398001
Duplicate Sample I.D.:	30218398001DUP
Sample Result Counting Uncertainty (pCi/L, g, F):	0.386
Sample Duplicate Result (pCi/L, g, F):	0.290
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.725
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.376
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.398
Duplicate RPD:	60.95%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Copy

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.:
Sample MS I.D.:	Sample MS I.D.:
Sample MSD I.D.:	Sample MSD I.D.:
Spike I.D.:	Spike I.D.:
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	Spike Volume Used in MS (mL):
Spike Volume Used in MS (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):	Spike uncertainty (calculated):
Sample Result Counting Uncertainty (pCi/L, g, F):	Sample Result:
Sample Matrix Spike Result	Sample Matrix Spike Result
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	MS Numerical Performance Indicator:
MS Numerical Performance Indicator:	MS Percent Recovery:
MSD Percent Recovery:	MS Status vs Numerical Indicator:
MS Status vs Numerical Indicator:	MS Status vs Recovery:
MS Status vs Recovery:	MSD Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample I.D.:
Sample MS I.D.:	Sample MS I.D.:
Sample MSD I.D.:	Sample MSD I.D.:
Sample Matrix Spike Result	Sample Matrix Spike Duplicate Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result	Duplicate Numerical Performance Indicator:
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAE0912

June 05, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink, appearing to read "Betty McDaniel", written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-2I	AAE0912-01	Ground Water	05/26/17 11:00	05/26/17 14:17



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Report No.: AAE0912

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AAE0912-01

Date/Time Sampled: 5/26/2017 11:00:00AM

Date/Time Received: 5/26/2017 2:17:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	223	25	10	mg/L	SM 2540 C		1	05/31/17 17:50	05/31/17 17:50	7050957	JPT
Inorganic Anions											
Chloride	0.93	0.25	0.01	mg/L	EPA 300.0		1	06/01/17 15:00	06/02/17 06:53	7060036	RLC
Fluoride	0.09	0.30	0.004	mg/L	EPA 300.0	J	1	06/01/17 15:00	06/02/17 06:53	7060036	RLC
Sulfate	12	1.0	0.09	mg/L	EPA 300.0		1	06/01/17 15:00	06/02/17 06:53	7060036	RLC
Metals, Total											
Antimony	0.0005	0.0030	0.0003	mg/L	EPA 6020B	J	1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Arsenic	0.0005	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Barium	0.0034	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Calcium	26.2	25.0	0.522	mg/L	EPA 6020B		50	05/30/17 11:10	06/02/17 19:32	7050903	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Molybdenum	0.0029	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Lithium	0.0038	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/30/17 11:10	06/02/17 19:26	7050903	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	06/01/17 09:30	06/01/17 17:23	7050922	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Report No.: AAE0912

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050957 - SM 2540 C											
Blank (7050957-BLK1)						Prepared & Analyzed: 05/31/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7050957-BS1)						Prepared & Analyzed: 05/31/17					
Total Dissolved Solids	381	25	10	mg/L	400.00		95	84-108			
Duplicate (7050957-DUP1)						Source: AAE0911-07 Prepared & Analyzed: 05/31/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7050957-DUP2)						Source: AAE0912-01 Prepared & Analyzed: 05/31/17					
Total Dissolved Solids	190	25	10	mg/L		223			16	10	QR-03



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Report No.: AAE0912

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7060036 - EPA 300.0											
Blank (7060036-BLK1)						Prepared & Analyzed: 06/01/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7060036-BS1)						Prepared & Analyzed: 06/01/17					
Chloride	10.4	0.25	0.01	mg/L	10.020		104	90-110			
Fluoride	10.3	0.30	0.004	mg/L	10.020		103	90-110			
Sulfate	10.5	1.0	0.09	mg/L	10.050		105	90-110			
Matrix Spike (7060036-MS1)						Source: AAE0911-01 Prepared: 06/01/17 Analyzed: 06/02/17					
Chloride	12.4	0.25	0.01	mg/L	10.020	2.44	100	90-110			
Fluoride	10.4	0.30	0.004	mg/L	10.020	0.08	103	90-110			
Sulfate	17.0	1.0	0.09	mg/L	10.050	5.74	112	90-110			QM-05
Matrix Spike (7060036-MS2)						Source: AAE0918-03 Prepared: 06/01/17 Analyzed: 06/02/17					
Chloride	20.1	0.25	0.01	mg/L	10.020	9.91	101	90-110			
Fluoride	10.8	0.30	0.004	mg/L	10.020	0.03	108	90-110			
Sulfate	85.7	1.0	0.09	mg/L	10.050	84.2	15	90-110			QM-02
Matrix Spike Dup (7060036-MSD1)						Source: AAE0911-01 Prepared: 06/01/17 Analyzed: 06/02/17					
Chloride	12.2	0.25	0.01	mg/L	10.020	2.44	98	90-110	2	15	
Fluoride	10.5	0.30	0.004	mg/L	10.020	0.08	104	90-110	0.3	15	
Sulfate	15.8	1.0	0.09	mg/L	10.050	5.74	100	90-110	8	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Report No.: AAE0912

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7050903 - EPA 3005A

Blank (7050903-BLK1)

Prepared: 05/30/17 Analyzed: 06/02/17

Antimony	ND	0.0030	0.0003	mg/L							
Arsenic	ND	0.0050	0.0004	mg/L							
Barium	ND	0.0100	0.0003	mg/L							
Beryllium	ND	0.0030	0.00007	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.00006	mg/L							
Calcium	ND	0.500	0.0104	mg/L							
Chromium	ND	0.0100	0.0003	mg/L							
Cobalt	ND	0.0100	0.0005	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0006	mg/L							
Nickel	ND	0.0100	0.0003	mg/L							
Selenium	ND	0.0100	0.0014	mg/L							
Silver	ND	0.0100	0.0003	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0014	mg/L							
Zinc	ND	0.0100	0.0013	mg/L							
Lithium	ND	0.0500	0.0011	mg/L							

LCS (7050903-BS1)

Prepared: 05/30/17 Analyzed: 06/02/17

Antimony	0.110	0.0030	0.0003	mg/L	0.10000		110	80-120			
Arsenic	0.104	0.0050	0.0004	mg/L	0.10000		104	80-120			
Barium	0.106	0.0100	0.0003	mg/L	0.10000		106	80-120			
Beryllium	0.103	0.0030	0.00007	mg/L	0.10000		103	80-120			
Boron	1.07	0.0400	0.0060	mg/L	1.0000		107	80-120			
Cadmium	0.104	0.0010	0.00006	mg/L	0.10000		104	80-120			
Calcium	1.08	0.500	0.0104	mg/L	1.0000		108	80-120			
Chromium	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Cobalt	0.106	0.0100	0.0005	mg/L	0.10000		106	80-120			
Copper	0.103	0.0250	0.0003	mg/L	0.10000		103	80-120			
Lead	0.103	0.0050	0.00007	mg/L	0.10000		103	80-120			
Molybdenum	0.105	0.0100	0.0006	mg/L	0.10000		105	80-120			
Nickel	0.106	0.0100	0.0003	mg/L	0.10000		106	80-120			
Selenium	0.105	0.0100	0.0014	mg/L	0.10000		105	80-120			
Silver	0.102	0.0100	0.0003	mg/L	0.10000		102	80-120			
Thallium	0.104	0.0010	0.00005	mg/L	0.10000		104	80-120			
Vanadium	0.106	0.0100	0.0014	mg/L	0.10000		106	80-120			
Zinc	0.106	0.0100	0.0013	mg/L	0.10000		106	80-120			
Lithium	0.106	0.0500	0.0011	mg/L	0.10000		106	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Report No.: AAE0912

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050903 - EPA 3005A											
Matrix Spike (7050903-MS1)			Source: AAE0911-01				Prepared: 05/30/17 Analyzed: 06/02/17				
Antimony	0.108	0.0030	0.0003	mg/L	0.10000	ND	108	75-125			
Arsenic	0.105	0.0050	0.0004	mg/L	0.10000	0.0015	103	75-125			
Barium	0.456	0.0100	0.0003	mg/L	0.10000	0.193	263	75-125			QM-02
Beryllium	0.0993	0.0030	0.00007	mg/L	0.10000	ND	99	75-125			
Boron	1.01	0.0400	0.0060	mg/L	1.0000	0.0100	100	75-125			
Cadmium	0.102	0.0010	0.00006	mg/L	0.10000	ND	102	75-125			
Calcium	34.6	25.0	0.522	mg/L	1.0000	33.8	73	75-125			QM-02
Chromium	0.107	0.0100	0.0003	mg/L	0.10000	ND	107	75-125			
Cobalt	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125			
Copper	0.103	0.0250	0.0003	mg/L	0.10000	ND	103	75-125			
Lead	0.101	0.0050	0.00007	mg/L	0.10000	0.0001	101	75-125			
Molybdenum	0.109	0.0100	0.0006	mg/L	0.10000	0.0020	107	75-125			
Nickel	0.105	0.0100	0.0003	mg/L	0.10000	ND	105	75-125			
Selenium	0.103	0.0100	0.0014	mg/L	0.10000	ND	103	75-125			
Silver	0.101	0.0100	0.0003	mg/L	0.10000	ND	101	75-125			
Thallium	0.103	0.0010	0.00005	mg/L	0.10000	0.0001	103	75-125			
Vanadium	0.110	0.0100	0.0014	mg/L	0.10000	ND	110	75-125			
Zinc	0.105	0.0100	0.0013	mg/L	0.10000	0.0015	104	75-125			
Lithium	0.104	0.0500	0.0011	mg/L	0.10000	ND	104	75-125			
Matrix Spike Dup (7050903-MSD1)			Source: AAE0911-01				Prepared: 05/30/17 Analyzed: 06/02/17				
Antimony	0.108	0.0030	0.0003	mg/L	0.10000	ND	108	75-125	0.3	20	
Arsenic	0.105	0.0050	0.0004	mg/L	0.10000	0.0015	103	75-125	0.1	20	
Barium	0.461	0.0100	0.0003	mg/L	0.10000	0.193	268	75-125	1	20	QM-02
Beryllium	0.103	0.0030	0.00007	mg/L	0.10000	ND	103	75-125	4	20	
Boron	1.02	0.0400	0.0060	mg/L	1.0000	0.0100	101	75-125	1	20	
Cadmium	0.105	0.0010	0.00006	mg/L	0.10000	ND	105	75-125	2	20	
Calcium	35.3	25.0	0.522	mg/L	1.0000	33.8	145	75-125	2	20	QM-02
Chromium	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125	4	20	
Cobalt	0.0996	0.0100	0.0005	mg/L	0.10000	ND	100	75-125	4	20	
Copper	0.100	0.0250	0.0003	mg/L	0.10000	ND	100	75-125	3	20	
Lead	0.100	0.0050	0.00007	mg/L	0.10000	0.0001	100	75-125	1	20	
Molybdenum	0.105	0.0100	0.0006	mg/L	0.10000	0.0020	103	75-125	3	20	
Nickel	0.100	0.0100	0.0003	mg/L	0.10000	ND	100	75-125	4	20	
Selenium	0.105	0.0100	0.0014	mg/L	0.10000	ND	105	75-125	1	20	
Silver	0.101	0.0100	0.0003	mg/L	0.10000	ND	101	75-125	0.1	20	
Thallium	0.102	0.0010	0.00005	mg/L	0.10000	0.0001	102	75-125	0.9	20	
Vanadium	0.106	0.0100	0.0014	mg/L	0.10000	ND	106	75-125	3	20	
Zinc	0.102	0.0100	0.0013	mg/L	0.10000	0.0015	101	75-125	3	20	
Lithium	0.104	0.0500	0.0011	mg/L	0.10000	ND	104	75-125	0.06	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Report No.: AAE0912

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050903 - EPA 3005A											
Post Spike (7050903-PS1)			Source: AAE0911-01			Prepared: 05/30/17 Analyzed: 06/02/17					
Antimony	106			ug/L	100.00	0.0698	106	80-120			
Arsenic	105			ug/L	100.00	1.49	103	80-120			
Barium	463			ug/L	100.00	193	270	80-120			QM-02
Beryllium	103			ug/L	100.00	0.0042	103	80-120			
Boron	1040			ug/L	1000.0	9.96	103	80-120			
Cadmium	100			ug/L	100.00	-0.0083	100	80-120			
Calcium	35400			ug/L	1000.0	33800	160	80-120			QM-02
Chromium	105			ug/L	100.00	0.145	105	80-120			
Cobalt	104			ug/L	100.00	0.156	104	80-120			
Copper	98.4			ug/L	100.00	-0.110	98	80-120			
Lead	99.2			ug/L	100.00	0.0975	99	80-120			
Molybdenum	106			ug/L	100.00	2.05	104	80-120			
Nickel	101			ug/L	100.00	0.229	101	80-120			
Selenium	104			ug/L	100.00	0.434	103	80-120			
Silver	102			ug/L	100.00	-0.0023	102	80-120			
Thallium	102			ug/L	100.00	0.0965	102	80-120			
Vanadium	107			ug/L	100.00	0.898	106	80-120			
Zinc	103			ug/L	100.00	1.49	101	80-120			
Lithium	101			ug/L	100.00	0.192	101	80-120			

Batch 7050922 - EPA 7470A

Blank (7050922-BLK1)					Prepared & Analyzed: 06/01/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7050922-BS1)					Prepared & Analyzed: 06/01/17						
Mercury	0.00239	0.00050	0.000041	mg/L	2.5000E-3	96	80-120				



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Report No.: AAE0912

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050922 - EPA 7470A											
Duplicate (7050922-DUP2)			Source: AAE0918-01			Prepared & Analyzed: 06/01/17					
Mercury	ND	0.00050	0.000041	mg/L		ND				20	
Matrix Spike (7050922-MS1)			Source: AAE0911-02			Prepared & Analyzed: 06/01/17					
Mercury	0.00240	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125			
Matrix Spike Dup (7050922-MSD1)			Source: AAE0911-02			Prepared & Analyzed: 06/01/17					
Mercury	0.00233	0.00050	0.000041	mg/L	2.5000E-3	ND	93	75-125	3	20	
Post Spike (7050922-PS1)			Source: AAE0911-02			Prepared & Analyzed: 06/01/17					
Mercury	1.78			ug/L	1.6667	-0.00486	107	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

June 05, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

PAGE: _____ OF _____



CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Health Research PO #: laurich@southernco.com	
REQUESTED COMPLETION DATE: PROJECT NAME/STATE: Plant Yates AP		PROJECT # Phase 1 CER Background event	
Collection DATE 5-26-17	Collection TIME 11:00	MATRIX CODE GW	SAMPLE IDENTIFICATION YGWA-2I
ANALYSIS REQUESTED CONTAINER TYPE: P 3 PRESERVATION: P 7 3 # of CONTAINERS: 4 Metals App. III & IV (FA 6020/7470) Cl, F, SO4, & TO5 (FA 300.0 & 5M 2540C) Rad. um 226+238 (SM-846 9315/9320)			
CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION: 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen			
*MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT			
REMARKS/ADDITIONAL INFORMATION			
L A B I D N U M B E R →			
CONTAINER TYPE: P 3 PRESERVATION: P 7 3 # of CONTAINERS: 4		ANALYSIS REQUESTED: Metals App. III & IV (FA 6020/7470), Cl, F, SO4, & TO5 (FA 300.0 & 5M 2540C), Rad. um 226+238 (SM-846 9315/9320)	
SAMPLED BY AND TITLE: RECEIVED BY: Ryan Walker		DATE/TIME: 5-26-17 / 11:00 DATE/TIME:	
RELINQUISHED BY:		DATE/TIME: 5-26-17 / 14:17	
SAMPLE SHIPPED VIA: UPS		CLIENT:	
CUSTODY SEAL: Intact		COURIER:	
TEMPERATURE: 20.0 Min. 20.0 Max.		OTHER FS:	
LAB #:		FOR LAB USE ONLY: AAE0912	
ENTERED INTO LIMS:		TRACKING #:	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 5/30/2017 10:07:12AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 05/26/17 14:17

Work Order: AAE0912

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 1

#Containers: 4

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: N/A

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	N/A
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

June 19, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAE0912 Plant Yates
Pace Project No.: 30220162

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on May 30, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAE0912 Plant Yates
Pace Project No.: 30220162

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAE0912 Plant Yates

Pace Project No.: 30220162

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30220162001	YGWA-2I	Water	05/26/17 11:00	05/30/17 09:45

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAE0912 Plant Yates
Pace Project No.: 30220162

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30220162001	YGWA-2I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0912 Plant Yates

Pace Project No.: 30220162

Sample: YGWA-2I **Lab ID: 30220162001** Collected: 05/26/17 11:00 Received: 05/30/17 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.0213 ± 0.261 (0.716) C:52% T:NA	pCi/L	06/08/17 10:00	13982-63-3	
Radium-228	EPA 9320	-0.120 ± 0.484 (1.13) C:80% T:74%	pCi/L	06/14/17 15:19	15262-20-1	
Total Radium	Total Radium Calculation	0.000 ± 0.745 (1.85)	pCi/L	06/16/17 13:43	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0912 Plant Yates

Pace Project No.: 30220162

QC Batch: 260846

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30220162001

METHOD BLANK: 1284545

Matrix: Water

Associated Lab Samples: 30220162001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0515 ± 0.131 (0.318) C:85% T:NA	pCi/L	06/08/17 10:00	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0912 Plant Yates

Pace Project No.: 30220162

QC Batch: 260865

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30220162001

METHOD BLANK: 1284599

Matrix: Water

Associated Lab Samples: 30220162001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.187 ± 0.335 (0.733) C:75% T:86%	pCi/L	06/14/17 11:31	

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

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

QUALIFIERS

Project: AAE0912 Plant Yates

Pace Project No.: 30220162

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

30220162

Chain of Custody



Workorder: AAE0912 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 6/21/2017

Report To:		Subcontract To:		Requested Analysis	
Betsy McDaniel		Pace - Pittsburgh		LAB USE ONLY	
Pace Analytical Atlanta		1638 Roseytown Road		NO#: 30220162	
110 Technology Parkway		Stes. 2,3,4			
Peachtree Corners, GA 30092		Greensburg, PA 15601		30220162	
Phone (770)-734-4200		Phone (724) 850-5600		001	

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Date/Time	Received By	Date/Time	Comments
1	YGWA-21	G	5/26/2017 11:00	AAE0912-01	GW	2				
2										
3										
4										
5										
6										
7										
8										
9										
10										

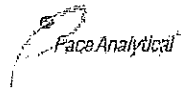
Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. KATHMAN	5/26/17	Karen Liu	5/30/17 0945	
2					
3					

Cooler Temperature on Receipt N/A °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace Georgia Project # 30220162

AM

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 6812 5104 6400

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp NA °C Correction Factor: NA °C Final Temp: NA °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: QA 5/30/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	/			1.
Chain of Custody Filled Out:	/			2.
Chain of Custody Relinquished:	/			3.
Sampler Name & Signature on COC:	/			4.
Sample Labels match COC:	/			5.
-Includes date/time/ID Matrix: <u>W+</u>				
Samples Arrived within Hold Time:	/			6.
Short Hold Time Analysis (<72hr remaining):		/		7.
Rush Turn Around Time Requested:		/		8.
Sufficient Volume:	/			9.
Correct Containers Used:	/			10.
-Pace Containers Used:	/			
Containers Intact:	/			11.
Orthophosphate field filtered			/	12.
Organic Samples checked for dechlorination:			/	13.
Filtered volume received for Dissolved tests			/	14.
All containers have been checked for preservation.	/			15. <u>pH < 2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	/			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>QA</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			/	16.
Trip Blank Present:			/	17.
Trip Blank Custody Seals Present			/	
Rad Aqueous Samples Screened > 0.5 mrem/hr		/		Initial when completed: <u>QA</u> Date: <u>5/30/17</u>

Client Notification/ Resolution:
 Person Contacted: _____ Date/Time: _____ Contacted By: _____
 Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 6/9/2017
Worklist: 36018
Matrix: DW

Method Blank Assessment	
MB Sample ID	1284599
MB concentration:	0.187
M/B Counting Uncertainty:	0.333
MB MDC:	0.733
MB Numerical Performance Indicator:	1.10
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS36018	N
LCS36018	LCS36018
Count Date:	6/14/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	24.293
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.805
Target Conc. (pCi/L, g, F):	6.036
Uncertainty (Calculated):	0.435
Result (pCi/L, g, F):	5.978
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.656
Numerical Performance Indicator:	-0.15
Percent Recovery:	99.02%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30220163002
Duplicate Sample I.D.:	30220163002DUP
Sample Result (pCi/L, g, F):	0.835
Sample Result Counting Uncertainty (pCi/L, g, F):	0.389
Sample Duplicate Result (pCi/L, g, F):	1.347
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.390
Are sample and/or duplicate results below MDC?	See Below #
Duplicate Numerical Performance Indicator:	-1.822
Duplicate RPD:	46.94%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Handwritten notes:
LCS36018
DMS/MSD

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.
Sample MS I.D.	Sample MSD 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):	Spike uncertainty (calculated):
Sample Result:	Sample Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Result:	Sample Matrix Spike Result:
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	MS Numerical Performance Indicator:
MS Numerical Performance Indicator:	MSD Numerical Performance Indicator:
MS Percent Recovery:	MS Percent Recovery:
MS Status vs Numerical Indicator:	MS Status vs Numerical Indicator:
MSD Status vs Recovery:	MSD Status vs Recovery:

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	Sample I.D.
Sample MS I.D.	Sample MS I.D.
Sample MSD I.D.	Sample Matrix Spike Result:
Sample Matrix Spike Result:	Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	Duplicate Numerical Performance Indicator:
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
Duplicate RPD:	MS/MSD Duplicate Status vs RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:

Quality Control Sample Performance Assessment



Analyst. Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 6/7/2017
Worklist: 36008
Matrix: DW

Method Blank Assessment

MB Sample ID: 1284545
MB concentration: 0.052
M/B Counting Uncertainty: 0.131
MB MDC: 0.318
MB Numerical Performance Indicator: 0.77
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCS (Y or N)? N
LCS36008 LCS36008

Count Date: 6/8/2017
Spike I.D.: 13-033
Spike Concentration (pCi/L, g, F): 19.848
Volume Used (mL): 0.40
Aliquot Volume (L, g, F): 0.501
Target Conc. (pCi/L, g, F): 15.852
Uncertainty (Calculated): 0.746
Result (pCi/L, g, F): 12.483
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 1.060
Numerical Performance Indicator: -5.08
Percent Recovery: 78.81%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30220161002
Duplicate Sample I.D.: 30220161002DUP
Sample Result (pCi/L, g, F): 0.088
Sample Result Counting Uncertainty (pCi/L, g, F): 0.147
Sample Duplicate Result (pCi/L, g, F): 0.331
Sample Duplicate Counting Uncertainty (pCi/L, g, F): 0.214
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.214
Are sample and/or duplicate results below MDC? See Below ##
Duplicate Numerical Performance Indicator: -1.838
Duplicate RPD: 115.95%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
30220161002
30220161002DUP
LMDP

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):
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:
Sample Matrix Spike Duplicate 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:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Original

Product Name: Low-Flow System

Date: 2017-04-27 15:48:18

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 55 ft

Pump placement from TOC 49.9 ft

Well Information:

Well ID YGWA-11
Well diameter 2 in
Well Total Depth 54.93 ft
Screen Length 10 ft
Depth to Water 38.70 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.7304883 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 24 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:25:07	4800.97	21.89	6.22	74.44	1.28	40.70	1.61	-61.58
Last 5	15:30:07	5100.96	21.91	6.17	72.58	1.12	40.70	1.77	-52.57
Last 5	15:35:08	5401.95	21.70	6.13	71.12	1.43	40.70	1.91	-45.78
Last 5	15:40:08	5701.96	21.66	6.10	70.27	1.75	40.70	2.00	-40.07
Last 5	15:45:08	6001.95	21.75	6.09	69.64	1.68	40.70	2.08	-35.34
Variance 0			-0.21	-0.04	-1.46			0.14	6.79
Variance 1			-0.04	-0.03	-0.85			0.09	5.70
Variance 2			0.09	-0.01	-0.64			0.08	4.73

Notes

Collected at 15:45. Cloudy 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-27 17:32:26

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 105 ft

Pump placement from TOC 103 ft

Well Information:

Well ID YGWA-1D
Well diameter 2 in
Well Total Depth 128.60 ft
Screen Length 10 ft
Depth to Water 52.33 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 2.765458 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 4.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	17:10:24	600.06	17.81	6.92	162.01	1.45	52.40	0.76	-131.75
Last 5	17:15:24	900.02	17.68	6.95	163.82	1.75	52.40	0.55	-140.94
Last 5	17:20:24	1199.99	17.72	6.96	163.79	1.62	52.40	0.34	-147.89
Last 5	17:25:24	1499.99	17.75	6.98	163.10	1.21	52.40	0.23	-152.71
Last 5	17:30:24	1799.98	17.72	6.99	161.76	1.15	52.40	0.20	-154.08
Variance 0			0.04	0.02	-0.03			-0.21	-6.94
Variance 1			0.02	0.02	-0.69			-0.11	-4.83
Variance 2			-0.03	0.01	-1.34			-0.04	-1.37

Notes

Collected at 17:35. Sunny 70s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-28 11:19:45

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° -53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 66 ft

Pump placement from TOC 60.7 ft

Well Information:

Well ID YGWA-2I
Well diameter 2 in
Well Total Depth 65.74 ft
Screen Length 10 ft
Depth to Water 46.40 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 1.918431 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 49 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:55:01	3900.96	21.06	7.18	219.49	2.54	50.00	0.40	-192.96
Last 5	11:00:01	4200.96	21.37	7.19	218.87	2.75	50.20	0.39	-193.07
Last 5	11:05:01	4500.96	21.82	7.18	217.39	3.65	50.30	0.37	-192.80
Last 5	11:10:01	4800.96	21.73	7.20	217.60	3.96	50.40	0.37	-193.76
Last 5	11:15:01	5100.94	21.78	7.21	217.37	3.06	50.50	0.35	-194.36
Variance 0			0.44	-0.00	-1.49			-0.02	0.27
Variance 1			-0.09	0.02	0.21			-0.01	-0.96
Variance 2			0.05	0.01	-0.22			-0.02	-0.60

Notes

Collected at 11:20. Sunny 70s. FB-1 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-26 13:31:39

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 115 ft

Pump placement from TOC 112 ft

Well Information:

Well ID YGWA-3D
Well diameter 2 in
Well Total Depth 137.10 ft
Screen Length 50 ft
Depth to Water 33.12 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 2.982644 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 6.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:06:40	1500.01	20.61	7.24	227.68	1.47	33.20	0.23	-71.19
Last 5	13:11:40	1800.01	19.55	7.32	224.38	1.55	33.20	0.16	-77.12
Last 5	13:16:40	2100.01	18.96	7.38	226.17	1.14	33.20	0.14	-85.15
Last 5	13:21:40	2400.01	19.07	7.41	226.51	1.07	33.20	0.13	-90.95
Last 5	13:26:39	2700.00	18.97	7.45	226.48	0.95	33.20	0.12	-96.99
Variance 0			-0.58	0.06	1.79			-0.02	-8.03
Variance 1			0.11	0.04	0.35			-0.02	-5.80
Variance 2			-0.10	0.03	-0.03			-0.01	-6.04

Notes

Collected at 13:30. Sunny 80s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-26 15:20:10

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 60 ft

Pump placement from TOC 55.0 ft

Well Information:

Well ID YGWA-3I
Well diameter 2 in
Well Total Depth 60.0 ft
Screen Length 10 ft
Depth to Water 49.37 ft

Pumping Information:

Final Pumping Rate 115 mL/min
Total System Volume 1.788119 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:41:20	900.02	20.21	7.39	245.76	1.30	33.80	1.00	-31.74
Last 5	14:46:20	1200.03	20.08	7.37	248.19	0.90	33.80	0.61	-38.50
Last 5	14:51:20	1500.02	19.89	7.38	239.93	0.73	33.80	0.50	-50.73
Last 5	14:56:20	1800.03	19.79	7.38	235.74	0.57	33.80	0.45	-57.90
Last 5	15:01:20	2100.00	19.50	7.40	229.17	0.45	33.80	0.40	-64.47
Variance 0			-0.19	0.01	-8.26			-0.11	-12.23
Variance 1			-0.10	0.00	-4.19			-0.05	-7.17
Variance 2			-0.29	0.02	-6.57			-0.05	-6.57

Notes

Collected at 15:10. Sunny 80s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-26 10:32:04

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 35 ft

Pump placement from TOC 30.8 ft

Well Information:

Well ID YGWA-14S
Well diameter 2 in
Well Total Depth 35.82 ft
Screen Length 10 ft
Depth to Water 16.03 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 1.245153 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 5.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:07:12	600.01	17.54	5.02	65.48	1.92	16.40	6.23	168.74
Last 5	10:12:12	900.02	17.57	4.98	65.53	1.34	16.40	6.10	173.31
Last 5	10:17:12	1200.00	17.48	5.01	65.29	0.95	16.40	6.02	175.44
Last 5	10:22:12	1500.00	17.36	5.02	65.33	0.90	16.40	6.02	178.55
Last 5	10:27:12	1799.99	17.47	5.02	65.22	0.81	16.40	6.02	180.75
Variance 0			-0.09	0.03	-0.24			-0.08	2.13
Variance 1			-0.12	0.01	0.04			-0.00	3.10
Variance 2			0.11	0.00	-0.11			-0.00	2.20

Notes

Collected at 10:30. Sunny 60s. EB 1 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-26 12:00:55

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 60 ft

Pump placement from TOC 54.6 ft

Well Information:

Well ID YGWA-30I
Well diameter 2 in
Well Total Depth 59.65 ft
Screen Length 10 ft
Depth to Water 37.68 ft

Pumping Information:

Final Pumping Rate 210 mL/min
Total System Volume 1.788119 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 7.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:35:54	600.01	18.39	5.54	39.88	0.68	37.70	6.58	150.06
Last 5	11:40:54	900.00	18.39	5.54	39.99	0.59	37.70	6.46	150.50
Last 5	11:45:54	1200.00	18.34	5.53	39.83	0.55	37.70	6.40	151.08
Last 5	11:50:54	1500.00	18.31	5.54	39.90	0.49	37.70	6.34	150.71
Last 5	11:55:55	1801.00	18.25	5.56	40.06	0.45	37.70	6.28	150.34
Variance 0			-0.05	-0.01	-0.16			-0.07	0.58
Variance 1			-0.03	0.01	0.07			-0.06	-0.37
Variance 2			-0.05	0.02	0.16			-0.06	-0.38

Notes

Collected at 12:00

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-08 10:28:08

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 40.08"
Longitude -84° -54' -27.78"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .125 in
Tubing Length 2 ft

Pump placement from TOC 66 ft

Well Information:

Well ID YGWC-26I
Well diameter 2 in
Well Total Depth 69.71 ft
Screen Length 10 ft
Depth to Water 24.55 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.4898264 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 3.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:05:10	600.03	20.13	5.83	303.73	1.17	24.80	0.39	113.54
Last 5	10:10:10	900.03	20.13	5.83	305.30	1.48	24.80	0.23	114.36
Last 5	10:15:10	1200.02	20.22	5.84	306.55	1.46	24.80	0.19	115.25
Last 5	10:20:10	1500.01	20.08	5.85	307.40	1.31	24.80	0.18	116.11
Last 5	10:25:10	1799.99	20.07	5.84	308.59	1.54	24.80	0.18	117.95
Variance 0			0.09	0.01	1.25			-0.04	0.88
Variance 1			-0.14	0.00	0.85			-0.01	0.86
Variance 2			-0.01	-0.01	1.19			0.00	1.84

Notes

Sunny, sample time-1025, dup-4 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-03 15:08:10

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 39.48"
Longitude -84° -54' -27.79"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .125 in
Tubing Length 2 ft

Pump placement from TOC 37 ft

Well Information:

Well ID YGWC26S
Well diameter 2 in
Well Total Depth 40.10 ft
Screen Length 10 ft
Depth to Water 20.77 ft

Pumping Information:

Final Pumping Rate 90 mL/min
Total System Volume 0.4898264 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 20 in
Total Volume Pumped 4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:45:02	1800.01	21.42	5.23	283.68	3.32	22.30	1.51	184.82
Last 5	14:50:02	2100.01	21.60	5.23	285.82	3.06	22.40	1.44	185.22
Last 5	14:55:02	2400.01	21.73	5.26	286.42	3.00	22.40	1.31	185.75
Last 5	15:00:02	2700.01	21.91	5.27	287.85	2.63	22.40	1.28	187.08
Last 5	15:05:02	3000.01	21.53	5.28	289.08	2.31	22.40	1.26	188.54
Variance 0			0.13	0.03	0.60			-0.12	0.53
Variance 1			0.18	0.02	1.43			-0.04	1.34
Variance 2			-0.38	0.01	1.23			-0.02	1.46

Notes

Sunny, sample time- 1505

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-08 10:42:57

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 81 ft

Pump placement from TOC 74.8 ft

Well Information:

Well ID YGWC-271
Well diameter 2 in
Well Total Depth 79.84 ft
Screen Length 10 ft
Depth to Water 28.05 ft

Pumping Information:

Final Pumping Rate 170 mL/min
Total System Volume 2.24421 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:17:34	600.02	19.37	6.31	344.86	4.32	28.70	0.58	-93.18
Last 5	10:22:34	900.01	19.41	6.26	346.46	1.68	28.70	0.37	-86.95
Last 5	10:27:34	1200.03	19.63	6.25	345.95	1.35	28.70	0.29	-84.16
Last 5	10:32:34	1500.00	19.68	6.25	346.10	0.97	28.70	0.19	-83.17
Last 5	10:37:34	1800.02	19.80	6.24	344.83	0.81	28.70	0.15	-79.95
Variance 0			0.22	-0.01	-0.51			-0.08	2.78
Variance 1			0.04	-0.00	0.15			-0.09	1.00
Variance 2			0.12	-0.01	-1.27			-0.04	3.22

Notes

Collected at 10:40. Sunny 60s

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-08 09:35:39

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 42 ft

Pump placement from TOC 35.2 ft

Well Information:

Well ID YGWC-27S
Well diameter 2 in
Well Total Depth 40.24 ft
Screen Length 10 ft
Depth to Water 27.37 ft

Pumping Information:

Final Pumping Rate 190 mL/min
Total System Volume 1.397183 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 6.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:08:30	600.01	18.56	6.21	431.52	2.30	27.40	1.65	8.16
Last 5	09:13:30	900.01	18.72	6.13	434.91	1.63	27.40	0.80	8.54
Last 5	09:18:30	1200.00	18.88	6.12	430.66	1.85	27.40	0.32	10.09
Last 5	09:23:31	1501.00	19.01	6.11	429.93	1.55	27.40	0.22	12.60
Last 5	09:28:31	1800.99	19.05	6.11	429.25	1.46	27.40	0.19	14.44
Variance 0			0.15	-0.01	-4.25			-0.48	1.55
Variance 1			0.13	-0.01	-0.73			-0.10	2.51
Variance 2			0.04	0.00	-0.69			-0.03	1.84

Notes

Collected at 09:30. Sunny 60s. Extra Rad here

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-05 13:32:01

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 73 ft

Pump placement from TOC 64.9 ft

Well Information:

Well ID YGWC-281
Well diameter 2 in
Well Total Depth 69.89 ft
Screen Length 10 ft
Depth to Water 23.60 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 2.070461 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 21 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:08:28	600.03	17.00	6.40	411.53	1.21	25.10	0.59	-22.56
Last 5	13:13:28	900.02	16.38	6.37	406.83	0.96	25.30	0.41	-18.58
Last 5	13:18:28	1200.02	16.49	6.35	410.55	0.82	25.40	0.27	-17.89
Last 5	13:23:28	1500.02	16.47	6.36	412.49	0.89	25.40	0.22	-16.90
Last 5	13:28:28	1800.01	16.52	6.36	417.48	0.80	25.40	0.22	-14.74
Variance 0			0.10	-0.02	3.72			-0.14	0.69
Variance 1			-0.01	0.01	1.94			-0.05	0.99
Variance 2			0.05	0.00	4.99			-0.00	2.16

Notes

Collected at 13:30. Cloudy 50s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-05 12:39:16

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 45 ft

Pump placement from TOC 39.8 ft

Well Information:

Well ID YGWC-28S
Well diameter 2 in
Well Total Depth 44.85 ft
Screen Length 10 ft
Depth to Water 22.45 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.462339 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 28 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:14:53	9901.84	17.14	6.39	460.38	5.41	22.70	0.14	-138.62
Last 5	12:19:53	10201.84	17.14	6.39	458.68	5.08	22.70	0.14	-138.54
Last 5	12:24:53	10501.85	17.19	6.40	456.82	5.15	22.70	0.13	-138.68
Last 5	12:29:53	10801.84	17.10	6.40	459.38	5.02	22.70	0.14	-138.33
Last 5	12:34:53	11101.83	16.96	6.40	457.80	4.83	22.70	0.13	-138.02
Variance 0			0.06	0.00	-1.86			-0.01	-0.14
Variance 1			-0.10	-0.00	2.56			0.01	0.35
Variance 2			-0.14	0.00	-1.59			-0.00	0.31

Notes

Collected at 12:35. Cloudy 50s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-08 12:28:16

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 40 ft

Pump placement from TOC 34.4 ft

Well Information:

Well ID YGWC-29I
Well diameter 2 in
Well Total Depth 39.46 ft
Screen Length 10 ft
Depth to Water 26.60 ft

Pumping Information:

Final Pumping Rate 160 mL/min
Total System Volume 1.353746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 19 in
Total Volume Pumped 5.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:59:04	600.02	19.59	6.19	267.14	0.64	27.80	1.53	9.42
Last 5	12:04:04	900.01	19.46	6.14	268.46	0.68	28.00	0.71	10.77
Last 5	12:09:04	1200.01	19.32	6.13	268.49	0.51	28.10	0.39	11.70
Last 5	12:14:04	1500.01	19.53	6.12	268.85	0.44	28.20	0.32	12.26
Last 5	12:19:06	1802.02	19.50	6.11	268.80	0.48	28.20	0.28	13.08
Variance 0			-0.13	-0.02	0.03			-0.31	0.93
Variance 1			0.21	-0.01	0.37			-0.08	0.55
Variance 2			-0.03	-0.01	-0.06			-0.03	0.83

Notes

Collected at 12:25. Sunny 70s. EB-4 here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-26 11:01:28

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 3.94"
Longitude -84° -54' -25.4"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 69 ft

Pump placement from TOC 59 ft

Well Information:

Well ID YGWA-2I
Well diameter 2 in
Well Total Depth 64.28 ft
Screen Length 10 ft
Depth to Water 46.09 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 0.7929762 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 79.32 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:38:04	5699.94	17.72	7.11	214.43	2.32	52.20	0.26	-103.81
Last 5	10:43:04	5999.94	17.74	7.12	214.43	2.48	52.40	0.26	-103.70
Last 5	10:48:04	6299.92	17.77	7.12	214.35	2.53	52.50	0.25	-103.78
Last 5	10:53:04	6599.92	17.90	7.12	214.30	2.76	52.60	0.25	-103.44
Last 5	10:58:04	6899.91	17.99	7.13	213.97	2.50	52.70	0.25	-102.55
Variance 0			0.03	0.01	-0.09			-0.01	-0.08
Variance 1			0.13	0.00	-0.05			-0.00	0.34
Variance 2			0.09	0.01	-0.33			0.00	0.89

Notes

Sunny 70's. Collected at 11:00. Phase 1 CCR Background event.

Grab Samples



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAF1025

July 05, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-1I	AAF1025-01	Ground Water	06/27/17 15:10	06/28/17 16:35
YGWA-1D	AAF1025-02	Ground Water	06/27/17 12:50	06/28/17 16:35
YGWA-5I	AAF1025-03	Ground Water	06/27/17 12:50	06/28/17 16:35
YGWA-5D	AAF1025-04	Ground Water	06/27/17 14:25	06/28/17 16:35
Dup-1	AAF1025-05	Ground Water	06/27/17 00:00	06/28/17 16:35
EB-1-6-27-17	AAF1025-06	Water	06/27/17 16:00	06/28/17 16:35
YGWA-2I	AAF1025-07	Ground Water	06/28/17 14:15	06/28/17 16:35
YGWA-3I	AAF1025-08	Ground Water	06/28/17 11:00	06/28/17 16:35
YGWA-3D	AAF1025-09	Ground Water	06/28/17 12:35	06/28/17 16:35
FB-1-6-28-17	AAF1025-10	Water	06/28/17 14:50	06/28/17 16:35



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 05, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1025

Project: CCR Event

Client ID: YGWA-1I

Lab Number ID: AAF1025-01

Date/Time Sampled: 6/27/2017 3:10:00PM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	42	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	1.4	0.25	0.01	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 11:26	7070010	SLH
Fluoride	0.06	0.30	0.004	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 11:26	7070010	SLH
Sulfate	6.4	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 11:26	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Barium	0.0092	0.0100	0.0004	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Boron	0.0060	0.0400	0.0060	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Calcium	2.36	0.500	0.0404	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Cobalt	0.0023	0.0100	0.0003	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Molybdenum	0.0093	0.0100	0.0010	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Lithium	0.0024	0.0500	0.0015	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:22	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:18	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Project: CCR Event

Client ID: YGWA-1D

Lab Number ID: AAF1025-02

Date/Time Sampled: 6/27/2017 12:50:00PM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	89	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.01	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 11:47	7070010	SLH
Fluoride	0.06	0.30	0.004	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 11:47	7070010	SLH
Sulfate	5.9	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 11:47	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Arsenic	0.0018	0.0050	0.0005	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Barium	0.0054	0.0100	0.0004	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Boron	0.0087	0.0400	0.0060	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Calcium	13.8	5.00	2.02	mg/L	EPA 6020B		50	06/30/17 07:15	06/30/17 18:51	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Molybdenum	0.0097	0.0100	0.0010	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Lithium	0.0094	0.0500	0.0015	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:45	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:21	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 05, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1025

Project: CCR Event

Client ID: YGWA-5I

Lab Number ID: AAF1025-03

Date/Time Sampled: 6/27/2017 12:50:00PM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	73	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	4.3	0.25	0.01	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 12:09	7070010	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 12:09	7070010	SLH
Sulfate	2.1	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 12:09	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Barium	0.0184	0.0100	0.0004	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Calcium	2.13	0.500	0.0404	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Lithium	0.0029	0.0500	0.0015	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 18:57	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:23	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Project: CCR Event

Client ID: YGWA-5D

Lab Number ID: AAF1025-04

Date/Time Sampled: 6/27/2017 2:25:00PM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	189	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	7.0	0.25	0.01	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 12:30	7070010	SLH
Fluoride	0.09	0.30	0.004	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 12:30	7070010	SLH
Sulfate	18	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 12:30	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Arsenic	0.0019	0.0050	0.0005	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Barium	0.0074	0.0100	0.0004	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Boron	0.0079	0.0400	0.0060	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Calcium	36.5	25.0	2.02	mg/L	EPA 6020B		50	06/30/17 07:15	06/30/17 19:14	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Molybdenum	0.0040	0.0100	0.0010	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Lithium	0.0018	0.0500	0.0015	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:08	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:30	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Project: CCR Event

Client ID: Dup-1

Lab Number ID: AAF1025-05

Date/Time Sampled: 6/27/2017 12:00:00AM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	67	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	4.3	0.25	0.01	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 13:33	7070010	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 13:33	7070010	SLH
Sulfate	2.1	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 13:33	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Barium	0.0184	0.0100	0.0004	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Calcium	2.16	0.500	0.0404	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Lithium	0.0029	0.0500	0.0015	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:20	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:33	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Project: CCR Event

Client ID: EB-1-6-27-17

Lab Number ID: AAF1025-06

Date/Time Sampled: 6/27/2017 4:00:00PM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	0.09	0.25	0.01	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 13:55	7070010	SLH
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 13:55	7070010	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 13:55	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:31	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:35	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AAF1025-07

Date/Time Sampled: 6/28/2017 2:15:00PM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	166	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	1.0	0.25	0.01	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 14:16	7070010	SLH
Fluoride	0.11	0.30	0.004	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 14:16	7070010	SLH
Sulfate	11	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 14:16	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Arsenic	0.0016	0.0050	0.0005	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Barium	0.0030	0.0100	0.0004	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Calcium	26.1	25.0	2.02	mg/L	EPA 6020B		50	06/30/17 07:15	06/30/17 19:54	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Molybdenum	0.0036	0.0100	0.0010	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Lithium	0.0026	0.0500	0.0015	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 19:48	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:37	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Project: CCR Event

Client ID: YGWA-3I

Lab Number ID: AAF1025-08

Date/Time Sampled: 6/28/2017 11:00:00AM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	126	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.01	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 16:24	7070010	SLH
Fluoride	0.12	0.30	0.004	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 16:24	7070010	SLH
Sulfate	12	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 16:24	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Arsenic	0.0011	0.0050	0.0005	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Barium	0.0040	0.0100	0.0004	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Calcium	23.9	5.00	2.02	mg/L	EPA 6020B		50	06/30/17 07:15	06/30/17 20:05	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Molybdenum	0.0080	0.0100	0.0010	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Lithium	0.0085	0.0500	0.0015	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 20:00	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:40	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 05, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1025

Project: CCR Event

Client ID: YGWA-3D

Lab Number ID: AAF1025-09

Date/Time Sampled: 6/28/2017 12:35:00PM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	169	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	1.3	0.25	0.01	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 16:45	7070010	SLH
Fluoride	0.47	0.30	0.004	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 16:45	7070010	SLH
Sulfate	5.4	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 16:45	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Arsenic	0.0007	0.0050	0.0005	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Barium	0.0071	0.0100	0.0004	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Calcium	29.8	25.0	2.02	mg/L	EPA 6020B		50	06/30/17 07:15	06/30/17 20:17	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Molybdenum	0.0102	0.0100	0.0010	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Lithium	0.0173	0.0500	0.0015	mg/L	EPA 6020B	J	1	06/30/17 07:15	06/30/17 20:11	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:42	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 05, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1025

Project: CCR Event

Client ID: FB-1-6-28-17

Lab Number ID: AAF1025-10

Date/Time Sampled: 6/28/2017 2:50:00PM

Date/Time Received: 6/28/2017 4:35:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	06/30/17 13:45	06/30/17 13:45	7060957	JPT
Inorganic Anions											
Chloride	0.10	0.25	0.01	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 17:06	7070010	SLH
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	07/02/17 19:19	07/03/17 17:06	7070010	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	07/02/17 19:19	07/03/17 17:06	7070010	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	06/30/17 07:15	06/30/17 20:22	7060925	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/03/17 09:45	07/03/17 15:44	7060937	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7060957 - SM 2540 C											
Blank (7060957-BLK1)						Prepared & Analyzed: 06/30/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7060957-BS1)						Prepared & Analyzed: 06/30/17					
Total Dissolved Solids	399	25	10	mg/L	400.00		100	84-108			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070010 - EPA 300.0											
Blank (7070010-BLK1)						Prepared: 07/02/17 Analyzed: 07/03/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	0.10	1.0	0.09	mg/L							J
LCS (7070010-BS1)						Prepared: 07/02/17 Analyzed: 07/03/17					
Chloride	9.96	0.25	0.01	mg/L	10.020		99	90-110			
Fluoride	9.98	0.30	0.004	mg/L	10.020		100	90-110			
Sulfate	10.1	1.0	0.09	mg/L	10.050		101	90-110			
Matrix Spike (7070010-MS1)						Source: AAF1025-04 Prepared: 07/02/17 Analyzed: 07/03/17					
Chloride	16.8	0.25	0.01	mg/L	10.020	6.97	98	90-110			
Fluoride	10.1	0.30	0.004	mg/L	10.020	0.09	100	90-110			
Sulfate	26.8	1.0	0.09	mg/L	10.050	18.3	85	90-110			QM-02
Matrix Spike (7070010-MS2)						Source: AAF1025-07 Prepared: 07/02/17 Analyzed: 07/03/17					
Chloride	10.9	0.25	0.01	mg/L	10.020	1.00	99	90-110			
Fluoride	10.2	0.30	0.004	mg/L	10.020	0.11	100	90-110			
Sulfate	20.7	1.0	0.09	mg/L	10.050	11.5	92	90-110			
Matrix Spike Dup (7070010-MSD1)						Source: AAF1025-04 Prepared: 07/02/17 Analyzed: 07/03/17					
Chloride	16.8	0.25	0.01	mg/L	10.020	6.97	98	90-110	0.01	15	
Fluoride	10.1	0.30	0.004	mg/L	10.020	0.09	100	90-110	0.06	15	
Sulfate	26.8	1.0	0.09	mg/L	10.050	18.3	85	90-110	0.01	15	QM-02



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7060925 - EPA 3005A

Blank (7060925-BLK1)

Prepared & Analyzed: 06/30/17

Antimony	ND	0.0030	0.0006	mg/L							
Arsenic	ND	0.0050	0.0005	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0404	mg/L							
Chromium	ND	0.0100	0.0005	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0010	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0018	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0012	mg/L							
Zinc	ND	0.0100	0.0012	mg/L							
Lithium	ND	0.0500	0.0015	mg/L							

LCS (7060925-BS1)

Prepared & Analyzed: 06/30/17

Antimony	0.102	0.0030	0.0006	mg/L	0.10000		102	80-120			
Arsenic	0.0993	0.0050	0.0005	mg/L	0.10000		99	80-120			
Barium	0.0928	0.0100	0.0004	mg/L	0.10000		93	80-120			
Beryllium	0.0975	0.0030	0.00009	mg/L	0.10000		98	80-120			
Boron	0.996	0.0400	0.0060	mg/L	1.0000		100	80-120			
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000		102	80-120			
Calcium	1.01	0.500	0.0404	mg/L	1.0000		101	80-120			
Chromium	0.102	0.0100	0.0005	mg/L	0.10000		102	80-120			
Cobalt	0.0985	0.0100	0.0003	mg/L	0.10000		99	80-120			
Copper	0.0981	0.0250	0.0003	mg/L	0.10000		98	80-120			
Lead	0.101	0.0050	0.00007	mg/L	0.10000		101	80-120			
Molybdenum	0.0999	0.0100	0.0010	mg/L	0.10000		100	80-120			
Nickel	0.0997	0.0100	0.0005	mg/L	0.10000		100	80-120			
Selenium	0.103	0.0100	0.0018	mg/L	0.10000		103	80-120			
Silver	0.0989	0.0100	0.0002	mg/L	0.10000		99	80-120			
Thallium	0.0991	0.0010	0.00005	mg/L	0.10000		99	80-120			
Vanadium	0.0979	0.0100	0.0012	mg/L	0.10000		98	80-120			
Zinc	0.103	0.0100	0.0012	mg/L	0.10000		103	80-120			
Lithium	0.100	0.0500	0.0015	mg/L	0.10000		100	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7060925 - EPA 3005A											
Matrix Spike (7060925-MS1)			Source: AAF1025-01				Prepared & Analyzed: 06/30/17				
Antimony	0.103	0.0030	0.0006	mg/L	0.10000	ND	103	75-125			
Arsenic	0.101	0.0050	0.0005	mg/L	0.10000	ND	101	75-125			
Barium	0.114	0.0100	0.0004	mg/L	0.10000	0.0092	105	75-125			
Beryllium	0.0889	0.0030	0.00009	mg/L	0.10000	ND	89	75-125			
Boron	0.926	0.0400	0.0060	mg/L	1.0000	0.0060	92	75-125			
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000	ND	102	75-125			
Calcium	3.14	0.500	0.0404	mg/L	1.0000	2.36	78	75-125			
Chromium	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125			
Cobalt	0.104	0.0100	0.0003	mg/L	0.10000	0.0023	102	75-125			
Copper	0.0971	0.0250	0.0003	mg/L	0.10000	0.0004	97	75-125			
Lead	0.100	0.0050	0.00007	mg/L	0.10000	ND	100	75-125			
Molybdenum	0.111	0.0100	0.0010	mg/L	0.10000	0.0093	102	75-125			
Nickel	0.0997	0.0100	0.0005	mg/L	0.10000	ND	100	75-125			
Selenium	0.103	0.0100	0.0018	mg/L	0.10000	ND	103	75-125			
Silver	0.100	0.0100	0.0002	mg/L	0.10000	ND	100	75-125			
Thallium	0.102	0.0010	0.00005	mg/L	0.10000	ND	102	75-125			
Vanadium	0.102	0.0100	0.0012	mg/L	0.10000	ND	102	75-125			
Zinc	0.105	0.0100	0.0012	mg/L	0.10000	0.0030	102	75-125			
Lithium	0.0946	0.0500	0.0015	mg/L	0.10000	0.0024	92	75-125			
Matrix Spike Dup (7060925-MSD1)			Source: AAF1025-01				Prepared & Analyzed: 06/30/17				
Antimony	0.106	0.0030	0.0006	mg/L	0.10000	ND	106	75-125	2	20	
Arsenic	0.0994	0.0050	0.0005	mg/L	0.10000	ND	99	75-125	2	20	
Barium	0.113	0.0100	0.0004	mg/L	0.10000	0.0092	104	75-125	1	20	
Beryllium	0.0904	0.0030	0.00009	mg/L	0.10000	ND	90	75-125	2	20	
Boron	0.923	0.0400	0.0060	mg/L	1.0000	0.0060	92	75-125	0.3	20	
Cadmium	0.103	0.0010	0.0001	mg/L	0.10000	ND	103	75-125	0.6	20	
Calcium	3.17	0.500	0.0404	mg/L	1.0000	2.36	81	75-125	0.8	20	
Chromium	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125	0.2	20	
Cobalt	0.104	0.0100	0.0003	mg/L	0.10000	0.0023	102	75-125	0.02	20	
Copper	0.0988	0.0250	0.0003	mg/L	0.10000	0.0004	98	75-125	2	20	
Lead	0.0994	0.0050	0.00007	mg/L	0.10000	ND	99	75-125	0.7	20	
Molybdenum	0.115	0.0100	0.0010	mg/L	0.10000	0.0093	105	75-125	3	20	
Nickel	0.0998	0.0100	0.0005	mg/L	0.10000	ND	100	75-125	0.08	20	
Selenium	0.101	0.0100	0.0018	mg/L	0.10000	ND	101	75-125	2	20	
Silver	0.101	0.0100	0.0002	mg/L	0.10000	ND	101	75-125	0.5	20	
Thallium	0.101	0.0010	0.00005	mg/L	0.10000	ND	101	75-125	1	20	
Vanadium	0.101	0.0100	0.0012	mg/L	0.10000	ND	101	75-125	1	20	
Zinc	0.107	0.0100	0.0012	mg/L	0.10000	0.0030	104	75-125	2	20	
Lithium	0.0956	0.0500	0.0015	mg/L	0.10000	0.0024	93	75-125	1	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7060925 - EPA 3005A											
Post Spike (7060925-PS1)			Source: AAF1025-01			Prepared & Analyzed: 06/30/17					
Antimony	99.5			ug/L	100.00	0.481	99	80-120			
Arsenic	100			ug/L	100.00	-0.0665	100	80-120			
Barium	112			ug/L	100.00	9.25	103	80-120			
Beryllium	92.8			ug/L	100.00	0.0009	93	80-120			
Boron	935			ug/L	1000.0	6.03	93	80-120			
Cadmium	104			ug/L	100.00	0.0364	104	80-120			
Calcium	3180			ug/L	1000.0	2360	81	80-120			
Chromium	103			ug/L	100.00	0.161	103	80-120			
Cobalt	103			ug/L	100.00	2.35	101	80-120			
Copper	99.0			ug/L	100.00	0.401	99	80-120			
Lead	98.6			ug/L	100.00	0.0615	99	80-120			
Molybdenum	110			ug/L	100.00	9.32	101	80-120			
Nickel	101			ug/L	100.00	0.366	100	80-120			
Selenium	99.5			ug/L	100.00	0.0385	99	80-120			
Silver	99.6			ug/L	100.00	0.0011	100	80-120			
Thallium	100			ug/L	100.00	0.0213	100	80-120			
Vanadium	101			ug/L	100.00	-0.993	101	80-120			
Zinc	105			ug/L	100.00	3.03	102	80-120			
Lithium	96.7			ug/L	100.00	2.40	94	80-120			

Batch 7060937 - EPA 7470A

Blank (7060937-BLK1)					Prepared & Analyzed: 07/03/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7060937-BS1)					Prepared & Analyzed: 07/03/17						
Mercury	0.00244	0.00050	0.000041	mg/L	2.5000E-3		98	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7060937 - EPA 7470A											
Matrix Spike (7060937-MS1)			Source: AAF1025-02			Prepared & Analyzed: 07/03/17					
Mercury	0.00247	0.00050	0.000041	mg/L	2.5000E-3	ND	99	75-125			
Matrix Spike Dup (7060937-MSD1)			Source: AAF1025-02			Prepared & Analyzed: 07/03/17					
Mercury	0.00243	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125	2	20	
Post Spike (7060937-PS1)			Source: AAF1025-02			Prepared & Analyzed: 07/03/17					
Mercury	1.75			ug/L	1.6667	0.00445	105	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 05, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239				REPORT TO: Lauren Petty CC: Maria Padilla Health McCorkle PO #: laburch@southernmco.com			
PROJECT NAME/STATE: Plant Yates AP				PROJECT #: Phase 2 CCR			
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	C O M P	C O M P	SAMPLE IDENTIFICATION	
6/27/17	1510	GW	✓	✓	✓	Y6WA-1I	
6/27/17	1250	GW	✓	✓	✓	Y6WA-1D	
6/27/17	1250	GW	✓	✓	✓	Y6WA-5I	
6/27/17	1425	GW	✓	✓	✓	Y6WA-5D	
6/27/17	-	GW	✓	✓	✓	DUP-1	
6/27/17	1600	W	✓	✓	✓	EB-1-6-27-17	
6/28/17	1415	GW	✓	✓	✓	Y6WA-2I	
6/28/17	1100	GW	✓	✓	✓	Y6WA-3I	
6/28/17	1235	GW	✓	✓	✓	Y6WA-3D	
6/28/17	1450	W	✓	✓	✓	FB-1-6-28-17	
SAMPLED BY AND TITLE: C. Parker J. Berrisford							
RECEIVED BY:							
DATE/TIME: 6/28/17 1500							
DATE/TIME:							
RELINQUISHED BY:							
DATE/TIME: 6/28/17 1635							
RELINQUISHED BY:							
DATE/TIME:							
SAMPLE SHIPPED VIA:							
UPS <input type="checkbox"/> FED-EX <input checked="" type="checkbox"/> LISPS <input type="checkbox"/> COURIER <input type="checkbox"/> OTHER <input type="checkbox"/> FS <input type="checkbox"/>							
CLIENT:							
CARRIER:							
# of Containers:							
Temperature:							
Container Seal:							
Broken:							
Not Present:							
Index ID:							
Other ID:							
Relinquished By:							
Signature:							

CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESERVATION
P - PLASTIC	P P P P	P P P P	1 - HCl, ≤6°C
A - AMBER GLASS	3 7 3	3 7 3	2 - H ₂ SO ₄ , ≤6°C
G - CLEAR GLASS			3 - HNO ₃
V - VOA VIAL			4 - NaOH, ≤6°C
S - STERILE			5 - NaOH/ZnAc, ≤6°C
O - OTHER			6 - Na ₂ S ₂ O ₃ , ≤6°C
			7 - ≤6°C not frozen
*MATRIX CODES: DW - DRINKING WATER S - SOIL MW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORMWATER L - LIQUID W - WATER P - PRODUCT			
REMARKS/ADDITIONAL INFORMATION			
1 2 3 4 5 6 7 8 9 10			
FOR LAB USE ONLY LAB #: AAF1095 Entered into LIMS: Tracking #:			

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 6/29/2017 10:17:28AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 06/28/17 16:35

Work Order: AAF1025

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 10

#Containers: 40

Minimum Temp(C): 1.2

Maximum Temp(C): 1.2

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

July 25, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAF1025 Plant Yates
Pace Project No.: 30223178

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on June 30, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAF1025 Plant Yates
Pace Project No.: 30223178

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAF1025 Plant Yates

Pace Project No.: 30223178

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30223178001	YGWA-1I	Water	06/27/17 15:10	06/30/17 10:10
30223178002	YGWA-1D	Water	06/27/17 12:50	06/30/17 10:10
30223178003	YGWA-5I	Water	06/27/17 12:50	06/30/17 10:10
30223178004	YGWA-5D	Water	06/27/17 14:25	06/30/17 10:10
30223178005	Dup-1	Water	06/27/17 00:00	06/30/17 10:10
30223178006	EB-1-6-27-17	Water	06/27/17 16:00	06/30/17 10:10
30223178007	YGWA-2I	Water	06/28/17 14:15	06/30/17 10:10
30223178008	YGWA-3I	Water	06/28/17 11:00	06/30/17 10:10
30223178009	YGWA-3D	Water	06/28/17 12:35	06/30/17 10:10
30223178010	FB-1-6-28-17	Water	06/28/17 14:50	06/30/17 10:10

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAF1025 Plant Yates
Pace Project No.: 30223178

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30223178001	YGWA-1I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178002	YGWA-1D	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178003	YGWA-5I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178004	YGWA-5D	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178005	Dup-1	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178006	EB-1-6-27-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178007	YGWA-2I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178008	YGWA-3I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178009	YGWA-3D	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30223178010	FB-1-6-28-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1025 Plant Yates
Pace Project No.: 30223178

Sample: YGWA-1I		Lab ID: 30223178001	Collected: 06/27/17 15:10	Received: 06/30/17 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.121 ± 0.163 (0.351) C:88% T:NA	pCi/L	07/17/17 08:52	13982-63-3	
Radium-228	EPA 9320	0.536 ± 0.550 (1.15) C:74% T:78%	pCi/L	07/21/17 16:02	15262-20-1	
Total Radium	Total Radium Calculation	0.657 ± 0.713 (1.50)	pCi/L	07/25/17 11:15	7440-14-4	

Sample: YGWA-1D		Lab ID: 30223178002	Collected: 06/27/17 12:50	Received: 06/30/17 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.152 ± 0.140 (0.256) C:90% T:NA	pCi/L	07/17/17 08:41	13982-63-3	
Radium-228	EPA 9320	0.867 ± 0.448 (0.809) C:76% T:91%	pCi/L	07/21/17 16:02	15262-20-1	
Total Radium	Total Radium Calculation	1.02 ± 0.588 (1.07)	pCi/L	07/25/17 11:15	7440-14-4	

Sample: YGWA-5I		Lab ID: 30223178003	Collected: 06/27/17 12:50	Received: 06/30/17 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.126 ± 0.145 (0.296) C:88% T:NA	pCi/L	07/17/17 08:42	13982-63-3	
Radium-228	EPA 9320	0.644 ± 0.486 (0.975) C:76% T:86%	pCi/L	07/21/17 16:02	15262-20-1	
Total Radium	Total Radium Calculation	0.770 ± 0.631 (1.27)	pCi/L	07/25/17 11:15	7440-14-4	

Sample: YGWA-5D		Lab ID: 30223178004	Collected: 06/27/17 14:25	Received: 06/30/17 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	2.04 ± 0.497 (0.309) C:88% T:NA	pCi/L	07/17/17 08:42	13982-63-3	
Radium-228	EPA 9320	0.757 ± 0.506 (0.990) C:77% T:81%	pCi/L	07/21/17 16:02	15262-20-1	
Total Radium	Total Radium Calculation	2.80 ± 1.00 (1.30)	pCi/L	07/25/17 11:15	7440-14-4	

Sample: Dup-1		Lab ID: 30223178005	Collected: 06/27/17 00:00	Received: 06/30/17 10:10	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.166 ± 0.143 (0.252) C:86% T:NA	pCi/L	07/17/17 08:42	13982-63-3	
Radium-228	EPA 9320	0.418 ± 0.452 (0.949) C:80% T:78%	pCi/L	07/21/17 16:02	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1025 Plant Yates
Pace Project No.: 30223178

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: Dup-1 Lab ID: 30223178005 Collected: 06/27/17 00:00 Received: 06/30/17 10:10 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.584 ± 0.595 (1.20)	pCi/L	07/25/17 11:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-1-6-27-17 Lab ID: 30223178006 Collected: 06/27/17 16:00 Received: 06/30/17 10:10 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.00863 ± 0.127 (0.333) C:91% T:NA	pCi/L	07/17/17 08:42	13982-63-3	
Radium-228	EPA 9320	0.865 ± 0.403 (0.679) C:79% T:85%	pCi/L	07/21/17 16:00	15262-20-1	
Total Radium	Total Radium Calculation	0.874 ± 0.530 (1.01)	pCi/L	07/25/17 11:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-2I Lab ID: 30223178007 Collected: 06/28/17 14:15 Received: 06/30/17 10:10 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.187 ± 0.155 (0.273) C:85% T:NA	pCi/L	07/17/17 08:42	13982-63-3	
Radium-228	EPA 9320	0.421 ± 0.350 (0.705) C:80% T:89%	pCi/L	07/21/17 16:00	15262-20-1	
Total Radium	Total Radium Calculation	0.608 ± 0.505 (0.978)	pCi/L	07/25/17 11:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-3I Lab ID: 30223178008 Collected: 06/28/17 11:00 Received: 06/30/17 10:10 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.269 ± 0.175 (0.284) C:94% T:NA	pCi/L	07/17/17 08:42	13982-63-3	
Radium-228	EPA 9320	0.805 ± 0.479 (0.905) C:75% T:82%	pCi/L	07/21/17 16:00	15262-20-1	
Total Radium	Total Radium Calculation	1.07 ± 0.654 (1.19)	pCi/L	07/25/17 11:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-3D Lab ID: 30223178009 Collected: 06/28/17 12:35 Received: 06/30/17 10:10 Matrix: Water						
PWS: Site ID: Sample Type:						
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.708 ± 0.272 (0.246) C:80% T:NA	pCi/L	07/17/17 08:42	13982-63-3	
Radium-228	EPA 9320	1.89 ± 0.497 (0.490) C:95% T:93%	pCi/L	07/21/17 16:00	15262-20-1	
Total Radium	Total Radium Calculation	2.60 ± 0.769 (0.736)	pCi/L	07/25/17 11:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1025 Plant Yates

Pace Project No.: 30223178

Sample: FB-1-6-28-17 **Lab ID: 30223178010** Collected: 06/28/17 14:50 Received: 06/30/17 10:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.124 ± 0.148 (0.307) C:96% T:NA	pCi/L	07/17/17 08:42	13982-63-3	
Radium-228	EPA 9320	0.192 ± 0.334 (0.730) C:75% T:86%	pCi/L	07/21/17 16:00	15262-20-1	
Total Radium	Total Radium Calculation	0.316 ± 0.482 (1.04)	pCi/L	07/25/17 11:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAF1025 Plant Yates

Pace Project No.: 30223178

QC Batch:	264892	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30223178001, 30223178002, 30223178003, 30223178004, 30223178005, 30223178006, 30223178007, 30223178008, 30223178009, 30223178010		

METHOD BLANK:	1304633	Matrix:	Water
Associated Lab Samples:	30223178001, 30223178002, 30223178003, 30223178004, 30223178005, 30223178006, 30223178007, 30223178008, 30223178009, 30223178010		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.962 ± 0.425 (0.708) C:85% T:81%	pCi/L	07/21/17 16:00	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAF1025 Plant Yates

Pace Project No.: 30223178

QC Batch:	264890	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30223178001, 30223178002, 30223178003, 30223178004, 30223178005, 30223178006, 30223178007, 30223178008, 30223178009, 30223178010		

METHOD BLANK:	1304631	Matrix:	Water
Associated Lab Samples:	30223178001, 30223178002, 30223178003, 30223178004, 30223178005, 30223178006, 30223178007, 30223178008, 30223178009, 30223178010		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0803 ± 0.0951 (0.181) C:92% T:NA	pCi/L	07/17/17 08:41	

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

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

QUALIFIERS

Project: AAF1025 Plant Yates

Pace Project No.: 30223178

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.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

Chain of Custody



Results Requested By: 7/24/2017

Owner Received Date:

Plant Yates

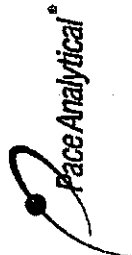
Workorder Name:

Workorder: AAF1025

Report To:	Subcontract To:	Requested Analysis					
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200	Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600	Radium 226, 228, Total					
<p>WO#: 30223178</p>							
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	LAB USE ONLY
1	YGWA-1I	G	6/27/2017 15:10	AAF1025-01	GW	2	001
2	YGWA-1D	G	6/27/2017 12:50	AAF1025-02	GW	2	002
3	YGWA-5I	G	6/27/2017 12:50	AAF1025-03	GW	2	003
4	YGWA-5D	G	6/27/2017 14:25	AAF1025-04	GW	2	004
5	Dup-1	G	6/27/2017 0:00	AAF1025-05	GW	2	005
6	EB-1-6-27-17	G	6/27/2017 16:00	AAF1025-06	W	2	006
7	YGWA-2I	G	6/28/2017 14:15	AAF1025-07	GW	2	007
8	YGWA-3I	G	6/28/2017 11:00	AAF1025-08	GW	2	008
9	YGWA-3D	G	6/28/2017 12:35	AAF1025-09	GW	2	009
10	FB-1-6-28-17	G	6/28/2017 14:50	AAF1025-10	W	2	010
Transfers Released By	Date/Time	Received By	Date/Time	Comments			
M. RAHMAN	6/29/17	[Signature]	6/30/17 10:10				

Cooler Temperature on Receipt 21A °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
 This chain of custody is considered complete as is since this information is available in the owner laboratory.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239 REPORT TO: Lauren Petty REQUESTED COMPLETION DATE: laburch@southemco.com PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CGR		ANALYSIS REQUESTED CONTAINER TYPE: P P P P PRESERVATION: 3 7 3 # of CONTAINERS: 4 4 4 4 4 4 4 4 4 4 Metals App. III & IV (EPA 60207470) Cl, n, SO ₄ , & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SM 846 9315/9320)		CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₄ , ≤6°C 7 - ≤6°C not frozen MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORMWATER L - LIQUID W - WATER P - PRODUCT REMARKS/ADDITIONAL INFORMATION		
Collection DATE	Collection TIME	MATRIX CODE	COMPARISON	SAMPLE IDENTIFICATION	LAB #	DATE/TIME
6/27/17	1510	GW	✓	Y6WA-1I	30223178	6/28/17 1500
6/27/17	1250	GW	✓	Y6WA-1D		
6/27/17	1250	GW	✓	Y6WA-5I		
6/27/17	1425	GW	✓	Y6WA-5D		
6/27/17	-	GW	✓	DUP-1		
6/27/17	1600	W	✓	EB-1-6-27-17		
6/28/17	1415	GW	✓	Y6WA-2I		
6/28/17	1100	GW	✓	Y6WA-3I		
6/28/17	1235	GW	✓	Y6WA-3D		
6/28/17	1450	W	✓	FB-1-6-28-17		
SAMPLED BY AND TITLE: Catherine J. Berisford RECEIVED BY:		RELINQUISHED BY: [Signature]	RELINQUISHED BY: [Signature]	DATE/TIME: 6/28/17 1635 DATE/TIME:	LAB #: AAF 1045 Entered into LIMS: [Signature]	FOR LAB USE ONLY Tracking #
RECEIVED BY LAB: [Signature]		DATE/TIME: 6/28/17 1635 DATE/TIME:	DATE/TIME: 6/28/17 1635 DATE/TIME:	CLIENT: GEORGIA POWER OTHER: FS	COPIES: 1 of 10	OTHER: FS

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh

ZH



Client Name: ACE-Atlanta Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 741366568858

Custody Seal on Cooler/Box Present: yes no Seals Intact: yes no

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: ZH 6/30/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. <u>see 7/3/17</u>
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.
-Pace Containers Used:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.
Orthophosphate field filtered	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.
Organic Samples checked for dechlorination:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13.
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.
All containers have been checked for preservation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. <u>PHC2</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>ZH</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16.
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17.
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Rad Aqueous Samples Screened > 0.5 mrem/hr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed: <u>ZH</u> Date: <u>6/30/17</u>

Client Notification/ Resolution:
 Person Contacted: _____ Date/Time: _____ Contacted By: _____
 Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 7/14/2017
Worklist: 36626
Matrix: DW

Method Blank Assessment	MB Sample ID 1304631
	MB Concentration: 0.080
	M/B Counting Uncertainty: 0.094
	MB MDC: 0.181
	MB Numerical Performance Indicator: 1.67
	MB Status vs Numerical Indicator: N/A
	MB Status vs. MDC: Pass

Laboratory Control Sample Assessment	LCS (Y or N)? N
	LCS36626
	LCS36626
Count Date:	7/17/2017
Spike I.D.:	17-030
Spike Concentration (pCi/mL):	80.198
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.501
Target Conc. (pCi/L, g, F):	16.021
Uncertainty (Calculated):	1.476
Result (pCi/L, g, F):	13.506
LOS/LCSD Counting Uncertainty (pCi/L, g, F):	0.928
Numerical Performance Indicator:	-2.83
Percent Recovery:	84.30%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
	30223258006
	30223258006DUP
Sample I.D.:	30223258006
Duplicate Sample I.D.:	30223258006DUP
Sample Result (pCi/L, g, F):	0.025
Sample Duplicate Result (pCi/L, g, F):	0.106
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.110
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.145
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.933
Duplicate RPD:	126.71%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

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):	
Spike uncertainty (calculated):	
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:	

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:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Handwritten signature/initials

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 7/19/2017
Worklist: 36628
Matrix: DW

Method Blank Assessment	
MB Sample ID	1304633
MB concentration:	0.962
M/B Counting Uncertainty:	0.389
MB MDC:	0.708
MB Numerical Performance Indicator:	4.85
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	
Count Date:	7/21/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	23.997
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.802
Target Conc. (pCi/L, g, F):	5.984
Uncertainty (Calculated):	0.431
Result (pCi/L, g, F):	7.272
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.731
Numerical Performance Indicator:	2.97
Percent Recovery:	121.51%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30223258006
Duplicate Sample I.D.:	30223258006DUP
Sample Result (pCi/L, g, F):	0.551
Sample Duplicate Result (pCi/L, g, F):	0.356
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.670
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.305
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.497
Duplicate RPD:	19.47%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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.

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
Duplicate Status vs Numerical Indicator:	
Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Handwritten signature: J. L. W.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAF1120

July 10, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

Project Manager Coordinator

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-18I	AAF1120-01	Ground Water	06/28/17 11:05	06/30/17 15:58
YGWA-18S	AAF1120-02	Ground Water	06/28/17 16:05	06/30/17 15:58
YGWA-4I	AAF1120-03	Ground Water	06/29/17 11:25	06/30/17 15:58
YGWA-21I	AAF1120-04	Ground Water	06/29/17 13:10	06/30/17 15:58
YGWA-20S	AAF1120-05	Ground Water	06/29/17 15:00	06/30/17 15:58
YGWA-17S	AAF1120-06	Ground Water	06/29/17 10:50	06/30/17 15:58
YGWA-6S	AAF1120-07	Ground Water	06/29/17 12:20	06/30/17 15:58
YGWA-6I	AAF1120-08	Ground Water	06/29/17 17:10	06/30/17 15:58
EB-2-6-29-17	AAF1120-09	Water	06/29/17 16:10	06/30/17 15:58
YGWA-14S	AAF1120-10	Ground Water	06/30/17 11:30	06/30/17 15:58
YGWA-30I	AAF1120-11	Ground Water	06/30/17 10:55	06/30/17 15:58
YGWC-27I	AAF1120-12	Ground Water	06/30/17 13:10	06/30/17 15:58
YGWC-27S	AAF1120-13	Ground Water	06/30/17 13:15	06/30/17 15:58
FB-2-6-30-17	AAF1120-14	Water	06/30/17 13:30	06/30/17 15:58
Dup-2	AAF1120-15	Ground Water	06/30/17 00:00	06/30/17 15:58



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-18I

Lab Number ID: AAF1120-01

Date/Time Sampled: 6/28/2017 11:05:00AM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	98	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	7.0	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 14:49	7070086	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 14:49	7070086	SLH
Sulfate	1.7	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 14:49	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Barium	0.0237	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Calcium	4.95	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Chromium	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Lithium	0.0039	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 16:35	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:02	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 10, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-18S

Lab Number ID: AAF1120-02

Date/Time Sampled: 6/28/2017 4:05:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	45	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	6.4	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 15:10	7070086	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 15:10	7070086	SLH
Sulfate	1.5	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 15:10	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Barium	0.0180	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Boron	0.0079	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Calcium	1.06	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Lithium	0.0016	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:06	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:05	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-4I

Lab Number ID: AAF1120-03

Date/Time Sampled: 6/29/2017 11:25:00AM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	79	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	4.2	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 15:31	7070086	SLH
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 15:31	7070086	SLH
Sulfate	9.2	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 15:31	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Barium	0.0154	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Calcium	8.81	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Cobalt	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Lithium	0.0145	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:18	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:07	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-211

Lab Number ID: AAF1120-04

Date/Time Sampled: 6/29/2017 1:10:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	94	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	2.8	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 15:52	7070086	SLH
Fluoride	0.05	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 15:52	7070086	SLH
Sulfate	5.5	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 15:52	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Arsenic	0.0012	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Barium	0.0109	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Calcium	6.04	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Cobalt	0.0093	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Lithium	0.0047	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:29	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:09	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-20S

Lab Number ID: AAF1120-05

Date/Time Sampled: 6/29/2017 3:00:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	68	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	2.6	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 16:14	7070086	SLH
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 16:14	7070086	SLH
Sulfate	0.15	1.0	0.09	mg/L	EPA 300.0	B-01, J	1	07/06/17 08:54	07/06/17 16:14	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Barium	0.0170	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Calcium	2.54	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Chromium	0.0005	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:40	7070032	CSW
Mercury	0.000053	0.00050	0.000041	mg/L	EPA 7470A	J	1	07/06/17 12:10	07/06/17 18:17	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-17S

Lab Number ID: AAF1120-06

Date/Time Sampled: 6/29/2017 10:50:00AM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	53	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	4.5	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 16:35	7070086	SLH
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 16:35	7070086	SLH
Sulfate	5.2	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 16:35	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Barium	0.0128	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Boron	0.0074	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Calcium	2.02	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Chromium	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Lead	0.00008	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 17:52	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:20	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-6S

Lab Number ID: AAF1120-07

Date/Time Sampled: 6/29/2017 12:20:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	102	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	3.0	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 19:03	7070086	SLH
Fluoride	0.07	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 19:03	7070086	SLH
Sulfate	31	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 19:03	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Barium	0.0201	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Boron	0.0538	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Calcium	5.86	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Chromium	0.0071	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:15	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:22	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-6I

Lab Number ID: AAF1120-08

Date/Time Sampled: 6/29/2017 5:10:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	169	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	7.8	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 19:25	7070086	SLH
Fluoride	0.01	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 19:25	7070086	SLH
Sulfate	65	5.0	0.46	mg/L	EPA 300.0	B-01	5	07/06/17 08:54	07/10/17 02:18	7070086	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Arsenic	0.0010	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Barium	0.0246	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Boron	0.0612	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Calcium	8.92	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Chromium	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Lead	0.0003	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Lithium	0.0081	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:26	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:25	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 10, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1120

Project: CCR Event

Client ID: EB-2-6-29-17

Lab Number ID: AAF1120-09

Date/Time Sampled: 6/29/2017 4:10:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	0.08	0.25	0.01	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 19:46	7070086	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 19:46	7070086	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 19:46	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Calcium	0.103	0.500	0.0404	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:38	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:27	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 10, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-14S

Lab Number ID: AAF1120-10

Date/Time Sampled: 6/30/2017 11:30:00AM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	45	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	3.7	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 20:07	7070086	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 20:07	7070086	SLH
Sulfate	6.5	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 20:07	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Barium	0.0081	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Beryllium	0.0002	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Boron	0.0173	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Calcium	1.24	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:43	7070032	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/06/17 12:10	07/06/17 18:29	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 10, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1120

Project: CCR Event

Client ID: YGWA-30I

Lab Number ID: AAF1120-11

Date/Time Sampled: 6/30/2017 10:55:00AM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	42	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	1.8	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 20:28	7070086	SLH
Fluoride	0.01	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 20:28	7070086	SLH
Sulfate	1.5	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 20:28	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Barium	0.0076	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Calcium	1.13	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Cobalt	0.0233	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 18:55	7070032	CSW
Mercury	0.00006	0.00050	0.000041	mg/L	EPA 7470A	J	1	07/06/17 12:10	07/06/17 18:32	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 10, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1120

Project: CCR Event

Client ID: YGWC-271

Lab Number ID: AAF1120-12

Date/Time Sampled: 6/30/2017 1:10:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	193	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 20:49	7070086	SLH
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 20:49	7070086	SLH
Sulfate	5.0	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 20:49	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Arsenic	0.0011	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Barium	0.0666	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Beryllium	0.0002	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Boron	2.28	2.00	0.298	mg/L	EPA 6020B		50	07/03/17 14:40	07/06/17 19:23	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Calcium	27.2	25.0	2.02	mg/L	EPA 6020B		50	07/03/17 14:40	07/06/17 19:23	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Cobalt	0.0044	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Lithium	0.0108	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:18	7070032	CSW
Mercury	0.00006	0.00050	0.000041	mg/L	EPA 7470A	J	1	07/06/17 12:10	07/06/17 18:34	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Project: CCR Event

Client ID: YGWC-27S

Lab Number ID: AAF1120-13

Date/Time Sampled: 6/30/2017 1:15:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	209	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	21	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 21:32	7070086	SLH
Fluoride	0.20	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 21:32	7070086	SLH
Sulfate	23	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 21:32	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Arsenic	0.0005	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Barium	0.0963	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Boron	1.47	0.400	0.0595	mg/L	EPA 6020B		10	07/03/17 14:40	07/10/17 14:42	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Calcium	36.2	25.0	2.02	mg/L	EPA 6020B		50	07/03/17 14:40	07/06/17 19:35	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Cobalt	0.0022	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Thallium	0.0001	0.0010	0.00005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:29	7070032	CSW
Mercury	0.00010	0.00050	0.000041	mg/L	EPA 7470A	J	1	07/06/17 12:10	07/06/17 18:36	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 10, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1120

Project: CCR Event

Client ID: FB-2-6-30-17

Lab Number ID: AAF1120-14

Date/Time Sampled: 6/30/2017 1:30:00PM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	0.10	0.25	0.01	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 23:20	7070086	SLH
Fluoride	0.01	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 23:20	7070086	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 23:20	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Arsenic	0.0007	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:41	7070032	CSW
Mercury	0.00007	0.00050	0.000041	mg/L	EPA 7470A	J	1	07/06/17 12:10	07/06/17 18:39	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 10, 2017

Attention: Mr. Joju Abraham

Report No.: AAF1120

Project: CCR Event

Client ID: Dup-2

Lab Number ID: AAF1120-15

Date/Time Sampled: 6/30/2017 12:00:00AM

Date/Time Received: 6/30/2017 3:58:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	43	25	10	mg/L	SM 2540 C		1	07/03/17 17:25	07/03/17 17:25	7070028	JPT
Inorganic Anions											
Chloride	3.7	0.25	0.01	mg/L	EPA 300.0		1	07/06/17 08:54	07/06/17 23:41	7070086	SLH
Fluoride	0.01	0.30	0.004	mg/L	EPA 300.0	J	1	07/06/17 08:54	07/06/17 23:41	7070086	SLH
Sulfate	6.6	1.0	0.09	mg/L	EPA 300.0	B-01	1	07/06/17 08:54	07/06/17 23:41	7070086	SLH
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Barium	0.0081	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Beryllium	0.0002	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Boron	0.0176	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Calcium	1.23	0.500	0.0404	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/03/17 14:40	07/06/17 19:46	7070032	CSW
Mercury	0.00009	0.00050	0.000041	mg/L	EPA 7470A	J	1	07/06/17 12:10	07/06/17 18:46	7070073	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070028 - SM 2540 C											
Blank (7070028-BLK1)						Prepared & Analyzed: 07/03/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7070028-BS1)						Prepared & Analyzed: 07/03/17					
Total Dissolved Solids	390	25	10	mg/L	400.00		98	84-108			
Duplicate (7070028-DUP1)						Source: AAF1120-04 Prepared & Analyzed: 07/03/17					
Total Dissolved Solids	103	25	10	mg/L		94			9	10	
Duplicate (7070028-DUP2)						Source: AAF1120-09 Prepared & Analyzed: 07/03/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070086 - EPA 300.0											
Blank (7070086-BLK1)						Prepared & Analyzed: 07/06/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	0.55	1.0	0.09	mg/L							J
LCS (7070086-BS1)						Prepared & Analyzed: 07/06/17					
Chloride	10.0	0.25	0.01	mg/L	10.020		100	90-110			
Fluoride	10.0	0.30	0.004	mg/L	10.020		100	90-110			
Sulfate	10.2	1.0	0.09	mg/L	10.050		102	90-110			
Matrix Spike (7070086-MS1)						Source: AAF1120-06 Prepared & Analyzed: 07/06/17					
Chloride	14.3	0.25	0.01	mg/L	10.020	4.50	98	90-110			
Fluoride	10.2	0.30	0.004	mg/L	10.020	0.02	102	90-110			
Sulfate	15.1	1.0	0.09	mg/L	10.050	5.17	99	90-110			
Matrix Spike (7070086-MS2)						Source: AAF1120-12 Prepared & Analyzed: 07/06/17					
Chloride	23.0	0.25	0.01	mg/L	10.020	13.9	91	90-110			
Fluoride	10.3	0.30	0.004	mg/L	10.020	0.03	103	90-110			
Sulfate	14.9	1.0	0.09	mg/L	10.050	5.03	98	90-110			
Matrix Spike Dup (7070086-MSD1)						Source: AAF1120-06 Prepared & Analyzed: 07/06/17					
Chloride	14.5	0.25	0.01	mg/L	10.020	4.50	100	90-110	1	15	
Fluoride	10.4	0.30	0.004	mg/L	10.020	0.02	103	90-110	2	15	
Sulfate	15.1	1.0	0.09	mg/L	10.050	5.17	99	90-110	0.1	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070032 - EPA 3005A											
Blank (7070032-BLK1)						Prepared: 07/03/17 Analyzed: 07/06/17					
Antimony	ND	0.0030	0.0006	mg/L							
Arsenic	ND	0.0050	0.0005	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.100	0.0060	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0404	mg/L							
Chromium	ND	0.0100	0.0005	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0010	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0018	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	0.0018	0.0100	0.0012	mg/L							J
Zinc	0.0015	0.0100	0.0012	mg/L							J
Lithium	ND	0.0500	0.0015	mg/L							
LCS (7070032-BS1)						Prepared: 07/03/17 Analyzed: 07/06/17					
Antimony	0.103	0.0030	0.0006	mg/L	0.10000		103	80-120			
Arsenic	0.0994	0.0050	0.0005	mg/L	0.10000		99	80-120			
Barium	0.0996	0.0100	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.109	0.0030	0.00009	mg/L	0.10000		109	80-120			
Boron	1.03	0.100	0.0060	mg/L	1.0000		103	80-120			
Cadmium	0.109	0.0010	0.0001	mg/L	0.10000		109	80-120			
Calcium	1.00	0.500	0.0404	mg/L	1.0000		100	80-120			
Chromium	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Cobalt	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Copper	0.105	0.0250	0.0003	mg/L	0.10000		105	80-120			
Lead	0.103	0.0050	0.00007	mg/L	0.10000		103	80-120			
Molybdenum	0.0999	0.0100	0.0010	mg/L	0.10000		100	80-120			
Nickel	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Selenium	0.0991	0.0100	0.0018	mg/L	0.10000		99	80-120			
Silver	0.102	0.0100	0.0002	mg/L	0.10000		102	80-120			
Thallium	0.106	0.0010	0.00005	mg/L	0.10000		106	80-120			
Vanadium	0.104	0.0100	0.0012	mg/L	0.10000		104	80-120			
Zinc	0.103	0.0100	0.0012	mg/L	0.10000		103	80-120			
Lithium	0.109	0.0500	0.0015	mg/L	0.10000		109	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070032 - EPA 3005A											
Matrix Spike (7070032-MS1)			Source: AAF1120-01				Prepared: 07/03/17 Analyzed: 07/06/17				
Antimony	0.102	0.0030	0.0006	mg/L	0.10000	ND	102	75-125			
Arsenic	0.100	0.0050	0.0005	mg/L	0.10000	ND	100	75-125			
Barium	0.121	0.0100	0.0004	mg/L	0.10000	0.0237	98	75-125			
Beryllium	0.111	0.0030	0.00009	mg/L	0.10000	ND	111	75-125			
Boron	1.07	0.100	0.0060	mg/L	1.0000	ND	107	75-125			
Cadmium	0.107	0.0010	0.0001	mg/L	0.10000	ND	107	75-125			
Calcium	5.91	0.500	0.0404	mg/L	1.0000	4.95	95	75-125			
Chromium	0.101	0.0100	0.0005	mg/L	0.10000	0.0006	101	75-125			
Cobalt	0.101	0.0100	0.0003	mg/L	0.10000	ND	101	75-125			
Copper	0.105	0.0250	0.0003	mg/L	0.10000	0.0004	105	75-125			
Lead	0.0995	0.0050	0.00007	mg/L	0.10000	ND	99	75-125			
Molybdenum	0.100	0.0100	0.0010	mg/L	0.10000	ND	100	75-125			
Nickel	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125			
Selenium	0.0963	0.0100	0.0018	mg/L	0.10000	ND	96	75-125			
Silver	0.100	0.0100	0.0002	mg/L	0.10000	ND	100	75-125			
Thallium	0.102	0.0010	0.00005	mg/L	0.10000	ND	102	75-125			
Vanadium	0.102	0.0100	0.0012	mg/L	0.10000	ND	102	75-125			
Zinc	0.106	0.0100	0.0012	mg/L	0.10000	0.0027	103	75-125			
Lithium	0.115	0.0500	0.0015	mg/L	0.10000	0.0039	111	75-125			
Matrix Spike Dup (7070032-MSD1)			Source: AAF1120-01				Prepared: 07/03/17 Analyzed: 07/06/17				
Antimony	0.103	0.0030	0.0006	mg/L	0.10000	ND	103	75-125	1	20	
Arsenic	0.0989	0.0050	0.0005	mg/L	0.10000	ND	99	75-125	2	20	
Barium	0.124	0.0100	0.0004	mg/L	0.10000	0.0237	100	75-125	2	20	
Beryllium	0.105	0.0030	0.00009	mg/L	0.10000	ND	105	75-125	5	20	
Boron	1.02	0.100	0.0060	mg/L	1.0000	ND	102	75-125	5	20	
Cadmium	0.105	0.0010	0.0001	mg/L	0.10000	ND	105	75-125	2	20	
Calcium	5.87	0.500	0.0404	mg/L	1.0000	4.95	91	75-125	0.7	20	
Chromium	0.101	0.0100	0.0005	mg/L	0.10000	0.0006	100	75-125	0.5	20	
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125	0.8	20	
Copper	0.106	0.0250	0.0003	mg/L	0.10000	0.0004	105	75-125	0.4	20	
Lead	0.0993	0.0050	0.00007	mg/L	0.10000	ND	99	75-125	0.2	20	
Molybdenum	0.102	0.0100	0.0010	mg/L	0.10000	ND	102	75-125	1	20	
Nickel	0.105	0.0100	0.0005	mg/L	0.10000	ND	105	75-125	0.4	20	
Selenium	0.0954	0.0100	0.0018	mg/L	0.10000	ND	95	75-125	0.9	20	
Silver	0.0997	0.0100	0.0002	mg/L	0.10000	ND	100	75-125	0.5	20	
Thallium	0.101	0.0010	0.00005	mg/L	0.10000	ND	101	75-125	0.9	20	
Vanadium	0.101	0.0100	0.0012	mg/L	0.10000	ND	101	75-125	2	20	
Zinc	0.106	0.0100	0.0012	mg/L	0.10000	0.0027	104	75-125	0.3	20	
Lithium	0.110	0.0500	0.0015	mg/L	0.10000	0.0039	106	75-125	5	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070032 - EPA 3005A											
Post Spike (7070032-PS1)			Source: AAF1120-01			Prepared: 07/03/17 Analyzed: 07/06/17					
Antimony	96.6			ug/L	100.00	0.360	96	80-120			
Arsenic	99.0			ug/L	100.00	0.0465	99	80-120			
Barium	121			ug/L	100.00	23.7	97	80-120			
Beryllium	101			ug/L	100.00	0.0080	101	80-120			
Boron	978			ug/L	1000.0	5.18	97	80-120			
Cadmium	103			ug/L	100.00	-0.0155	103	80-120			
Calcium	5790			ug/L	1000.0	4950	84	80-120			
Chromium	103			ug/L	100.00	0.626	103	80-120			
Cobalt	101			ug/L	100.00	0.0518	101	80-120			
Copper	105			ug/L	100.00	0.439	104	80-120			
Lead	98.9			ug/L	100.00	0.0382	99	80-120			
Molybdenum	98.3			ug/L	100.00	0.236	98	80-120			
Nickel	102			ug/L	100.00	0.128	102	80-120			
Selenium	99.8			ug/L	100.00	-0.410	100	80-120			
Silver	98.0			ug/L	100.00	0.0028	98	80-120			
Thallium	101			ug/L	100.00	0.0257	101	80-120			
Vanadium	102			ug/L	100.00	0.350	101	80-120			
Zinc	104			ug/L	100.00	2.73	101	80-120			
Lithium	106			ug/L	100.00	3.91	102	80-120			

Batch 7070073 - EPA 7470A

Blank (7070073-BLK1)					Prepared & Analyzed: 07/06/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7070073-BS1)					Prepared & Analyzed: 07/06/17						
Mercury	0.00269	0.00050	0.000041	mg/L	2.5000E-3		108	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070073 - EPA 7470A											
Matrix Spike (7070073-MS1)			Source: AAF1120-02			Prepared & Analyzed: 07/06/17					
Mercury	0.00202	0.00050	0.000041	mg/L	2.5000E-3	ND	81	75-125			
Matrix Spike Dup (7070073-MSD1)			Source: AAF1120-02			Prepared & Analyzed: 07/06/17					
Mercury	0.00190	0.00050	0.000041	mg/L	2.5000E-3	ND	76	75-125	6	20	
Post Spike (7070073-PS1)			Source: AAF1120-02			Prepared & Analyzed: 07/06/17					
Mercury	1.72			ug/L	1.6667	0.00631	103	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 10, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).
- B-01** Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

Note: Unless otherwise noted, all results are reported on an as received basis.



CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 2

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR	
Collection DATE mm/dd/yy	Collection TIME	MATRIX CODE*	C O M P	G O R A B	SAMPLE IDENTIFICATION
6-28-17	1105	GW	✓	✓	Y6WA-18I
6-28-17	1605	GW	✓	✓	Y6WA-18S
6-29-17	1125	GW	✓	✓	Y6WA-4I
6-29-17	1310	GW	✓	✓	Y6WA-21I
6-29-17	1500	GW	✓	✓	Y6WA-20S
6-29-17	1050	GW	✓	✓	Y6WA-17S
6-29-17	1220	GW	✓	✓	Y6WA-6S
6-29-17	1710	GW	✓	✓	Y6WA-6I
6-29-17	1610	W	✓	✓	EB-2-6-29-17

SAMPLED BY AND TITLE: C. Parker, R. Walker (Acc)	DATE/TIME: 6-30-17 1558
RECEIVED BY: Maria Padilla	DATE/TIME: 6-30-17 1558

RELINQUISHED BY: C. Parker	DATE/TIME: 6-30-17 1558
RELINQUISHED BY: Maria Padilla	DATE/TIME: 6-30-17 1558

SAMPLE SHIPPED VIA: UPS	FED-EX	USPS	COURIER	OTHER	FS
Custody Seal: Intact	Broken	Not Present	# of Coolers	Cooler ID:	FS

LAB #: HAF-1120	FOR LAB USE ONLY
Entered into LIMS:	Tracking #:

Plant Yates COC Ash Ponds.xlsx



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 2 OF 2

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Mania Padilla Heath McCorkle		REQUESTED COMPLETION DATE: PO #: laburch@southernmco.com		PROJECT NAME/STATE: Plant Yates AP		PROJECT #: Phase 2 CCR			
Collection DATE M/DD/YY	Collection TIME	MATRIX CODE*	COOR M A P B	GRAB	SAMPLE IDENTIFICATION	CONTAINER TYPE PRESERVATION	ANALYSIS REQUESTED	CONTAINER TYPE PRESERVATION	LAB #	DATE/TIME	REMARKS/ADDITIONAL INFORMATION		
6-30-17	1130	GW		✓	Y6WA-145	(EPA 6020/470) Metals App. III & IV	3	P	1	6-30-17 1558			
6-30-17	1055	GW		✓	Y6WA-30I	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)	7	P	1	6-30-17 1558			
6-30-17	1310	GW		✓	Y6WC-27I	Radium 226 & 228 (SW-846 9315/9320)	3	P	1	6-30-17 1558			
6-30-17	1315	GW		✓	Y6WC-27S								
6-30-17	1330	W		✓	FB-2-6-30-17								
6-30-17	—	GW		✓	DUP-2								
SAMPLED BY AND TITLE: C. Barker, R. Walker RECEIVED BY:											RELINQUISHED BY: [Signature] RELINQUISHED BY: [Signature]	DATE/TIME: 6-30-17 1558 DATE/TIME: 6-30-17 1558	FOR LAB USE ONLY ATF-1120 [Signature]
ANALYSIS REQUESTED:											SAMPLE SHIPPED VIA: UPS Intact: [] Broken: []	DATE/TIME: 6-30-17 1558 DATE/TIME: 6-30-17 1558	ENTERED INTO LIMS: [Signature] Tracking #:
CONTAINER TYPE: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER PRESERVATION: 1 - HCl, ≤6°C, 2 - H ₂ SO ₄ , ≤6°C, 3 - HNO ₃ , 4 - NaOH, ≤6°C, 5 - NaOH/ZnAc, ≤6°C, 6 - Na ₂ S ₂ O ₃ , ≤6°C, 7 - ≤6°C not frozen											MATRIX CODES: DW - DRINKING WATER, WW - WASTEWATER, GW - GROUNDWATER, SW - SURFACE WATER, ST - STORM WATER, W - WATER, S - SOIL, SL - SLUDGE, SD - SOLID, A - AIR, L - LIQUID, P - PRODUCT	L A B I D N U M B E R → 10 11 12 13 14 15	REMARKS/ADDITIONAL INFORMATION

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 7/3/2017 8:54:11AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 06/30/17 15:58

Work Order: AAF1120

Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 15

#Containers: 62

Minimum Temp(C): 3.0

Maximum Temp(C): 3.0

Custody Seal(s) Used: N/A

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact N/A
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

July 26, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAF1120 Plant Yates
Pace Project No.: 30223258

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on July 03, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30223258001	YGWA-18I	Water	06/28/17 11:05	07/03/17 09:40
30223258002	YGWA-18S	Water	06/28/17 16:05	07/03/17 09:40
30223258003	YGWA-4I	Water	06/29/17 11:25	07/03/17 09:40
30223258004	YGWA-21I	Water	06/29/17 13:10	07/03/17 09:40
30223258005	YGWA-20S	Water	06/29/17 15:00	07/03/17 09:40
30223258006	YGWA-17S	Water	06/29/17 10:50	07/03/17 09:40
30223258007	YGWA-6S	Water	06/29/17 12:20	07/03/17 09:40
30223258008	YGWA-6I	Water	06/29/17 17:10	07/03/17 09:40
30223258009	EB-2-6-29-17	Water	06/29/17 16:10	07/03/17 09:40
30223258010	YGWA-14S	Water	06/30/17 11:30	07/03/17 09:40
30223258011	YGWA-30I	Water	06/30/17 10:55	07/03/17 09:40
30223258012	YGWC-27I	Water	06/30/17 13:10	07/03/17 09:40
30223258013	YGWC-27S	Water	06/30/17 13:15	07/03/17 09:40
30223258014	FB-2-6-30-17	Water	06/30/17 13:30	07/03/17 09:40
30223258015	Dup-2	Water	06/30/17 00:00	07/03/17 09:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30223258001	YGWA-18I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258002	YGWA-18S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258003	YGWA-4I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258004	YGWA-21I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258005	YGWA-20S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258006	YGWA-17S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258007	YGWA-6S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258008	YGWA-6I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258009	EB-2-6-29-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258010	YGWA-14S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258011	YGWA-30I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258012	YGWC-27I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258013	YGWC-27S	EPA 9315	JC2	1

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: AAF1120 Plant Yates

Pace Project No.: 30223258

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258014	FB-2-6-30-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30223258015	Dup-2	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

Sample: YGWA-181		Lab ID: 30223258001	Collected: 06/28/17 11:05	Received: 07/03/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0304 ± 0.108 (0.274) C:88% T:NA	pCi/L	07/17/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.862 ± 0.381 (0.609) C:78% T:85%	pCi/L	07/21/17 16:00	15262-20-1	
Total Radium	Total Radium Calculation	0.892 ± 0.489 (0.883)	pCi/L	07/26/17 13:15	7440-14-4	

Sample: YGWA-18S		Lab ID: 30223258002	Collected: 06/28/17 16:05	Received: 07/03/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.00102 ± 0.0854 (0.239) C:97% T:NA	pCi/L	07/17/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.635 ± 0.370 (0.676) C:81% T:81%	pCi/L	07/21/17 15:57	15262-20-1	
Total Radium	Total Radium Calculation	0.636 ± 0.455 (0.915)	pCi/L	07/26/17 13:15	7440-14-4	

Sample: YGWA-4I		Lab ID: 30223258003	Collected: 06/29/17 11:25	Received: 07/03/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.504 ± 0.214 (0.239) C:92% T:NA	pCi/L	07/17/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.843 ± 0.383 (0.627) C:80% T:83%	pCi/L	07/21/17 15:57	15262-20-1	
Total Radium	Total Radium Calculation	1.35 ± 0.597 (0.866)	pCi/L	07/26/17 13:15	7440-14-4	

Sample: YGWA-21I		Lab ID: 30223258004	Collected: 06/29/17 13:10	Received: 07/03/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.213 ± 0.173 (0.317) C:91% T:NA	pCi/L	07/17/17 08:52	13982-63-3	
Radium-228	EPA 9320	0.628 ± 0.340 (0.595) C:77% T:87%	pCi/L	07/21/17 15:57	15262-20-1	
Total Radium	Total Radium Calculation	0.841 ± 0.513 (0.912)	pCi/L	07/26/17 13:15	7440-14-4	

Sample: YGWA-20S		Lab ID: 30223258005	Collected: 06/29/17 15:00	Received: 07/03/17 09:40	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.127 ± 0.139 (0.278) C:92% T:NA	pCi/L	07/17/17 08:44	13982-63-3	
Radium-228	EPA 9320	0.994 ± 0.392 (0.594) C:80% T:89%	pCi/L	07/21/17 15:58	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1120 Plant Yates

Pace Project No.: 30223258

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-20S Lab ID: 30223258005 Collected: 06/29/17 15:00 Received: 07/03/17 09:40 Matrix: Water PWS: Site ID: Sample Type:						
Total Radium	Total Radium Calculation	1.12 ± 0.531 (0.872)	pCi/L	07/26/17 13:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-17S Lab ID: 30223258006 Collected: 06/29/17 10:50 Received: 07/03/17 09:40 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.0247 ± 0.106 (0.271) C:90% T:NA	pCi/L	07/17/17 08:44	13982-63-3	
Radium-228	EPA 9320	0.551 ± 0.369 (0.696) C:75% T:77%	pCi/L	07/21/17 15:58	15262-20-1	
Total Radium	Total Radium Calculation	0.576 ± 0.475 (0.967)	pCi/L	07/26/17 13:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-6S Lab ID: 30223258007 Collected: 06/29/17 12:20 Received: 07/03/17 09:40 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.249 ± 0.173 (0.287) C:92% T:NA	pCi/L	07/17/17 08:44	13982-63-3	
Radium-228	EPA 9320	0.729 ± 0.370 (0.626) C:76% T:80%	pCi/L	07/21/17 15:58	15262-20-1	
Total Radium	Total Radium Calculation	0.978 ± 0.543 (0.913)	pCi/L	07/26/17 13:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: YGWA-6I Lab ID: 30223258008 Collected: 06/29/17 17:10 Received: 07/03/17 09:40 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.689 ± 0.227 (0.191) C:123% T:NA	pCi/L	07/17/17 08:44	13982-63-3	
Radium-228	EPA 9320	0.772 ± 0.387 (0.661) C:77% T:83%	pCi/L	07/21/17 15:58	15262-20-1	
Total Radium	Total Radium Calculation	1.46 ± 0.614 (0.852)	pCi/L	07/26/17 13:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: EB-2-6-29-17 Lab ID: 30223258009 Collected: 06/29/17 16:10 Received: 07/03/17 09:40 Matrix: Water PWS: Site ID: Sample Type:						
Radium-226	EPA 9315	0.0368 ± 0.134 (0.330) C:85% T:NA	pCi/L	07/17/17 08:44	13982-63-3	
Radium-228	EPA 9320	1.39 ± 0.497 (0.713) C:77% T:82%	pCi/L	07/21/17 15:58	15262-20-1	
Total Radium	Total Radium Calculation	1.43 ± 0.631 (1.04)	pCi/L	07/26/17 13:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

Sample: YGWA-14S		Lab ID: 30223258010	Collected: 06/30/17 11:30	Received: 07/03/17 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.0273 ± 0.119 (0.300)		pCi/L	07/17/17 08:54	13982-63-3	
		C:89% T:NA					
Radium-228	EPA 9320	0.967 ± 0.420 (0.660)		pCi/L	07/21/17 15:57	15262-20-1	
		C:75% T:79%					
Total Radium	Total Radium Calculation	0.994 ± 0.539 (0.960)		pCi/L	07/26/17 13:15	7440-14-4	

Sample: YGWA-30I		Lab ID: 30223258011	Collected: 06/30/17 10:55	Received: 07/03/17 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.229 ± 0.162 (0.268)		pCi/L	07/17/17 08:45	13982-63-3	
		C:91% T:NA					
Radium-228	EPA 9320	0.509 ± 0.303 (0.553)		pCi/L	07/21/17 11:26	15262-20-1	
		C:76% T:97%					
Total Radium	Total Radium Calculation	0.738 ± 0.465 (0.821)		pCi/L	07/26/17 13:15	7440-14-4	

Sample: YGWC-27I		Lab ID: 30223258012	Collected: 06/30/17 13:10	Received: 07/03/17 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.96 ± 0.475 (0.287)		pCi/L	07/17/17 08:45	13982-63-3	
		C:87% T:NA					
Radium-228	EPA 9320	0.892 ± 0.384 (0.621)		pCi/L	07/21/17 11:26	15262-20-1	
		C:76% T:94%					
Total Radium	Total Radium Calculation	2.85 ± 0.859 (0.908)		pCi/L	07/26/17 13:15	7440-14-4	

Sample: YGWC-27S		Lab ID: 30223258013	Collected: 06/30/17 13:15	Received: 07/03/17 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.222 ± 0.192 (0.366)		pCi/L	07/17/17 08:46	13982-63-3	
		C:87% T:NA					
Radium-228	EPA 9320	0.370 ± 0.342 (0.695)		pCi/L	07/21/17 11:26	15262-20-1	
		C:72% T:87%					
Total Radium	Total Radium Calculation	0.592 ± 0.534 (1.06)		pCi/L	07/26/17 13:15	7440-14-4	

Sample: FB-2-6-30-17		Lab ID: 30223258014	Collected: 06/30/17 13:30	Received: 07/03/17 09:40	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.128 ± 0.157 (0.330)		pCi/L	07/17/17 08:54	13982-63-3	
		C:94% T:NA					
Radium-228	EPA 9320	0.332 ± 0.337 (0.694)		pCi/L	07/21/17 11:26	15262-20-1	
		C:75% T:80%					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1120 Plant Yates

Pace Project No.: 30223258

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.460 ± 0.494 (1.02)	pCi/L	07/26/17 13:15	7440-14-4	

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	-0.00796 ± 0.0790 (0.240) C:85% T:NA	pCi/L	07/17/17 08:33	13982-63-3	
Radium-228	EPA 9320	0.862 ± 0.420 (0.734) C:78% T:87%	pCi/L	07/21/17 15:58	15262-20-1	
Total Radium	Total Radium Calculation	0.862 ± 0.499 (0.974)	pCi/L	07/26/17 13:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAF1120 Plant Yates

Pace Project No.: 30223258

QC Batch: 264891

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30223258011, 30223258012, 30223258013, 30223258014, 30223258015

METHOD BLANK: 1304632

Matrix: Water

Associated Lab Samples: 30223258011, 30223258012, 30223258013, 30223258014, 30223258015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0334 ± 0.0891 (0.219) C:89% T:NA	pCi/L	07/17/17 08:45	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAF1120 Plant Yates

Pace Project No.: 30223258

QC Batch:	264892	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30223258001, 30223258002, 30223258003, 30223258004, 30223258005, 30223258006, 30223258007, 30223258008, 30223258009, 30223258010		

METHOD BLANK:	1304633	Matrix:	Water
Associated Lab Samples:	30223258001, 30223258002, 30223258003, 30223258004, 30223258005, 30223258006, 30223258007, 30223258008, 30223258009, 30223258010		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.962 ± 0.425 (0.708) C:85% T:81%	pCi/L	07/21/17 16:00	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAF1120 Plant Yates

Pace Project No.: 30223258

QC Batch: 264893

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30223258011, 30223258012, 30223258013, 30223258014, 30223258015

METHOD BLANK: 1304634

Matrix: Water

Associated Lab Samples: 30223258011, 30223258012, 30223258013, 30223258014, 30223258015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.399 ± 0.326 (0.649) C:79% T:87%	pCi/L	07/21/17 11:27	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AAF1120 Plant Yates

Pace Project No.: 30223258

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.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

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

WO#: 30223258



Chain of Custody



Workorder: AAF1120

Workorder Name: Plant Yates

Owner Received Date:

Results Requested By: 7/26/2017

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers			Date/Time	Date/Time	Comments
						CON	H	N			
1	YGWA-181	G	6/28/2017 11:05	AAF1120-01	GW	2			X		
2	YGWA-185	G	6/28/2017 16:05	AAF1120-02	GW	2			X		
3	YGWA-41	G	6/29/2017 11:25	AAF1120-03	GW	2			X		
4	YGWA-211	G	6/29/2017 13:10	AAF1120-04	GW	2			X		
5	YGWA-205	G	6/29/2017 15:00	AAF1120-05	GW	2			X		
6	YGWA-175	G	6/29/2017 10:50	AAF1120-06	GW	4			X		
7	YGWA-65	G	6/29/2017 12:20	AAF1120-07	GW	2			X		
8	YGWA-61	G	6/29/2017 17:10	AAF1120-08	GW	2			X		
9	EB-2-6-29-17	G	6/29/2017 16:10	AAF1120-09	W	2			X		
10	YGWA-145	G	6/30/2017 11:30	AAF1120-10	GW	2			X		
Transfers Released By											
1										Received By	
2										Date/Time	6/17/2017
3										Date/Time	

Radium 226, 228, Total

LAB USE ONLY
001
002
003
004
005
006
007
008
009
010

Cooler Temperature on Receipt N/A °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Friday, June 17, 2016 11:01:34 AM

FMT-ALL-C-002rev.00 24March2009

Page 1 of 2

30223258-1

Chain of Custody



Workorder: AAF1120 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 7/26/2017

Report To: Betsy McDaniel
 Pace Analytical Atlanta
 110 Technology Parkway
 Peachtree Corners, GA 30092
 Phone (770)-734-4200

Subcontract To: Pace - Pittsburgh
 1638 Roseytown Road
 Stes. 2,3,4
 Greensburg, PA 15601
 Phone (724) 850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers		Date/Time	Comments
						CON	NH		
11	YGWA-301	G	6/30/2017 10:55	AAF1120-11	GW	2			
12	YGWC-271	G	6/30/2017 13:10	AAF1120-12	GW	2			
13	YGWC-275	G	6/30/2017 13:15	AAF1120-13	GW	2			
14	FB-2-6-30-17	G	6/30/2017 13:30	AAF1120-14	W	2			
15	Dup-2	G	6/30/2017 0:00	AAF1120-15	GW	2			
16									
17									
18									
19									
20									
Transfers Released By								Date/Time	Comments
1								7/13/17 0940	
2									
3									

LAB USE ONLY
 011
 012
 013
 014
 015

Radium 226, 228, Total

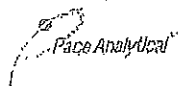
Received By: *[Signature]* Date/Time: 7/13/17 0940

Cooler Temperature on Receipt: N/A °C Custody Seal Y or N: N Received on Ice Y or N: N Sample Intact Y or N: N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Condition Upon Receipt Pittsburgh



Client Name: PACE - GA.

Project # 30223258 ZH

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 74366569328

Custody Seal on Cooler/Box Present: yes no Seals Intact: yes no

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C
Temp should be above freezing to 6°C

Date and Initials of person examining contents: ZH 7/3/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	/			1.
Chain of Custody Filled Out:	/			2.
Chain of Custody Relinquished:	/			3.
Sampler Name & Signature on COC:	/			4.
Sample Labels match COC:	/			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	/			6.
Short Hold Time Analysis (<72hr remaining):		/		7.
Rush Turn Around Time Requested:		/		8.
Sufficient Volume:	/			9.
Correct Containers Used:	/			10.
-Pace Containers Used:		/		
Containers Intact:	/			11.
Orthophosphate field filtered			/	12.
Organic Samples checked for dechlorination:			/	13.
Filtered volume received for Dissolved tests	/		/	14.
All containers have been checked for preservation.	/			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	/			<u>PHC2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: <u>ZH</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			/	16.
Trip Blank Present:			/	17.
Trip Blank Custody Seals Present			/	
Rad Aqueous Samples Screened > 0.5 mrem/hr		/		Initial when completed: <u>ZH</u> Date: <u>7/3/17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.



CHAIN OF CUSTODY RECORD

30223258

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.as-lab.com

PAGE: 2 OF 2

Form containing client information, analysis requested, container details, and sample identification. Includes fields for client name, address, phone, report to, project name, collection date, matrix code, and analysis requested.

Plant Yates COC Ash Ponds.xlsx

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 7/14/2017
Worklist: 36626
Matrix: DW

Method Blank Assessment	
MB Sample ID	1304631
MB Concentration:	0.080
M/B Counting Uncertainty:	0.094
MB MDC:	0.181
MB Numerical Performance Indicator:	1.67
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	LCS36626 7/17/2017
Spike I.D.:	LCSD36626 N
Spike Concentration (pCi/mL):	17.030
Volume Used (mL):	80.198
Aliquot Volume (L, g, F):	0.10
Target Conc. (pCi/L, g, F):	0.501
Uncertainty (Calculated):	16.021
Result (pCi/L, g, F):	1.476
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	13.506
Numerical Performance Indicator:	0.928
Percent Recovery:	84.30%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30223258006
Duplicate Sample I.D.:	30223258006DUP
Sample Result (pCi/L, g, F):	0.025
Sample Duplicate Result (pCi/L, g, F):	0.106
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.110
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.145
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.933
Duplicate RPD:	126.71%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

Comments:

***Batch must be re-prepped due to unacceptable precision.

Handwritten signature

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
 Analyst: JC2
 Date: 7/14/2017
 Worklist: 36627
 Matrix: DW

Method Blank Assessment	
MB Sample ID	1304632
MB Concentration:	0.033
M/B Counting Uncertainty:	0.089
MB MDC:	0.219
MB Numerical Performance Indicator:	0.74
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
N LCS036627	
Count Date:	7/17/2017
Spike I.D.:	17-030
Spike Concentration (pCi/mL):	80.198
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.500
Target Conc. (pCi/L, g, F):	16.025
Uncertainty (Calculated):	1.476
Result (pCi/L, g, F):	13.450
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.676
Numerical Performance Indicator:	-3.11
Percent Recovery:	83.93%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30223681001
Duplicate Sample I.D.:	30223681001DUP
Sample Result (pCi/L, g, F):	0.722
Sample Duplicate Result (pCi/L, g, F):	0.240
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.561
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.750
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	1.118
Duplicate RPD:	25.14%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***

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

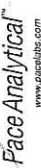
Comments:

***Batch must be re-prepped due to unacceptable precision.

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):	
Spike uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample 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:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	

Quality Control Sample Performance Assessment



www.paceanalytical.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 7/19/2017
Worklist: 36628
Matrix: DW

Method Blank Assessment	
MB Sample ID	1304633
MB concentration:	0.962
M/B Counting Uncertainty:	0.389
MB MDC:	0.708
MB Numerical Performance Indicator:	4.85
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment		N
LCS#		LCS36628
Count Date:	7/21/2017	
Spike I.D.:	17-005	
Spike Concentration (pCi/mL):	23.997	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.802	
Target Conc. (pCi/L, g, F):	5.984	
Uncertainty (Calculated):	0.431	
Result (pCi/L, g, F):	7.272	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.731	
Numerical Performance Indicator:	2.97	
Percent Recovery:	121.51%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment	
Sample I.D.:	30223258006
Duplicate Sample I.D.:	30223258006DUP
Sample Result (pCi/L, g, F):	0.551
Sample Result Counting Uncertainty (pCi/L, g, F):	0.356
Sample Duplicate Result (pCi/L, g, F):	0.670
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.305
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.497
Duplicate RPD:	19.47%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

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.

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):	
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:	
Sample Matrix Spike Duplicate 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:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate 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:	

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLW
Date: 7/19/2017
Worklist: 36629
Matrix: DW

Method Blank Assessment	
MB Sample ID	1304634
MB concentration:	0.399
M/B Counting Uncertainty:	0.318
MB MDC:	0.649
MB Numerical Performance Indicator:	2.46
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS#	36629
Count Date:	7/21/2017
Spike I.D.:	17-005
Spike Concentration (pCi/mL):	23.988
Volume Used (mL):	0.20
Aliquot Volume (L, g, F):	0.803
Target Conc. (pCi/L, g, F):	5.975
Uncertainty (Calculated):	0.430
Result (pCi/L, g, F):	4.020
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.685
Numerical Performance Indicator:	-4.74
Percent Recovery:	67.28%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass

Duplicate Sample Assessment	
Sample I.D.:	30223681001
Duplicate Sample I.D.:	30223681001DUP
Sample Result (pCi/L, g, F):	0.730
Sample Result Counting Uncertainty (pCi/L, g, F):	0.368
Sample Duplicate Result (pCi/L, g, F):	0.737
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.354
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-0.028
Duplicate RPD:	0.99%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

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):	
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:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	

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:	
Sample 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:	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAG0163

July 14, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-22S	AAG0163-01	Ground Water	07/05/17 12:40	07/07/17 15:42
YGWC-29I	AAG0163-02	Ground Water	07/05/17 14:20	07/07/17 15:42
YGWC-28S	AAG0163-03	Ground Water	07/07/17 11:15	07/07/17 15:42
YGWC-24S	AAG0163-04	Ground Water	07/07/17 12:40	07/07/17 15:42
YGWC-28I	AAG0163-05	Ground Water	07/05/17 15:35	07/07/17 15:42



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Project: CCR Event

Client ID: YGWC-22S

Lab Number ID: AAG0163-01

Date/Time Sampled: 7/5/2017 12:40:00PM

Date/Time Received: 7/7/2017 3:42:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	459	25	10	mg/L	SM 2540 C		1	07/10/17 14:00	07/10/17 14:00	7070185	JPT
Inorganic Anions											
Chloride	25	0.25	0.01	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 12:41	7070181	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 12:41	7070181	RLC
Sulfate	320	10	0.92	mg/L	EPA 300.0		10	07/10/17 09:52	07/12/17 17:44	7070181	RLC
Metals, Total											
Antimony	0.0007	0.0030	0.0006	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Barium	0.0188	0.0100	0.0004	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Beryllium	0.0007	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Boron	5.98	2.00	0.298	mg/L	EPA 6020B		50	07/11/17 09:00	07/11/17 16:55	7070195	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Calcium	54.4	25.0	2.02	mg/L	EPA 6020B		50	07/11/17 09:00	07/11/17 16:55	7070195	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Cobalt	0.0011	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Selenium	0.0147	0.0100	0.0018	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Thallium	0.00006	0.0010	0.00005	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Lithium	0.0016	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 16:49	7070195	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/13/17 09:00	07/13/17 14:07	7070231	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Project: CCR Event

Client ID: YGWC-29I

Lab Number ID: AAG0163-02

Date/Time Sampled: 7/5/2017 2:20:00PM

Date/Time Received: 7/7/2017 3:42:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	136	25	10	mg/L	SM 2540 C		1	07/10/17 14:00	07/10/17 14:00	7070185	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 13:02	7070181	RLC
Fluoride	0.08	0.30	0.004	mg/L	EPA 300.0	J	1	07/10/17 09:52	07/10/17 13:02	7070181	RLC
Sulfate	31	1.0	0.09	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 13:02	7070181	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Barium	0.0677	0.0100	0.0004	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Boron	0.811	0.0400	0.0060	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Cadmium	0.0002	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Calcium	11.9	5.00	2.02	mg/L	EPA 6020B		50	07/11/17 09:00	07/11/17 17:22	7070195	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Cobalt	0.0003	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Lithium	0.0058	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:16	7070195	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/13/17 09:00	07/13/17 14:10	7070231	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Project: CCR Event

Client ID: YGWC-28S

Lab Number ID: AAG0163-03

Date/Time Sampled: 7/7/2017 11:15:00AM

Date/Time Received: 7/7/2017 3:42:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	236	25	10	mg/L	SM 2540 C		1	07/10/17 14:00	07/10/17 14:00	7070185	JPT
Inorganic Anions											
Chloride	20	0.25	0.01	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 13:23	7070181	RLC
Fluoride	0.18	0.30	0.004	mg/L	EPA 300.0	J	1	07/10/17 09:52	07/10/17 13:23	7070181	RLC
Sulfate	2.7	1.0	0.09	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 13:23	7070181	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Arsenic	0.0007	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Barium	0.205	0.0500	0.0021	mg/L	EPA 6020B		5	07/11/17 09:00	07/13/17 14:43	7070195	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Boron	3.01	2.00	0.298	mg/L	EPA 6020B		50	07/11/17 09:00	07/11/17 17:33	7070195	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Calcium	28.6	25.0	2.02	mg/L	EPA 6020B		50	07/11/17 09:00	07/11/17 17:33	7070195	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Cobalt	0.0012	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Lead	0.00007	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:27	7070195	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/13/17 09:00	07/13/17 14:17	7070231	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Project: CCR Event

Client ID: YGWC-24S

Lab Number ID: AAG0163-04

Date/Time Sampled: 7/7/2017 12:40:00PM

Date/Time Received: 7/7/2017 3:42:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	46	25	10	mg/L	SM 2540 C		1	07/10/17 14:00	07/10/17 14:00	7070185	JPT
Inorganic Anions											
Chloride	5.7	0.25	0.01	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 13:43	7070181	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 13:43	7070181	RLC
Sulfate	0.37	1.0	0.09	mg/L	EPA 300.0	J	1	07/10/17 09:52	07/10/17 13:43	7070181	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Barium	0.0190	0.0100	0.0004	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Beryllium	0.0001	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Boron	0.0076	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Calcium	1.80	0.500	0.0404	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:39	7070195	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/13/17 09:00	07/13/17 14:19	7070231	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Project: CCR Event

Client ID: YGWC-28I

Lab Number ID: AAG0163-05

Date/Time Sampled: 7/5/2017 3:35:00PM

Date/Time Received: 7/7/2017 3:42:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	217	25	10	mg/L	SM 2540 C		1	07/10/17 14:00	07/10/17 14:00	7070185	JPT
Inorganic Anions											
Chloride	18	0.25	0.01	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 14:04	7070181	RLC
Fluoride	0.11	0.30	0.004	mg/L	EPA 300.0	J	1	07/10/17 09:52	07/10/17 14:04	7070181	RLC
Sulfate	8.1	1.0	0.09	mg/L	EPA 300.0		1	07/10/17 09:52	07/10/17 14:04	7070181	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Barium	0.0862	0.0100	0.0004	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Boron	2.70	2.00	0.298	mg/L	EPA 6020B		50	07/11/17 09:00	07/11/17 17:56	7070195	CSW
Cadmium	0.0002	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Calcium	33.4	25.0	2.02	mg/L	EPA 6020B		50	07/11/17 09:00	07/11/17 17:56	7070195	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Molybdenum	0.0014	0.0100	0.0010	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Lithium	0.0072	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/11/17 09:00	07/11/17 17:50	7070195	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/13/17 09:00	07/13/17 14:22	7070231	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070185 - SM 2540 C											
Blank (7070185-BLK1)						Prepared & Analyzed: 07/10/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7070185-BS1)						Prepared & Analyzed: 07/10/17					
Total Dissolved Solids	373	25	10	mg/L	400.00		93	84-108			
Duplicate (7070185-DUP1)						Source: AAG0163-03 Prepared & Analyzed: 07/10/17					
Total Dissolved Solids	243	25	10	mg/L		236			3	10	
Duplicate (7070185-DUP2)						Source: AAG0166-05 Prepared & Analyzed: 07/10/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070181 - EPA 300.0											
Blank (7070181-BLK1)						Prepared & Analyzed: 07/10/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7070181-BS1)						Prepared & Analyzed: 07/10/17					
Chloride	10.2	0.25	0.01	mg/L	10.020		102	90-110			
Fluoride	10.0	0.30	0.004	mg/L	10.020		100	90-110			
Sulfate	10.3	1.0	0.09	mg/L	10.050		103	90-110			
Matrix Spike (7070181-MS1)						Source: AAG0163-05 Prepared & Analyzed: 07/10/17					
Chloride	27.0	0.25	0.01	mg/L	10.020	18.5	85	90-110			QM-02
Fluoride	10.2	0.30	0.004	mg/L	10.020	0.11	101	90-110			
Sulfate	17.6	1.0	0.09	mg/L	10.050	8.07	95	90-110			
Matrix Spike (7070181-MS2)						Source: AAG0166-02 Prepared & Analyzed: 07/10/17					
Chloride	38.5	0.25	0.01	mg/L	10.020	32.2	63	90-110			QM-02
Fluoride	10.2	0.30	0.004	mg/L	10.020	0.09	101	90-110			
Sulfate	29.7	1.0	0.09	mg/L	10.050	21.3	83	90-110			QM-02
Matrix Spike Dup (7070181-MSD1)						Source: AAG0163-05 Prepared & Analyzed: 07/10/17					
Chloride	27.0	0.25	0.01	mg/L	10.020	18.5	85	90-110	0.004	15	QM-02
Fluoride	10.3	0.30	0.004	mg/L	10.020	0.11	101	90-110	0.2	15	
Sulfate	17.6	1.0	0.09	mg/L	10.050	8.07	95	90-110	0.2	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070195 - EPA 3005A											
Blank (7070195-BLK1)						Prepared & Analyzed: 07/11/17					
Antimony	ND	0.0030	0.0006	mg/L							
Arsenic	ND	0.0050	0.0005	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0404	mg/L							
Chromium	ND	0.0100	0.0005	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	0.0173	0.0250	0.0003	mg/L							J
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0010	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0018	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0012	mg/L							
Zinc	0.0041	0.0100	0.0012	mg/L							J
Lithium	ND	0.0500	0.0015	mg/L							
LCS (7070195-BS1)						Prepared & Analyzed: 07/11/17					
Antimony	0.112	0.0030	0.0006	mg/L	0.10000		112	80-120			
Arsenic	0.102	0.0050	0.0005	mg/L	0.10000		102	80-120			
Barium	0.101	0.0100	0.0004	mg/L	0.10000		101	80-120			
Beryllium	0.106	0.0030	0.00009	mg/L	0.10000		106	80-120			
Boron	0.996	0.0400	0.0060	mg/L	1.0000		100	80-120			
Cadmium	0.104	0.0010	0.0001	mg/L	0.10000		104	80-120			
Calcium	1.00	0.500	0.0404	mg/L	1.0000		100	80-120			
Chromium	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Cobalt	0.0994	0.0100	0.0003	mg/L	0.10000		99	80-120			
Copper	0.118	0.0250	0.0003	mg/L	0.10000		118	80-120			
Lead	0.0983	0.0050	0.00007	mg/L	0.10000		98	80-120			
Molybdenum	0.106	0.0100	0.0010	mg/L	0.10000		106	80-120			
Nickel	0.0990	0.0100	0.0005	mg/L	0.10000		99	80-120			
Selenium	0.104	0.0100	0.0018	mg/L	0.10000		104	80-120			
Silver	0.104	0.0100	0.0002	mg/L	0.10000		104	80-120			
Thallium	0.100	0.0010	0.00005	mg/L	0.10000		100	80-120			
Vanadium	0.100	0.0100	0.0012	mg/L	0.10000		100	80-120			
Zinc	0.108	0.0100	0.0012	mg/L	0.10000		108	80-120			
Lithium	0.104	0.0500	0.0015	mg/L	0.10000		104	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070195 - EPA 3005A											
Matrix Spike (7070195-MS1)			Source: AAG0163-01				Prepared & Analyzed: 07/11/17				
Antimony	0.112	0.0030	0.0006	mg/L	0.10000	0.0007	112	75-125			
Arsenic	0.107	0.0050	0.0005	mg/L	0.10000	ND	107	75-125			
Barium	0.117	0.0100	0.0004	mg/L	0.10000	0.0188	98	75-125			
Beryllium	0.101	0.0030	0.00009	mg/L	0.10000	0.0007	100	75-125			
Boron	6.68	2.00	0.298	mg/L	1.0000	5.98	70	75-125			QM-02
Cadmium	0.105	0.0010	0.0001	mg/L	0.10000	ND	105	75-125			
Calcium	52.3	25.0	2.02	mg/L	1.0000	54.4	NR	75-125			QM-02
Chromium	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125			
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000	0.0011	101	75-125			
Copper	0.0969	0.0250	0.0003	mg/L	0.10000	0.0024	94	75-125			
Lead	0.0948	0.0050	0.00007	mg/L	0.10000	0.0001	95	75-125			
Molybdenum	0.104	0.0100	0.0010	mg/L	0.10000	ND	104	75-125			
Nickel	0.0969	0.0100	0.0005	mg/L	0.10000	ND	97	75-125			
Selenium	0.122	0.0100	0.0018	mg/L	0.10000	0.0147	107	75-125			
Silver	0.0982	0.0100	0.0002	mg/L	0.10000	ND	98	75-125			
Thallium	0.0983	0.0010	0.00005	mg/L	0.10000	0.00006	98	75-125			
Vanadium	0.102	0.0100	0.0012	mg/L	0.10000	ND	102	75-125			
Zinc	0.117	0.0100	0.0012	mg/L	0.10000	0.0183	99	75-125			
Lithium	0.100	0.0500	0.0015	mg/L	0.10000	0.0016	99	75-125			
Matrix Spike Dup (7070195-MSD1)			Source: AAG0163-01				Prepared & Analyzed: 07/11/17				
Antimony	0.117	0.0030	0.0006	mg/L	0.10000	0.0007	116	75-125	4	20	
Arsenic	0.107	0.0050	0.0005	mg/L	0.10000	ND	107	75-125	0.3	20	
Barium	0.123	0.0100	0.0004	mg/L	0.10000	0.0188	104	75-125	5	20	
Beryllium	0.0990	0.0030	0.00009	mg/L	0.10000	0.0007	98	75-125	2	20	
Boron	6.59	2.00	0.298	mg/L	1.0000	5.98	61	75-125	1	20	QM-02
Cadmium	0.104	0.0010	0.0001	mg/L	0.10000	ND	104	75-125	0.8	20	
Calcium	50.6	25.0	2.02	mg/L	1.0000	54.4	NR	75-125	3	20	QM-02
Chromium	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125	3	20	
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000	0.0011	101	75-125	0.6	20	
Copper	0.0968	0.0250	0.0003	mg/L	0.10000	0.0024	94	75-125	0.1	20	
Lead	0.0960	0.0050	0.00007	mg/L	0.10000	0.0001	96	75-125	1	20	
Molybdenum	0.109	0.0100	0.0010	mg/L	0.10000	ND	109	75-125	5	20	
Nickel	0.0971	0.0100	0.0005	mg/L	0.10000	ND	97	75-125	0.3	20	
Selenium	0.128	0.0100	0.0018	mg/L	0.10000	0.0147	113	75-125	5	20	
Silver	0.100	0.0100	0.0002	mg/L	0.10000	ND	100	75-125	2	20	
Thallium	0.0997	0.0010	0.00005	mg/L	0.10000	0.00006	100	75-125	1	20	
Vanadium	0.102	0.0100	0.0012	mg/L	0.10000	ND	102	75-125	0.5	20	
Zinc	0.119	0.0100	0.0012	mg/L	0.10000	0.0183	101	75-125	2	20	
Lithium	0.0946	0.0500	0.0015	mg/L	0.10000	0.0016	93	75-125	6	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070195 - EPA 3005A											
Post Spike (7070195-PS1)			Source: AAG0163-01			Prepared & Analyzed: 07/11/17					
Antimony	103			ug/L	100.00	0.748	102	80-120			
Arsenic	105			ug/L	100.00	0.327	105	80-120			
Barium	120			ug/L	100.00	18.8	101	80-120			
Beryllium	101			ug/L	100.00	0.705	100	80-120			
Boron	6840			ug/L	1000.0	5980	86	80-120			
Cadmium	108			ug/L	100.00	0.140	108	80-120			
Calcium	53300			ug/L	1000.0	54400	NR	80-120			QM-02
Chromium	100			ug/L	100.00	0.179	100	80-120			
Cobalt	98.0			ug/L	100.00	1.08	97	80-120			
Copper	95.7			ug/L	100.00	2.40	93	80-120			
Lead	94.9			ug/L	100.00	0.110	95	80-120			
Molybdenum	104			ug/L	100.00	0.0822	104	80-120			
Nickel	95.3			ug/L	100.00	0.138	95	80-120			
Selenium	127			ug/L	100.00	14.7	112	80-120			
Silver	96.8			ug/L	100.00	0.0006	97	80-120			
Thallium	97.9			ug/L	100.00	0.0588	98	80-120			
Vanadium	99.4			ug/L	100.00	-0.301	99	80-120			
Zinc	122			ug/L	100.00	18.3	103	80-120			
Lithium	98.3			ug/L	100.00	1.59	97	80-120			

Batch 7070231 - EPA 7470A

Blank (7070231-BLK1)					Prepared & Analyzed: 07/13/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7070231-BS1)					Prepared & Analyzed: 07/13/17						
Mercury	0.00252	0.00050	0.000041	mg/L	2.5000E-3		101	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Report No.: AAG0163

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070231 - EPA 7470A											
Duplicate (7070231-DUP1)			Source: AAG0141-01			Prepared & Analyzed: 07/13/17					
Mercury	ND	0.00050	0.000041	mg/L		ND				20	
Matrix Spike (7070231-MS1)			Source: AAG0230-01			Prepared & Analyzed: 07/13/17					
Mercury	0.00251	0.00050	0.000041	mg/L	2.5000E-3	ND	100	75-125			
Matrix Spike Dup (7070231-MSD1)			Source: AAG0230-01			Prepared & Analyzed: 07/13/17					
Mercury	0.00248	0.00050	0.000041	mg/L	2.5000E-3	ND	99	75-125	1	20	
Post Spike (7070231-PS1)			Source: AAG0230-01			Prepared & Analyzed: 07/13/17					
Mercury	1.79			ug/L	1.6667	-0.0120	107	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 14, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty Health McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP Phase 2 CCR	
Collection DATE 7-5-17 7-5-17 7-5-17 7-7-17 7-7-17 7-5-17	Collection TIME 1240 1420 1535 1115 1240 1535	MATRIX CODE* GW GW GW GW GW GW	CLG O M P X X X X X X	SAMPLE IDENTIFICATION Y6WC-225 Y6WC-24I Y6WC-28I Y6WC-28S Y6WC-24S Y6WC-28I	ANALYSIS REQUESTED P 3 P 7 P 3 Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-846 9315/9320)
CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER					
PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen					
MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORMWATER L - LIQUID W - WATER P - PRODUCT					
REMARKS/ADDITIONAL INFORMATION Extra Rad Here Extra Rad Here					
CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER					
PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen					

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 7/10/2017 9:34:05AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 07/07/17 15:42

Work Order: AAG0163

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 5

#Containers: 21

Minimum Temp(C): 4.5

Maximum Temp(C): 4.5

Custody Seal(s) Used: N/A

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact N/A
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

August 01, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAG0163 Plant Yates
Pace Project No.: 30223684

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on July 10, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: AAG0163 Plant Yates
Pace Project No.: 30223684

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: AAG0163 Plant Yates

Pace Project No.: 30223684

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30223684001	YGWC-22S	Water	07/05/17 12:40	07/10/17 09:15
30223684002	YGWC-29I	Water	07/05/17 14:20	07/10/17 09:15
30223684003	YGWC-28S	Water	07/07/17 11:15	07/10/17 09:15
30223684004	YGWC-24S	Water	07/07/17 12:40	07/10/17 09:15
30223684005	YGWC-28I	Water	07/05/17 15:35	07/10/17 09:15

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: AAG0163 Plant Yates

Pace Project No.: 30223684

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30223684001	YGWC-22S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30223684002	YGWC-29I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30223684003	YGWC-28S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30223684004	YGWC-24S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30223684005	YGWC-28I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0163 Plant Yates

Pace Project No.: 30223684

Sample: YGWC-22S		Lab ID: 30223684001	Collected: 07/05/17 12:40	Received: 07/10/17 09:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.314 ± 0.185 (0.275) C:90% T:NA	pCi/L	07/17/17 08:33	13982-63-3	
Radium-228	EPA 9320	0.371 ± 0.403 (0.843) C:78% T:76%	pCi/L	07/21/17 15:59	15262-20-1	
Total Radium	Total Radium Calculation	0.685 ± 0.588 (1.12)	pCi/L	07/27/17 11:19	7440-14-4	

Sample: YGWC-29I		Lab ID: 30223684002	Collected: 07/05/17 14:20	Received: 07/10/17 09:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.432 ± 0.207 (0.248) C:87% T:NA	pCi/L	07/17/17 08:33	13982-63-3	
Radium-228	EPA 9320	0.188 ± 0.315 (0.687) C:73% T:86%	pCi/L	07/21/17 15:27	15262-20-1	
Total Radium	Total Radium Calculation	0.620 ± 0.522 (0.935)	pCi/L	07/27/17 11:19	7440-14-4	

Sample: YGWC-28S		Lab ID: 30223684003	Collected: 07/07/17 11:15	Received: 07/10/17 09:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.507 ± 0.223 (0.247) C:88% T:NA	pCi/L	07/17/17 08:33	13982-63-3	
Radium-228	EPA 9320	0.782 ± 0.386 (0.660) C:77% T:94%	pCi/L	07/21/17 16:02	15262-20-1	
Total Radium	Total Radium Calculation	1.29 ± 0.609 (0.907)	pCi/L	07/27/17 11:19	7440-14-4	

Sample: YGWC-24S		Lab ID: 30223684004	Collected: 07/07/17 12:40	Received: 07/10/17 09:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.181 ± 0.0996 (0.136) C:83% T:NA	pCi/L	07/17/17 11:40	13982-63-3	
Radium-228	EPA 9320	0.532 ± 0.386 (0.751) C:75% T:85%	pCi/L	07/21/17 15:28	15262-20-1	
Total Radium	Total Radium Calculation	0.713 ± 0.486 (0.887)	pCi/L	07/27/17 11:19	7440-14-4	

Sample: YGWC-28I		Lab ID: 30223684005	Collected: 07/05/17 15:35	Received: 07/10/17 09:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.132 ± 0.0889 (0.148) C:93% T:NA	pCi/L	07/17/17 11:40	13982-63-3	
Radium-228	EPA 9320	0.160 ± 0.311 (0.685) C:72% T:90%	pCi/L	07/21/17 15:28	15262-20-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0163 Plant Yates

Pace Project No.: 30223684

Sample: YGWC-28I **Lab ID: 30223684005** Collected: 07/05/17 15:35 Received: 07/10/17 09:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.292 ± 0.400 (0.833)	pCi/L	07/27/17 11:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAG0163 Plant Yates

Pace Project No.: 30223684

QC Batch: 264891

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Associated Lab Samples: 30223684001, 30223684002, 30223684003, 30223684004, 30223684005

METHOD BLANK: 1304632

Matrix: Water

Associated Lab Samples: 30223684001, 30223684002, 30223684003, 30223684004, 30223684005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0334 ± 0.0891 (0.219) C:89% T:NA	pCi/L	07/17/17 08:45	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAG0163 Plant Yates

Pace Project No.: 30223684

QC Batch: 264893

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Associated Lab Samples: 30223684001, 30223684002, 30223684003, 30223684004, 30223684005

METHOD BLANK: 1304634

Matrix: Water

Associated Lab Samples: 30223684001, 30223684002, 30223684003, 30223684004, 30223684005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.399 ± 0.326 (0.649) C:79% T:87%	pCi/L	07/21/17 11:27	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: AAG0163 Plant Yates

Pace Project No.: 30223684

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.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

WO#: 30223684



30223684

Chain of Custody



Workorder: AAG0163

Workorder Name: Pace - Pittsburgh

Owner Received Date:

Results Requested By: 8/1/2017

Report To:	Subcontract To:	Plant Yates	Requested Analysis
Betsy McDaniel	Pace - Pittsburgh		
Pace Analytical Atlanta	1638 Roseytown Road		
110 Technology Parkway	Stes. 2,3,4		
Peachtree Corners, GA 30092	Greensburg, PA 15601		
Phone (770)-734-4200	Phone (724) 850-5600		

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers		Date/Time	Comments	
						SONH	ENH			
1	YGWC-22S	G	7/5/2017 12:40	AAG0163-01	GW	2			X	LAB USE ONLY 001
2	YGWC-29I	G	7/5/2017 14:20	AAG0163-02	GW	2			X	002
3	YGWC-28S	G	7/7/2017 11:15	AAG0163-03	GW	2			X	003
4	YGWC-24S	G	7/7/2017 12:40	AAG0163-04	GW	2			X	004
5	YGWC-28I	G	7/5/2017 15:35	AAG0163-05	GW	2			X	005
6										
7										
8										
9										
10										

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	7/7/17	Charles Pace	7-10-17/0415	
2					
3					

Cooler Temperature on Receipt N/A °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

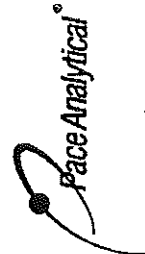
***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Friday, June 17, 2016 11:01:34 AM

FMT-ALL-C-002 rev.00 24March2009

30223684 -

CHAIN OF CUSTODY RECORD



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

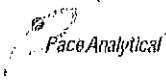
PAGE: 1 OF 1

CLIENT NAME:		ANALYSIS REQUESTED		CONTAINER TYPE		PRESERVATION					
Georgia Power		P		P		1 - HCl, 56°C					
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:		P		P		2 - H ₂ SO ₄ , 56°C					
241 Ralph McGill Blvd SE B10185		7		7		3 - HNO ₃					
Atlanta, GA 30308		3		3		4 - NaOH, 56°C					
404-506-7239						5 - NaOH/ZnAc, 56°C					
REPORT TO:						6 - Na ₂ S ₂ O ₃ , 56°C					
Lauren Petty						7 - 56°C not frozen					
REQUESTED COMPLETION DATE:											
PO #:											
laburch@southernco.com											
PROJECT NAME/STATE:											
Plant Yates AP											
PROJECT #:											
Phase 2 COC											
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION	CONTAINER #	ANALYSIS REQUESTED	DATE/TIME	RELINQUISHED BY	DATE/TIME	REMARKS/ADDITIONAL INFORMATION
7-5-17	1240	GW	X	X	Y6WC-225	4	Metals App. III & IV (EPA 6020/470)	1542	JSL	1542	
7-5-17	1420	GW	X	X	Y6WC-24I	4	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)				
7-5-17	1535	GW	X	X	Y6WC-28I	4	Radium 226 & 228 (GW-846 9315/9320)				
7-7-17	1115	GW	X	X	Y6WC-28S	4					Extra Red Area
7-7-17	1240	GW	X	X	Y6WC-24S	4					
7-5-17	1535	GW	X	X	Y6WC-28I	5					Extra Red Area

LAB #	FOR LAB USE ONLY			
AAG0163				
ENTERED INTO LIMS				
Tracking #				
DATE/TIME				
DATE/TIME				
RELINQUISHED BY				
RELINQUISHED #				
SAMPLE SHIPPED VIA				
UPS	FEDEX	USPS	COURIER	OTHER
Method	Blocker	Not Present	MR	
Container ID				

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh



Client Name: Pace, GA

Project # 30223684

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 7413 6657 0505

Label	<u>ANL</u>
LIMS Login	<u>BLM</u>

Custody Seal on Cooler/Box Present: yes no Seals Intact: yes no

Thermometer Used N/A Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C
Temp should be above freezing to 6°C

Date and initials of person examining contents: ANL 7-10-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered:			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15.
All containers needing preservation are found to be in compliance with EPA recommendation.	X			<u>PHL2</u>
exceptions: VOA, collform, TOC, O&G, Phenolics				Initial when completed: <u>ANL</u> Date/time of preservation: _____
				Lot # of added preservative: _____
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: <u>ANL</u> Date: <u>7-10-17</u>

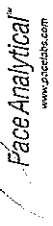
Client Notification/ Resolution: Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Re-226
Analyst: JC2
Date: 7/14/2017
Worklist: 36627
Matrix: DW

Method Blank Assessment

MB Sample ID: 130-4632
MB concentration: 0.033
MB Counting Uncertainty: 0.089
MB MDC: 0.219
MB Numerical Performance Indicator: 0.74
MB Status vs Numerical Indicator: N/A
MB Status vs MDC: Pass

Laboratory Control Sample Assessment

LCS (Y or N): N
LCS ID: LCS36627
Count Date: 7/17/2017
Spike I.D.: 17-030
Spike Concentration (pCi/mL): 80.198
Volume Used (mL): 0.10
Aliquot Volume (L, g, F): 0.500
Target Conc. (pCi/L, g, F): 16.025
Uncertainty (Calculated): 1.476
Result (pCi/L, g, F): 13.450
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.676
Numerical Performance Indicator: -3.11
Percent Recovery: 83.93%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30223681001
Duplicate Sample I.D.: 30223681001DUP
Sample Result (pCi/L, g, F): 0.722
Sample Result Counting Uncertainty (pCi/L, g, F): 0.240
Sample Duplicate Result (pCi/L, g, F): 0.561
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.150
Are sample and/or duplicate results below MDC? See Below #
Duplicate Numerical Performance Indicator: 25.118
Duplicate RPD: 25.14%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Fail***

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):
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:

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:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

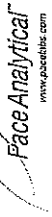
*** Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

* Numerical Indicators Acceptable. 2/27/17

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JLLW
Date: 7/19/2017
Worklist: 36629
Matrix: DW

Method Blank Assessment

MB Sample ID: 1304634
MB concentration: 0.399
M/B Counting Uncertainty: 0.318
MB MDC: 0.649
MB Numerical Performance Indicator: 2.46
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCS (Y or N)? N
LCS36629

Count Date: 7/21/2017
Spike I.D.: 17-005
Spike Concentration (pCi/mL): 23.998
Volume Used (mL): 0.20
Aliquot Volume (L, g, F): 0.803
Target Conc. (pCi/L, g, F): 5.975
Uncertainty (Calculated): 0.430
Result (pCi/L, g, F): 4.020
LOS/LCSD Counting Uncertainty (pCi/L, g, F): 0.685
Numerical Performance Indicator: -4.74
Percent Recovery: 67.28%
Status vs Numerical Indicator: N/A
Status vs Recovery: Pass

Duplicate Sample Assessment

Sample I.D.: 30223681001
Duplicate Sample I.D.: 30223681001DUP
Sample Result (pCi/L, g, F): 0.730
Sample Result Counting Uncertainty (pCi/L, g, F): 0.368
Sample Duplicate Result (pCi/L, g, F): 0.737
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.354
Are sample and/or duplicate results below MDC? See Below #
Duplicate Numerical Performance Indicator: -0.028
Duplicate RPD: 0.99%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

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):
Spike uncertainty (calculated):
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:

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:
Sample MS I.D.:
Sample MSD I.D.:
Sample Matrix Spike Result:
Sample Matrix Spike Duplicate Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
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:

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Q7/27/17



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAG0261

July 20, 2017

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-33S	AAG0261-01	Ground Water	07/10/17 11:30	07/12/17 09:50
YGWC-34I	AAG0261-02	Ground Water	07/10/17 15:15	07/12/17 09:50
YGWC-19S	AAG0261-03	Ground Water	07/10/17 14:40	07/12/17 09:50
Dup-3	AAG0261-04	Ground Water	07/10/17 00:00	07/12/17 09:50
YGWC-23S	AAG0261-05	Ground Water	07/10/17 14:50	07/12/17 09:50
YGWC-26S	AAG0261-06	Ground Water	07/10/17 11:40	07/12/17 09:50
YGWC-26I	AAG0261-07	Ground Water	07/10/17 13:15	07/12/17 09:50
EB-3-7-10-17	AAG0261-08	Water	07/10/17 15:20	07/12/17 09:50
FB-3-7-10-17	AAG0261-09	Water	07/10/17 13:40	07/12/17 09:50
YGWC-32I	AAG0261-10	Ground Water	07/11/17 11:25	07/12/17 09:50
YGWC-32S	AAG0261-11	Ground Water	07/11/17 13:25	07/12/17 09:50
EB-4-7-11-17	AAG0261-12	Water	07/11/17 12:40	07/12/17 09:50
Dup-4	AAG0261-13	Ground Water	07/11/17 00:00	07/12/17 09:50
FB-4-7-11-17	AAG0261-14	Water	07/11/17 10:55	07/12/17 09:50



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Case Narrative

The Radium analysis by methods EPA 9315/9320 was performed by Pace-Pittsburgh, 1638 Roseytown Road - Suites 2, 3, 4, Greensburg PA 15601. The Pace-Pittsburgh lab contact is Jacquelyn Collins at 724-850-5612.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Project: CCR Event

Client ID: YGWC-33S

Lab Number ID: AAG0261-01

Date/Time Sampled: 7/10/2017 11:30:00AM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1170	25	10	mg/L	SM 2540 C		1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	5.6	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 12:30	7070320	RLC
Fluoride	0.57	0.30	0.004	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 12:30	7070320	RLC
Sulfate	810	100	9.2	mg/L	EPA 300.0		100	07/14/17 08:55	07/17/17 17:04	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Arsenic	0.0044	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Barium	0.0137	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:05	7070326	CSW
Beryllium	0.0143	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Boron	15.2	2.00	0.298	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 18:39	7070326	CSW
Cadmium	0.0029	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Calcium	139	25.0	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 18:39	7070326	CSW
Chromium	0.0012	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Cobalt	0.0121	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Lead	0.0018	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Selenium	0.0106	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Thallium	0.0002	0.0010	0.00005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Lithium	0.0214	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 18:33	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:29	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Project: CCR Event

Client ID: YGWC-34I

Lab Number ID: AAG0261-02

Date/Time Sampled: 7/10/2017 3:15:00PM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	467	25	10	mg/L	SM 2540 C		1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	13	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 12:50	7070320	RLC
Fluoride	0.14	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/14/17 12:50	7070320	RLC
Sulfate	320	50	4.6	mg/L	EPA 300.0		50	07/14/17 08:55	07/17/17 17:25	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Barium	0.0199	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:11	7070326	CSW
Beryllium	0.0007	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Boron	3.67	0.0400	0.0060	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Cadmium	0.0002	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Calcium	93.9	25.0	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 19:14	7070326	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Cobalt	0.0051	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Molybdenum	0.0240	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Selenium	0.0773	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Thallium	0.0002	0.0010	0.00005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Lithium	0.0032	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:08	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:31	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: YGWC-19S

Lab Number ID: AAG0261-03

Date/Time Sampled: 7/10/2017 2:40:00PM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	24	25	10	mg/L	SM 2540 C	J	1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	2.7	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 13:11	7070320	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 13:11	7070320	RLC
Sulfate	0.54	1.0	0.09	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/14/17 13:11	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Barium	0.0088	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Boron	0.0195	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Calcium	0.964	0.500	0.0404	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:19	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:34	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: Dup-3

Lab Number ID: AAG0261-04

Date/Time Sampled: 7/10/2017 12:00:00AM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1210	25	10	mg/L	SM 2540 C		1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	5.6	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 14:13	7070320	RLC
Fluoride	0.65	0.30	0.004	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 14:13	7070320	RLC
Sulfate	820	100	9.2	mg/L	EPA 300.0		100	07/14/17 08:55	07/17/17 17:45	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Arsenic	0.0042	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Barium	0.0131	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:16	7070326	CSW
Beryllium	0.0136	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Boron	13.9	2.00	0.298	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 19:37	7070326	CSW
Cadmium	0.0030	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Calcium	134	25.0	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 19:37	7070326	CSW
Chromium	0.0013	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Cobalt	0.0118	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Lead	0.0018	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Selenium	0.0106	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Thallium	0.0002	0.0010	0.00005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Lithium	0.0200	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:31	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:36	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: YGWC-23S

Lab Number ID: AAG0261-05

Date/Time Sampled: 7/10/2017 2:50:00PM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	123	25	10	mg/L	SM 2540 C		1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	1.9	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 14:34	7070320	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/14/17 14:34	7070320	RLC
Sulfate	57	5.0	0.46	mg/L	EPA 300.0		5	07/14/17 08:55	07/17/17 19:29	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Barium	0.0395	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:22	7070326	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Boron	1.12	0.0400	0.0060	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Calcium	8.09	5.00	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 19:48	7070326	CSW
Chromium	0.0007	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Selenium	0.0386	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Lithium	0.0018	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:42	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:39	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Project: CCR Event

Client ID: YGWC-26S

Lab Number ID: AAG0261-06

Date/Time Sampled: 7/10/2017 11:40:00AM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	183	25	10	mg/L	SM 2540 C		1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	15	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 14:54	7070320	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/14/17 14:54	7070320	RLC
Sulfate	100	10	0.92	mg/L	EPA 300.0		10	07/14/17 08:55	07/17/17 19:49	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Barium	0.0274	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:28	7070326	CSW
Beryllium	0.0002	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Boron	0.580	0.0400	0.0060	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Calcium	12.7	5.00	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 19:59	7070326	CSW
Chromium	0.0025	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Cobalt	0.0020	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Lead	0.00008	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 19:54	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:41	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Project: CCR Event

Client ID: YGWC-26I

Lab Number ID: AAG0261-07

Date/Time Sampled: 7/10/2017 1:15:00PM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	219	25	10	mg/L	SM 2540 C		1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	19	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/14/17 15:15	7070320	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/14/17 15:15	7070320	RLC
Sulfate	84	10	0.92	mg/L	EPA 300.0		10	07/14/17 08:55	07/17/17 20:10	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Barium	0.0691	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:34	7070326	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Boron	0.855	0.0400	0.0060	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Calcium	17.4	5.00	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 20:22	7070326	CSW
Chromium	0.0005	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Selenium	0.0020	0.0100	0.0018	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Lithium	0.0064	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:17	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:43	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: EB-3-7-10-17

Lab Number ID: AAG0261-08

Date/Time Sampled: 7/10/2017 3:20:00PM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	0.08	0.25	0.01	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/14/17 15:36	7070320	RLC
Fluoride	0.01	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/14/17 15:36	7070320	RLC
Sulfate	0.23	1.0	0.09	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/14/17 15:36	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Boron	0.0088	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:28	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:46	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: FB-3-7-10-17

Lab Number ID: AAG0261-09

Date/Time Sampled: 7/10/2017 1:40:00PM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	07/13/17 15:00	07/13/17 15:00	7070292	JPT
Inorganic Anions											
Chloride	0.08	0.25	0.01	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 12:15	7070320	RLC
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 12:15	7070320	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	07/14/17 08:55	07/17/17 12:15	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Boron	0.0076	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Calcium	0.0419	0.500	0.0404	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Chromium	0.0005	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:34	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:48	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: YGWC-32I

Lab Number ID: AAG0261-10

Date/Time Sampled: 7/11/2017 11:25:00AM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	723	25	10	mg/L	SM 2540 C		1	07/17/17 19:10	07/17/17 19:10	7070375	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/17/17 12:36	7070320	RLC
Fluoride	0.08	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 12:36	7070320	RLC
Sulfate	450	50	4.6	mg/L	EPA 300.0		50	07/14/17 08:55	07/17/17 20:31	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Barium	0.0258	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:39	7070326	CSW
Beryllium	0.0001	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Boron	3.60	0.0400	0.0060	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Cadmium	0.0008	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Calcium	106	25.0	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 20:45	7070326	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Cobalt	0.0017	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Selenium	0.0046	0.0100	0.0018	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Lithium	0.0034	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:39	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:55	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: YGWC-32S

Lab Number ID: AAG0261-11

Date/Time Sampled: 7/11/2017 1:25:00PM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	588	25	10	mg/L	SM 2540 C		1	07/17/17 19:10	07/17/17 19:10	7070375	JPT
Inorganic Anions											
Chloride	19	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/17/17 12:56	7070320	RLC
Fluoride	0.12	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 12:56	7070320	RLC
Sulfate	320	50	4.6	mg/L	EPA 300.0		50	07/14/17 08:55	07/17/17 20:51	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Arsenic	0.0007	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Barium	0.0230	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:45	7070326	CSW
Beryllium	0.0033	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Boron	3.92	0.0400	0.0060	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Cadmium	0.0007	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Calcium	131	25.0	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 20:56	7070326	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Cobalt	0.0043	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Selenium	0.0696	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Thallium	0.00005	0.0010	0.00005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 20:51	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 17:58	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261
 Client ID: EB-4-7-11-17

Project: CCR Event

Lab Number ID: AAG0261-12

Date/Time Sampled: 7/11/2017 12:40:00PM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	07/17/17 19:10	07/17/17 19:10	7070375	JPT
Inorganic Anions											
Chloride	0.09	0.25	0.01	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 13:38	7070320	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 13:38	7070320	RLC
Sulfate	0.22	1.0	0.09	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 13:38	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Boron	0.0158	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:02	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 18:00	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: Dup-4

Lab Number ID: AAG0261-13

Date/Time Sampled: 7/11/2017 12:00:00AM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	587	25	10	mg/L	SM 2540 C		1	07/17/17 19:10	07/17/17 19:10	7070375	JPT
Inorganic Anions											
Chloride	19	0.25	0.01	mg/L	EPA 300.0		1	07/14/17 08:55	07/17/17 13:58	7070320	RLC
Fluoride	0.18	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 13:58	7070320	RLC
Sulfate	350	50	4.6	mg/L	EPA 300.0		50	07/14/17 08:55	07/17/17 21:12	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Arsenic	0.0006	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Barium	0.0220	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/18/17 10:51	7070326	CSW
Beryllium	0.0033	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Boron	3.90	0.0400	0.0060	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Cadmium	0.0008	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Calcium	125	25.0	2.02	mg/L	EPA 6020B		50	07/14/17 12:50	07/14/17 21:25	7070326	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Cobalt	0.0043	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Selenium	0.0694	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Thallium	0.00006	0.0010	0.00005	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:19	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 18:02	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

July 20, 2017

Attention: Mr. Joju Abraham

Report No.: AAG0261

Project: CCR Event

Client ID: FB-4-7-11-17

Lab Number ID: AAG0261-14

Date/Time Sampled: 7/11/2017 10:55:00AM

Date/Time Received: 7/12/2017 9:50:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	07/17/17 19:10	07/17/17 19:10	7070375	JPT
Inorganic Anions											
Chloride	0.10	0.25	0.01	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 14:19	7070320	RLC
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 14:19	7070320	RLC
Sulfate	0.19	1.0	0.09	mg/L	EPA 300.0	J	1	07/14/17 08:55	07/17/17 14:19	7070320	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Boron	0.0143	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/14/17 12:50	07/14/17 21:31	7070326	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/18/17 12:40	07/18/17 18:05	7070368	MTC



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070292 - SM 2540 C											
Blank (7070292-BLK1)						Prepared & Analyzed: 07/13/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7070292-BS1)						Prepared & Analyzed: 07/13/17					
Total Dissolved Solids	373	25	10	mg/L	400.00		93	84-108			
Duplicate (7070292-DUP1)						Source: AAG0261-09 Prepared & Analyzed: 07/13/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7070292-DUP2)						Source: AAG0275-01 Prepared & Analyzed: 07/13/17					
Total Dissolved Solids	1100	25	10	mg/L		1100			0.09	10	
Batch 7070375 - SM 2540 C											
Blank (7070375-BLK1)						Prepared & Analyzed: 07/17/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7070375-BS1)						Prepared & Analyzed: 07/17/17					
Total Dissolved Solids	390	25	10	mg/L	400.00		98	84-108			
Duplicate (7070375-DUP1)						Source: AAG0275-08 Prepared & Analyzed: 07/17/17					
Total Dissolved Solids	ND	25	10	mg/L		15				10	
Duplicate (7070375-DUP2)						Source: AAG0275-09 Prepared & Analyzed: 07/17/17					
Total Dissolved Solids	824	25	10	mg/L		836			1	10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070320 - EPA 300.0											
Blank (7070320-BLK1)						Prepared & Analyzed: 07/14/17					
Chloride	ND	0.25	0.01	mg/L							
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	ND	1.0	0.09	mg/L							
LCS (7070320-BS1)						Prepared & Analyzed: 07/14/17					
Chloride	10.2	0.25	0.01	mg/L	10.020		102	90-110			
Fluoride	10.0	0.30	0.004	mg/L	10.020		100	90-110			
Sulfate	10.3	1.0	0.09	mg/L	10.050		102	90-110			
Matrix Spike (7070320-MS1)						Source: AAG0261-03 Prepared & Analyzed: 07/14/17					
Chloride	12.9	0.25	0.01	mg/L	10.020	2.69	102	90-110			
Fluoride	10.2	0.30	0.004	mg/L	10.020	ND	102	90-110			
Sulfate	10.7	1.0	0.09	mg/L	10.050	0.54	101	90-110			
Matrix Spike (7070320-MS2)						Source: AAG0261-11RE1 Prepared: 07/14/17 Analyzed: 07/17/17					
Chloride	27.5	0.25	0.01	mg/L	10.020	18.6	88	90-110			QM-02
Fluoride	10.4	0.30	0.004	mg/L	10.020	0.12	102	90-110			
Sulfate	232	1.0	0.09	mg/L	10.050	245	NR	90-110			QM-02
Matrix Spike Dup (7070320-MSD1)						Source: AAG0261-03 Prepared & Analyzed: 07/14/17					
Chloride	12.9	0.25	0.01	mg/L	10.020	2.69	102	90-110	0.3	15	
Fluoride	10.3	0.30	0.004	mg/L	10.020	ND	103	90-110	0.8	15	
Sulfate	10.7	1.0	0.09	mg/L	10.050	0.54	101	90-110	0.03	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7070326 - EPA 3005A

Blank (7070326-BLK1)

Prepared & Analyzed: 07/14/17

Antimony	ND	0.0030	0.0006	mg/L							
Arsenic	ND	0.0050	0.0005	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0404	mg/L							
Chromium	ND	0.0100	0.0005	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	0.0003	0.0250	0.0003	mg/L							J
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0010	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0018	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0012	mg/L							
Zinc	ND	0.0100	0.0012	mg/L							
Lithium	ND	0.0500	0.0015	mg/L							

LCS (7070326-BS1)

Prepared & Analyzed: 07/14/17

Antimony	0.104	0.0030	0.0006	mg/L	0.10000		104	80-120			
Arsenic	0.103	0.0050	0.0005	mg/L	0.10000		103	80-120			
Barium	0.0984	0.0100	0.0004	mg/L	0.10000		98	80-120			
Beryllium	0.102	0.0030	0.00009	mg/L	0.10000		102	80-120			
Boron	1.07	0.0400	0.0060	mg/L	1.0000		107	80-120			
Cadmium	0.106	0.0010	0.0001	mg/L	0.10000		106	80-120			
Calcium	1.02	0.500	0.0404	mg/L	1.0000		102	80-120			
Chromium	0.109	0.0100	0.0005	mg/L	0.10000		109	80-120			
Cobalt	0.105	0.0100	0.0003	mg/L	0.10000		105	80-120			
Copper	0.104	0.0250	0.0003	mg/L	0.10000		104	80-120			
Lead	0.104	0.0050	0.00007	mg/L	0.10000		104	80-120			
Molybdenum	0.105	0.0100	0.0010	mg/L	0.10000		105	80-120			
Nickel	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Selenium	0.106	0.0100	0.0018	mg/L	0.10000		106	80-120			
Silver	0.101	0.0100	0.0002	mg/L	0.10000		101	80-120			
Thallium	0.105	0.0010	0.00005	mg/L	0.10000		105	80-120			
Vanadium	0.107	0.0100	0.0012	mg/L	0.10000		107	80-120			
Zinc	0.107	0.0100	0.0012	mg/L	0.10000		107	80-120			
Lithium	0.106	0.0500	0.0015	mg/L	0.10000		106	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070326 - EPA 3005A											
Matrix Spike (7070326-MS1)			Source: AAG0261-01				Prepared & Analyzed: 07/14/17				
Antimony	0.108	0.0030	0.0006	mg/L	0.10000	ND	108	75-125			
Arsenic	0.108	0.0050	0.0005	mg/L	0.10000	0.0044	104	75-125			
Barium	0.113	0.0100	0.0004	mg/L	0.10000	0.0137	99	75-125			
Beryllium	0.0933	0.0030	0.00009	mg/L	0.10000	0.0143	79	75-125			
Boron	14.5	2.00	0.298	mg/L	1.0000	15.2	NR	75-125			QM-02
Cadmium	0.106	0.0010	0.0001	mg/L	0.10000	0.0029	104	75-125			
Calcium	133	25.0	2.02	mg/L	1.0000	139	NR	75-125			QM-02
Chromium	0.103	0.0100	0.0005	mg/L	0.10000	0.0012	102	75-125			
Cobalt	0.109	0.0100	0.0003	mg/L	0.10000	0.0121	97	75-125			
Copper	0.0951	0.0250	0.0003	mg/L	0.10000	0.0030	92	75-125			
Lead	0.0904	0.0050	0.00007	mg/L	0.10000	0.0018	89	75-125			
Molybdenum	0.107	0.0100	0.0010	mg/L	0.10000	ND	107	75-125			
Nickel	0.127	0.0100	0.0005	mg/L	0.10000	0.0325	95	75-125			
Selenium	0.118	0.0100	0.0018	mg/L	0.10000	0.0106	107	75-125			
Silver	0.0966	0.0100	0.0002	mg/L	0.10000	ND	97	75-125			
Thallium	0.0910	0.0010	0.00005	mg/L	0.10000	0.0002	91	75-125			
Vanadium	0.103	0.0100	0.0012	mg/L	0.10000	ND	103	75-125			
Zinc	0.230	0.0100	0.0012	mg/L	0.10000	0.136	94	75-125			
Lithium	0.0995	0.0500	0.0015	mg/L	0.10000	0.0214	78	75-125			
Matrix Spike Dup (7070326-MSD1)			Source: AAG0261-01				Prepared & Analyzed: 07/14/17				
Antimony	0.103	0.0030	0.0006	mg/L	0.10000	ND	103	75-125	5	20	
Arsenic	0.105	0.0050	0.0005	mg/L	0.10000	0.0044	100	75-125	3	20	
Barium	0.108	0.0100	0.0004	mg/L	0.10000	0.0137	94	75-125	4	20	
Beryllium	0.0913	0.0030	0.00009	mg/L	0.10000	0.0143	77	75-125	2	20	
Boron	15.2	2.00	0.298	mg/L	1.0000	15.2	NR	75-125	4	20	QM-02
Cadmium	0.104	0.0010	0.0001	mg/L	0.10000	0.0029	101	75-125	2	20	
Calcium	133	25.0	2.02	mg/L	1.0000	139	NR	75-125	0.1	20	QM-02
Chromium	0.0982	0.0100	0.0005	mg/L	0.10000	0.0012	97	75-125	5	20	
Cobalt	0.105	0.0100	0.0003	mg/L	0.10000	0.0121	93	75-125	4	20	
Copper	0.0916	0.0250	0.0003	mg/L	0.10000	0.0030	89	75-125	4	20	
Lead	0.0864	0.0050	0.00007	mg/L	0.10000	0.0018	85	75-125	5	20	
Molybdenum	0.101	0.0100	0.0010	mg/L	0.10000	ND	101	75-125	5	20	
Nickel	0.122	0.0100	0.0005	mg/L	0.10000	0.0325	90	75-125	4	20	
Selenium	0.114	0.0100	0.0018	mg/L	0.10000	0.0106	103	75-125	4	20	
Silver	0.0928	0.0100	0.0002	mg/L	0.10000	ND	93	75-125	4	20	
Thallium	0.0875	0.0010	0.00005	mg/L	0.10000	0.0002	87	75-125	4	20	
Vanadium	0.0983	0.0100	0.0012	mg/L	0.10000	ND	98	75-125	5	20	
Zinc	0.225	0.0100	0.0012	mg/L	0.10000	0.136	89	75-125	2	20	
Lithium	0.0994	0.0500	0.0015	mg/L	0.10000	0.0214	78	75-125	0.06	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070326 - EPA 3005A											
Post Spike (7070326-PS1)			Source: AAG0261-01			Prepared & Analyzed: 07/14/17					
Antimony	102			ug/L	100.00	0.559	101	80-120			
Arsenic	105			ug/L	100.00	4.41	101	80-120			
Barium	111			ug/L	100.00	13.7	97	80-120			
Beryllium	93.7			ug/L	100.00	14.3	79	80-120			QM-05
Boron	15700			ug/L	1000.0	15200	46	80-120			QM-02
Cadmium	105			ug/L	100.00	2.92	102	80-120			
Calcium	132000			ug/L	1000.0	139000	NR	80-120			QM-02
Chromium	99.8			ug/L	100.00	1.18	99	80-120			
Cobalt	106			ug/L	100.00	12.1	94	80-120			
Copper	91.4			ug/L	100.00	3.03	88	80-120			
Lead	87.7			ug/L	100.00	1.80	86	80-120			
Molybdenum	101			ug/L	100.00	0.0857	101	80-120			
Nickel	122			ug/L	100.00	32.5	90	80-120			
Selenium	116			ug/L	100.00	10.6	106	80-120			
Silver	94.6			ug/L	100.00	0.0049	95	80-120			
Thallium	89.4			ug/L	100.00	0.238	89	80-120			
Vanadium	100			ug/L	100.00	-0.224	100	80-120			
Zinc	226			ug/L	100.00	136	90	80-120			
Lithium	104			ug/L	100.00	21.4	82	80-120			

Batch 7070368 - EPA 7470A

Blank (7070368-BLK1)					Prepared & Analyzed: 07/18/17						
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7070368-BS1)					Prepared & Analyzed: 07/18/17						
Mercury	0.00242	0.00050	0.000041	mg/L	2.5000E-3		97	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070368 - EPA 7470A											
Matrix Spike (7070368-MS1)			Source: AAG0261-02			Prepared & Analyzed: 07/18/17					
Mercury	0.00235	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125			
Matrix Spike Dup (7070368-MSD1)			Source: AAG0261-02			Prepared & Analyzed: 07/18/17					
Mercury	0.00229	0.00050	0.000041	mg/L	2.5000E-3	ND	92	75-125	2	20	
Post Spike (7070368-PS1)			Source: AAG0261-02			Prepared & Analyzed: 07/18/17					
Mercury	1.68			ug/L	1.6667	0.0142	100	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

July 20, 2017

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Health McCorkle PO #: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 CCR				
CONTAINER TYPE: PRESERVATION: # of	P 3 P 7 P 3	ANALYSIS REQUESTED	CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER	PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ S ₂ O ₃ , ≤6°C 7 - ≤6°C not frozen	L A B N U M B E R			
CONTAINER TYPE: PRESERVATION: # of	P 3 P 7 P 3	Metals App. III & IV (EPA 6020/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-846 9315/9320)	MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORMWATER L - LIQUID W - WATER P - PRODUCT	REMARKS/ADDITIONAL INFORMATION	LAB #: AAG60261 Entered into LIMS: Tracking #			
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION	RELINQUISHED BY:	DATE/TIME:	
M-00-Y4								
7-11-17	1125	GW	✓		Y6WC-32I	Ol Parker	7/11/17 1400	
7-11-17	1325	GW	✓		Y6WC-32S			
7-11-17	1240	WJ	✓		EB-4-7-11-17			
7-11-17	—	GW	✓		D4P-4			
7-11-17	1055	W	✓		FB-4-7-11-17			
SAMPLED BY AND TITLE: C. Perke (Acc)							RELINQUISHED BY: Ol Parker	DATE/TIME: 7/11/17 1400
RECEIVED BY: M. Padilla							RELINQUISHED BY:	DATE/TIME:
RECEIVED BY LAB: M. Padilla							SAMPLE SHIPPED VIA: UPS	DATE/TIME: 7/12/17 0952
TEMPERATURE: Min. Max.							OTHER: FS	DATE/TIME: 7/12/17 0952

Plant Yates COC Ash Ponds.xlsx



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 7/13/2017 8:26:55AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 07/12/17 09:50

Work Order: AAG0261

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 14

#Containers: 56

Minimum Temp(C): 4.2

Maximum Temp(C): 4.2

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:

August 04, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAG0261 Plant Yates
Pace Project No.: 30224006

Dear Maria Padilla:

Enclosed are the analytical results for sample(s) received by the laboratory on July 13, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: AAG0261 Plant Yates
Pace Project No.: 30224006

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: AAG0261 Plant Yates

Pace Project No.: 30224006

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30224006001	YGWC-33S	Water	07/10/17 11:30	07/13/17 10:15
30224006002	YGWC-34I	Water	07/10/17 15:15	07/13/17 10:15
30224006003	YGWC-19S	Water	07/10/17 14:40	07/13/17 10:15
30224006004	Dup-3	Water	07/10/17 00:00	07/13/17 10:15
30224006005	YGWC-23S	Water	07/10/17 14:50	07/13/17 10:15
30224006006	YGWC-26S	Water	07/10/17 11:40	07/13/17 10:15
30224006007	YGWC-26I	Water	07/10/17 13:15	07/13/17 10:15
30224006008	EB-3-7-10-17	Water	07/10/17 15:20	07/13/17 10:15
30224006009	FB-3-7-10-17	Water	07/10/17 13:40	07/13/17 10:15
30224006010	YGWC-32I	Water	07/11/17 11:25	07/13/17 10:15
30224006011	YGWC-32S	Water	07/11/17 13:25	07/13/17 10:15
30224006012	EB-4-7-11-17	Water	07/11/17 12:40	07/13/17 10:15
30224006013	Dup-4	Water	07/11/17 00:00	07/13/17 10:15
30224006014	FB-4-7-11-17	Water	07/11/17 10:55	07/13/17 10:15

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: AAG0261 Plant Yates
Pace Project No.: 30224006

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30224006001	YGWC-33S	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006002	YGWC-34I	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006003	YGWC-19S	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006004	Dup-3	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006005	YGWC-23S	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006006	YGWC-26S	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006007	YGWC-26I	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006008	EB-3-7-10-17	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006009	FB-3-7-10-17	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006010	YGWC-32I	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006011	YGWC-32S	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006012	EB-4-7-11-17	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006013	Dup-4	EPA 9315	JC2	1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: AAG0261 Plant Yates
Pace Project No.: 30224006

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224006014	FB-4-7-11-17	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0261 Plant Yates

Pace Project No.: 30224006

Sample: YGWC-33S		Lab ID: 30224006001	Collected: 07/10/17 11:30	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.321 ± 0.148 (0.174) C:90% T:NA	pCi/L	07/25/17 15:09	13982-63-3	
Radium-228	EPA 9320	0.139 ± 0.314 (0.696) C:82% T:90%	pCi/L	07/28/17 14:31	15262-20-1	
Total Radium	Total Radium Calculation	0.460 ± 0.462 (0.870)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: YGWC-34I		Lab ID: 30224006002	Collected: 07/10/17 15:15	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.214 ± 0.139 (0.226) C:85% T:NA	pCi/L	07/25/17 15:09	13982-63-3	
Radium-228	EPA 9320	0.375 ± 0.310 (0.620) C:77% T:98%	pCi/L	07/28/17 14:31	15262-20-1	
Total Radium	Total Radium Calculation	0.589 ± 0.449 (0.846)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: YGWC-19S		Lab ID: 30224006003	Collected: 07/10/17 14:40	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.252 ± 0.128 (0.154) C:93% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.508 ± 0.367 (0.717) C:79% T:89%	pCi/L	07/28/17 14:31	15262-20-1	
Total Radium	Total Radium Calculation	0.760 ± 0.495 (0.871)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: Dup-3		Lab ID: 30224006004	Collected: 07/10/17 00:00	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.419 ± 0.161 (0.146) C:93% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.459 ± 0.360 (0.708) C:76% T:83%	pCi/L	07/28/17 14:31	15262-20-1	
Total Radium	Total Radium Calculation	0.878 ± 0.521 (0.854)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: YGWC-23S		Lab ID: 30224006005	Collected: 07/10/17 14:50	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.303 ± 0.139 (0.151) C:91% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.512 ± 0.453 (0.927) C:75% T:82%	pCi/L	07/28/17 14:31	15262-20-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0261 Plant Yates

Pace Project No.: 30224006

Sample: YGWC-23S		Lab ID: 30224006005	Collected: 07/10/17 14:50	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.815 ± 0.592 (1.08)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: YGWC-26S		Lab ID: 30224006006	Collected: 07/10/17 11:40	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.347 ± 0.151 (0.174) C:91% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.302 ± 0.308 (0.637) C:79% T:92%	pCi/L	07/28/17 14:31	15262-20-1	
Total Radium	Total Radium Calculation	0.649 ± 0.459 (0.811)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: YGWC-26I		Lab ID: 30224006007	Collected: 07/10/17 13:15	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.400 ± 0.165 (0.177) C:89% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.512 ± 0.336 (0.639) C:80% T:92%	pCi/L	07/28/17 14:32	15262-20-1	
Total Radium	Total Radium Calculation	0.912 ± 0.501 (0.816)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: EB-3-7-10-17		Lab ID: 30224006008	Collected: 07/10/17 15:20	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.168 ± 0.109 (0.161) C:89% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.169 ± 0.289 (0.629) C:79% T:89%	pCi/L	07/28/17 14:32	15262-20-1	
Total Radium	Total Radium Calculation	0.337 ± 0.398 (0.790)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: FB-3-7-10-17		Lab ID: 30224006009	Collected: 07/10/17 13:40	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.176 ± 0.126 (0.221) C:95% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	-0.138 ± 0.268 (0.660) C:77% T:90%	pCi/L	07/28/17 14:32	15262-20-1	
Total Radium	Total Radium Calculation	0.176 ± 0.394 (0.881)	pCi/L	08/02/17 11:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0261 Plant Yates

Pace Project No.: 30224006

Sample: YGWC-321		Lab ID: 30224006010	Collected: 07/11/17 11:25	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.319 ± 0.146 (0.180) C:96% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.961 ± 0.400 (0.621) C:71% T:93%	pCi/L	07/28/17 14:28	15262-20-1	
Total Radium	Total Radium Calculation	1.28 ± 0.546 (0.801)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: YGWC-32S		Lab ID: 30224006011	Collected: 07/11/17 13:25	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.333 ± 0.147 (0.171) C:95% T:NA	pCi/L	07/26/17 08:43	13982-63-3	
Radium-228	EPA 9320	0.598 ± 0.292 (0.490) C:79% T:103%	pCi/L	07/28/17 14:28	15262-20-1	
Total Radium	Total Radium Calculation	0.931 ± 0.439 (0.661)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: EB-4-7-11-17		Lab ID: 30224006012	Collected: 07/11/17 12:40	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.124 ± 0.0971 (0.155) C:85% T:NA	pCi/L	07/26/17 08:30	13982-63-3	
Radium-228	EPA 9320	0.622 ± 0.326 (0.570) C:81% T:90%	pCi/L	07/28/17 14:29	15262-20-1	
Total Radium	Total Radium Calculation	0.746 ± 0.423 (0.725)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: Dup-4		Lab ID: 30224006013	Collected: 07/11/17 00:00	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.296 ± 0.158 (0.245) C:94% T:NA	pCi/L	07/26/17 08:30	13982-63-3	
Radium-228	EPA 9320	0.917 ± 0.395 (0.631) C:77% T:89%	pCi/L	07/28/17 14:29	15262-20-1	
Total Radium	Total Radium Calculation	1.21 ± 0.553 (0.876)	pCi/L	08/02/17 11:27	7440-14-4	

Sample: FB-4-7-11-17		Lab ID: 30224006014	Collected: 07/11/17 10:55	Received: 07/13/17 10:15	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.283 ± 0.137 (0.160) C:91% T:NA	pCi/L	07/26/17 08:31	13982-63-3	
Radium-228	EPA 9320	0.315 ± 0.249 (0.488) C:79% T:102%	pCi/L	07/28/17 14:29	15262-20-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0261 Plant Yates

Pace Project No.: 30224006

Sample: FB-4-7-11-17 **Lab ID: 30224006014** Collected: 07/11/17 10:55 Received: 07/13/17 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	0.598 ± 0.386 (0.648)	pCi/L	08/02/17 11:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAG0261 Plant Yates

Pace Project No.: 30224006

QC Batch:	265166	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
Associated Lab Samples:	30224006001, 30224006002, 30224006003, 30224006004, 30224006005, 30224006006, 30224006007, 30224006008, 30224006009, 30224006010, 30224006011, 30224006012, 30224006013, 30224006014		

METHOD BLANK:	1306529	Matrix:	Water
Associated Lab Samples:	30224006001, 30224006002, 30224006003, 30224006004, 30224006005, 30224006006, 30224006007, 30224006008, 30224006009, 30224006010, 30224006011, 30224006012, 30224006013, 30224006014		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0444 ± 0.286 (0.656) C:80% T:91%	pCi/L	07/28/17 14:30	

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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAG0261 Plant Yates

Pace Project No.: 30224006

QC Batch:	265161	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
Associated Lab Samples:	30224006001, 30224006002, 30224006003, 30224006004, 30224006005, 30224006006, 30224006007, 30224006008, 30224006009, 30224006010, 30224006011, 30224006012, 30224006013, 30224006014		

METHOD BLANK:	1306524	Matrix:	Water
Associated Lab Samples:	30224006001, 30224006002, 30224006003, 30224006004, 30224006005, 30224006006, 30224006007, 30224006008, 30224006009, 30224006010, 30224006011, 30224006012, 30224006013, 30224006014		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.278 ± 0.0986 (0.0983) C:97% T:NA	pCi/L	07/25/17 15:28	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: AAG0261 Plant Yates
Pace Project No.: 30224006

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.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: 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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Chain of Custody



Workorder: AAG0261 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 8/4/2017

Report To:	Subcontract To:	Requested Analysis						
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200	Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600	LAB USE ONLY 001 002 003 004 005 006 007 008 009 010						
MO# : 30224006 								
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Date/Time	Comments
1	YGWC-33S	G	7/10/2017 11:30	AAG0261-01	GW	2		
2	YGWC-34I	G	7/10/2017 15:15	AAG0261-02	GW	2		
3	YGWC-19S	G	7/10/2017 14:40	AAG0261-03	GW	2		
4	Dup-3	G	7/10/2017 0:00	AAG0261-04	GW	2		
5	YGWC-23S	G	7/10/2017 14:50	AAG0261-05	GW	2		
6	YGWC-26S	G	7/10/2017 11:40	AAG0261-06	GW	2		
7	YGWC-26I	G	7/10/2017 13:15	AAG0261-07	GW	2		
8	EB-3-7-10-17	G	7/10/2017 15:20	AAG0261-08	W	2		
9	FB-3-7-10-17	G	7/10/2017 13:40	AAG0261-09	W	2		
10	YGWC-32I	G	7/11/2017 11:25	AAG0261-10	GW	2		
Transfers Released By: M. RAHMAN								Date/Time: 7/13/17
1								
2								
3								

Cooler Temperature on Receipt: N/A °C Custody Seal Y or N: Y Received on Ice Y or N: N Sample Intact Y or N: Y

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Chain of Custody



Results Requested By: 8/4/2017

Owner Received Date:

Workorder Name: Plant Yates

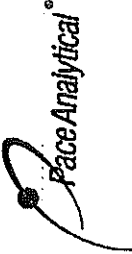
Workorder: AAG0261

Report To:	Subcontract To:	Requested Analysis								
Betsy McDaniel Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)-734-4200	Pace - Pittsburgh 1638 Roseytown Road Stes. 2,3,4 Greensburg, PA 15601 Phone (724) 850-5600	30224006 LAB USE ONLY 011 012 013 014								
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Matrix	Received By	Date/Time	Comments
11	YGWC-325	G	7/11/2017 13:25	AAG0261-11	GW	2	GW	[Signature]	7/13/17	
12	EB-4-7-11-17	G	7/11/2017 12:40	AAG0261-12	W	2	W			
13	Dup-4	G	7/11/2017 0:00	AAG0261-13	GW	2	GW			
14	FB-4-7-11-17	G	7/11/2017 10:55	AAG0261-14	W	2	W			
15										
16										
17										
18										
19										
20										
Transfers	Released By	Date/Time	Received By	Date/Time	Comments					
1	M. RATTMAN	7/12/17	[Signature]	7/13/17						
2										
3										

Cooler Temperature on Receipt 11.2 °C Custody Seal Y of N Y Received on Ice Y of N N Sample Intact Y of N Y

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC

This chain of custody is considered complete as is since this information is available in the owner laboratory.

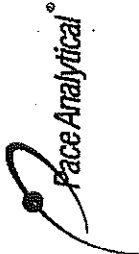


CHAIN OF CUSTODY RECORD

Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Mania Padilla Heath McCorkle PO #: laburcht@southernco.com		PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 OCR	
CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		PRESERVATION: 1 - HCl, 56°C 2 - H ₂ SO ₄ , 56°C 3 - HNO ₃ 4 - NaOH, 56°C 5 - NaOH/ZnAc, 56°C 6 - Na ₂ S ₂ O ₃ , 56°C 7 - 56°C not frozen		MATRIX CODES: DW - DRINKING WATER S - SOIL MW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR SI - STORM WATER L - LIQUID W - WATER P - PRODUCT	
CONTAINER TYPE: P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER		PRESERVATION: 1 - HCl, 56°C 2 - H ₂ SO ₄ , 56°C 3 - HNO ₃ 4 - NaOH, 56°C 5 - NaOH/ZnAc, 56°C 6 - Na ₂ S ₂ O ₃ , 56°C 7 - 56°C not frozen		MATRIX CODES: DW - DRINKING WATER S - SOIL MW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR SI - STORM WATER L - LIQUID W - WATER P - PRODUCT	
ANALYSIS REQUESTED: Metals App. III & IV Cl, T, SO ₄ & TDS (EPA 8020/7470) (EPA 300.0 & SM 2540C) Radium 226 & 228 (SM-846 9315/9320)		CONTAINERS: 4 4 4 4 4 4 4 4 4 4		DATE/TIME: 7/10/17 1130 7/10/17 1515 7/10/17 1440 7/10/17 7/10/17 1450 7/10/17 1140 7/10/17 1315 7/10/17 1520 7/10/17 1340	
RECEIVED BY LAB: C. Barker, R. Walker DATE/TIME: 7/10/17 1400		RECEIVED BY: M. Padilla DATE/TIME: 7/10/17 0950		RELINQUISHED BY: C. Barker DATE/TIME: 7/12/17 0950	
RECEIVED BY: M. Padilla DATE/TIME: 7/12/17 0950		RELINQUISHED BY: C. Barker DATE/TIME: 7/12/17 0950		RECEIVED BY: M. Padilla DATE/TIME: 7/12/17 0950	
LAB #: 30224006		ENTERED INTO LIMS: M. Padilla		TRACKING #: M. Padilla	

Plant Yates COC Ash Ponds.xlsx



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7229 REPORT TO: Lauren Petty REQUESTED COMPLETION DATE: PO #: laburch@southernmco.com PROJECT NAME/STATE: Plant Yates AP PROJECT #: Phase 2 COR		ANALYSIS REQUESTED CONTAINER TYPE: P 3 PRESERVATION: 3 P 7 P 3 P 7 P 3 Metals App. III & IV (EPA 8220/7470) Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C) Radium 226 & 228 (SW-845 9315/9320)						
CONTAINERS # of CONTAINERS ↓		CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER PRESERVATION 1 - HCl, ≤6°C 2 - H ₂ SO ₄ , ≤6°C 3 - HNO ₃ 4 - NaOH, ≤6°C 5 - NaOH/ZnAc, ≤6°C 6 - Na ₂ O ₃ , ≤8°C 7 - ≤6°C not frozen MATRIX CODES: DW - DRINKING WATER S - SOIL WW - WASTEWATER SL - SLUDGE GW - GROUNDWATER SD - SOLID SW - SURFACE WATER A - AIR ST - STORM WATER L - LIQUID W - WATER P - PRODUCT REMARKS/ADDITIONAL INFORMATION 30224006						
Collection DATE 7-11-17 Collection TIME 1125 MATRIX CODE GW Sample Identification Y6WC-32-I	Collection DATE 7-11-17 Collection TIME 1325 MATRIX CODE GW Sample Identification Y6WC-32-S	Collection DATE 7-11-17 Collection TIME 1240 MATRIX CODE W Sample Identification EB-4-7-11-17	Collection DATE 7-11-17 Collection TIME --- MATRIX CODE GW Sample Identification DUP-4	Collection DATE 7-11-17 Collection TIME 1055 MATRIX CODE W Sample Identification FB-4-7-11-17	CONTAINER TYPE P PRESERVATION 3	CONTAINER TYPE P PRESERVATION 3	DATE/TIME 7/11/17 1400 RELINQUISHED BY: C. Parker (Acc)	DATE/TIME 7/12/17 0950 RELINQUISHED BY: [Signature]
RECEIVED BY: [Signature] DATE/TIME: 7/12/17 0950		RECEIVED BY: [Signature] DATE/TIME: 7/12/17 0950		LAB #: AAG00261 Entered into LIS: Tracking #		LAB #: AAG00261 Entered into LIS: Tracking #		

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh

30224006

Pace Analytical

Client Name: DALE - GA Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Label	<u>AM</u>
LIMS Login	<u>ADL</u>

Tracking #: 741366571247

Custody Seal on Cooler/Box Present: yes no Seals Intact: yes no

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ZH 7/13/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	/			1.
Chain of Custody Filled Out:	/			2.
Chain of Custody Relinquished:	/			3.
Sampler Name & Signature on COC:	/			4. <u>ZH 7/13/17</u>
Sample Labels match COC:	/			5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	/			6.
Short Hold Time Analysis (<72hr remaining):		/		7.
Rush Turn Around Time Requested:		/		8.
Sufficient Volume:	/			9.
Correct Containers Used:	/			10.
-Pace Containers Used:		/		
Containers Intact:	/			11.
Orthophosphate field filtered			/	12.
Organic Samples checked for dechlorination:			/	13.
Filtered volume received for Dissolved tests			/	14.
All containers have been checked for preservation.	/			15. <u>PHLZ</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	/			
exceptions: VOA, coliform, TOC, O&G, Phenolics				
				Initial when completed: <u>ZH</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			/	16.
Trip Blank Present:			/	17.
Trip Blank Custody Seals Present			/	
Rad Aqueous Samples Screened > 0.5 mrem/hr		/		Initial when completed: <u>ZH</u> Date: <u>7/13/17</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JJC
Date: 7/20/2017
Worklist: 36692
Matrix: DW

Method Blank Assessment

MB Sample ID: 1306524
MB concentration: 0.278
MB Counting Uncertainty: 0.090
MB MDC: 0.098
MB Numerical Performance Indicator: 6.06
MB Status vs Numerical Indicator: N/A
MB Status vs. MDC: See Comment*

Laboratory Control Sample Assessment

Count Date:	LCSD (Y or N)?	Y
7/26/2017	LCSD36692	7/26/2017
Spike I.D.: 17-030		17-030
Spike Concentration (pCi/mL): 80.197		80.197
Volume Used (mL): 0.10		0.10
Aliquot Volume (L, g, F): 0.501		0.505
Target Conc. (pCi/L, g, F): 15.999		15.872
Uncertainty (Calculated): 1.474		1.462
Result (pCi/L, g, F): 12.204		12.053
Counting Uncertainty (pCi/L, g, F): 0.770		0.778
Numerical Performance Indicator: -4.47		-4.52
Percent Recovery: 76.28%		75.94%
Status vs Numerical Indicator: N/A		N/A
Status vs Recovery: Pass		Pass

Duplicate Sample Assessment

Sample I.D.: LCS36692
Duplicate Sample I.D.: LCS36692
Sample Result Counting Uncertainty (pCi/L, g, F): 12.204
Sample Duplicate Result (pCi/L, g, F): 0.770
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 12.053
Are sample and/or duplicate results below MDC? NO
Duplicate Numerical Performance Indicator: 0.271
Duplicate RPD: 1.25%
Duplicate Status vs Numerical Indicator: N/A
Duplicate Status vs RPD: Pass

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

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.

06/13/17

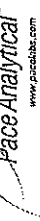
Sample Matrix Spike Control Assessment

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):
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:

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:
MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 7/24/2017
Worklist: 36695
Matrix: DW

Method Blank Assessment	
MB Sample ID	1306529
MB concentration:	0.044
M/B Counting Uncertainty:	0.286
MB MDC:	0.666
MB Numerical Performance Indicator:	0.30
MB Status vs. Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		Y
LCS36695		LCS36695
Count Date:	7/28/2017	7/28/2017
Spike I.D.:	17-005	17-005
Spike Concentration (pCi/mL):	23.942	23.942
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.803	0.810
Target Conc. (pCi/L, g, F):	5.964	5.915
Uncertainty (Calculated):	0.429	0.426
Result (pCi/L, g, F):	6.410	4.817
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.669	0.558
Numerical Performance Indicator:	1.10	-3.07
Percent Recovery:	107.48%	81.44%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
LCS36695		
Duplicate Sample I.D.:	LCS36695	
Sample Result (pCi/L, g, F):	6.410	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.669	
Sample Duplicate Result (pCi/L, g, F):	4.817	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.558	
Are sample and/or duplicate results below MDC?	NO	
Duplicate Numerical Performance Indicator:	3.586	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	27.57%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	

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):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
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:	
MS 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:	

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:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

August 17

Product Name: Low-Flow System

Date: 2017-06-27 15:15:55

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° -53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 55.0 ft

Pump placement from TOC 49.9 ft

Well Information:

Well ID YGWA-11
Well diameter 2 in
Well Total Depth 54.93 ft
Screen Length 10 ft
Depth to Water 38.84 ft

Pumping Information:

Final Pumping Rate 65 mL/min
Total System Volume 1.679525 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 13 in
Total Volume Pumped 7.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:48:55	5113.96	20.17	6.26	67.10	3.12	41.00	1.67	38.89
Last 5	14:53:55	5413.95	20.19	6.21	67.56	3.30	41.10	1.78	41.00
Last 5	14:58:55	5713.95	20.04	6.24	66.99	3.05	41.10	1.91	40.61
Last 5	15:03:55	6013.94	20.12	6.21	66.54	2.85	41.10	2.02	42.37
Last 5	15:08:55	6313.94	19.94	6.21	66.43	2.61	41.10	2.12	42.71
Variance 0			-0.16	0.03	-0.58			0.13	-0.39
Variance 1			0.09	-0.02	-0.44			0.11	1.75
Variance 2			-0.18	-0.00	-0.11			0.11	0.34

Notes

Collected at 15:10. Sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-27 12:50:16

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° -53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 105 ft

Pump placement from TOC 123.6 ft

Well Information:

Well ID YGWA-1D
Well diameter 2 in
Well Total Depth 128.60 ft
Screen Length 50 ft
Depth to Water 52.18 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 2.765458 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 5.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:27:16	900.01	18.72	7.11	153.38	4.02	52.30	1.07	-4.26
Last 5	12:32:16	1200.01	18.56	6.98	157.95	3.87	52.30	0.68	-7.61
Last 5	12:37:16	1500.01	18.94	6.93	158.75	2.58	52.30	0.55	-14.54
Last 5	12:42:16	1800.01	19.32	6.88	158.64	2.95	52.30	0.39	-20.82
Last 5	12:47:16	2099.99	19.67	6.87	157.99	2.61	52.30	0.29	-24.61
Variance 0			0.38	-0.06	0.81			-0.13	-6.93
Variance 1			0.38	-0.04	-0.12			-0.16	-6.28
Variance 2			0.34	-0.01	-0.65			-0.10	-3.79

Notes

Collected at 12:50. Sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-28 14:16:15

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 65.0 ft

Pump placement from TOC 60.7 ft

Well Information:

Well ID YGWA-2I
Well diameter 2 in
Well Total Depth 65.74 ft
Screen Length 10 ft
Depth to Water 45.90 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 1.896712 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 40 in
Total Volume Pumped 2.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:53:01	1200.01	22.26	7.04	217.90	2.12	48.50	0.52	-59.02
Last 5	13:58:01	1499.99	23.81	7.05	219.79	3.76	48.80	0.55	-62.34
Last 5	14:03:01	1800.00	24.54	7.05	219.72	4.03	49.00	0.53	-64.29
Last 5	14:08:01	2099.99	24.23	7.05	218.79	3.95	49.10	0.50	-65.16
Last 5	14:13:01	2399.99	24.36	7.06	217.69	2.42	49.20	0.45	-66.79
Variance 0			0.73	-0.00	-0.07			-0.02	-1.95
Variance 1			-0.30	0.00	-0.92			-0.03	-0.87
Variance 2			0.12	0.01	-1.10			-0.05	-1.63

Notes

Collected at 14:15. Sunny 80s. FB-1 here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-28 12:36:59

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 126.0 ft

Pump placement from TOC 122.10 ft

Well Information:

Well ID YGWA-3D
Well diameter 2 in
Well Total Depth 137.10 ft
Screen Length 10 ft
Depth to Water 32.38 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 3.22155 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:14:16	600.03	21.49	7.51	225.60	3.45	32.50	0.11	-56.22
Last 5	12:19:16	900.02	21.60	7.55	226.50	2.12	32.50	0.13	-59.09
Last 5	12:24:16	1200.02	22.22	7.60	225.23	1.80	32.50	0.14	-62.27
Last 5	12:29:16	1500.01	22.20	7.63	224.49	1.74	32.50	0.15	-64.22
Last 5	12:34:16	1800.01	21.69	7.65	224.99	1.81	32.50	0.15	-64.47
Variance 0			0.62	0.04	-1.28			0.01	-3.18
Variance 1			-0.02	0.03	-0.74			0.02	-1.95
Variance 2			-0.52	0.02	0.51			-0.00	-0.25

Notes

Collected at 12:35. Sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-28 11:02:49

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 62.0 ft

Pump placement from TOC 55.0 ft

Well Information:

Well ID YGWA-3I
Well diameter 2 in
Well Total Depth 60.0 ft
Screen Length 10 ft
Depth to Water 49.17 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 1.831556 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:39:58	900.02	20.93	7.61	235.81	2.45	49.40	2.03	18.62
Last 5	10:44:58	1200.01	20.75	7.54	239.27	1.98	49.50	1.22	12.21
Last 5	10:49:58	1500.00	20.83	7.50	237.21	1.90	49.50	0.79	3.82
Last 5	10:54:58	1800.01	20.75	7.49	231.18	1.74	49.50	0.54	-4.84
Last 5	10:59:58	2100.05	20.59	7.50	226.90	1.89	49.50	0.45	-11.83
Variance 0			0.09	-0.04	-2.05			-0.42	-8.39
Variance 1			-0.09	-0.01	-6.03			-0.25	-8.66
Variance 2			-0.16	0.00	-4.28			-0.09	-6.99

Notes

Collected at 11:00. Sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-30 11:31:24

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 40.0 ft

Pump placement from TOC 30.8 ft

Well Information:

Well ID YGWA-14S
Well diameter 2 in
Well Total Depth 35.82 ft
Screen Length 10 ft
Depth to Water 15.72 ft

Pumping Information:

Final Pumping Rate 210 mL/min
Total System Volume 1.353746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 7.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:09:31	600.02	19.45	5.41	64.58	1.82	16.10	6.31	161.60
Last 5	11:14:31	900.02	19.59	5.40	64.34	1.89	16.10	6.25	167.68
Last 5	11:19:31	1200.01	19.32	5.38	64.04	1.54	16.10	6.22	172.32
Last 5	11:24:31	1500.01	19.14	5.38	63.75	2.05	16.10	6.24	175.29
Last 5	11:29:31	1800.00	19.24	5.39	63.75	1.74	16.10	6.25	177.79
Variance 0			-0.27	-0.01	-0.30			-0.02	4.64
Variance 1			-0.18	-0.00	-0.29			0.02	2.97
Variance 2			0.10	0.00	0.00			0.01	2.50

Notes

Collected at 11:30. DUP-2 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-30 10:54:23

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 26.54"
Longitude -84° -54' -21.3"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 64 ft

Pump placement from TOC 54 ft

Well Information:

Well ID YGWA-30I
Well diameter 2 in
Well Total Depth 59.65 ft
Screen Length 10 ft
Depth to Water 37.2 ft

Pumping Information:

Final Pumping Rate 210 mL/min
Total System Volume 1.874993 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1.2 in
Total Volume Pumped 8.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:31:49	1200.02	18.78	5.69	39.04	0.41	37.30	6.21	77.03
Last 5	10:36:49	1500.02	18.74	5.60	39.02	0.45	37.30	6.19	78.70
Last 5	10:41:49	1800.01	18.70	5.71	39.03	0.41	37.30	6.11	73.34
Last 5	10:46:49	2099.99	18.73	5.69	39.06	0.42	37.30	6.06	73.45
Last 5	10:51:49	2399.99	18.75	5.72	39.14	0.32	37.30	6.00	71.09
Variance 0			-0.04	0.11	0.01			-0.08	-5.36
Variance 1			0.03	-0.02	0.03			-0.05	0.10
Variance 2			0.02	0.04	0.08			-0.05	-2.36

Notes

Sampled at 10:55. Rain 70's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-10 13:15:29

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Default Site
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 407447
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 74 ft

Pump placement from TOC 64 ft

Well Information:

Well ID YGWC-26I
Well diameter 2 in
Well Total Depth 69.71 ft
Screen Length 10 ft
Depth to Water 22.92 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 1.99718 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2.16 in
Total Volume Pumped 3.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1%	+/- 3%	+/- 10		+/- 0.3%	+/- 10
Last 5	12:53:53	600.02	23.03	5.96	302.12	2.74	23.10	0.56	-5.03
Last 5	12:58:53	900.02	22.75	5.93	303.12	2.28	23.10	0.43	22.72
Last 5	13:03:53	1200.02	22.75	5.93	302.40	2.50	23.10	0.40	28.89
Last 5	13:08:53	1500.13	22.60	5.92	303.83	2.94	23.10	0.35	31.50
Last 5	13:13:53	1800.13	22.45	5.92	304.83	2.99	23.10	0.30	33.01
Variance 0			-0.01	-0.01	-0.72			-0.03	6.16
Variance 1			-0.14	-0.00	1.43			-0.05	2.61
Variance 2			-0.16	-0.01	1.00			-0.05	1.51

Notes

Sunny 80's. Sampled at 13:15. FB-3 here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-10 11:41:48

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Default Site
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 407447
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 45 ft

Pump placement from TOC 35 ft

Well Information:

Well ID YGWC-26S
Well diameter 2 in
Well Total Depth 40.1 ft
Screen Length 10 ft
Depth to Water 18.49 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.367339 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8.52 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1%	+/- 3%	+/- 10		+/- 0.3%	+/- 10
Last 5	11:19:24	1800.57	23.79	5.28	273.01	7.50	19.20	2.02	80.36
Last 5	11:24:24	2100.57	23.70	5.27	272.85	6.44	19.20	1.99	77.31
Last 5	11:29:24	2400.57	23.61	5.25	273.90	5.78	19.20	1.95	76.03
Last 5	11:34:24	2700.57	23.51	5.25	273.93	5.04	19.20	1.94	74.69
Last 5	11:39:24	3000.57	23.61	5.25	274.95	4.40	19.20	1.92	72.63
Variance 0			-0.09	-0.01	1.06			-0.04	-1.29
Variance 1			-0.10	-0.00	0.03			-0.00	-1.33
Variance 2			0.10	-0.00	1.02			-0.02	-2.06

Notes

Sunny 80's. Sampled at 11:40.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-30 13:11:45

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting, Inc.
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 36.66"
Longitude -84° -54' -29.31"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Bladder
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 84 ft

Pump placement from TOC 74 ft

Well Information:

Well ID YGWC-271
Well diameter 2 in
Well Total Depth 79.84 ft
Screen Length 10 ft
Depth to Water 26.56 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 2.309366 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 7.68 in
Total Volume Pumped 4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:48:03	600.02	20.01	6.13	329.63	4.09	27.20	0.83	30.59
Last 5	12:53:03	900.02	20.13	6.15	334.51	3.26	27.20	0.43	24.94
Last 5	12:58:03	1200.02	20.31	6.17	335.04	1.61	27.20	0.26	17.24
Last 5	13:03:04	1501.02	20.25	6.18	334.46	1.32	27.20	0.20	12.54
Last 5	13:08:04	1801.02	20.24	6.21	334.67	0.92	27.20	0.19	7.83
Variance 0			0.18	0.02	0.53			-0.18	-7.69
Variance 1			-0.05	0.01	-0.58			-0.06	-4.70
Variance 2			-0.02	0.03	0.20			-0.01	-4.71

Notes

Sampled at 13:10. Rain 70's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-30 13:15:56

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 43.0 ft

Pump placement from TOC 35.2 ft

Well Information:

Well ID YGWC-27S
Well diameter 2 in
Well Total Depth 40.26 ft
Screen Length 10 ft
Depth to Water 25.90 ft

Pumping Information:

Final Pumping Rate 210 mL/min
Total System Volume 1.418902 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 6.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:53:44	600.02	21.18	6.18	412.65	3.28	26.00	2.33	85.59
Last 5	12:58:44	900.01	20.57	6.16	413.06	3.12	26.00	0.97	91.38
Last 5	13:03:44	1200.02	20.47	6.17	414.31	3.66	26.00	0.44	91.23
Last 5	13:08:44	1500.02	20.43	6.17	414.82	4.05	26.00	0.30	90.97
Last 5	13:13:44	1800.02	19.85	6.17	415.23	3.95	26.00	0.20	90.03
Variance 0			-0.10	0.01	1.25			-0.53	-0.15
Variance 1			-0.04	-0.00	0.51			-0.14	-0.26
Variance 2			-0.58	-0.00	0.41			-0.11	-0.95

Notes

Collected at 13:15. Rain 70s. FB-2 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-05 15:37:10

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 34.4"
Longitude -84° 54' -30.55"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 70 ft

Pump placement from TOC 64.9 ft

Well Information:

Well ID YGWC-28I
Well diameter 2 in
Well Total Depth 69.89 ft
Screen Length 10 ft
Depth to Water 22.89 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 1.462339 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 23 in
Total Volume Pumped 3.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:15:01	900.02	22.48	6.40	398.27	1.11	24.30	0.66	79.24
Last 5	15:20:01	1200.02	22.46	6.39	397.32	0.85	24.60	0.41	79.82
Last 5	15:25:01	1500.01	22.04	6.38	396.80	0.67	24.70	0.25	82.70
Last 5	15:30:01	1800.02	22.59	6.39	399.52	0.72	24.80	0.22	85.28
Last 5	15:35:01	2100.00	22.71	6.40	400.34	0.50	24.80	0.20	87.80
Variance 0			-0.42	-0.01	-0.52			-0.15	2.88
Variance 1			0.55	0.01	2.72			-0.03	2.59
Variance 2			0.12	0.01	0.82			-0.02	2.52

Notes

Cloudy, 80's, sample time-1535, 2nd Rad here

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-07 11:17:59

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 34.41"
Longitude -84° 54' -30.72"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 45 ft

Pump placement from TOC 40 ft

Well Information:

Well ID YGWC-28S
Well diameter 2 in
Well Total Depth 44.85 ft
Screen Length 10 ft
Depth to Water 22.02 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.462339 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 4 in
Total Volume Pumped 14.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:55:08	4499.97	22.04	6.45	460.61	6.81	22.30	0.11	-58.70
Last 5	11:00:08	4799.95	22.11	6.46	461.25	6.11	22.30	0.11	-59.00
Last 5	11:05:08	5099.95	22.20	6.46	461.45	5.65	22.30	0.11	-59.38
Last 5	11:10:09	5400.95	22.01	6.46	461.11	5.08	22.30	0.11	-59.70
Last 5	11:15:09	5700.94	22.10	6.46	461.48	4.84	22.30	0.11	-60.16
Variance 0			0.08	0.00	0.20			0.00	-0.38
Variance 1			-0.18	0.00	-0.35			0.00	-0.32
Variance 2			0.08	0.00	0.38			0.00	-0.46

Notes

Sunny, 80's, sample time-1115

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-05 14:21:56

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 31.97"
Longitude -84° -54' -31.99"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 40 ft

Pump placement from TOC 35 ft

Well Information:

Well ID YGWC-29I
Well diameter 2 in
Well Total Depth 39.46 ft
Screen Length 10 ft
Depth to Water 25.23 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 1.353746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 21 in
Total Volume Pumped 3.9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:00:02	900.03	22.09	6.19	257.30	0.49	26.30	1.32	74.61
Last 5	14:05:02	1200.02	22.22	6.17	256.44	0.41	26.70	0.65	77.38
Last 5	14:10:02	1500.02	21.51	6.16	257.03	0.55	26.90	0.39	79.55
Last 5	14:15:02	1800.01	21.37	6.16	257.62	0.35	27.00	0.31	79.52
Last 5	14:20:02	2100.00	21.77	6.17	257.82	0.42	27.00	0.26	79.47
Variance 0			-0.71	-0.02	0.59			-0.26	2.18
Variance 1			-0.14	0.00	0.58			-0.07	-0.03
Variance 2			0.40	0.01	0.21			-0.06	-0.05

Notes

Cloudy, 80's, sample time 1420

Grab Samples



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAJ0178

January 08, 2018

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink, appearing to read "Betsy McDaniel", written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-1I	AAJ0178-01	Ground Water	10/03/17 13:50	10/05/17 11:45
YGWA-1D	AAJ0178-02	Ground Water	10/03/17 15:05	10/05/17 11:45
YGWA-2I	AAJ0178-03	Ground Water	10/03/17 16:15	10/05/17 11:45
EB-1-10-3-17	AAJ0178-04	Water	10/03/17 16:00	10/05/17 11:45
YGWA-5I	AAJ0178-05	Ground Water	10/03/17 12:50	10/05/17 11:45
YGWA-5D	AAJ0178-06	Ground Water	10/03/17 14:00	10/05/17 11:45
YGWA-21I	AAJ0178-07	Ground Water	10/03/17 15:45	10/05/17 11:45
FB-1-10-3-17	AAJ0178-08	Water	10/03/17 15:00	10/05/17 11:45
YGWA-3I	AAJ0178-09	Ground Water	10/04/17 12:40	10/05/17 11:45
YGWA-3D	AAJ0178-10	Ground Water	10/04/17 10:25	10/05/17 11:45
YGWA-17S	AAJ0178-11	Ground Water	10/04/17 11:15	10/05/17 11:45
YGWA-20S	AAJ0178-12	Ground Water	10/04/17 09:45	10/05/17 11:45
YGWA-30I	AAJ0178-13	Ground Water	10/04/17 14:15	10/05/17 11:45
Dup-1	AAJ0178-14	Ground Water	10/04/17 00:00	10/05/17 11:45



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Case Narrative

CCR Event Plant Yates Report AAJ0178 1/8/2018

This revised report replaces the original report submitted on 10/16/2017.

Some of the quality control data for Metals was missing from batch 7100245. The following changes were made: LCS, MS, MSD, and PDS recoveries for Boron, Calcium, and Molybdenum have been added to the batch QC section. No other changes were made to this report.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-1I

Lab Number ID: AAJ0178-01

Date/Time Sampled: 10/3/2017 1:50:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	58	25	10	mg/L	SM 2540 C		1	10/06/17 15:30	10/06/17 15:30	7100182	JPT
Inorganic Anions											
Chloride	1.7	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/09/17 23:53	7100220	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 10:29	10/09/17 23:53	7100220	RLC
Sulfate	5.9	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/09/17 23:53	7100220	RLC
Metals, Total											
Boron	0.0071	0.0400	0.0060	mg/L	EPA 6020B	J	1	10/10/17 14:25	10/11/17 19:57	7100245	CSW
Calcium	2.21	0.500	0.0404	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 19:57	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 08, 2018

Attention: Mr. Joju Abraham

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-1D

Lab Number ID: AAJ0178-02

Date/Time Sampled: 10/3/2017 3:05:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	119	25	10	mg/L	SM 2540 C		1	10/06/17 15:30	10/06/17 15:30	7100182	JPT
Inorganic Anions											
Chloride	1.1	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 00:14	7100220	RLC
Fluoride	0.07	0.30	0.03	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 00:14	7100220	RLC
Sulfate	6.6	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 00:14	7100220	RLC
Metals, Total											
Boron	0.0072	0.0400	0.0060	mg/L	EPA 6020B	J	1	10/10/17 14:25	10/11/17 20:09	7100245	CSW
Calcium	14.0	5.00	2.02	mg/L	EPA 6020B		50	10/10/17 14:25	10/11/17 20:14	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-2I

Lab Number ID: AAJ0178-03

Date/Time Sampled: 10/3/2017 4:15:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	153	25	10	mg/L	SM 2540 C		1	10/06/17 15:30	10/06/17 15:30	7100182	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 00:35	7100220	RLC
Fluoride	0.12	0.30	0.03	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 00:35	7100220	RLC
Sulfate	7.9	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 00:35	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 20:32	7100245	CSW
Calcium	26.7	25.0	2.02	mg/L	EPA 6020B		50	10/10/17 14:25	10/11/17 20:37	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: EB-1-10-3-17

Lab Number ID: AAJ0178-04

Date/Time Sampled: 10/3/2017 4:00:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	14	25	10	mg/L	SM 2540 C	J	1	10/06/17 15:30	10/06/17 15:30	7100182	JPT
Inorganic Anions											
Chloride	0.12	0.25	0.02	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 00:55	7100220	RLC
Fluoride	1.7	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 00:55	7100220	RLC
Sulfate	0.05	1.0	0.02	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 00:55	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 20:43	7100245	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 20:43	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-5I

Lab Number ID: AAJ0178-05

Date/Time Sampled: 10/3/2017 12:50:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	89	25	10	mg/L	SM 2540 C		1	10/06/17 15:30	10/06/17 15:30	7100182	JPT
Inorganic Anions											
Chloride	4.2	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 02:39	7100220	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 02:39	7100220	RLC
Sulfate	2.3	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 02:39	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 20:49	7100245	CSW
Calcium	2.15	0.500	0.0404	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 20:49	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-5D

Lab Number ID: AAJ0178-06

Date/Time Sampled: 10/3/2017 2:00:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	170	25	10	mg/L	SM 2540 C		1	10/06/17 15:30	10/06/17 15:30	7100182	JPT
Inorganic Anions											
Chloride	6.5	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 02:59	7100220	RLC
Fluoride	0.05	0.30	0.03	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 02:59	7100220	RLC
Sulfate	16	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 02:59	7100220	RLC
Metals, Total											
Boron	0.0094	0.0400	0.0060	mg/L	EPA 6020B	J	1	10/10/17 14:25	10/11/17 21:00	7100245	CSW
Calcium	30.9	25.0	2.02	mg/L	EPA 6020B		50	10/10/17 14:25	10/11/17 21:06	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-211

Lab Number ID: AAJ0178-07

Date/Time Sampled: 10/3/2017 3:45:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	149	25	10	mg/L	SM 2540 C		1	10/06/17 15:30	10/06/17 15:30	7100182	JPT
Inorganic Anions											
Chloride	2.2	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 04:02	7100220	RLC
Fluoride	0.08	0.30	0.03	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 04:02	7100220	RLC
Sulfate	5.8	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 04:02	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 21:11	7100245	CSW
Calcium	8.28	0.500	0.0404	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 21:11	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: FB-1-10-3-17

Lab Number ID: AAJ0178-08

Date/Time Sampled: 10/3/2017 3:00:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	0.06	0.25	0.02	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 04:23	7100220	RLC
Fluoride	1.1	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 04:23	7100220	RLC
Sulfate	0.14	1.0	0.02	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 04:23	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 21:23	7100245	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 21:23	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-3I

Lab Number ID: AAJ0178-09

Date/Time Sampled: 10/4/2017 12:40:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	147	25	10	mg/L	SM 2540 C		1	10/09/17 14:10	10/09/17 14:10	7100223	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 04:44	7100220	RLC
Fluoride	0.10	0.30	0.03	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 04:44	7100220	RLC
Sulfate	12	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 04:44	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 21:40	7100245	CSW
Calcium	22.1	5.00	2.02	mg/L	EPA 6020B		50	10/10/17 14:25	10/11/17 21:46	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-3D

Lab Number ID: AAJ0178-10

Date/Time Sampled: 10/4/2017 10:25:00AM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	141	25	10	mg/L	SM 2540 C		1	10/09/17 14:10	10/09/17 14:10	7100223	JPT
Inorganic Anions											
Chloride	1.5	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 05:05	7100220	RLC
Fluoride	0.47	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 05:05	7100220	RLC
Sulfate	6.2	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 05:05	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 21:51	7100245	CSW
Calcium	29.7	25.0	2.02	mg/L	EPA 6020B		50	10/10/17 14:25	10/11/17 21:57	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-17S

Lab Number ID: AAJ0178-11

Date/Time Sampled: 10/4/2017 11:15:00AM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	61	25	10	mg/L	SM 2540 C		1	10/09/17 14:10	10/09/17 14:10	7100223	JPT
Inorganic Anions											
Chloride	4.7	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 05:48	7100220	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 05:48	7100220	RLC
Sulfate	5.3	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 05:48	7100220	RLC
Metals, Total											
Boron	0.0077	0.0400	0.0060	mg/L	EPA 6020B	J	1	10/10/17 14:25	10/11/17 22:03	7100245	CSW
Calcium	2.03	0.500	0.0404	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 22:03	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-20S

Lab Number ID: AAJ0178-12

Date/Time Sampled: 10/4/2017 9:45:00AM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	54	25	10	mg/L	SM 2540 C		1	10/09/17 14:10	10/09/17 14:10	7100223	JPT
Inorganic Anions											
Chloride	2.6	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 07:34	7100220	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 07:34	7100220	RLC
Sulfate	0.14	1.0	0.02	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 07:34	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 22:14	7100245	CSW
Calcium	2.25	0.500	0.0404	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 22:14	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Project: CCR Event

Client ID: YGWA-30I

Lab Number ID: AAJ0178-13

Date/Time Sampled: 10/4/2017 2:15:00PM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	31	25	10	mg/L	SM 2540 C		1	10/09/17 14:10	10/09/17 14:10	7100223	JPT
Inorganic Anions											
Chloride	1.8	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 07:55	7100220	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 07:55	7100220	RLC
Sulfate	1.4	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 07:55	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 22:26	7100245	CSW
Calcium	1.09	0.500	0.0404	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 22:26	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 08, 2018

Attention: Mr. Joju Abraham

Report No.: AAJ0178

Project: CCR Event

Client ID: Dup-1

Lab Number ID: AAJ0178-14

Date/Time Sampled: 10/4/2017 12:00:00AM

Date/Time Received: 10/5/2017 11:45:00AM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	124	25	10	mg/L	SM 2540 C		1	10/09/17 14:10	10/09/17 14:10	7100223	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 08:16	7100220	RLC
Fluoride	0.12	0.30	0.03	mg/L	EPA 300.0	J	1	10/09/17 10:29	10/10/17 08:16	7100220	RLC
Sulfate	12	1.0	0.02	mg/L	EPA 300.0		1	10/09/17 10:29	10/10/17 08:16	7100220	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/10/17 14:25	10/11/17 22:49	7100245	CSW
Calcium	22.4	5.00	2.02	mg/L	EPA 6020B		50	10/10/17 14:25	10/11/17 22:54	7100245	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100182 - SM 2540 C											
Blank (7100182-BLK1)						Prepared & Analyzed: 10/06/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7100182-BS1)						Prepared & Analyzed: 10/06/17					
Total Dissolved Solids	379	25	10	mg/L	400.00		95	84-108			
Duplicate (7100182-DUP1)						Source: AAJ0126-04 Prepared & Analyzed: 10/06/17					
Total Dissolved Solids	3330	25	10	mg/L		3350			0.7	10	
Duplicate (7100182-DUP2)						Source: AAJ0126-05 Prepared & Analyzed: 10/06/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Batch 7100223 - SM 2540 C											
Blank (7100223-BLK1)						Prepared & Analyzed: 10/09/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7100223-BS1)						Prepared & Analyzed: 10/09/17					
Total Dissolved Solids	360	25	10	mg/L	400.00		90	84-108			
Duplicate (7100223-DUP1)						Source: AAJ0126-10 Prepared & Analyzed: 10/09/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7100223-DUP2)						Source: AAJ0239-10 Prepared & Analyzed: 10/09/17					
Total Dissolved Solids	63	25	10	mg/L		74			16	10	QR-03
Batch 7100259 - SM 2540 C											
Blank (7100259-BLK1)						Prepared & Analyzed: 10/10/17					
Total Dissolved Solids	ND	25	10	mg/L							



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100259 - SM 2540 C											
LCS (7100259-BS1)						Prepared & Analyzed: 10/10/17					
Total Dissolved Solids	388	25	10	mg/L	400.00		97	84-108			
Duplicate (7100259-DUP1)						Source: AAJ0178-08RE1 Prepared & Analyzed: 10/10/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7100259-DUP2)						Source: AAJ0239-01 Prepared & Analyzed: 10/10/17					
Total Dissolved Solids	107	25	10	mg/L		191			56	10	QR-03



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100220 - EPA 300.0											
Blank (7100220-BLK1)						Prepared & Analyzed: 10/09/17					
Chloride	ND	0.25	0.02	mg/L							
Fluoride	ND	0.30	0.03	mg/L							
Sulfate	ND	1.0	0.02	mg/L							
LCS (7100220-BS1)						Prepared & Analyzed: 10/09/17					
Chloride	10.4	0.25	0.02	mg/L	10.020		104	90-110			
Fluoride	9.92	0.30	0.03	mg/L	10.020		99	90-110			
Sulfate	10.7	1.0	0.02	mg/L	10.050		106	90-110			
Matrix Spike (7100220-MS1)						Source: AAJ0178-06 Prepared: 10/09/17 Analyzed: 10/10/17					
Chloride	16.8	0.25	0.02	mg/L	10.020	6.52	102	90-110			
Fluoride	10.1	0.30	0.03	mg/L	10.020	0.05	101	90-110			
Sulfate	25.1	1.0	0.02	mg/L	10.050	16.0	90	90-110			
Matrix Spike (7100220-MS2)						Source: AAJ0178-10 Prepared: 10/09/17 Analyzed: 10/10/17					
Chloride	11.4	0.25	0.02	mg/L	10.020	1.47	99	90-110			
Fluoride	10.5	0.30	0.03	mg/L	10.020	0.47	100	90-110			
Sulfate	16.1	1.0	0.02	mg/L	10.050	6.16	99	90-110			
Matrix Spike Dup (7100220-MSD1)						Source: AAJ0178-06 Prepared: 10/09/17 Analyzed: 10/10/17					
Chloride	16.8	0.25	0.02	mg/L	10.020	6.52	103	90-110	0.3	15	
Fluoride	10.1	0.30	0.03	mg/L	10.020	0.05	100	90-110	0.5	15	
Sulfate	25.1	1.0	0.02	mg/L	10.050	16.0	90	90-110	0.2	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7100245 - EPA 3005A

Blank (7100245-BLK1)

Prepared: 10/10/17 Analyzed: 10/11/17

Antimony	ND	0.0030	0.0006	mg/L							
Arsenic	ND	0.0050	0.0005	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0404	mg/L							
Chromium	ND	0.0100	0.0005	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0010	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0018	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0012	mg/L							
Zinc	ND	0.0100	0.0012	mg/L							
Lithium	ND	0.0500	0.0015	mg/L							

LCS (7100245-BS1)

Prepared: 10/10/17 Analyzed: 10/11/17

Antimony	0.110	0.0030	0.0006	mg/L	0.10000		110	80-120			
Arsenic	0.104	0.0050	0.0005	mg/L	0.10000		104	80-120			
Barium	0.106	0.0100	0.0004	mg/L	0.10000		106	80-120			
Beryllium	0.105	0.0030	0.00009	mg/L	0.10000		105	80-120			
Boron	1.10	0.0400	0.0060	mg/L	1.0000		110	80-120			
Cadmium	0.104	0.0010	0.0001	mg/L	0.10000		104	80-120			
Calcium	1.06	0.500	0.0404	mg/L	1.0000		106	80-120			
Chromium	0.106	0.0100	0.0005	mg/L	0.10000		106	80-120			
Cobalt	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Copper	0.102	0.0250	0.0003	mg/L	0.10000		102	80-120			
Lead	0.104	0.0050	0.00007	mg/L	0.10000		104	80-120			
Molybdenum	0.106	0.0100	0.0010	mg/L	0.10000		106	80-120			
Nickel	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Selenium	0.106	0.0100	0.0018	mg/L	0.10000		106	80-120			
Silver	0.106	0.0100	0.0002	mg/L	0.10000		106	80-120			
Thallium	0.106	0.0010	0.00005	mg/L	0.10000		106	80-120			
Vanadium	0.105	0.0100	0.0012	mg/L	0.10000		105	80-120			
Zinc	0.106	0.0100	0.0012	mg/L	0.10000		106	80-120			
Lithium	0.106	0.0500	0.0015	mg/L	0.10000		106	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100245 - EPA 3005A											
Matrix Spike (7100245-MS1)			Source: AAJ0126-01				Prepared: 10/10/17 Analyzed: 10/11/17				
Antimony	0.107	0.0030	0.0006	mg/L	0.10000	ND	107	75-125			
Arsenic	0.102	0.0050	0.0005	mg/L	0.10000	ND	102	75-125			
Barium	0.124	0.0100	0.0004	mg/L	0.10000	0.0185	106	75-125			
Beryllium	0.101	0.0030	0.00009	mg/L	0.10000	ND	101	75-125			
Boron	1.15	0.0400	0.0060	mg/L	1.0000	0.116	103	75-125			
Cadmium	0.0999	0.0010	0.0001	mg/L	0.10000	ND	100	75-125			
Calcium	3.22	0.500	0.0404	mg/L	1.0000	2.19	103	75-125			
Chromium	0.108	0.0100	0.0005	mg/L	0.10000	0.0008	108	75-125			
Cobalt	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125			
Copper	0.102	0.0250	0.0003	mg/L	0.10000	0.0004	101	75-125			
Lead	0.104	0.0050	0.00007	mg/L	0.10000	0.0007	104	75-125			
Molybdenum	0.104	0.0100	0.0010	mg/L	0.10000	ND	104	75-125			
Nickel	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125			
Selenium	0.104	0.0100	0.0018	mg/L	0.10000	ND	104	75-125			
Silver	0.103	0.0100	0.0002	mg/L	0.10000	ND	103	75-125			
Thallium	0.106	0.0010	0.00005	mg/L	0.10000	ND	106	75-125			
Vanadium	0.108	0.0100	0.0012	mg/L	0.10000	0.0015	106	75-125			
Zinc	0.103	0.0100	0.0012	mg/L	0.10000	0.0022	101	75-125			
Lithium	0.105	0.0500	0.0015	mg/L	0.10000	ND	105	75-125			
Matrix Spike Dup (7100245-MSD1)			Source: AAJ0126-01				Prepared: 10/10/17 Analyzed: 10/11/17				
Antimony	0.111	0.0030	0.0006	mg/L	0.10000	ND	111	75-125	4	20	
Arsenic	0.104	0.0050	0.0005	mg/L	0.10000	ND	104	75-125	2	20	
Barium	0.127	0.0100	0.0004	mg/L	0.10000	0.0185	108	75-125	2	20	
Beryllium	0.102	0.0030	0.00009	mg/L	0.10000	ND	102	75-125	0.3	20	
Boron	1.17	0.0400	0.0060	mg/L	1.0000	0.116	105	75-125	1	20	
Cadmium	0.105	0.0010	0.0001	mg/L	0.10000	ND	105	75-125	5	20	
Calcium	3.19	0.500	0.0404	mg/L	1.0000	2.19	101	75-125	0.7	20	
Chromium	0.111	0.0100	0.0005	mg/L	0.10000	0.0008	110	75-125	2	20	
Cobalt	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125	0.2	20	
Copper	0.104	0.0250	0.0003	mg/L	0.10000	0.0004	104	75-125	2	20	
Lead	0.102	0.0050	0.00007	mg/L	0.10000	0.0007	102	75-125	2	20	
Molybdenum	0.108	0.0100	0.0010	mg/L	0.10000	ND	108	75-125	3	20	
Nickel	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125	2	20	
Selenium	0.105	0.0100	0.0018	mg/L	0.10000	ND	105	75-125	0.9	20	
Silver	0.104	0.0100	0.0002	mg/L	0.10000	ND	104	75-125	2	20	
Thallium	0.103	0.0010	0.00005	mg/L	0.10000	ND	103	75-125	2	20	
Vanadium	0.108	0.0100	0.0012	mg/L	0.10000	0.0015	106	75-125	0.01	20	
Zinc	0.106	0.0100	0.0012	mg/L	0.10000	0.0022	104	75-125	3	20	
Lithium	0.103	0.0500	0.0015	mg/L	0.10000	ND	103	75-125	2	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100245 - EPA 3005A											
Post Spike (7100245-PS1)			Source: AAJ0126-01			Prepared: 10/10/17 Analyzed: 10/11/17					
Antimony	102			ug/L	100.00	0.190	102	80-120			
Arsenic	101			ug/L	100.00	0.354	101	80-120			
Barium	122			ug/L	100.00	18.5	104	80-120			
Beryllium	97.9			ug/L	100.00	0.0268	98	80-120			
Boron	1110			ug/L	1000.0	116	99	80-120			
Cadmium	102			ug/L	100.00	0.0043	102	80-120			
Calcium	3160			ug/L	1000.0	2190	98	80-120			
Chromium	108			ug/L	100.00	0.770	108	80-120			
Cobalt	100			ug/L	100.00	0.150	100	80-120			
Copper	101			ug/L	100.00	0.385	100	80-120			
Lead	103			ug/L	100.00	0.683	102	80-120			
Molybdenum	106			ug/L	100.00	0.215	106	80-120			
Nickel	101			ug/L	100.00	0.305	101	80-120			
Selenium	101			ug/L	100.00	0.564	100	80-120			
Silver	102			ug/L	100.00	0.0022	102	80-120			
Thallium	105			ug/L	100.00	0.0181	105	80-120			
Vanadium	109			ug/L	100.00	1.53	107	80-120			
Zinc	104			ug/L	100.00	2.24	101	80-120			
Lithium	99.3			ug/L	100.00	0.424	99	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
BRL - Not Detected at levels equal to or greater than the RL
RL - Reporting Limit **MDL** - Method Detection Limit
SOP - Method run per Pace Standard Operating Procedure
CFU - Colony Forming Units
DF - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 1 OF 2

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-508-7239		REPORT TO: Lauren Petty Heath McCorkle		PROJECT NAME/STATE: Plant Yates AP	
REQUESTED COMPLETION DATE: laburch@southernco.com		PROJECT #: Phase 2 CCR		CONTAINER TYPE: PRESERVATION: # of		ANALYSIS REQUESTED	
Collection DATE	Collection TIME	MATRIX CODE*	C O M P	G R A B	SAMPLE IDENTIFICATION	CONTAINER TYPE: PRESERVATION: # of	ANALYSIS REQUESTED
10-3-17	1350	6W	✓	✓	Y6WA-1I	Metals App. III (EPA 6020/7470) Cl, P, SO, & TDS (EPA 300.0 & SM 2540C)	P 3 P 7
10-3-17	1505	6W	✓	✓	Y6WA-1D		
10-3-17	1615	6W	✓	✓	Y6WA-2I		
10-3-17	1600	W	✓	✓	EB-1-10-3-17		
10-3-17	1250	6W	✓	✓	Y6WA-5I		
10-3-17	1400	6W	✓	✓	Y6WA-5D		
10-3-17	1545	6W	✓	✓	Y6WA-21I		
10-3-17	1500	W	✓	✓	FB-1-10-3-17		
SAMPLED BY AND TITLE: C. Kerley, J. Barisford (Acc)		DATE/TIME: 10-3-17 1615	RELINQUISHED BY: C. Kerley	DATE/TIME: 10-5-17 1145	LAB #: AAJ0178	FOR LAB USE ONLY	
RECEIVED BY: K. Salzman		DATE/TIME: 10/05/17 1145	RECEIVED BY: C. Kerley	DATE/TIME: 10-5-17 1145	Entered into LIMS: AAJ0178	Tracking #:	
No. NA (Yes) No. NA (Yes) No. NA (Yes) Max. 0.1		Temperature: Min. 0.1 Max.	Sample Shipped Via: UPS (checked) FedEx USPS Courier Other FS	Relinquished by: C. Kerley	Client: C. Kerley	Cooler ID:	

Plant Yates COC Ash Ponds



Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: 2 OF 2

CHAIN OF CUSTODY RECORD

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-508-7239		REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorkle		REQUESTED COMPLETION DATE: laburch@southernco.com		PROJECT NAME/STATE: Plant Yates AP			
PROJECT #: Phase 2 CCR											
Collection DATE	Collection TIME	MATRIX CODE	COMPARISON	GRADES	SAMPLE IDENTIFICATION	CONTAINER TYPE	ANALYSIS REQUESTED	CONTAINER TYPE	PRESCRIPTION		
10-4-17	1240	6W	✓	✓	Y6WA-3I	2	Metals App. III (EPA 6020/7470)	P	3		
10-4-17	1035	6W	✓	✓	Y6WA-3D	2	Cl, F, SO ₄ & TDS (EPA 300.0 & SM 2540C)	P	7		
10-4-17	1115	6W	✓	✓	Y6WA-17S	2					
10-4-17	0945	6W	✓	✓	Y6WA-20S	2					
10-4-17	1415	6W	✓	✓	Y6WA-30I	2					
10-4-17	—	6W	✓	✓	DUP-1	2					
CONTAINER TYPE P - PLASTIC A - AMBER GLASS G - CLEAR GLASS V - VOA VIAL S - STERILE O - OTHER											
PRESCRIPTION 1 - HCl, 56°C 2 - H ₂ SO ₄ , 56°C 3 - HNO ₃ 4 - NaOH, 56°C 5 - NaOH/ZnAc, 56°C 6 - Na ₂ S ₂ O ₃ , 56°C 7 - 56°C not frozen											
MATRIX CODES: DW - DRINKING WATER WW - WASTEWATER GW - GROUNDWATER SW - SURFACE WATER ST - STORM WATER W - WATER S - SOIL SL - SLUDGE SD - SOLID A - AIR L - LIQUID P - PRODUCT											
REMARKS/ADDITIONAL INFORMATION											
9 10 11 12 13 14											
SAMPLED BY AND TITLE: C. Berke, J. Berke, J. Berke (Acc)						DATE/TIME: 10-4-17 1415		RELINQUISHED BY: [Signature]		DATE/TIME: 10-5-17 1145	
RECEIVED BY: [Signature]						DATE/TIME: 10-5-17 1145		RELINQUISHED BY: [Signature]		DATE/TIME: 10-5-17 1145	
RECEIVED BY LAB: [Signature]						DATE/TIME: 10/05/17 1145		USPS Intact		CLIENT FS	
Method: No NA Yes No NA Max: 0.1						Temperature: Min: Max:		COURIER # of Coolers		OTHER Cooler ID:	

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt

Face Analytical

Client Name: GLA power

Project # AAJ0178

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used IR-4

Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 0.1

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 8°C

Comments:

Date and Initials of person examining contents: 10/05/17 MR

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>GLA</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 10/6/2017 10:23:07AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 10/05/17 11:45

Work Order: AAJ0178

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 14

#Containers: 28

Minimum Temp(C): 0.1

Maximum Temp(C): 0.1

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAJ0389

January 08, 2018

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink, appearing to read "Betsy McDaniel", written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-28S	AAJ0389-01	Ground Water	10/09/17 14:20	10/11/17 17:25
YGWC-27I	AAJ0389-02	Ground Water	10/09/17 15:25	10/11/17 17:25
YGWC-19S	AAJ0389-03	Ground Water	10/10/17 14:55	10/11/17 17:25
YGWC-26S	AAJ0389-04	Ground Water	10/10/17 11:35	10/11/17 17:25
YGWC-26I	AAJ0389-05	Ground Water	10/10/17 12:20	10/11/17 17:25
YGWC-23S	AAJ0389-06	Ground Water	10/11/17 09:45	10/11/17 17:25
YGWC-33S	AAJ0389-07	Ground Water	10/11/17 10:45	10/11/17 17:25
YGWC-36	AAJ0389-08	Ground Water	10/11/17 12:10	10/11/17 17:25
Dup-3	AAJ0389-09	Ground Water	10/11/17 00:00	10/11/17 17:25
EB-3-10-10-17	AAJ0389-10	Water	10/10/17 12:00	10/11/17 17:25
FB-3-10-11-17	AAJ0389-11	Water	10/11/17 09:20	10/11/17 17:25



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Case Narrative

CCR Event Plant Yates Report AAJ0389 1/8/2018

This revised report replaces the original report submitted on 10/25/2017.

Some of the quality control data for Metals was missing from batch 7100507. The following changes were made: LCS, MS, MSD, and PDS recoveries for Boron, Calcium, and Molybdenum have been added to the batch QC section. No other changes were made to this report.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: YGWC-28S

Lab Number ID: AAJ0389-01

Date/Time Sampled: 10/9/2017 2:20:00PM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	204	25	10	mg/L	SM 2540 C		1	10/13/17 13:20	10/13/17 13:20	7100400	JPT
Inorganic Anions											
Chloride	20	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 16:26	7100492	RLC
Fluoride	0.25	0.30	0.03	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 16:26	7100492	RLC
Sulfate	2.9	1.0	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 16:26	7100492	RLC
Metals, Total											
Boron	2.76	2.00	0.298	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 20:54	7100507	CSW
Calcium	27.3	25.0	2.02	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 20:54	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 08, 2018

Attention: Mr. Joju Abraham

Report No.: AAJ0389

Project: CCR Event

Client ID: YGWC-27I

Lab Number ID: AAJ0389-02

Date/Time Sampled: 10/9/2017 3:25:00PM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	185	25	10	mg/L	SM 2540 C		1	10/13/17 13:20	10/13/17 13:20	7100400	JPT
Inorganic Anions											
Chloride	14	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 16:46	7100492	RLC
Fluoride	0.07	0.30	0.03	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 16:46	7100492	RLC
Sulfate	5.1	1.0	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 16:46	7100492	RLC
Metals, Total											
Boron	1.82	0.0400	0.0060	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 21:00	7100507	CSW
Calcium	27.3	25.0	2.02	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 21:06	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: YGWC-19S

Lab Number ID: AAJ0389-03

Date/Time Sampled: 10/10/2017 2:55:00PM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	10/13/17 13:20	10/13/17 13:20	7100400	JPT
Inorganic Anions											
Chloride	2.8	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 17:07	7100492	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 17:07	7100492	RLC
Sulfate	0.27	1.0	0.02	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 17:07	7100492	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 21:11	7100507	CSW
Calcium	0.895	0.500	0.0404	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 21:11	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: YGWC-26S

Lab Number ID: AAJ0389-04

Date/Time Sampled: 10/10/2017 11:35:00AM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	179	25	10	mg/L	SM 2540 C		1	10/13/17 13:20	10/13/17 13:20	7100400	JPT
Inorganic Anions											
Chloride	15	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 17:28	7100492	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 17:28	7100492	RLC
Sulfate	97	5.0	0.08	mg/L	EPA 300.0		5	10/17/17 11:34	10/23/17 16:05	7100492	RLC
Metals, Total											
Boron	0.612	0.0400	0.0060	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 21:23	7100507	CSW
Calcium	11.4	5.00	2.02	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 21:29	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: YGWC-26I

Lab Number ID: AAJ0389-05

Date/Time Sampled: 10/10/2017 12:20:00PM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	194	25	10	mg/L	SM 2540 C		1	10/13/17 13:20	10/13/17 13:20	7100400	JPT
Inorganic Anions											
Chloride	19	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 17:48	7100492	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 17:48	7100492	RLC
Sulfate	82	5.0	0.08	mg/L	EPA 300.0		5	10/17/17 11:34	10/23/17 16:26	7100492	RLC
Metals, Total											
Boron	0.887	0.0400	0.0060	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 21:46	7100507	CSW
Calcium	15.5	5.00	2.02	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 21:51	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: YGWC-23S

Lab Number ID: AAJ0389-06

Date/Time Sampled: 10/11/2017 9:45:00AM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	100	25	10	mg/L	SM 2540 C		1	10/16/17 18:30	10/16/17 18:30	7100447	JPT
Inorganic Anions											
Chloride	2.4	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 18:09	7100492	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 18:09	7100492	RLC
Sulfate	52	2.0	0.03	mg/L	EPA 300.0		2	10/17/17 11:34	10/23/17 16:47	7100492	RLC
Metals, Total											
Boron	1.09	0.0400	0.0060	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 21:57	7100507	CSW
Calcium	6.36	0.500	0.0404	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 21:57	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: YGWC-33S

Lab Number ID: AAJ0389-07

Date/Time Sampled: 10/11/2017 10:45:00AM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1110	25	10	mg/L	SM 2540 C		1	10/16/17 18:30	10/16/17 18:30	7100447	JPT
Inorganic Anions											
Chloride	5.8	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 18:30	7100492	RLC
Fluoride	0.18	0.30	0.03	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 18:30	7100492	RLC
Sulfate	730	20	0.34	mg/L	EPA 300.0		20	10/17/17 11:34	10/23/17 18:50	7100492	RLC
Metals, Total											
Boron	11.4	2.00	0.298	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 22:14	7100507	CSW
Calcium	125	25.0	2.02	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 22:14	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: YGWC-36

Lab Number ID: AAJ0389-08

Date/Time Sampled: 10/11/2017 12:10:00PM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	264	25	10	mg/L	SM 2540 C		1	10/16/17 18:30	10/16/17 18:30	7100447	JPT
Inorganic Anions											
Chloride	6.4	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 19:32	7100492	RLC
Fluoride	0.14	0.30	0.03	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 19:32	7100492	RLC
Sulfate	150	10	0.17	mg/L	EPA 300.0		10	10/17/17 11:34	10/23/17 19:11	7100492	RLC
Metals, Total											
Boron	0.245	0.0400	0.0060	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 22:20	7100507	CSW
Calcium	18.1	5.00	2.02	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 22:26	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: Dup-3

Lab Number ID: AAJ0389-09

Date/Time Sampled: 10/11/2017 12:00:00AM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1080	25	10	mg/L	SM 2540 C		1	10/16/17 18:30	10/16/17 18:30	7100447	JPT
Inorganic Anions											
Chloride	5.5	0.25	0.02	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 21:36	7100492	RLC
Fluoride	0.16	0.30	0.03	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 21:36	7100492	RLC
Sulfate	760	20	0.34	mg/L	EPA 300.0		20	10/17/17 11:34	10/23/17 19:32	7100492	RLC
Metals, Total											
Boron	11.5	2.00	0.298	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 22:37	7100507	CSW
Calcium	121	25.0	2.02	mg/L	EPA 6020B		50	10/18/17 09:05	10/19/17 22:37	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: EB-3-10-10-17

Lab Number ID: AAJ0389-10

Date/Time Sampled: 10/10/2017 12:00:00PM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	10/13/17 13:20	10/13/17 13:20	7100400	JPT
Inorganic Anions											
Chloride	0.03	0.25	0.02	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 21:56	7100492	RLC
Fluoride	0.42	0.30	0.03	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 21:56	7100492	RLC
Sulfate	0.32	1.0	0.02	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 21:56	7100492	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 22:54	7100507	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 22:54	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Project: CCR Event

Client ID: FB-3-10-11-17

Lab Number ID: AAJ0389-11

Date/Time Sampled: 10/11/2017 9:20:00AM

Date/Time Received: 10/11/2017 5:25:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	10/16/17 18:30	10/16/17 18:30	7100447	JPT
Inorganic Anions											
Chloride	0.03	0.25	0.02	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 22:17	7100492	RLC
Fluoride	0.51	0.30	0.03	mg/L	EPA 300.0		1	10/17/17 11:34	10/17/17 22:17	7100492	RLC
Sulfate	0.10	1.0	0.02	mg/L	EPA 300.0	J	1	10/17/17 11:34	10/17/17 22:17	7100492	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 23:00	7100507	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	10/18/17 09:05	10/19/17 23:00	7100507	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100400 - SM 2540 C											
Blank (7100400-BLK1)						Prepared & Analyzed: 10/13/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7100400-BS1)						Prepared & Analyzed: 10/13/17					
Total Dissolved Solids	368	25	10	mg/L	400.00		92	84-108			
Duplicate (7100400-DUP1)						Source: AAJ0387-04 Prepared & Analyzed: 10/13/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7100400-DUP2)						Source: AAJ0389-01 Prepared & Analyzed: 10/13/17					
Total Dissolved Solids	225	25	10	mg/L		204			10	10	
Batch 7100447 - SM 2540 C											
Blank (7100447-BLK1)						Prepared & Analyzed: 10/16/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7100447-BS1)						Prepared & Analyzed: 10/16/17					
Total Dissolved Solids	384	25	10	mg/L	400.00		96	84-108			
Duplicate (7100447-DUP1)						Source: AAJ0389-11 Prepared & Analyzed: 10/16/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7100447-DUP2)						Source: AAJ0483-01 Prepared & Analyzed: 10/16/17					
Total Dissolved Solids	69	25	10	mg/L		68			1	10	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100492 - EPA 300.0											
Blank (7100492-BLK1)						Prepared & Analyzed: 10/17/17					
Chloride	ND	0.25	0.02	mg/L							
Fluoride	ND	0.30	0.03	mg/L							
Sulfate	ND	1.0	0.02	mg/L							
LCS (7100492-BS1)						Prepared & Analyzed: 10/17/17					
Chloride	10.4	0.25	0.02	mg/L	10.020		104	90-110			
Fluoride	10.5	0.30	0.03	mg/L	10.020		105	90-110			
Sulfate	10.2	1.0	0.02	mg/L	10.050		102	90-110			
Matrix Spike (7100492-MS1)						Source: AAJ0389-07 Prepared & Analyzed: 10/17/17					
Chloride	5.56	0.25	0.02	mg/L	10.020	5.76	NR	90-110			QM-05
Fluoride	0.16	0.30	0.03	mg/L	10.020	0.18	NR	90-110			QM-05, J
Sulfate	402	1.0	0.02	mg/L	10.050	402	NR	90-110			QM-05
Matrix Spike (7100492-MS2)						Source: AAJ0389-08 Prepared & Analyzed: 10/17/17					
Chloride	16.0	0.25	0.02	mg/L	10.020	6.44	96	90-110			
Fluoride	10.9	0.30	0.03	mg/L	10.020	0.14	107	90-110			
Sulfate	129	1.0	0.02	mg/L	10.050	132	NR	90-110			QM-02
Matrix Spike Dup (7100492-MSD1)						Source: AAJ0389-07 Prepared & Analyzed: 10/17/17					
Chloride	5.47	0.25	0.02	mg/L	10.020	5.76	NR	90-110	2	15	QM-05
Fluoride	0.16	0.30	0.03	mg/L	10.020	0.18	NR	90-110	2	15	QM-05, J
Sulfate	402	1.0	0.02	mg/L	10.050	402	0.8	90-110	0.07	15	QM-05



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7100507 - EPA 3005A

Blank (7100507-BLK1)

Prepared: 10/18/17 Analyzed: 10/19/17

Antimony	ND	0.0030	0.0006	mg/L							
Arsenic	0.0006	0.0050	0.0005	mg/L							J
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0404	mg/L							
Chromium	ND	0.0100	0.0005	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0010	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0018	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	0.0021	0.0100	0.0012	mg/L							J
Zinc	ND	0.0100	0.0012	mg/L							
Lithium	ND	0.0500	0.0015	mg/L							

LCS (7100507-BS1)

Prepared: 10/18/17 Analyzed: 10/19/17

Antimony	0.102	0.0030	0.0006	mg/L	0.10000		102	80-120			
Arsenic	0.0967	0.0050	0.0005	mg/L	0.10000		97	80-120			
Barium	0.0981	0.0100	0.0004	mg/L	0.10000		98	80-120			
Beryllium	0.107	0.0030	0.00009	mg/L	0.10000		107	80-120			
Boron	1.03	0.0400	0.0060	mg/L	1.0000		103	80-120			
Cadmium	0.100	0.0010	0.0001	mg/L	0.10000		100	80-120			
Calcium	1.02	0.500	0.0404	mg/L	1.0000		102	80-120			
Chromium	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Cobalt	0.0988	0.0100	0.0003	mg/L	0.10000		99	80-120			
Copper	0.0991	0.0250	0.0003	mg/L	0.10000		99	80-120			
Lead	0.103	0.0050	0.00007	mg/L	0.10000		103	80-120			
Molybdenum	0.101	0.0100	0.0010	mg/L	0.10000		101	80-120			
Nickel	0.0996	0.0100	0.0005	mg/L	0.10000		100	80-120			
Selenium	0.103	0.0100	0.0018	mg/L	0.10000		103	80-120			
Silver	0.100	0.0100	0.0002	mg/L	0.10000		100	80-120			
Thallium	0.104	0.0010	0.00005	mg/L	0.10000		104	80-120			
Vanadium	0.101	0.0100	0.0012	mg/L	0.10000		101	80-120			
Zinc	0.101	0.0100	0.0012	mg/L	0.10000		101	80-120			
Lithium	0.102	0.0500	0.0015	mg/L	0.10000		102	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100507 - EPA 3005A											
Matrix Spike (7100507-MS1)			Source: AAJ0387-02			Prepared: 10/18/17 Analyzed: 10/19/17					
Antimony	0.101	0.0030	0.0006	mg/L	0.10000	ND	101	75-125			
Arsenic	0.101	0.0050	0.0005	mg/L	0.10000	0.0007	100	75-125			
Barium	0.216	0.0100	0.0004	mg/L	0.10000	0.112	104	75-125			
Beryllium	0.0954	0.0030	0.00009	mg/L	0.10000	ND	95	75-125			
Boron	1.56	0.0400	0.0060	mg/L	1.0000	0.603	96	75-125			
Cadmium	0.0974	0.0010	0.0001	mg/L	0.10000	ND	97	75-125			
Calcium	30.6	25.0	2.02	mg/L	1.0000	27.2	334	75-125			QM-02
Chromium	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125			
Cobalt	0.0987	0.0100	0.0003	mg/L	0.10000	0.0017	97	75-125			
Copper	0.0959	0.0250	0.0003	mg/L	0.10000	ND	96	75-125			
Lead	0.101	0.0050	0.00007	mg/L	0.10000	ND	101	75-125			
Molybdenum	0.102	0.0100	0.0010	mg/L	0.10000	ND	102	75-125			
Nickel	0.0970	0.0100	0.0005	mg/L	0.10000	0.0013	96	75-125			
Selenium	0.106	0.0100	0.0018	mg/L	0.10000	ND	106	75-125			
Silver	0.0974	0.0100	0.0002	mg/L	0.10000	ND	97	75-125			
Thallium	0.103	0.0010	0.00005	mg/L	0.10000	ND	103	75-125			
Vanadium	0.101	0.0100	0.0012	mg/L	0.10000	0.0018	99	75-125			
Zinc	0.0996	0.0100	0.0012	mg/L	0.10000	ND	100	75-125			
Lithium	0.108	0.0500	0.0015	mg/L	0.10000	0.0123	96	75-125			
Matrix Spike Dup (7100507-MSD1)			Source: AAJ0387-02			Prepared: 10/18/17 Analyzed: 10/19/17					
Antimony	0.105	0.0030	0.0006	mg/L	0.10000	ND	105	75-125	4	20	
Arsenic	0.100	0.0050	0.0005	mg/L	0.10000	0.0007	99	75-125	0.6	20	
Barium	0.214	0.0100	0.0004	mg/L	0.10000	0.112	102	75-125	1	20	
Beryllium	0.0988	0.0030	0.00009	mg/L	0.10000	ND	99	75-125	4	20	
Boron	1.59	0.0400	0.0060	mg/L	1.0000	0.603	99	75-125	2	20	
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000	ND	102	75-125	4	20	
Calcium	30.0	25.0	2.02	mg/L	1.0000	27.2	272	75-125	2	20	QM-02
Chromium	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125	0.2	20	
Cobalt	0.101	0.0100	0.0003	mg/L	0.10000	0.0017	99	75-125	2	20	
Copper	0.0984	0.0250	0.0003	mg/L	0.10000	ND	98	75-125	3	20	
Lead	0.102	0.0050	0.00007	mg/L	0.10000	ND	102	75-125	0.3	20	
Molybdenum	0.104	0.0100	0.0010	mg/L	0.10000	ND	104	75-125	2	20	
Nickel	0.102	0.0100	0.0005	mg/L	0.10000	0.0013	100	75-125	5	20	
Selenium	0.105	0.0100	0.0018	mg/L	0.10000	ND	105	75-125	0.9	20	
Silver	0.0991	0.0100	0.0002	mg/L	0.10000	ND	99	75-125	2	20	
Thallium	0.103	0.0010	0.00005	mg/L	0.10000	ND	103	75-125	0.2	20	
Vanadium	0.101	0.0100	0.0012	mg/L	0.10000	0.0018	99	75-125	0.0007	20	
Zinc	0.102	0.0100	0.0012	mg/L	0.10000	ND	102	75-125	2	20	
Lithium	0.107	0.0500	0.0015	mg/L	0.10000	0.0123	95	75-125	0.4	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100507 - EPA 3005A											
Post Spike (7100507-PS1)		Source: AAJ0387-02				Prepared: 10/18/17 Analyzed: 10/19/17					
Antimony	99.2			ug/L	100.00	0.0789	99	80-120			
Arsenic	99.5			ug/L	100.00	0.670	99	80-120			
Barium	217			ug/L	100.00	112	105	80-120			
Beryllium	100			ug/L	100.00	0.0097	100	80-120			
Boron	1610			ug/L	1000.0	603	101	80-120			
Cadmium	99.9			ug/L	100.00	0.0338	100	80-120			
Calcium	28800			ug/L	1000.0	27200	154	80-120			QM-02
Chromium	101			ug/L	100.00	0.101	100	80-120			
Cobalt	97.4			ug/L	100.00	1.70	96	80-120			
Copper	98.1			ug/L	100.00	0.0651	98	80-120			
Lead	101			ug/L	100.00	0.0115	101	80-120			
Molybdenum	106			ug/L	100.00	0.295	106	80-120			
Nickel	98.6			ug/L	100.00	1.30	97	80-120			
Selenium	107			ug/L	100.00	-0.0424	107	80-120			
Silver	103			ug/L	100.00	-0.0009	103	80-120			
Thallium	104			ug/L	100.00	0.0058	104	80-120			
Vanadium	107			ug/L	100.00	1.77	105	80-120			
Zinc	99.8			ug/L	100.00	0.773	99	80-120			
Lithium	106			ug/L	100.00	12.3	94	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QM-05** The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.

Sample Condition Upon Receipt



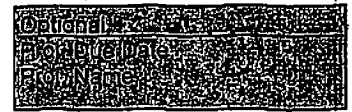
Client Name: GIA Power

Project # AAJ0389

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no



Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used IR-4 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 4.3 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 10/11/17 MR

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix:	<u>GIA</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):	_____		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALLC003rev.3 11September2006



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 10/12/2017 4:27:23PM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 10/11/17 17:25

Work Order: AAJ0389

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 11

#Containers: 22

Minimum Temp(C): 4.3

Maximum Temp(C): 4.3

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

- COC included with Samples YES
- Sample Container(s) Intact YES
- Chain of Custody Complete YES
- Sample Container(s) Match COC YES
- Custody seal Intact YES
- Temperature in Compliance YES
- Sufficient Sample Volume for Analysis YES
- Zero Headspace Maintained for VOA Analyses YES
- Samples labeled preserved (If Applicable) YES
- Samples received within Allowable Hold Times YES
- Samples Received on Ice YES
- Preservation Confirmed YES

Comments:



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

**Georgia Power
2480 Maner Road
Atlanta, GA 30339**

Attention: Mr. Joju Abraham

Report Number: AAJ0238

January 08, 2018

Project: CCR Event

Project #: Plant Yates

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

A handwritten signature in black ink that reads "Betsy McDaniel" written over a horizontal line.

Project Manager

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, LLC.
All test results relate only to the samples analyzed.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-18S	AAJ0238-01	Ground Water	10/04/17 15:05	10/06/17 14:40
YGWA-4I	AAJ0238-02	Ground Water	10/05/17 15:40	10/06/17 14:40
YGWA-14S	AAJ0238-03	Ground Water	10/05/17 11:35	10/06/17 14:40
YGWA-18I	AAJ0238-04	Ground Water	10/05/17 12:45	10/06/17 14:40
YGWC-24S	AAJ0238-05	Ground Water	10/05/17 16:45	10/06/17 14:40
YGWC-28I	AAJ0238-06	Ground Water	10/05/17 16:05	10/06/17 14:40
YGWC-29I	AAJ0238-07	Ground Water	10/05/17 14:25	10/06/17 14:40
EB-2-10-5-17	AAJ0238-08	Water	10/05/17 15:50	10/06/17 14:40
Dup-2	AAJ0238-09	Ground Water	10/05/17 00:00	10/06/17 14:40
YGWC-27S	AAJ0238-10	Ground Water	10/06/17 11:45	10/06/17 14:40
FB-2-10-5-17	AAJ0238-11	Water	10/05/17 15:20	10/06/17 14:40



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Case Narrative

CCR Event Plant Yates Report AAJ0238 1/8/2018

This revised report replaces the original report submitted on 10/20/2017.

Some of the quality control data for Metals was missing from batch 7100469. The following changes were made: LCS, MS, MSD, and PDS recoveries for Boron, Calcium, and Molybdenum have been added to the batch QC section. No other changes were made to this report.



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: YGWA-18S

Lab Number ID: AAJ0238-01

Date/Time Sampled: 10/4/2017 3:05:00PM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	45	25	10	mg/L	SM 2540 C		1	10/09/17 14:10	10/09/17 14:10	7100223	JPT
Inorganic Anions											
Chloride	6.8	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 14:20	7100254	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 14:20	7100254	RLC
Sulfate	1.7	1.0	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 14:20	7100254	RLC
Metals, Total											
Boron	0.0090	0.0400	0.0060	mg/L	EPA 6020B	J	1	10/16/17 18:00	10/17/17 21:38	7100469	CSW
Calcium	1.10	0.500	0.0404	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 21:38	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: YGWA-4I

Lab Number ID: AAJ0238-02

Date/Time Sampled: 10/5/2017 3:40:00PM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	95	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	4.7	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 14:41	7100254	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 14:41	7100254	RLC
Sulfate	9.6	1.0	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 14:41	7100254	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 22:01	7100469	CSW
Calcium	9.29	0.500	0.0404	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 22:01	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: YGWA-14S

Lab Number ID: AAJ0238-03

Date/Time Sampled: 10/5/2017 11:35:00AM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	40	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	3.8	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 15:02	7100254	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 15:02	7100254	RLC
Sulfate	7.9	1.0	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 15:02	7100254	RLC
Metals, Total											
Boron	0.0173	0.0400	0.0060	mg/L	EPA 6020B	J	1	10/16/17 18:00	10/17/17 22:12	7100469	CSW
Calcium	1.11	0.500	0.0404	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 22:12	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 08, 2018

Attention: Mr. Joju Abraham

Report No.: AAJ0238

Project: CCR Event

Client ID: YGWA-18I

Lab Number ID: AAJ0238-04

Date/Time Sampled: 10/5/2017 12:45:00PM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	104	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	7.0	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 15:22	7100254	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 15:22	7100254	RLC
Sulfate	1.6	1.0	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 15:22	7100254	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 22:24	7100469	CSW
Calcium	5.28	0.500	0.0404	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 22:24	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: YGWC-24S

Lab Number ID: AAJ0238-05

Date/Time Sampled: 10/5/2017 4:45:00PM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	48	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	6.0	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 15:43	7100254	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 15:43	7100254	RLC
Sulfate	0.36	1.0	0.02	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 15:43	7100254	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 22:35	7100469	CSW
Calcium	1.70	0.500	0.0404	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 22:35	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: YGWC-28I

Lab Number ID: AAJ0238-06

Date/Time Sampled: 10/5/2017 4:05:00PM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	221	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	19	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 16:04	7100254	RLC
Fluoride	0.08	0.30	0.03	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 16:04	7100254	RLC
Sulfate	8.6	1.0	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 16:04	7100254	RLC
Metals, Total											
Boron	2.53	2.00	0.298	mg/L	EPA 6020B		50	10/16/17 18:00	10/19/17 15:49	7100469	CSW
Calcium	36.4	25.0	2.02	mg/L	EPA 6020B		50	10/16/17 18:00	10/17/17 22:52	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: YGWC-29I

Lab Number ID: AAJ0238-07

Date/Time Sampled: 10/5/2017 2:25:00PM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	139	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	15	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 17:06	7100254	RLC
Fluoride	0.09	0.30	0.03	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 17:06	7100254	RLC
Sulfate	31	1.0	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 17:06	7100254	RLC
Metals, Total											
Boron	0.851	0.400	0.0595	mg/L	EPA 6020B		10	10/16/17 18:00	10/19/17 15:55	7100469	CSW
Calcium	12.0	5.00	2.02	mg/L	EPA 6020B		50	10/16/17 18:00	10/17/17 23:15	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: EB-2-10-5-17

Lab Number ID: AAJ0238-08

Date/Time Sampled: 10/5/2017 3:50:00PM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	0.07	0.25	0.02	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 17:26	7100254	RLC
Fluoride	1.0	0.30	0.03	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 17:26	7100254	RLC
Sulfate	0.06	1.0	0.02	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 17:26	7100254	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 23:21	7100469	CSW
Calcium	0.0461	0.500	0.0404	mg/L	EPA 6020B	J	1	10/16/17 18:00	10/17/17 23:21	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: Dup-2

Lab Number ID: AAJ0238-09

Date/Time Sampled: 10/5/2017 12:00:00AM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	50	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	6.0	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 18:49	7100254	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 18:49	7100254	RLC
Sulfate	0.38	1.0	0.02	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 18:49	7100254	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 23:26	7100469	CSW
Calcium	1.63	0.500	0.0404	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 23:26	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Project: CCR Event

Client ID: YGWC-27S

Lab Number ID: AAJ0238-10

Date/Time Sampled: 10/6/2017 11:45:00AM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Ground Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	183	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	21	0.25	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 19:10	7100254	RLC
Fluoride	0.15	0.30	0.03	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 19:10	7100254	RLC
Sulfate	23	1.0	0.02	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 19:10	7100254	RLC
Metals, Total											
Boron	1.31	0.400	0.0595	mg/L	EPA 6020B		10	10/16/17 18:00	10/19/17 16:01	7100469	CSW
Calcium	39.8	25.0	2.02	mg/L	EPA 6020B		50	10/16/17 18:00	10/17/17 23:44	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

January 08, 2018

Attention: Mr. Joju Abraham

Report No.: AAJ0238

Project: CCR Event

Client ID: FB-2-10-5-17

Lab Number ID: AAJ0238-11

Date/Time Sampled: 10/5/2017 3:20:00PM

Date/Time Received: 10/6/2017 2:40:00PM

Matrix: Water

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	ND	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	0.14	0.25	0.02	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 19:30	7100254	RLC
Fluoride	1.9	0.30	0.03	mg/L	EPA 300.0		1	10/10/17 10:23	10/11/17 19:30	7100254	RLC
Sulfate	0.30	1.0	0.02	mg/L	EPA 300.0	J	1	10/10/17 10:23	10/11/17 19:30	7100254	RLC
Metals, Total											
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 23:49	7100469	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	10/16/17 18:00	10/17/17 23:49	7100469	CSW



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100223 - SM 2540 C											
Blank (7100223-BLK1)						Prepared & Analyzed: 10/09/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7100223-BS1)						Prepared & Analyzed: 10/09/17					
Total Dissolved Solids	360	25	10	mg/L	400.00		90	84-108			
Duplicate (7100223-DUP1)						Source: AAJ0126-10 Prepared & Analyzed: 10/09/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7100223-DUP2)						Source: AAJ0239-10 Prepared & Analyzed: 10/09/17					
Total Dissolved Solids	63	25	10	mg/L		74			16	10	QR-03
Batch 7100259 - SM 2540 C											
Blank (7100259-BLK1)						Prepared & Analyzed: 10/10/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7100259-BS1)						Prepared & Analyzed: 10/10/17					
Total Dissolved Solids	388	25	10	mg/L	400.00		97	84-108			
Duplicate (7100259-DUP1)						Source: AAJ0178-08RE1 Prepared & Analyzed: 10/10/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7100259-DUP2)						Source: AAJ0239-01 Prepared & Analyzed: 10/10/17					
Total Dissolved Solids	107	25	10	mg/L		191			56	10	QR-03



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100254 - EPA 300.0											
Blank (7100254-BLK1)						Prepared: 10/10/17 Analyzed: 10/11/17					
Chloride	ND	0.25	0.02	mg/L							
Fluoride	ND	0.30	0.03	mg/L							
Sulfate	ND	1.0	0.02	mg/L							
LCS (7100254-BS1)						Prepared: 10/10/17 Analyzed: 10/11/17					
Chloride	10.3	0.25	0.02	mg/L	10.020		103	90-110			
Fluoride	9.42	0.30	0.03	mg/L	10.020		94	90-110			
Sulfate	10.6	1.0	0.02	mg/L	10.050		106	90-110			
Matrix Spike (7100254-MS1)						Source: AAJ0238-06 Prepared: 10/10/17 Analyzed: 10/11/17					
Chloride	27.4	0.25	0.02	mg/L	10.020	18.9	86	90-110			QM-02
Fluoride	10.1	0.30	0.03	mg/L	10.020	0.08	100	90-110			
Sulfate	18.3	1.0	0.02	mg/L	10.050	8.64	96	90-110			
Matrix Spike (7100254-MS2)						Source: AAJ0239-04 Prepared: 10/10/17 Analyzed: 10/11/17					
Chloride	11.7	0.25	0.02	mg/L	10.020	1.48	102	90-110			
Fluoride	9.63	0.30	0.03	mg/L	10.020	ND	96	90-110			
Sulfate	10.9	1.0	0.02	mg/L	10.050	0.50	103	90-110			
Matrix Spike Dup (7100254-MSD1)						Source: AAJ0238-06 Prepared: 10/10/17 Analyzed: 10/11/17					
Chloride	27.7	0.25	0.02	mg/L	10.020	18.9	88	90-110	0.8	15	QM-02
Fluoride	10.2	0.30	0.03	mg/L	10.020	0.08	101	90-110	1	15	
Sulfate	18.4	1.0	0.02	mg/L	10.050	8.64	97	90-110	0.5	15	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 7100469 - EPA 3005A

Blank (7100469-BLK1)

Prepared: 10/16/17 Analyzed: 10/17/17

Antimony	ND	0.0030	0.0006	mg/L							
Arsenic	ND	0.0050	0.0005	mg/L							
Barium	ND	0.0100	0.0004	mg/L							
Beryllium	ND	0.0030	0.00009	mg/L							
Boron	ND	0.0400	0.0060	mg/L							
Cadmium	ND	0.0010	0.0001	mg/L							
Calcium	ND	0.500	0.0404	mg/L							
Chromium	ND	0.0100	0.0005	mg/L							
Cobalt	ND	0.0100	0.0003	mg/L							
Copper	ND	0.0250	0.0003	mg/L							
Lead	ND	0.0050	0.00007	mg/L							
Molybdenum	ND	0.0100	0.0010	mg/L							
Nickel	ND	0.0100	0.0005	mg/L							
Selenium	ND	0.0100	0.0018	mg/L							
Silver	ND	0.0100	0.0002	mg/L							
Thallium	ND	0.0010	0.00005	mg/L							
Vanadium	ND	0.0100	0.0012	mg/L							
Zinc	ND	0.0100	0.0012	mg/L							
Lithium	ND	0.0500	0.0015	mg/L							

LCS (7100469-BS1)

Prepared: 10/16/17 Analyzed: 10/17/17

Antimony	0.101	0.0030	0.0006	mg/L	0.10000		101	80-120			
Arsenic	0.0990	0.0050	0.0005	mg/L	0.10000		99	80-120			
Barium	0.0974	0.0100	0.0004	mg/L	0.10000		97	80-120			
Beryllium	0.102	0.0030	0.00009	mg/L	0.10000		102	80-120			
Boron	1.06	0.0400	0.0060	mg/L	1.0000		106	80-120			
Cadmium	0.105	0.0010	0.0001	mg/L	0.10000		105	80-120			
Calcium	1.00	0.500	0.0404	mg/L	1.0000		100	80-120			
Chromium	0.106	0.0100	0.0005	mg/L	0.10000		106	80-120			
Cobalt	0.0998	0.0100	0.0003	mg/L	0.10000		100	80-120			
Copper	0.0994	0.0250	0.0003	mg/L	0.10000		99	80-120			
Lead	0.0974	0.0050	0.00007	mg/L	0.10000		97	80-120			
Molybdenum	0.103	0.0100	0.0010	mg/L	0.10000		103	80-120			
Nickel	0.0990	0.0100	0.0005	mg/L	0.10000		99	80-120			
Selenium	0.0994	0.0100	0.0018	mg/L	0.10000		99	80-120			
Silver	0.0981	0.0100	0.0002	mg/L	0.10000		98	80-120			
Thallium	0.100	0.0010	0.00005	mg/L	0.10000		100	80-120			
Vanadium	0.104	0.0100	0.0012	mg/L	0.10000		104	80-120			
Zinc	0.106	0.0100	0.0012	mg/L	0.10000		106	80-120			
Lithium	0.105	0.0500	0.0015	mg/L	0.10000		105	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100469 - EPA 3005A											
Matrix Spike (7100469-MS1)			Source: AAJ0319-03			Prepared: 10/16/17 Analyzed: 10/17/17					
Antimony	0.101	0.0030	0.0006	mg/L	0.10000	ND	101	75-125			
Arsenic	0.102	0.0050	0.0005	mg/L	0.10000	0.0007	102	75-125			
Barium	0.391	0.0100	0.0004	mg/L	0.10000	0.178	213	75-125			
Beryllium	0.106	0.0030	0.00009	mg/L	0.10000	ND	106	75-125			
Boron	1.34	0.0400	0.0060	mg/L	1.0000	0.200	114	75-125			
Cadmium	0.105	0.0010	0.0001	mg/L	0.10000	ND	105	75-125			
Calcium	58.5	25.0	2.02	mg/L	1.0000	58.0	49	75-125			QM-02
Chromium	0.106	0.0100	0.0005	mg/L	0.10000	ND	106	75-125			
Cobalt	0.0977	0.0100	0.0003	mg/L	0.10000	ND	98	75-125			
Copper	0.0986	0.0250	0.0003	mg/L	0.10000	ND	99	75-125			
Lead	0.0956	0.0050	0.00007	mg/L	0.10000	ND	96	75-125			
Molybdenum	0.104	0.0100	0.0010	mg/L	0.10000	ND	104	75-125			
Nickel	0.0985	0.0100	0.0005	mg/L	0.10000	ND	99	75-125			
Selenium	0.101	0.0100	0.0018	mg/L	0.10000	0.0018	99	75-125			
Silver	0.0975	0.0100	0.0002	mg/L	0.10000	ND	98	75-125			
Thallium	0.100	0.0010	0.00005	mg/L	0.10000	ND	100	75-125			
Vanadium	0.109	0.0100	0.0012	mg/L	0.10000	ND	109	75-125			
Zinc	0.105	0.0100	0.0012	mg/L	0.10000	ND	105	75-125			
Lithium	0.109	0.0500	0.0015	mg/L	0.10000	ND	109	75-125			
Matrix Spike Dup (7100469-MSD1)			Source: AAJ0319-03			Prepared: 10/16/17 Analyzed: 10/17/17					
Antimony	0.0994	0.0030	0.0006	mg/L	0.10000	ND	99	75-125	2	20	
Arsenic	0.100	0.0050	0.0005	mg/L	0.10000	0.0007	99	75-125	2	20	
Barium	0.380	0.0100	0.0004	mg/L	0.10000	0.178	203	75-125	3	20	
Beryllium	0.104	0.0030	0.00009	mg/L	0.10000	ND	104	75-125	2	20	
Boron	1.28	0.0400	0.0060	mg/L	1.0000	0.200	108	75-125	4	20	
Cadmium	0.101	0.0010	0.0001	mg/L	0.10000	ND	101	75-125	4	20	
Calcium	54.5	25.0	2.02	mg/L	1.0000	58.0	NR	75-125	7	20	QM-02
Chromium	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125	2	20	
Cobalt	0.0966	0.0100	0.0003	mg/L	0.10000	ND	97	75-125	1	20	
Copper	0.0947	0.0250	0.0003	mg/L	0.10000	ND	95	75-125	4	20	
Lead	0.0942	0.0050	0.00007	mg/L	0.10000	ND	94	75-125	2	20	
Molybdenum	0.103	0.0100	0.0010	mg/L	0.10000	ND	103	75-125	1	20	
Nickel	0.0983	0.0100	0.0005	mg/L	0.10000	ND	98	75-125	0.2	20	
Selenium	0.102	0.0100	0.0018	mg/L	0.10000	0.0018	100	75-125	1	20	
Silver	0.0963	0.0100	0.0002	mg/L	0.10000	ND	96	75-125	1	20	
Thallium	0.0980	0.0010	0.00005	mg/L	0.10000	ND	98	75-125	2	20	
Vanadium	0.105	0.0100	0.0012	mg/L	0.10000	ND	105	75-125	4	20	
Zinc	0.101	0.0100	0.0012	mg/L	0.10000	ND	101	75-125	4	20	
Lithium	0.107	0.0500	0.0015	mg/L	0.10000	ND	107	75-125	1	20	



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
 110 Technology Parkway, Peachtree Corners, GA 30092
 (770) 734-4200 FAX (770) 734-4201

Georgia Power
 2480 Maner Road
 Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100469 - EPA 3005A											
Post Spike (7100469-PS1)		Source: AAJ0319-03				Prepared: 10/16/17 Analyzed: 10/17/17					
Antimony	99.8			ug/L	100.00	0.0209	100	80-120			
Arsenic	104			ug/L	100.00	0.685	103	80-120			
Barium	401			ug/L	100.00	178	223	80-120			
Beryllium	105			ug/L	100.00	-0.0006	105	80-120			
Boron	1290			ug/L	1000.0	200	109	80-120			
Cadmium	103			ug/L	100.00	0.0001	103	80-120			
Calcium	55800			ug/L	1000.0	58000	NR	80-120			QM-02
Chromium	103			ug/L	100.00	0.370	103	80-120			
Cobalt	98.7			ug/L	100.00	0.0057	99	80-120			
Copper	96.8			ug/L	100.00	0.248	97	80-120			
Lead	93.6			ug/L	100.00	0.0214	94	80-120			
Molybdenum	108			ug/L	100.00	0.714	107	80-120			
Nickel	100			ug/L	100.00	0.207	100	80-120			
Selenium	102			ug/L	100.00	1.77	100	80-120			
Silver	99.6			ug/L	100.00	-0.0007	100	80-120			
Thallium	97.5			ug/L	100.00	0.0090	97	80-120			
Vanadium	106			ug/L	100.00	0.478	105	80-120			
Zinc	103			ug/L	100.00	0.797	103	80-120			
Lithium	108			ug/L	100.00	0.260	108	80-120			



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Georgia Power
2480 Maner Road
Atlanta GA, 30339

Attention: Mr. Joju Abraham

January 08, 2018

Legend

Definition of Laboratory Terms

- ND** - Not Detected at levels equal to or greater than the MDL
- BRL** - Not Detected at levels equal to or greater than the RL
- RL** - Reporting Limit **MDL** - Method Detection Limit
- SOP** - Method run per Pace Standard Operating Procedure
- CFU** - Colony Forming Units
- DF** - Dilution Factor **TIC** - Tentatively Identified Compound

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. Pace is not NELAC certified for N-Nitrosodiphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

- QR-03** The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to suspected matrix interference and/or non-homogeneous sample matrix.
- QM-02** The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.
- J** Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

Note: Unless otherwise noted, all results are reported on an as received basis.



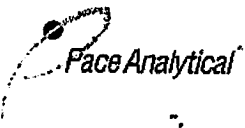
Pace Analytical Services, Inc.
 110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
 (770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Georgia Power		CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308 404-506-7239		REPORT TO: Lauren Petty CC: Maria Padilla Heath McCorde PO #: laburch@southernmco.com		PROJECT NAME/STATE: Plant Yates AP	
PROJECT #: Phase 2 CCR							
Collection DATE	Collection TIME	MATRIX CODE*	GRA B	SAMPLE IDENTIFICATION	CONTAINER TYPE	PRESERVATION	ANALYSIS REQUESTED
10-4-17	1505	GW	✓	YGWA-18S	Z	(1)	
10-5-17	1540	GW	✓	YGWA-4I	3	(2)	
10-5-17	1135	GW	✓	YGWA-14G	2	(1)	
10-5-17	1245	GW	✓	YGWA-18I	3	(2)	
10-5-17	1645	GW	✓	YGWC-24S	3	(2)	
10-5-17	1605	GW	✓	YGWC-28I	3	(2)	
10-5-17	1425	GW	✓	YGWC-29I	3	(2)	
10-5-17	1550	W	✓	ED-2-10-5-17	2	(1)	
10-5-17	---	GW	✓	DUP-2	2	(1)	
10-6-17	1145	GW	✓	YGWC-27S	3	(2)	
10-5-17	1520	W	✓	FB-2-10-5-17	2	(1)	
SAMPLED BY AND TITLE: C. Berker, Sr. District Lead		DATE/TIME: 10-6-17 1420		RELINQUISHED BY: [Signature] Lab		DATE/TIME: 10-6-17 1440	
RECEIVED BY:		DATE/TIME:		RELINQUISHED BY:		DATE/TIME:	
RECEIVED BY LAB: [Signature]		DATE/TIME: 10/6/17 1440		USPS		COURIER	
Temp:		Min:		Max:		OTHER	
Seal:		Intact		Broken		Not Present	
Yes		No		Yes		No	
NA		NA		NA		NA	
FS		FS		FS		FS	

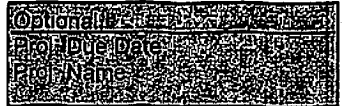
Plant Yates COC Ash Ponds



Sample Condition Upon Receipt

Client Name: GLA Power Project # AAJ0238

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Tracking #: _____



Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used IR-4 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 0.1 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 10/6/17 MR

Temp should be above freezing to 6°C Comments: _____

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix: <u>GLA</u>			
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution: _____ Date/Time: _____ Field Data Required? Y / N

Person Contacted: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST

Printed: 10/10/2017 10:17:11AM

Attn: Mr. Joju Abraham

Client: Georgia Power

Project: CCR Event

Date Received: 10/06/17 14:40

Work Order: AAJ0238

Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 11

#Containers: 28

Minimum Temp(C): 0.1

Maximum Temp(C): 0.1

Custody Seal(s) Used: Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

Product Name: Low-Flow System

Date: 2017-10-03 13:53:44

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° -53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 55.0 ft

Pump placement from TOC 49.9 ft

Well Information:

Well ID YGWA-1I
Well diameter 2 in
Well Total Depth 54.93 ft
Screen Length 10 ft
Depth to Water 38.50 ft

Pumping Information:

Final Pumping Rate 60 mL/min
Total System Volume 1.679525 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 24 in
Total Volume Pumped 9.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:28:42	600.01	22.09	5.98	63.08	2.50	40.60	2.75	78.53
Last 5	13:33:42	900.01	21.82	5.96	62.99	2.21	40.60	2.86	80.03
Last 5	13:38:42	1200.00	21.76	5.90	62.69	2.85	40.60	2.94	84.26
Last 5	13:43:42	1500.01	21.96	6.00	62.32	2.30	40.60	2.97	79.17
Last 5	13:48:45	1803.00	21.73	5.98	61.96	2.05	40.60	3.10	80.99
Variance 0			-0.06	-0.06	-0.30			0.08	4.23
Variance 1			0.20	0.11	-0.37			0.03	-5.09
Variance 2			-0.23	-0.02	-0.36			0.13	1.82

Notes

Collected at 13:50. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-03 15:07:29

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° -53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 108 ft

Pump placement from TOC 103.6 ft

Well Information:

Well ID YGWA-1D
Well diameter 2 in
Well Total Depth 128.60 ft
Screen Length 10 ft
Depth to Water 52.15 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 2.830614 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 6.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:32:39	600.02	18.70	6.63	164.68	1.96	52.40	0.39	13.04
Last 5	14:37:39	900.01	18.56	6.67	165.14	2.02	52.40	0.21	-14.49
Last 5	14:52:39	1800.00	19.14	6.82	159.25	1.58	52.40	0.14	-32.84
Last 5	14:57:39	2099.99	19.25	6.83	157.14	1.23	51.40	0.15	-30.97
Last 5	15:02:43	2403.99	19.41	6.81	155.65	1.65	51.40	0.16	-27.99
Variance 0			0.58	0.15	-5.89			-0.07	-18.35
Variance 1			0.11	0.01	-2.11			0.01	1.87
Variance 2			0.16	-0.03	-1.49			0.01	2.97

Notes

Collected at 15:05. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-03 16:14:39

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 65.0 ft

Pump placement from TOC 55.7 ft

Well Information:

Well ID YGWA-2I
Well diameter 2 in
Well Total Depth 65.74 ft
Screen Length 10 ft
Depth to Water 45.85 ft

Pumping Information:

Final Pumping Rate 60 mL/min
Total System Volume 1.896712 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 39 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:49:04	1200.00	22.53	7.02	223.12	1.65	47.50	1.17	-41.85
Last 5	15:54:04	1500.00	22.44	6.98	222.87	1.95	47.70	0.95	-44.51
Last 5	15:59:04	1800.00	22.11	6.98	223.20	1.58	47.90	0.84	-46.77
Last 5	16:04:04	2099.99	21.91	6.98	224.17	1.85	48.00	0.84	-47.55
Last 5	16:09:04	2399.98	21.77	6.99	223.59	1.45	48.10	0.88	-49.00
Variance 0			-0.34	-0.01	0.34			-0.12	-2.26
Variance 1			-0.20	0.00	0.97			0.01	-0.78
Variance 2			-0.13	0.01	-0.58			0.04	-1.45

Notes

Collected at 16:15. Sunny 70s. EB-1 here at 1600 (tubing)

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-04 10:26:56

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 127 ft

Pump placement from TOC 122.10 ft

Well Information:

Well ID YGWA-3D
Well diameter 2 in
Well Total Depth 137.10 ft
Screen Length 50 ft
Depth to Water 32.68 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 3.243268 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:02:22	900.02	19.35	7.32	227.53	1.87	32.70	0.25	-10.86
Last 5	10:07:22	1200.01	19.51	7.36	227.70	1.56	32.70	0.18	-17.76
Last 5	10:12:22	1500.00	19.59	7.41	227.29	1.16	32.70	0.13	-25.26
Last 5	10:17:22	1800.00	19.86	7.45	227.13	1.94	32.70	0.13	-31.70
Last 5	10:22:22	2100.00	20.04	7.49	227.29	1.69	32.70	0.13	-38.12
Variance 0			0.08	0.05	-0.41			-0.05	-7.51
Variance 1			0.27	0.04	-0.16			0.00	-6.44
Variance 2			0.18	0.04	0.16			0.01	-6.42

Notes

Collected at 10:25. Sunny 60s

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-04 12:40:39

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° -53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 63.0 ft

Pump placement from TOC 58.0 ft

Well Information:

Well ID YGWA-3I
Well diameter 2 in
Well Total Depth 60.0 ft
Screen Length 10 ft
Depth to Water 53.35 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.853275 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 13 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:18:04	3899.95	19.86	7.45	211.44	1.95	53.60	0.30	-62.28
Last 5	12:23:04	4199.96	19.90	7.46	209.23	2.43	53.60	0.29	-63.74
Last 5	12:28:04	4499.96	19.86	7.47	207.36	1.76	53.60	0.29	-65.04
Last 5	12:33:04	4799.95	19.73	7.44	206.21	2.02	53.60	0.28	-64.53
Last 5	12:38:04	5099.94	19.80	7.45	206.07	1.24	53.60	0.28	-65.21
Variance 0			-0.05	0.01	-1.88			-0.01	-1.29
Variance 1			-0.13	-0.03	-1.14			-0.01	0.51
Variance 2			0.07	0.01	-0.14			-0.00	-0.68

Notes

Collected at 12:40. Sunny 70s. DUP 1 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-05 11:35:51

Project Information:

Operator Name Jordan Berisford
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 445707
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 35.8 ft

Pump placement from TOC 30.8 ft

Well Information:

Well ID YGWA-14S
Well diameter 2 in
Well Total Depth 35.82 ft
Screen Length 10 ft
Depth to Water 16.73 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 1.262527 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5.6 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	11:15:04	600.02	18.94	5.50	63.61	2.51	17.10	6.92	146.24
Last 5	11:20:04	900.02	18.84	5.48	63.47	1.05	17.10	6.75	133.49
Last 5	11:25:04	1200.02	18.87	5.49	63.39	0.91	17.20	6.75	125.32
Last 5	11:30:04	1500.02	18.82	5.49	62.85	0.67	17.20	6.62	119.52
Last 5	11:35:05	1800.80	18.83	5.49	62.74	0.45	17.20	6.59	116.15
Variance 0			0.03	0.00	-0.08			-0.00	-8.17
Variance 1			-0.04	0.00	-0.53			-0.12	-5.80
Variance 2			0.01	0.00	-0.11			-0.03	-3.37

Notes

Sunny, 70s, sample time-1135

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-04 14:14:39

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° -53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 59 ft

Pump placement from TOC 54.6 ft

Well Information:

Well ID YGWA-30I
Well diameter 2 in
Well Total Depth 59.65 ft
Screen Length 10 ft
Depth to Water 36.90 ft

Pumping Information:

Final Pumping Rate 170 mL/min
Total System Volume 1.7664 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2 in
Total Volume Pumped 9.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:49:46	1501.01	21.62	6.04	39.17	1.83	37.10	7.01	60.90
Last 5	13:54:46	1801.01	21.55	6.00	39.03	1.70	37.10	6.86	63.80
Last 5	13:59:47	2102.00	21.49	5.79	39.20	1.56	37.10	6.93	75.81
Last 5	14:04:47	2401.99	21.37	5.88	39.03	1.69	37.10	6.93	72.91
Last 5	14:09:47	2701.99	20.92	5.87	38.84	1.36	37.10	6.88	75.33
Variance 0			-0.06	-0.21	0.17			0.07	12.01
Variance 1			-0.12	0.08	-0.17			-0.01	-2.90
Variance 2			-0.45	-0.01	-0.19			-0.05	2.42

Notes

Collected at 14:15. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-10 12:21:13

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Plant Yates- AP -Phase 2 CCR
Site Name Plant Yates
Latitude 33° 27' 39.55"
Longitude -84° -54' -27.8"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 70 ft

Pump placement from TOC 64.7 ft

Well Information:

Well ID YGWC-26I
Well diameter 2 in
Well Total Depth 69.71 ft
Screen Length 10 ft
Depth to Water 24.58 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 2.005305 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1.4 in
Total Volume Pumped 3.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 10
Last 5	12:00:05	600.02	25.33	5.80	319.82	1.86	24.60	0.54	59.53
Last 5	12:05:05	900.01	25.46	5.83	315.61	1.80	24.70	0.43	65.32
Last 5	12:10:05	1200.01	25.01	5.83	318.04	1.53	24.70	0.36	69.38
Last 5	12:15:05	1500.00	24.88	5.84	318.58	1.22	24.70	0.32	72.03
Last 5	12:20:05	1799.99	25.42	5.84	320.17	1.08	24.70	0.29	73.27
Variance 0			-0.45	-0.00	2.43			-0.06	4.05
Variance 1			-0.13	0.01	0.54			-0.04	2.66
Variance 2			0.54	0.00	1.59			-0.03	1.24

Notes

Cloudy,70s, sample time-1220,RB3-10-10-17 here at 1200

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-10 11:35:52

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Plant Yates- AP -Phase 2 CCR
Site Name Plant Yates
Latitude 33° 27' 39.65"
Longitude -84° -54' -27.8"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 40.1 ft

Pump placement from TOC 35.1 ft

Well Information:

Well ID YGWC-26S
Well diameter 2 in
Well Total Depth 40.1 ft
Screen Length 10 ft
Depth to Water 20.75 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.355918 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 6.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 10
Last 5	11:20:01	300.08	24.06	5.19	288.81	4.45	20.80	1.78	111.00
Last 5	11:25:01	600.06	23.97	5.22	289.86	2.90	20.80	1.65	111.13
Last 5	11:30:01	900.06	24.51	5.21	291.61	3.73	20.80	1.63	112.21
Last 5	11:35:01	1200.06	24.30	5.17	291.59	2.88	20.80	1.61	115.77
Last 5									
Variance 0			-0.09	0.03	1.05			-0.14	0.12
Variance 1			0.54	-0.00	1.74			-0.02	1.08
Variance 2			-0.21	-0.04	-0.01			-0.02	3.56

Notes

Cloudy,70s,sample time-1135

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-09 15:21:49

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 80.0 ft

Pump placement from TOC 74.8 ft

Well Information:

Well ID YGWC-27I
Well diameter 2 in
Well Total Depth 79.84 ft
Screen Length 10 ft
Depth to Water 26.43 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 2.222492 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 7 in
Total Volume Pumped 6.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:56:13	600.02	20.95	6.27	337.67	9.95	26.90	0.46	6.07
Last 5	15:01:13	900.02	20.92	6.29	340.00	4.56	27.00	0.33	7.97
Last 5	15:06:13	1200.01	20.76	6.27	340.54	2.67	27.00	0.28	10.19
Last 5	15:11:13	1500.02	20.83	6.24	341.91	1.96	27.00	0.21	11.50
Last 5	15:16:13	1800.02	20.64	6.26	341.81	2.08	27.00	0.17	11.25
Variance 0			-0.16	-0.02	0.54			-0.05	2.22
Variance 1			0.06	-0.03	1.37			-0.07	1.32
Variance 2			-0.19	0.02	-0.10			-0.04	-0.25

Notes

Collected at 15:25. Light rain 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-06 11:43:50

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 40 ft

Pump placement from TOC 35.2 ft

Well Information:

Well ID YGWC-27S
Well diameter 2 in
Well Total Depth 40.26 ft
Screen Length 10 ft
Depth to Water 27.92 ft

Pumping Information:

Final Pumping Rate 180 mL/min
Total System Volume 1.353746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 7.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:20:50	600.00	20.64	6.38	416.94	2.76	28.00	1.81	93.82
Last 5	11:25:50	900.00	20.48	6.19	419.48	3.07	28.00	0.74	98.85
Last 5	11:30:50	1199.99	20.48	6.17	421.93	2.67	28.00	0.43	99.30
Last 5	11:35:50	1500.06	20.55	6.16	421.64	2.92	28.00	0.34	100.15
Last 5	11:40:50	1800.01	20.39	6.13	421.53	2.55	28.00	0.27	101.80
Variance 0			0.00	-0.02	2.45			-0.31	0.45
Variance 1			0.06	-0.01	-0.29			-0.10	0.85
Variance 2			-0.15	-0.03	-0.11			-0.06	1.65

Notes

Collected at 11:45. Sunny 70s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-05 16:07:36

Project Information:

Operator Name Jordan Berisford
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 445707
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 69 ft

Pump placement from TOC 64 ft

Well Information:

Well ID YGWC-281
Well diameter 2 in
Well Total Depth 69.89 ft
Screen Length 10 ft
Depth to Water 24.43 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 1.983587 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 20.4 in
Total Volume Pumped 4.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	15:45:05	900.02	22.31	6.41	405.94	0.65	25.80	0.78	90.78
Last 5	15:50:05	1200.02	22.11	6.41	407.62	0.69	26.00	0.86	110.66
Last 5	15:55:05	1500.73	21.61	6.43	410.16	0.56	26.00	0.95	112.00
Last 5	16:00:05	1800.73	21.28	6.44	413.25	0.77	26.00	0.83	106.43
Last 5	16:05:05	2100.73	21.73	6.43	414.09	1.02	26.00	0.47	98.86
Variance 0			-0.50	0.01	2.54			0.09	1.34
Variance 1			-0.33	0.01	3.09			-0.12	-5.56
Variance 2			0.44	-0.00	0.84			-0.36	-7.58

Notes

80s,sunny , sample time -1605, EB-2-10-5-17 here(gloves)

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-09 14:18:43

Project Information:

Operator Name Chris Parker
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 33° 27' 46.22"
Longitude -84° 53' -53.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Bladder Pump
Tubing Type Poly
Tubing Diameter .375 in
Tubing Length 45 ft

Pump placement from TOC 39.8 ft

Well Information:

Well ID YGWC-28 S
Well diameter 2 in
Well Total Depth 44.85 ft
Screen Length 10 ft
Depth to Water 22.35 ft

Pumping Information:

Final Pumping Rate 210 mL/min
Total System Volume 1.462339 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 33 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:55:48	7499.91	20.53	6.37	447.11	5.46	22.70	0.08	-45.65
Last 5	14:00:48	7799.90	20.46	6.33	446.96	5.13	22.70	0.08	-46.58
Last 5	14:05:48	8099.89	20.49	6.37	447.85	5.01	22.70	0.08	-45.19
Last 5	14:10:48	8399.88	20.41	6.34	446.45	4.95	22.70	0.08	-46.35
Last 5	14:15:48	8699.88	20.53	6.37	447.25	4.88	22.70	0.08	-46.42
Variance 0			0.03	0.03	0.88			-0.00	1.39
Variance 1			-0.08	-0.03	-1.40			-0.00	-1.15
Variance 2			0.12	0.03	0.80			0.00	-0.08

Notes

Collected at 14:20. Light rain

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-05 14:25:54

Project Information:

Operator Name Jordan Berisford
Company Name Atlantic Coast Consulting
Project Name Plant Yates AP - Phase 2 CCR
Site Name Plant Yates - Ash Ponds
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 445707
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 39.5 ft

Pump placement from TOC 34.5 ft

Well Information:

Well ID YGWC-29I
Well diameter 2 in
Well Total Depth 39.46 ft
Screen Length 10 ft
Depth to Water 27.10 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 1.342886 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 11.7 in
Total Volume Pumped 4.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	14:05:02	1200.39	22.62	6.19	265.76	0.77	28.00	1.21	60.06
Last 5	14:10:02	1500.39	22.98	6.17	266.62	0.84	28.00	0.85	60.00
Last 5	14:15:02	1800.39	22.98	6.17	267.03	0.91	28.00	0.71	60.78
Last 5	14:20:02	2100.39	22.85	6.17	267.04	0.32	28.00	0.71	61.51
Last 5	14:25:02	2400.39	22.84	6.17	267.87	0.42	28.00	0.73	62.31
Variance 0			-0.00	-0.01	0.41			-0.14	0.78
Variance 1			-0.13	0.00	0.01			-0.01	0.73
Variance 2			-0.00	-0.00	0.83			0.02	0.80

Notes

Sunny,80s, sample time-1425

Grab Samples

APPENDIX C

STATISTICAL ANALYSES

100% Non-Detects

Date: 11/2/2017 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Boron

YGWA-30I

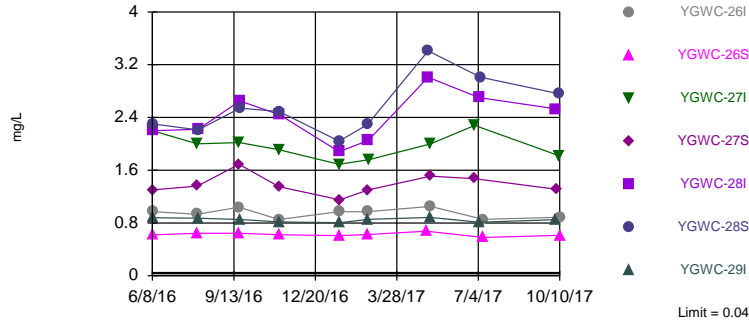
Interwell Prediction Limit

Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 11/3/2017, 10:47 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	YGWC-26I	0.04	n/a	10/10/2017	0.887	Yes	63	65.08	n/a	0.0004803	NP Inter (NDs) 1 of 2
Boron (mg/L)	YGWC-26S	0.04	n/a	10/10/2017	0.612	Yes	63	65.08	n/a	0.0004803	NP Inter (NDs) 1 of 2
Boron (mg/L)	YGWC-27I	0.04	n/a	10/9/2017	1.82	Yes	63	65.08	n/a	0.0004803	NP Inter (NDs) 1 of 2
Boron (mg/L)	YGWC-27S	0.04	n/a	10/6/2017	1.31	Yes	63	65.08	n/a	0.0004803	NP Inter (NDs) 1 of 2
Boron (mg/L)	YGWC-28I	0.04	n/a	10/5/2017	2.53	Yes	63	65.08	n/a	0.0004803	NP Inter (NDs) 1 of 2
Boron (mg/L)	YGWC-28S	0.04	n/a	10/9/2017	2.76	Yes	63	65.08	n/a	0.0004803	NP Inter (NDs) 1 of 2
Boron (mg/L)	YGWC-29I	0.04	n/a	10/5/2017	0.851	Yes	63	65.08	n/a	0.0004803	NP Inter (NDs) 1 of 2
Calcium (mg/L)	YGWC-26I	30.7	n/a	10/10/2017	15.5	No	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-26S	30.7	n/a	10/10/2017	11.4	No	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-27I	30.7	n/a	10/9/2017	27.3	No	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-27S	30.7	n/a	10/6/2017	39.8	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-28I	30.7	n/a	10/5/2017	36.4	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-28S	30.7	n/a	10/9/2017	27.3	No	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-29I	30.7	n/a	10/5/2017	12	No	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-26I	4.9	n/a	10/10/2017	19	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-26S	4.9	n/a	10/10/2017	15	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-27I	4.9	n/a	10/9/2017	14	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-27S	4.9	n/a	10/6/2017	21	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-28I	4.9	n/a	10/5/2017	19	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-28S	4.9	n/a	10/9/2017	20	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-29I	4.9	n/a	10/5/2017	15	Yes	63	0	n/a	0.0004803	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-26I	12.24	n/a	10/10/2017	82	Yes	63	0	No	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-26S	12.24	n/a	10/10/2017	97	Yes	63	0	No	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-27I	12.24	n/a	10/9/2017	5.1	No	63	0	No	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-27S	12.24	n/a	10/6/2017	23	Yes	63	0	No	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-28I	12.24	n/a	10/5/2017	8.6	No	63	0	No	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-28S	12.24	n/a	10/9/2017	2.9	No	63	0	No	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	YGWC-29I	12.24	n/a	10/5/2017	31	Yes	63	0	No	0.001075	Param Inter 1 of 2

Exceeds Limit: YGWC-26I, YGWC-26S, YGWC-27I, YGWC-27S, YGWC-28I, YGWC-28S

Prediction Limit
Interwell Non-parametric

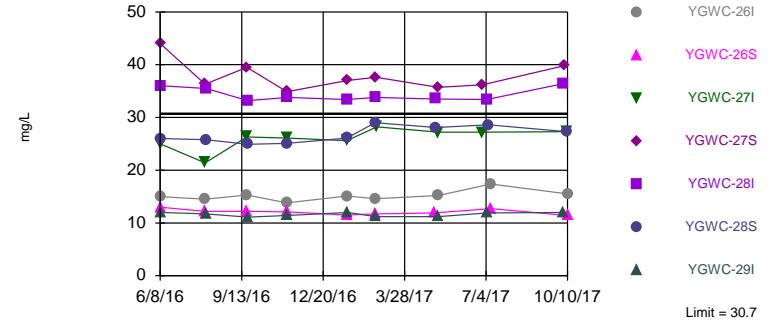


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 63 background values. 65.08% NDs. Annual per-constituent alpha = 0.006703. Individual comparison alpha = 0.0004803 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 11/3/2017 10:43 AM View: Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Exceeds Limit: YGWC-27S, YGWC-28I

Prediction Limit
Interwell Non-parametric

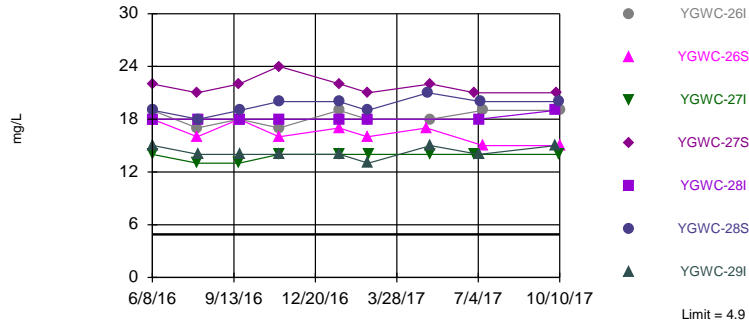


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 63 background values. Annual per-constituent alpha = 0.006703. Individual comparison alpha = 0.0004803 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium Analysis Run 11/3/2017 10:43 AM View: Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Exceeds Limit: YGWC-26I, YGWC-26S, YGWC-27I, YGWC-27S, YGWC-28I, YGWC-28S

Prediction Limit
Interwell Non-parametric

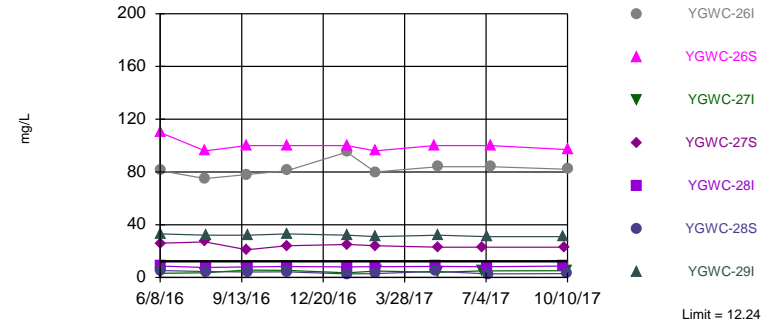


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 63 background values. Annual per-constituent alpha = 0.006703. Individual comparison alpha = 0.0004803 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride Analysis Run 11/3/2017 10:43 AM View: Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Exceeds Limit: YGWC-26I, YGWC-26S, YGWC-27S, YGWC-29I

Prediction Limit
Interwell Parametric



Background Data Summary: Mean=6.23, Std. Dev.=3.138, n=63. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9703, critical = 0.947. Kappa = 1.916 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

Constituent: Sulfate Analysis Run 11/3/2017 10:43 AM View: Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/3/2017 10:47 AM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-14S (bg)	YGWC-26I	YGWC-27I	YGWC-27S
6/1/2016	<0.04	<0.04	<0.04						
6/2/2016				<0.04	<0.04	<0.04			
6/8/2016							0.97	2.2	1.3
6/9/2016									
7/25/2016	<0.04	<0.04		<0.04					
7/26/2016			0.0055 (J)		0.0097 (J)	0.0177 (J)			
8/1/2016							0.932	2	1.36
8/2/2016									
9/13/2016	<0.04		<0.04						
9/14/2016		<0.04							
9/15/2016					0.0102 (J)	0.0214 (J)			
9/19/2016				<0.04					
9/20/2016							1.04	2.02	1.69
9/21/2016									
11/1/2016		<0.04	0.0086 (J)	<0.04	<0.04				
11/2/2016						0.0151 (J)			
11/4/2016	<0.04								
11/7/2016							0.852	1.91	1.35
11/8/2016									
12/15/2016									
1/10/2017						0.0198 (J)			
1/11/2017		<0.04	0.0074 (J)		<0.04				
1/16/2017	<0.04			<0.04					
1/18/2017							0.972	1.69	
1/19/2017									1.15
2/21/2017				<0.04			0.972		
2/22/2017									1.3
2/23/2017								1.76	
3/1/2017		0.0063 (J)							
3/2/2017	<0.04		0.008 (J)		0.0084 (J)				
3/3/2017									
3/8/2017						0.0189 (J)			
4/26/2017		<0.04		<0.04	<0.04	0.0161 (J)			
4/27/2017	<0.04		0.0066 (J)						
4/28/2017									
5/3/2017									
5/5/2017									
5/8/2017							1.05	2	1.51
5/26/2017									
6/27/2017	0.006 (J)		0.0087 (J)						
6/28/2017		<0.04			<0.04				
6/30/2017				<0.04		0.0173 (J)		2.28	1.47
7/5/2017									
7/7/2017									
7/10/2017							0.855		
10/3/2017	0.0071 (J)		0.0072 (J)						
10/4/2017		<0.04		<0.04	<0.04				
10/5/2017						0.0173 (J)			
10/6/2017									1.31
10/9/2017								1.82	
10/10/2017							0.887		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/3/2017 10:47 AM View: Interwell PL
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-29I	YGWC-28S	YGWC-28I	YGWA-2I (bg)
6/1/2016					
6/2/2016					
6/8/2016	0.62				
6/9/2016		0.88	2.3	2.2	
7/25/2016					
7/26/2016					
8/1/2016	0.643				
8/2/2016		0.872	2.21	2.22	
9/13/2016					
9/14/2016					<0.04
9/15/2016					
9/19/2016					
9/20/2016	0.644				
9/21/2016		0.853	2.54	2.65	
11/1/2016					
11/2/2016					
11/4/2016					<0.04
11/7/2016	0.621	0.815	2.49		
11/8/2016				2.44	
12/15/2016					0.0107 (J)
1/10/2017					
1/11/2017					
1/16/2017					<0.04
1/18/2017	0.607		2.04	1.88	
1/19/2017		0.803			
2/21/2017	0.624		2.29		
2/22/2017		0.855		2.05	
2/23/2017					
3/1/2017					
3/2/2017					
3/3/2017					<0.04
3/8/2017					
4/26/2017					
4/27/2017					
4/28/2017					<0.04
5/3/2017	0.676				
5/5/2017			3.41	3.01	
5/8/2017		0.884			
5/26/2017					<0.04
6/27/2017					
6/28/2017					<0.04
6/30/2017					
7/5/2017		0.811		2.7	
7/7/2017			3.01		
7/10/2017	0.58				
10/3/2017					<0.04
10/4/2017					
10/5/2017		0.851		2.53	
10/6/2017					
10/9/2017			2.76		
10/10/2017	0.612				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/3/2017 10:47 AM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-14S (bg)	YGWC-26I	YGWC-27I	YGWC-27S
6/1/2016	2.5	21	12						
6/2/2016				1.3	28	1.3			
6/8/2016							15	25	44
6/9/2016									
7/25/2016	2.16	20.3		1.17					
7/26/2016			11		24.5	1.24			
8/1/2016							14.5	21.4	36.3
8/2/2016									
9/13/2016	2.21		11.8						
9/14/2016		19.7							
9/15/2016					27	1.17			
9/19/2016				1.05					
9/20/2016							15.3	26.3	39.5
9/21/2016									
11/1/2016		18.4	11	1.14	25.6				
11/2/2016						1.23			
11/4/2016	2.67								
11/7/2016							13.8	26.1	34.9
11/8/2016									
12/15/2016									
1/10/2017							1.24		
1/11/2017		20.3	11.2		27.5				
1/16/2017	2.45			1.23					
1/18/2017							15.1	25.6	
1/19/2017									37
2/21/2017				1.25			14.6		
2/22/2017									37.6
2/23/2017								28.2	
3/1/2017		18.6							
3/2/2017	2.57		11		27.5				
3/3/2017									
3/8/2017							1.21		
4/26/2017		25.6		1.03	30.4	1.14			
4/27/2017	2.38		11.1						
4/28/2017									
5/3/2017									
5/5/2017									
5/8/2017							15.2	27.2	35.7
5/26/2017									
6/27/2017	2.36		13.8						
6/28/2017		23.9			29.8				
6/30/2017				1.13		1.24		27.2	36.2
7/5/2017									
7/7/2017									
7/10/2017							17.4		
10/3/2017	2.21		14						
10/4/2017		22.1		1.09	29.7				
10/5/2017						1.11			
10/6/2017									39.8
10/9/2017								27.3	
10/10/2017							15.5		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/3/2017 10:47 AM View: Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-29I	YGWC-28S	YGWC-28I	YGWA-2I (bg)
6/1/2016					
6/2/2016					
6/8/2016	13				
6/9/2016		12	26	36	
7/25/2016					
7/26/2016					
8/1/2016	12.2				
8/2/2016		11.7	25.8	35.5	
9/13/2016					
9/14/2016					23.5
9/15/2016					
9/19/2016					
9/20/2016	12.2				
9/21/2016		11.1	24.9	33.2	
11/1/2016					
11/2/2016					
11/4/2016					23.7
11/7/2016	12.1	11.4	25.1		
11/8/2016				33.8	
12/15/2016					23.1
1/10/2017					
1/11/2017					
1/16/2017					23.3
1/18/2017	11.5		26.1	33.4	
1/19/2017		12			
2/21/2017	11.7		29		
2/22/2017		11.2		33.8	
2/23/2017					
3/1/2017					
3/2/2017					
3/3/2017					25.1
3/8/2017					
4/26/2017					
4/27/2017					
4/28/2017					30.7
5/3/2017	11.9				
5/5/2017			28.1	33.5	
5/8/2017		11.2			
5/26/2017					26.2
6/27/2017					
6/28/2017					26.1
6/30/2017					
7/5/2017		11.9		33.4	
7/7/2017			28.6		
7/10/2017	12.7				
10/3/2017					26.7
10/4/2017					
10/5/2017		12		36.4	
10/6/2017					
10/9/2017			27.3		
10/10/2017	11.4				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/3/2017 10:47 AM View: Interwell PL
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-28S	YGWC-28I	YGWC-29I	YGWA-2I (bg)
6/1/2016					
6/2/2016					
6/8/2016	18				
6/9/2016		19	18	15	
7/25/2016					
7/26/2016					
8/1/2016	16				
8/2/2016		18	18	14	
9/13/2016					
9/14/2016					1.1
9/15/2016					
9/19/2016					
9/20/2016	18				
9/21/2016		19	18	14	
11/1/2016					
11/2/2016					
11/4/2016					1.4
11/7/2016	16	20		14	
11/8/2016			18		
12/15/2016					2.9
1/10/2017					
1/11/2017					
1/16/2017					0.98
1/18/2017	17	20	18		
1/19/2017				14	
2/21/2017	16	19			
2/22/2017			18	13	
2/23/2017					
3/1/2017					
3/2/2017					
3/3/2017					1.1
3/8/2017					
4/26/2017					
4/27/2017					
4/28/2017					0.91
5/3/2017	17				
5/5/2017		21	19 (o)		
5/8/2017				15	
5/26/2017					0.93
6/27/2017					
6/28/2017					1
6/30/2017					
7/5/2017			18	14	
7/7/2017		20			
7/10/2017	15				
10/3/2017					1.2
10/4/2017					
10/5/2017			19	15	
10/6/2017					
10/9/2017		20			
10/10/2017	15				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/3/2017 10:47 AM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-14S (bg)	YGWC-26I	YGWC-27I	YGWC-27S
6/1/2016	4.2	12	5						
6/2/2016				1.3	5.8	6.6			
6/8/2016							81	3.2	26
6/9/2016									
7/25/2016	3.7	8.4		1.2					
7/26/2016			5.4		6.7	6.1			
8/1/2016							75	3.6	27
8/2/2016									
9/13/2016	5.2		2.9						
9/14/2016		8.6							
9/15/2016					6	6.1			
9/19/2016				1.2					
9/20/2016							78	5.6	21
9/21/2016									
11/1/2016		8.9	3.9	1.3	4.9				
11/2/2016						6.3			
11/4/2016	5								
11/7/2016							81	5.4	24
11/8/2016									
12/15/2016									
1/10/2017						5.9			
1/11/2017		8.6	3.7		4.5				
1/16/2017	7.9			1.4					
1/18/2017							95	3.5	
1/19/2017									25
2/21/2017				1.4			80		
2/22/2017									24
2/23/2017								4.9	
3/1/2017		9.3							
3/2/2017	7.4		4.6		4.4				
3/3/2017									
3/8/2017						7			
4/26/2017		11		1.4	5.1	7			
4/27/2017	7.4		5.2						
4/28/2017									
5/3/2017									
5/5/2017									
5/8/2017							84	3.9	23
5/26/2017									
6/27/2017	6.4		5.9						
6/28/2017		12			5.4				
6/30/2017				1.5		6.5		5	23
7/5/2017									
7/7/2017									
7/10/2017							84		
10/3/2017	5.9		6.6						
10/4/2017		12		1.4	6.2				
10/5/2017						7.9			
10/6/2017									23
10/9/2017								5.1	
10/10/2017							82		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/3/2017 10:47 AM View: Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-29I	YGWC-28S	YGWC-28I	YGWA-2I (bg)
6/1/2016					
6/2/2016					
6/8/2016	110				
6/9/2016		33	5.2	8.7	
7/25/2016					
7/26/2016					
8/1/2016	96				
8/2/2016		32	4.5	7.5	
9/13/2016					
9/14/2016					9.4
9/15/2016					
9/19/2016					
9/20/2016	100				
9/21/2016		32	4.1	8	
11/1/2016					
11/2/2016					
11/4/2016					13
11/7/2016	100	33	4.3		
11/8/2016				8.3	
12/15/2016					1.8
1/10/2017					
1/11/2017					
1/16/2017					11
1/18/2017	100		2.7	8	
1/19/2017		32			
2/21/2017	96		3		
2/22/2017		31		8.2	
2/23/2017					
3/1/2017					
3/2/2017					
3/3/2017					8.8
3/8/2017					
4/26/2017					
4/27/2017					
4/28/2017					10
5/3/2017	100				
5/5/2017			4.7	8.4	
5/8/2017		32			
5/26/2017					12
6/27/2017					
6/28/2017					11
6/30/2017					
7/5/2017		31		8.1	
7/7/2017			2.7		
7/10/2017	100				
10/3/2017					7.9
10/4/2017					
10/5/2017		31		8.6	
10/6/2017					
10/9/2017			2.9		
10/10/2017	97				

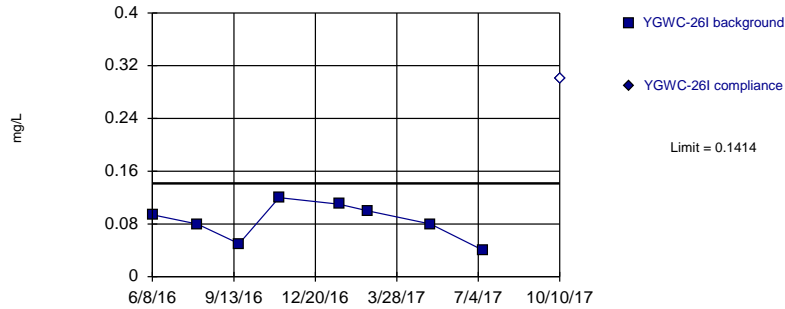
Intrawell Prediction Limit

Plant Yates Client: Southern Company Data: Yates Ash Pond 2 Printed 11/3/2017, 10:59 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	YGWC-26I	0.1414	n/a	10/10/2017	0.3ND	No	8	0	No	0.001075	Param Intra 1 of 3
Fluoride (mg/L)	YGWC-26S	0.4684	n/a	10/10/2017	0.3ND	No	8	12.5	No	0.001075	Param Intra 1 of 3
Fluoride (mg/L)	YGWC-27I	0.2818	n/a	10/9/2017	0.07	No	8	12.5	No	0.001075	Param Intra 1 of 3
Fluoride (mg/L)	YGWC-27S	0.3296	n/a	10/6/2017	0.15	No	8	0	No	0.001075	Param Intra 1 of 3
Fluoride (mg/L)	YGWC-28I	0.3701	n/a	10/5/2017	0.08	No	8	0	No	0.001075	Param Intra 1 of 3
Fluoride (mg/L)	YGWC-28S	0.4947	n/a	10/9/2017	0.25	No	8	0	No	0.001075	Param Intra 1 of 3
Fluoride (mg/L)	YGWC-29I	0.1173	n/a	10/5/2017	0.09	No	8	0	No	0.001075	Param Intra 1 of 3
pH (pH)	YGWC-26I	5.949	5.768	10/10/2017	5.84	No	8	0	No	0.0005373	Param Intra 1 of 3
pH (pH)	YGWC-26S	5.406	5.089	10/10/2017	5.17	No	8	0	No	0.0005373	Param Intra 1 of 3
pH (pH)	YGWC-27I	6.415	6.15	10/9/2017	6.26	No	8	0	No	0.0005373	Param Intra 1 of 3
pH (pH)	YGWC-27S	6.331	6.052	10/6/2017	6.13	No	8	0	No	0.0005373	Param Intra 1 of 3
pH (pH)	YGWC-28I	6.498	6.264	10/5/2017	6.43	No	8	0	No	0.0005373	Param Intra 1 of 3
pH (pH)	YGWC-28S	6.514	6.236	10/9/2017	6.37	No	8	0	No	0.0005373	Param Intra 1 of 3
pH (pH)	YGWC-29I	6.252	6.068	10/5/2017	6.17	No	8	0	No	0.0005373	Param Intra 1 of 3
Total Dissolv...	YGWC-26I	311.4	n/a	10/10/2017	194	No	8	0	No	0.001075	Param Intra 1 of 3
Total Dissolv...	YGWC-26S	308.1	n/a	10/10/2017	179	No	8	0	No	0.001075	Param Intra 1 of 3
Total Dissolv...	YGWC-27I	277.1	n/a	10/9/2017	185	No	8	0	No	0.001075	Param Intra 1 of 3
Total Dissolv...	YGWC-27S	295.1	n/a	10/6/2017	183	No	8	0	No	0.001075	Param Intra 1 of 3
Total Dissolv...	YGWC-28I	317.6	n/a	10/5/2017	221	No	8	0	No	0.001075	Param Intra 1 of 3
Total Dissolv...	YGWC-28S	422.5	n/a	10/9/2017	204	No	8	0	ln(x)	0.001075	Param Intra 1 of 3
Total Dissolv...	YGWC-29I	278.2	n/a	10/5/2017	139	No	8	0	sqrt(x)	0.001075	Param Intra 1 of 3

Within Limit

Prediction Limit
Intrawell Parametric

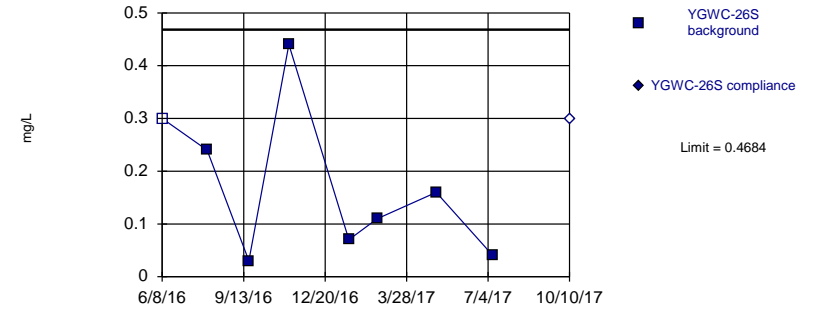


Background Data Summary: Mean=0.08425, Std. Dev.=0.02791, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9423, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

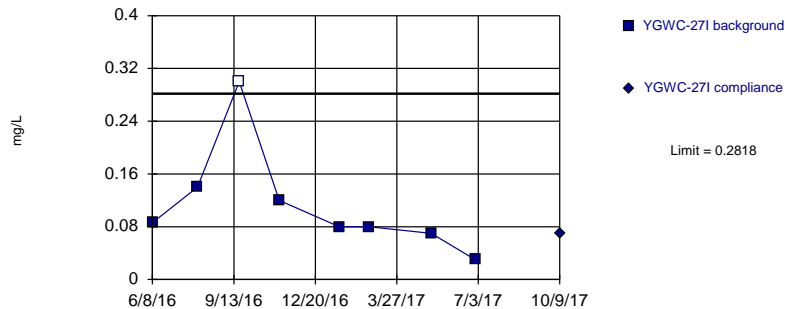


Background Data Summary: Mean=0.1738, Std. Dev.=0.1438, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9092, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

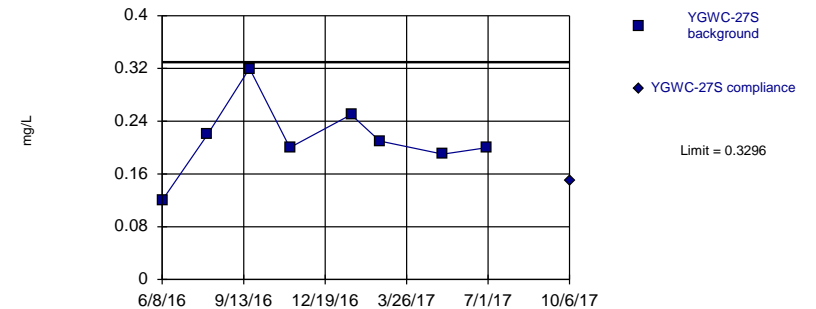


Background Data Summary: Mean=0.1133, Std. Dev.=0.08228, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7848, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

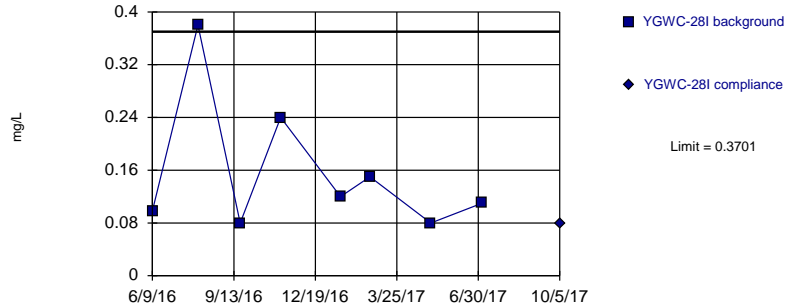


Background Data Summary: Mean=0.2138, Std. Dev.=0.05655, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9271, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

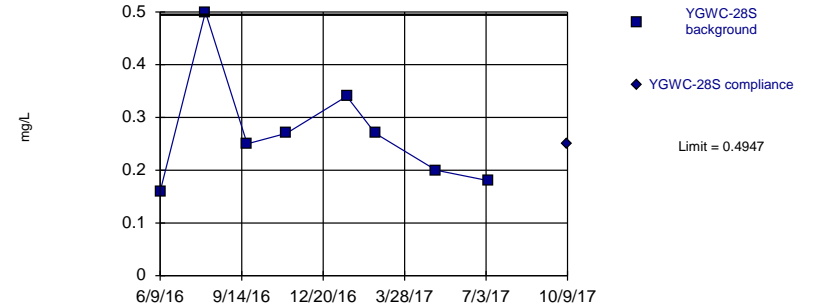


Background Data Summary: Mean=0.1573, Std. Dev.=0.1039, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7736, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

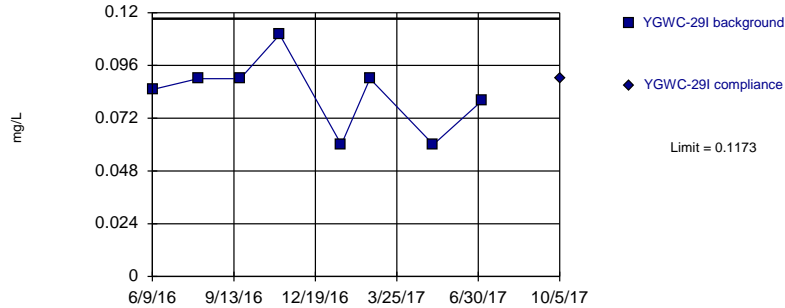


Background Data Summary: Mean=0.2713, Std. Dev.=0.1091, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8734, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

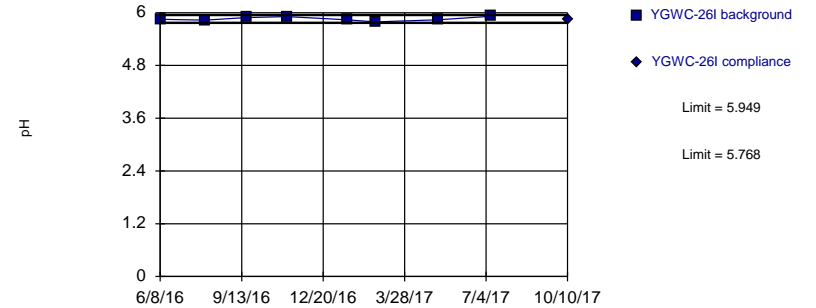


Background Data Summary: Mean=0.08313, Std. Dev.=0.01668, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8964, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limits

Prediction Limit
Intrawell Parametric

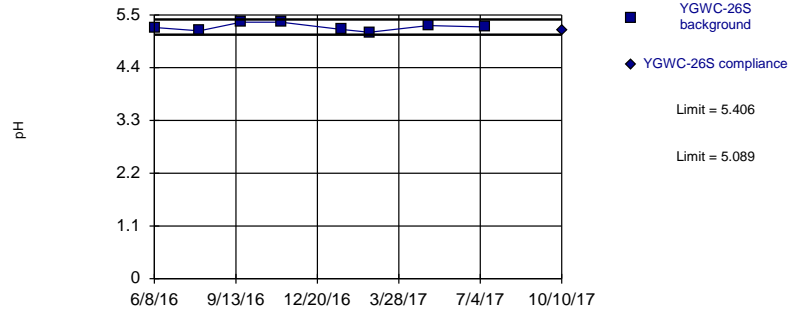


Background Data Summary: Mean=5.859, Std. Dev.=0.04422, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9373, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limits

Prediction Limit
Intrawell Parametric

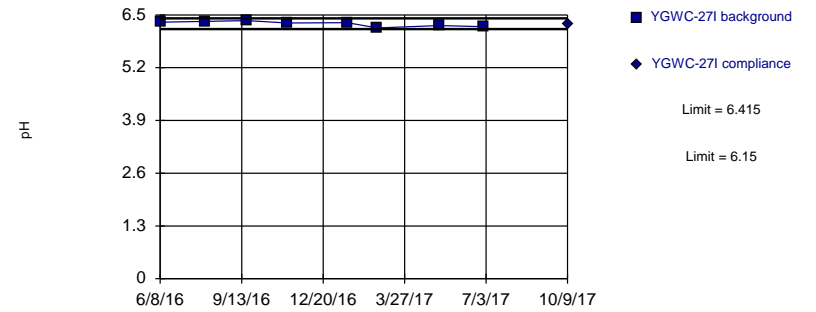


Background Data Summary: Mean=5.248, Std. Dev.=0.07741, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9397, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limits

Prediction Limit
Intrawell Parametric

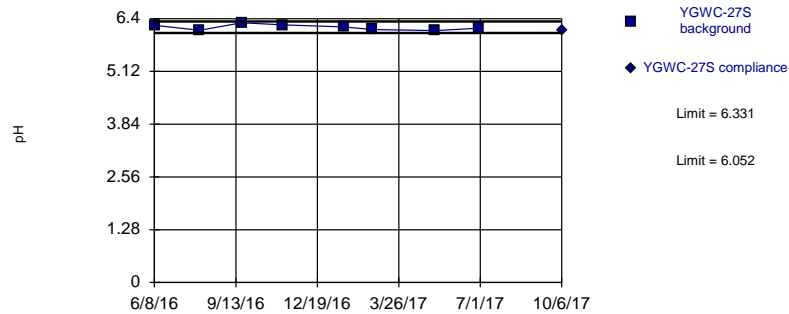


Background Data Summary: Mean=6.283, Std. Dev.=0.06475, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9228, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limits

Prediction Limit
Intrawell Parametric

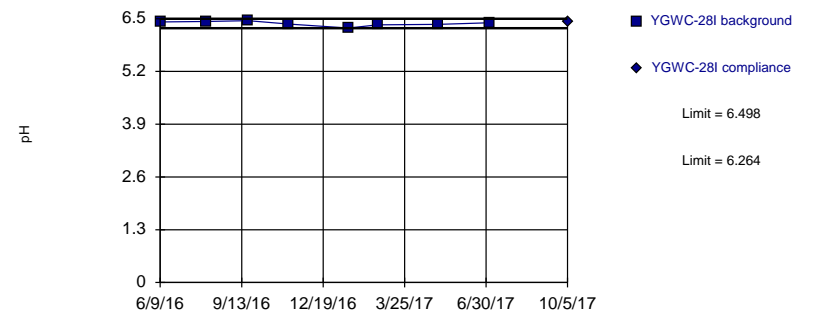


Background Data Summary: Mean=6.191, Std. Dev.=0.06813, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9452, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limits

Prediction Limit
Intrawell Parametric

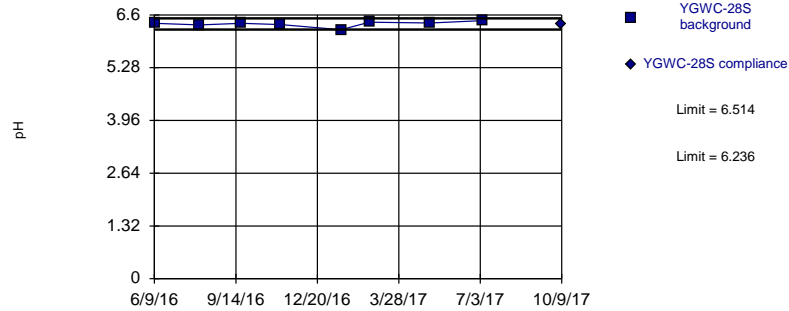


Background Data Summary: Mean=6.381, Std. Dev.=0.05718, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9363, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limits

Prediction Limit
Intrawell Parametric

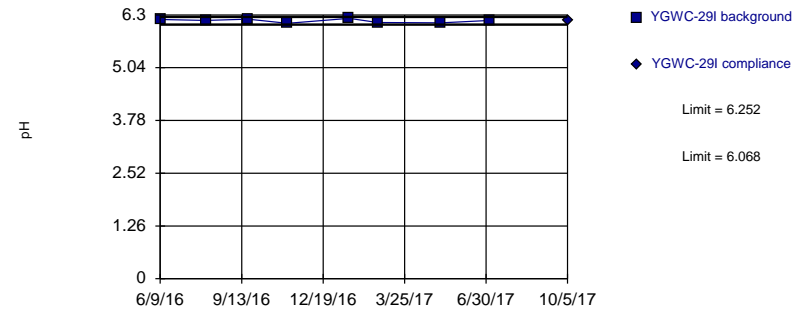


Background Data Summary: Mean=6.375, Std. Dev.=0.06782, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8798, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limits

Prediction Limit
Intrawell Parametric

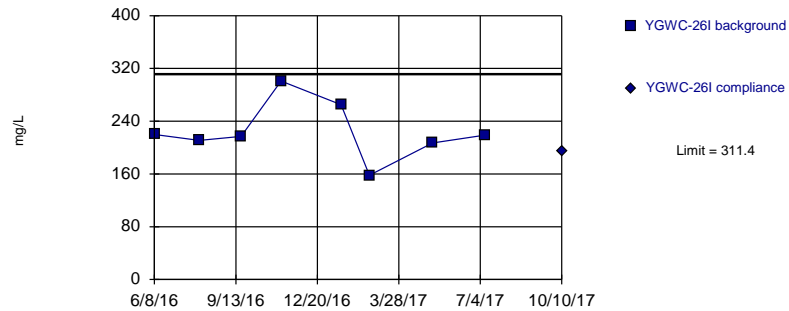


Background Data Summary: Mean=6.16, Std. Dev.=0.04472, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9169, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

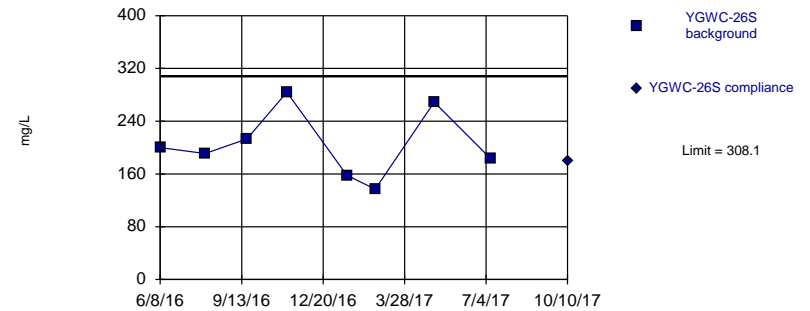


Background Data Summary: Mean=224.8, Std. Dev.=42.27, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.908, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

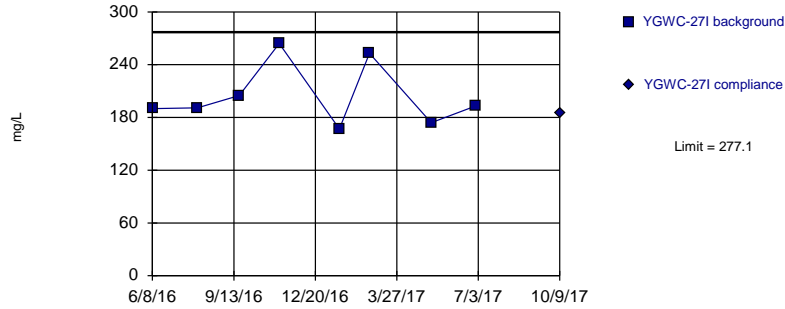


Background Data Summary: Mean=204.4, Std. Dev.=50.62, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9396, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

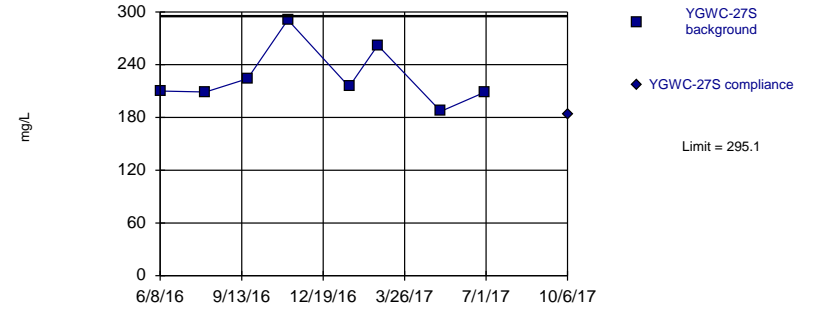


Background Data Summary: Mean=204.6, Std. Dev.=35.36, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8533, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

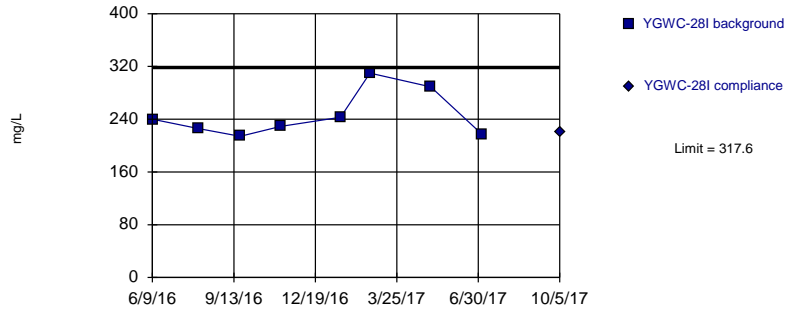


Background Data Summary: Mean=225.9, Std. Dev.=33.81, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8529, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

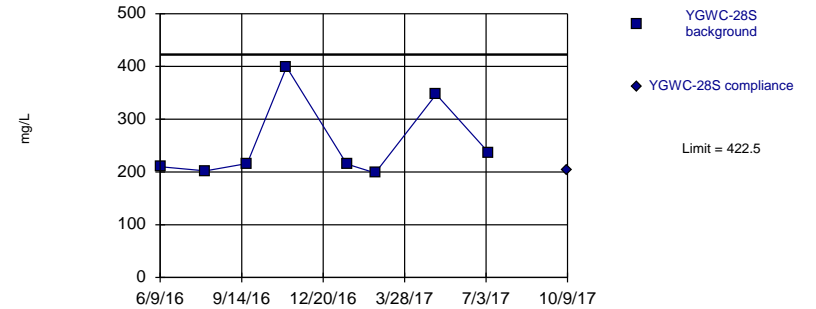


Background Data Summary: Mean=246, Std. Dev.=34.94, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8349, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit
Intrawell Parametric

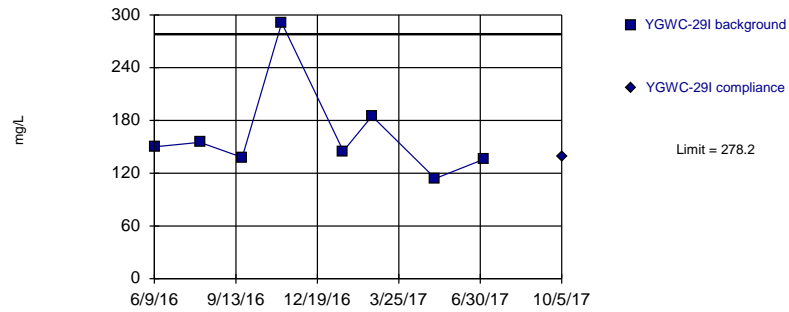


Background Data Summary (based on natural log transformation): Mean=5.499, Std. Dev.=0.2672, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7591, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Within Limit

Prediction Limit Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=12.69, Std. Dev.=1.949, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7993, critical = 0.749. Kappa = 2.049 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:56 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:59 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26I
6/8/2016	0.094 (J)	
8/1/2016	0.08 (J)	
9/20/2016	0.05 (J)	
11/7/2016	0.12 (J)	
1/18/2017	0.11 (J)	
2/21/2017	0.1 (J)	
5/8/2017	0.08 (J)	
7/10/2017	0.04 (J)	
10/10/2017		<0.3

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:59 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-26S
6/8/2016	<0.3	
8/1/2016	0.24 (J)	
9/20/2016	0.03 (J)	
11/7/2016	0.44	
1/18/2017	0.07 (J)	
2/21/2017	0.11 (J)	
5/3/2017	0.16 (J)	
7/10/2017	0.04 (J)	
10/10/2017		<0.3

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:59 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27I	YGWC-27I
6/8/2016	0.086 (J)	
8/1/2016	0.14 (J)	
9/20/2016	<0.3	
11/7/2016	0.12 (J)	
1/18/2017	0.08 (J)	
2/23/2017	0.08 (J)	
5/8/2017	0.07 (J)	
6/30/2017	0.03 (J)	
10/9/2017		0.07 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:59 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-27S
6/8/2016	0.12 (J)	
8/1/2016	0.22 (J)	
9/20/2016	0.32	
11/7/2016	0.2 (J)	
1/19/2017	0.25 (J)	
2/22/2017	0.21 (J)	
5/8/2017	0.19 (J)	
6/30/2017	0.2 (J)	
10/6/2017		0.15 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:59 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28I	YGWC-28I
6/9/2016	0.098 (J)	
8/2/2016	0.38	
9/21/2016	0.08 (J)	
11/8/2016	0.24 (J)	
1/18/2017	0.12 (J)	
2/22/2017	0.15 (J)	
5/5/2017	0.08 (J)	
7/5/2017	0.11 (J)	
10/5/2017		0.08 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:59 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28S	YGWC-28S
6/9/2016	0.16 (J)	
8/2/2016	0.5	
9/21/2016	0.25 (J)	
11/7/2016	0.27 (J)	
1/18/2017	0.34	
2/21/2017	0.27 (J)	
5/5/2017	0.2 (J)	
7/7/2017	0.18 (J)	
10/9/2017		0.25 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:59 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-29I	YGWC-29I
6/9/2016	0.085 (J)	
8/2/2016	0.09 (J)	
9/21/2016	0.09 (J)	
11/7/2016	0.11 (J)	
1/19/2017	0.06 (J)	
2/22/2017	0.09 (J)	
5/8/2017	0.06 (J)	
7/5/2017	0.08 (J)	
10/5/2017		0.09 (J)

Prediction Limit

Constituent: pH (pH) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26I
6/8/2016	5.85	
8/1/2016	5.83	
9/20/2016	5.89	
11/7/2016	5.91	
1/18/2017	5.84	
2/21/2017	5.79	
5/8/2017	5.84	
7/10/2017	5.92	
10/10/2017		5.84

Prediction Limit

Constituent: pH (pH) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-26S
6/8/2016	5.24	
8/1/2016	5.17	
9/20/2016	5.35	
11/7/2016	5.35	
1/18/2017	5.2	
2/21/2017	5.14	
5/3/2017	5.28	
7/10/2017	5.25	
10/10/2017		5.17

Prediction Limit

Constituent: pH (pH) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27I	YGWC-27I
6/8/2016	6.32	
8/1/2016	6.34	
9/20/2016	6.36	
11/7/2016	6.3	
1/18/2017	6.31	
2/23/2017	6.18	
5/8/2017	6.24	
6/30/2017	6.21	
10/9/2017		6.26

Prediction Limit

Constituent: pH (pH) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-27S
6/8/2016	6.24	
8/1/2016	6.12	
9/20/2016	6.3	
11/7/2016	6.25	
1/19/2017	6.2	
2/22/2017	6.14	
5/8/2017	6.11	
6/30/2017	6.17	
10/6/2017		6.13

Prediction Limit

Constituent: pH (pH) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28I	YGWC-28I
6/9/2016	6.42	
8/2/2016	6.43	
9/21/2016	6.45	
11/8/2016	6.37	
1/18/2017	6.27	
2/22/2017	6.35	
5/5/2017	6.36	
7/5/2017	6.4	
10/5/2017		6.43

Prediction Limit

Constituent: pH (pH) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28S	YGWC-28S
6/9/2016	6.39	
8/2/2016	6.35	
9/21/2016	6.39	
11/7/2016	6.36	
1/18/2017	6.23	
2/21/2017	6.42	
5/5/2017	6.4	
7/7/2017	6.46	
10/9/2017		6.37

Prediction Limit

Constituent: pH (pH) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-29I	YGWC-29I
6/9/2016	6.19	
8/2/2016	6.17	
9/21/2016	6.2	
11/7/2016	6.1	
1/19/2017	6.22	
2/22/2017	6.12	
5/8/2017	6.11	
7/5/2017	6.17	
10/5/2017		6.17

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26I	YGWC-26I
6/8/2016	220	
8/1/2016	211	
9/20/2016	217	
11/7/2016	301	
1/18/2017	265 (D)	
2/21/2017	158	
5/8/2017	207	
7/10/2017	219	
10/10/2017		194

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-26S	YGWC-26S
6/8/2016	200	
8/1/2016	191	
9/20/2016	213	
11/7/2016	284	
1/18/2017	158 (D)	
2/21/2017	137	
5/3/2017	269	
7/10/2017	183	
10/10/2017		179

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27I	YGWC-27I
6/8/2016	190	
8/1/2016	191	
9/20/2016	205	
11/7/2016	264	
1/18/2017	167 (D)	
2/23/2017	253	
5/8/2017	174	
6/30/2017	193	
10/9/2017		185

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-27S
6/8/2016	210	
8/1/2016	209	
9/20/2016	224	
11/7/2016	291	
1/19/2017	215 (D)	
2/22/2017	262	
5/8/2017	187	
6/30/2017	209	
10/6/2017		183

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:59 AM View: Intrawell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-28I	YGWC-28I
6/9/2016	240	
8/2/2016	226	
9/21/2016	214	
11/8/2016	229	
1/18/2017	243 (D)	
2/22/2017	310	
5/5/2017	289	
7/5/2017	217	
10/5/2017		221

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

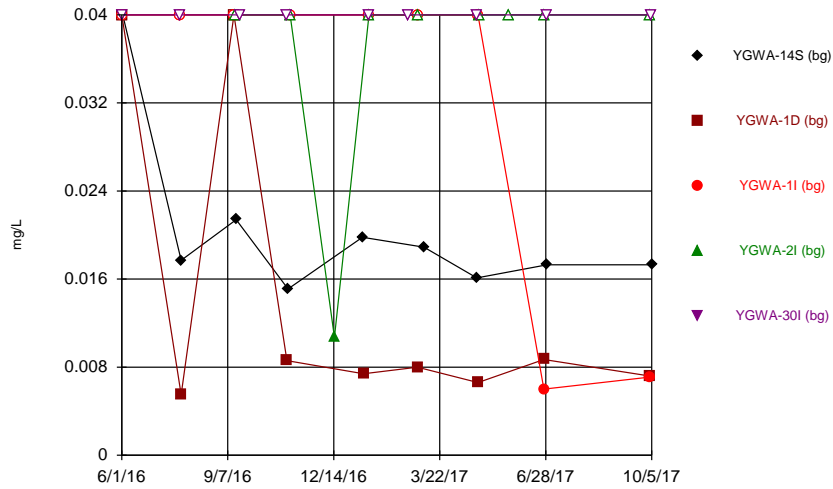
	YGWC-28S	YGWC-28S
6/9/2016	210	
8/2/2016	202	
9/21/2016	216	
11/7/2016	399	
1/18/2017	215 (D)	
2/21/2017	198	
5/5/2017	347	
7/7/2017	236	
10/9/2017		204

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:59 AM View: IntraWell PL
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

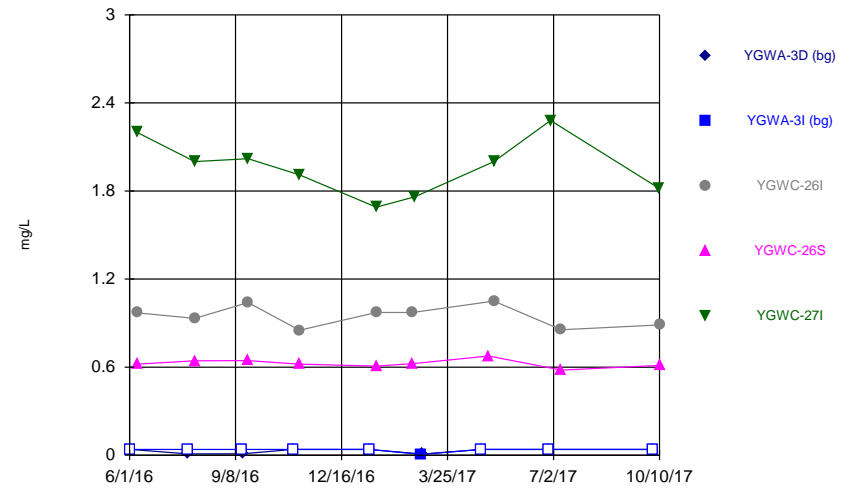
	YGWC-29I	YGWC-29I
6/9/2016	150	
8/2/2016	155	
9/21/2016	138	
11/7/2016	291	
1/19/2017	145 (D)	
2/22/2017	185	
5/8/2017	114	
7/5/2017	136	
10/5/2017		139

Time Series



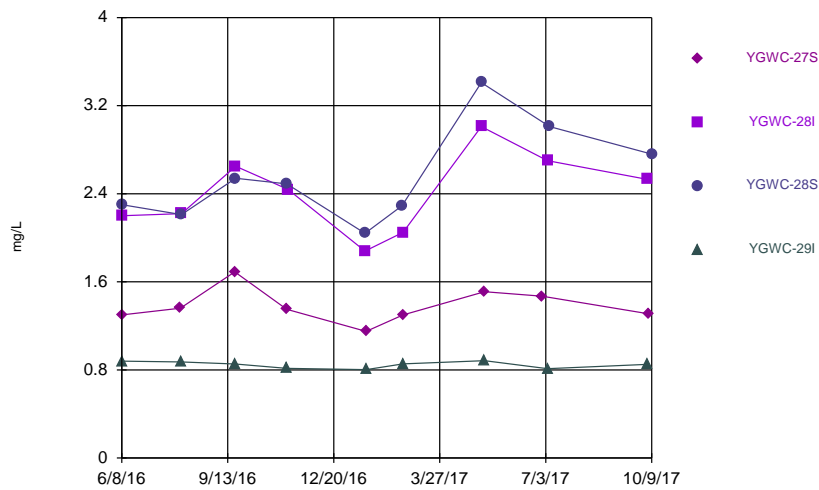
Constituent: Boron Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



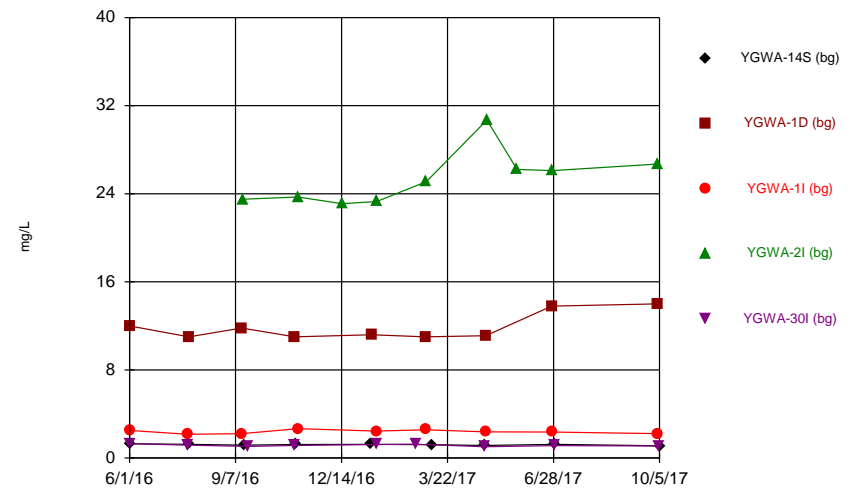
Constituent: Boron Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



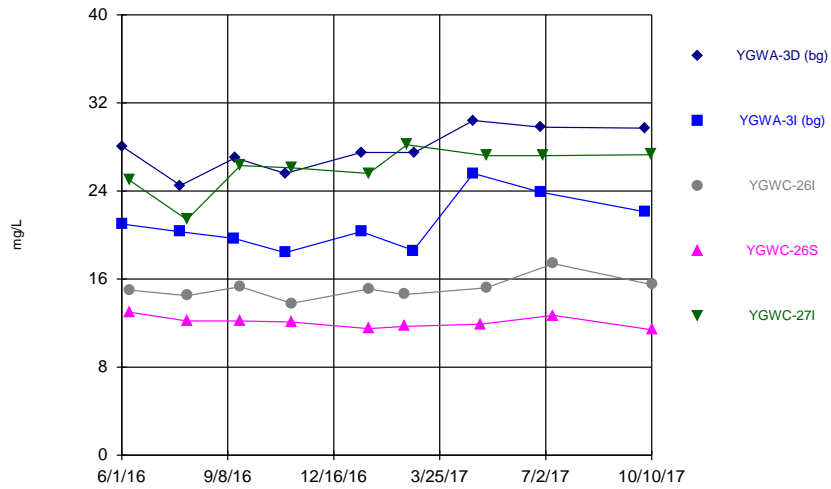
Constituent: Boron Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



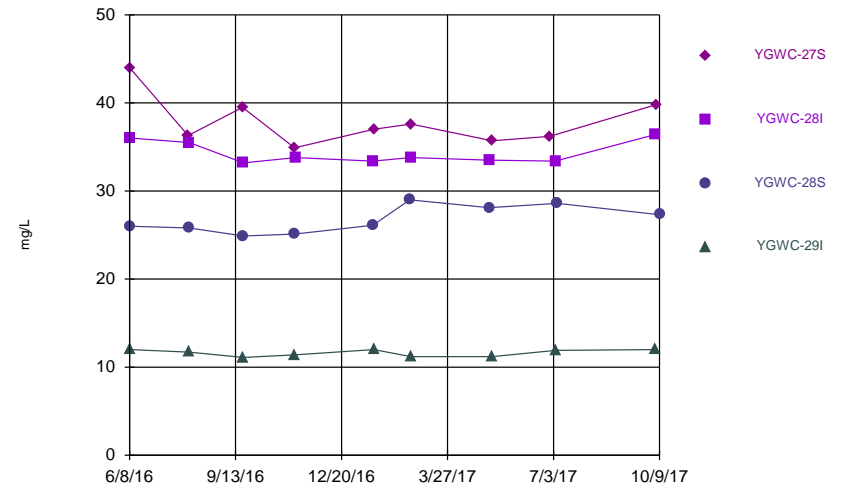
Constituent: Calcium Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



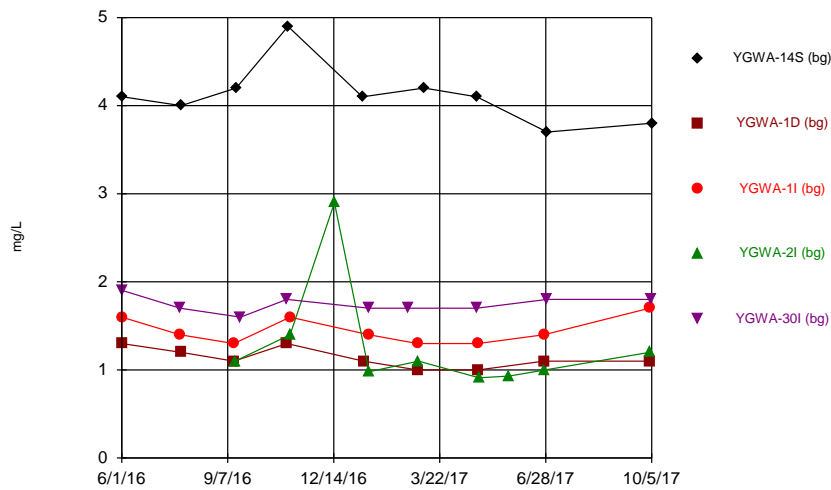
Constituent: Calcium Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



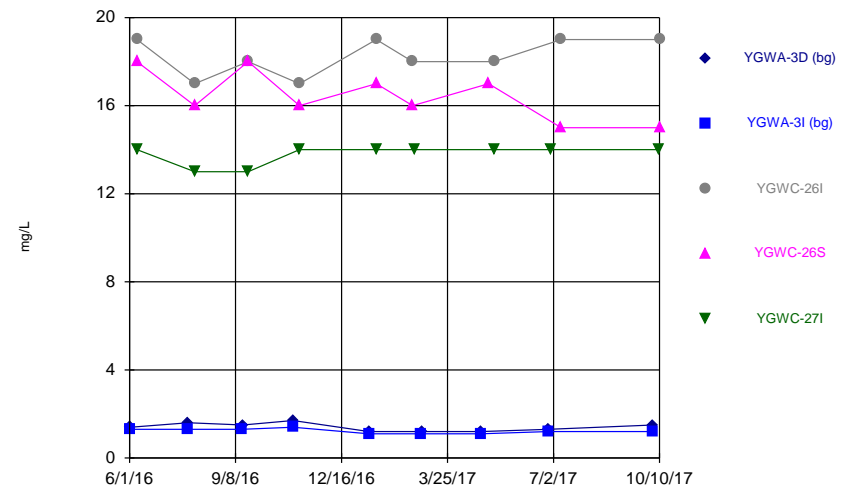
Constituent: Calcium Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



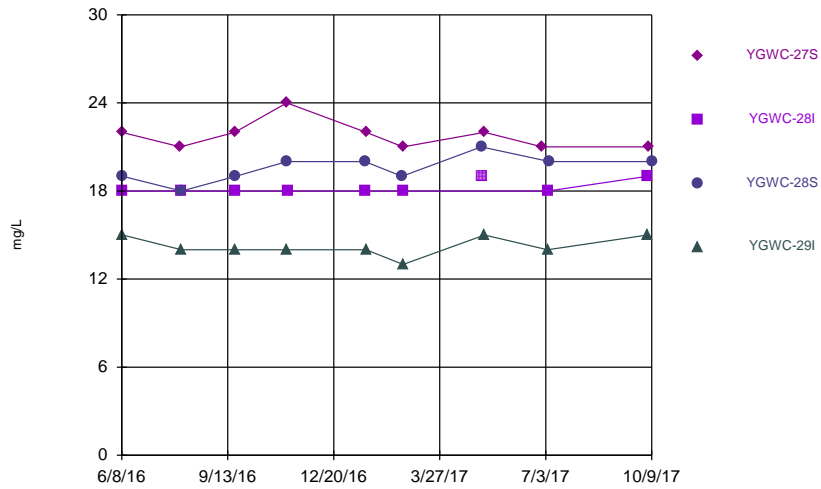
Constituent: Chloride Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



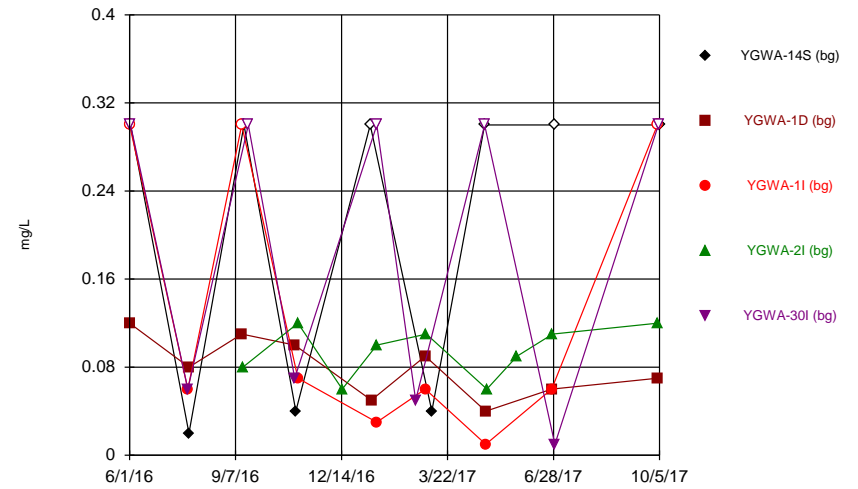
Constituent: Chloride Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



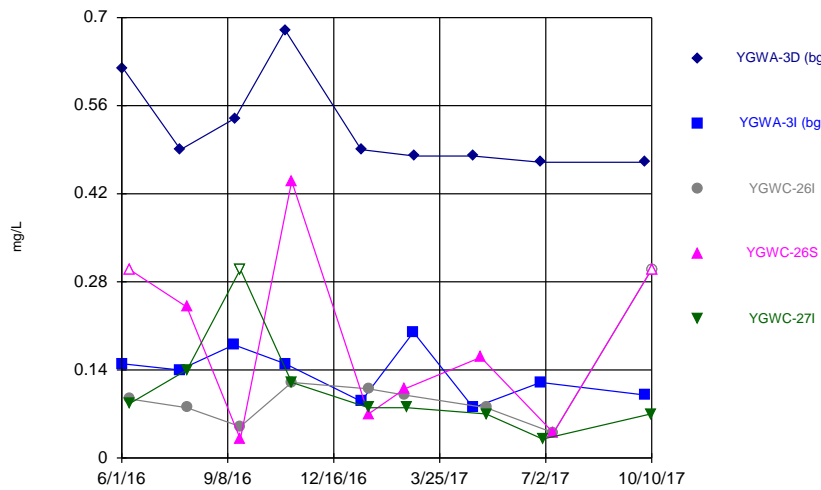
Constituent: Chloride Analysis Run 11/3/2017 10:24 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



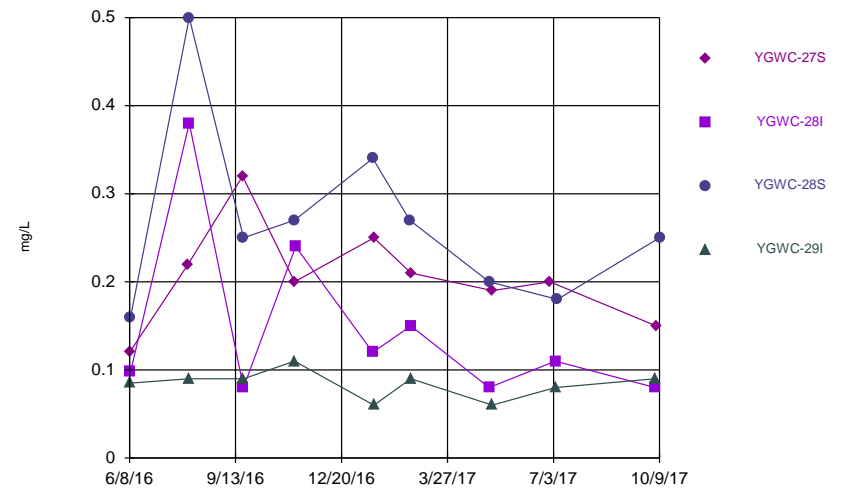
Constituent: Fluoride Analysis Run 11/3/2017 10:24 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



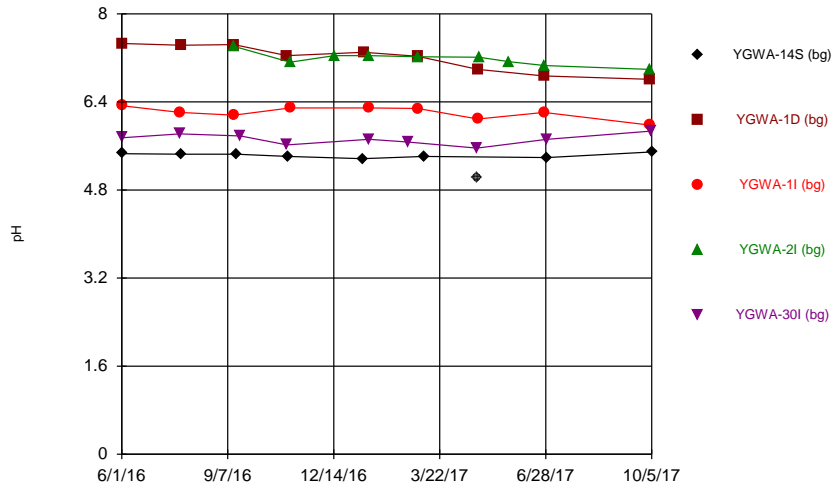
Constituent: Fluoride Analysis Run 11/3/2017 10:24 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



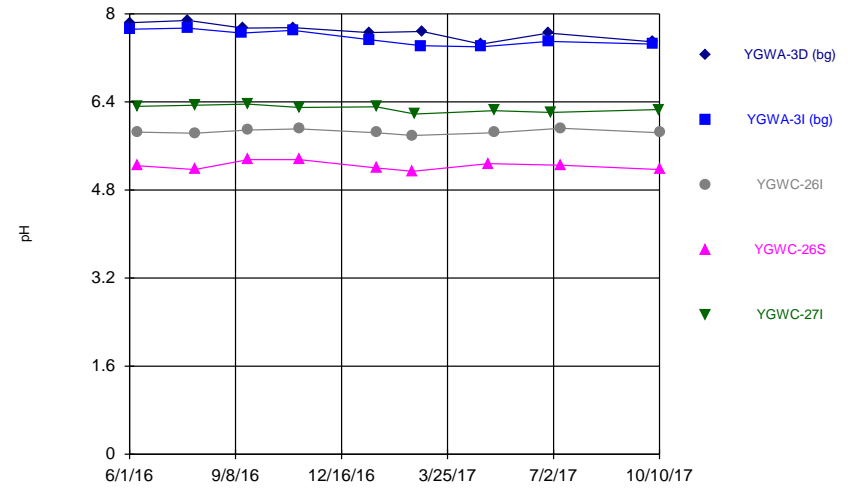
Constituent: Fluoride Analysis Run 11/3/2017 10:24 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



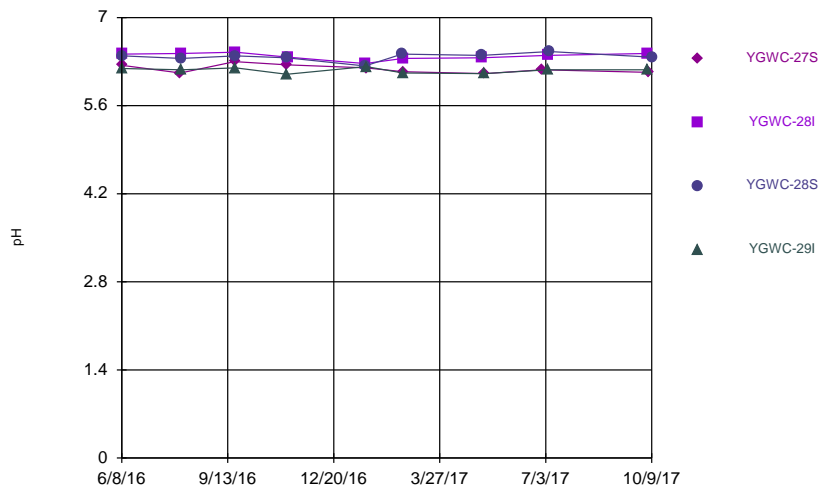
Constituent: pH Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



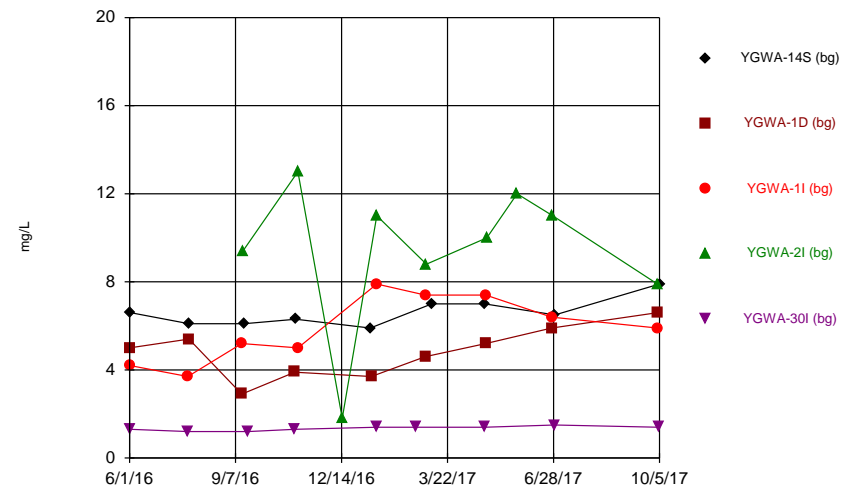
Constituent: pH Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



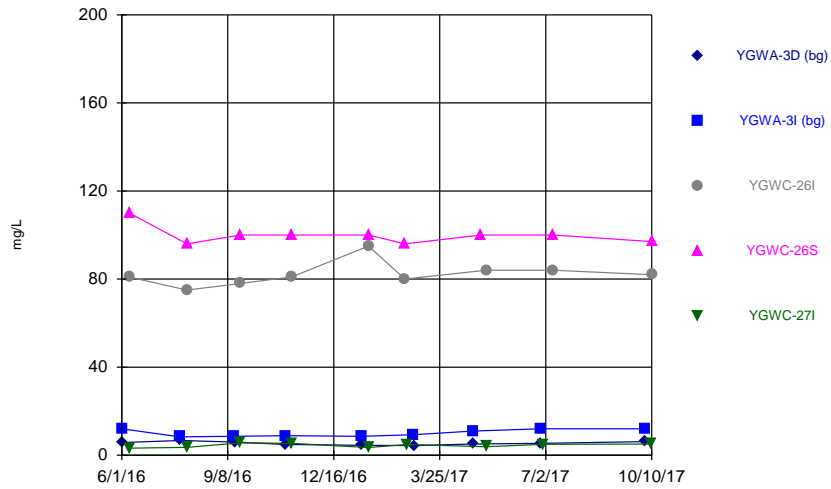
Constituent: pH Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



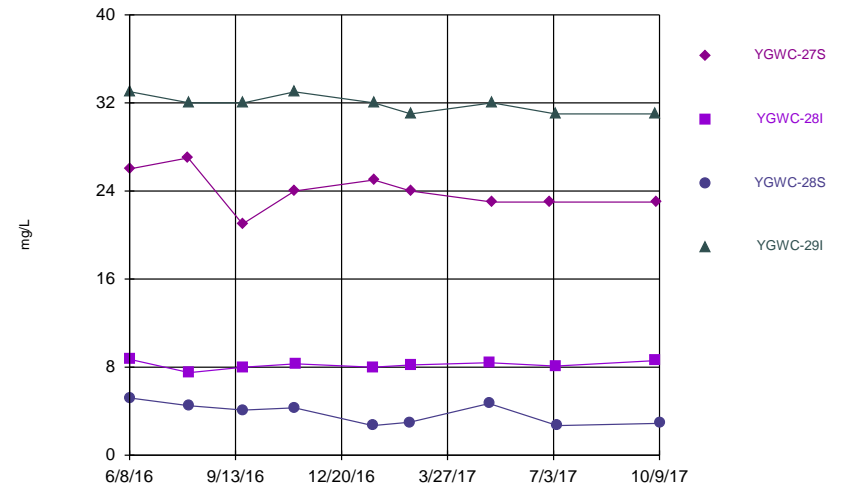
Constituent: Sulfate Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



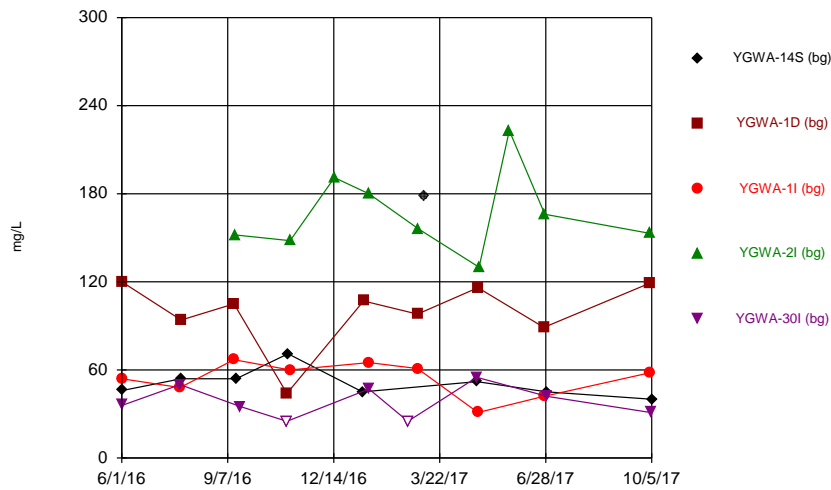
Constituent: Sulfate Analysis Run 11/3/2017 10:24 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



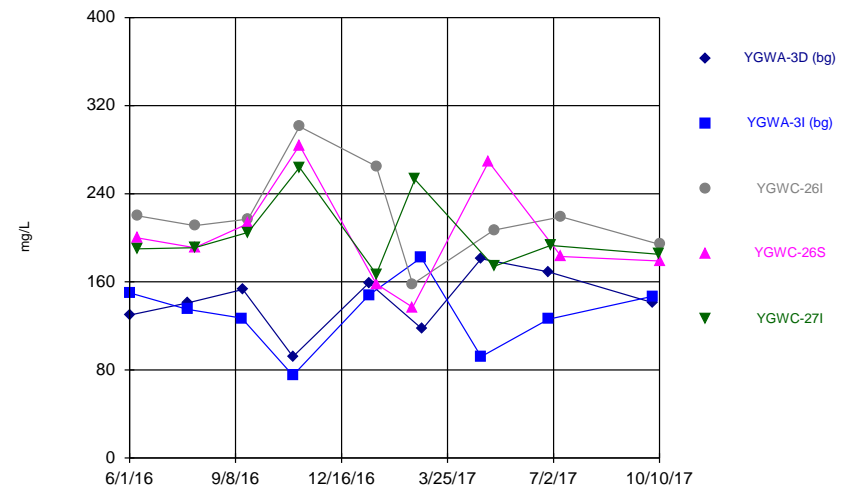
Constituent: Sulfate Analysis Run 11/3/2017 10:24 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



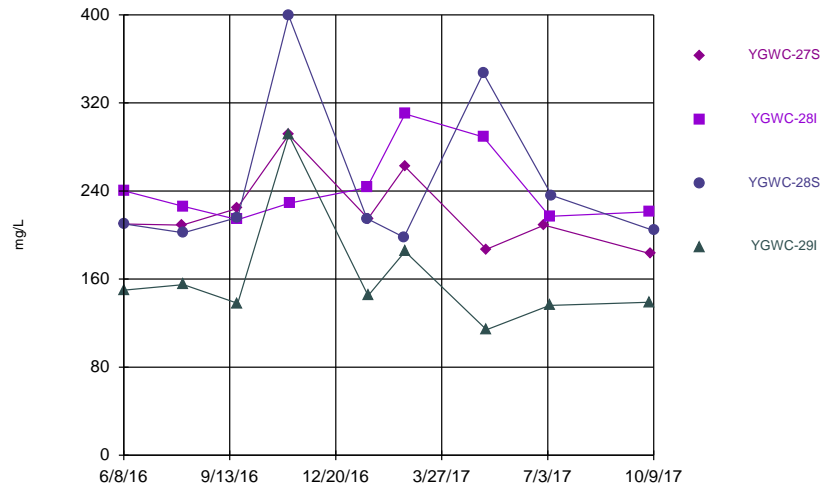
Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:24 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:24 AM
 Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/3/2017 10:24 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

Time Series

Constituent: Boron (mg/L) Analysis Run 11/3/2017 10:28 AM
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)
6/1/2016		<0.04	<0.04		
6/2/2016	<0.04				<0.04
7/25/2016			<0.04		<0.04
7/26/2016	0.0177 (J)	0.0055 (J)			
9/13/2016		<0.04	<0.04		
9/14/2016				<0.04	
9/15/2016	0.0214 (J)				
9/19/2016					<0.04
11/1/2016		0.0086 (J)			<0.04
11/2/2016	0.0151 (J)				
11/4/2016			<0.04	<0.04	
12/15/2016				0.0107 (J)	
1/10/2017	0.0198 (J)				
1/11/2017		0.0074 (J)			
1/16/2017			<0.04	<0.04	<0.04
2/21/2017					<0.04
3/2/2017		0.008 (J)	<0.04		
3/3/2017				<0.04	
3/8/2017	0.0189 (J)				
4/26/2017	0.0161 (J)				<0.04
4/27/2017		0.0066 (J)	<0.04		
4/28/2017				<0.04	
5/26/2017				<0.04	
6/27/2017		0.0087 (J)	0.006 (J)		
6/28/2017				<0.04	
6/30/2017	0.0173 (J)				<0.04
10/3/2017		0.0072 (J)	0.0071 (J)	<0.04	
10/4/2017					<0.04
10/5/2017	0.0173 (J)				

Time Series

Constituent: Boron (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016		<0.04			
6/2/2016	<0.04				
6/8/2016			0.97	0.62	2.2
7/25/2016		<0.04			
7/26/2016	0.0097 (J)				
8/1/2016			0.932	0.643	2
9/14/2016		<0.04			
9/15/2016	0.0102 (J)				
9/20/2016			1.04	0.644	2.02
11/1/2016	<0.04	<0.04			
11/7/2016			0.852	0.621	1.91
1/11/2017	<0.04	<0.04			
1/18/2017			0.972	0.607	1.69
2/21/2017			0.972	0.624	
2/23/2017					1.76
3/1/2017		0.0063 (J)			
3/2/2017	0.0084 (J)				
4/26/2017	<0.04	<0.04			
5/3/2017				0.676	
5/8/2017			1.05		2
6/28/2017	<0.04	<0.04			
6/30/2017					2.28
7/10/2017			0.855	0.58	
10/4/2017	<0.04	<0.04			
10/9/2017					1.82
10/10/2017			0.887	0.612	

Time Series

Constituent: Boron (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	1.3			
6/9/2016		2.2	2.3	0.88
8/1/2016	1.36			
8/2/2016		2.22	2.21	0.872
9/20/2016	1.69			
9/21/2016		2.65	2.54	0.853
11/7/2016	1.35		2.49	0.815
11/8/2016		2.44		
1/18/2017		1.88	2.04	
1/19/2017	1.15			0.803
2/21/2017			2.29	
2/22/2017	1.3	2.05		0.855
5/5/2017		3.01	3.41	
5/8/2017	1.51			0.884
6/30/2017	1.47			
7/5/2017		2.7		0.811
7/7/2017			3.01	
10/5/2017		2.53		0.851
10/6/2017	1.31			
10/9/2017			2.76	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/3/2017 10:28 AM
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)
6/1/2016		12	2.5		
6/2/2016	1.3				1.3
7/25/2016			2.16		1.17
7/26/2016	1.24	11			
9/13/2016		11.8	2.21		
9/14/2016				23.5	
9/15/2016	1.17				
9/19/2016					1.05
11/1/2016		11			1.14
11/2/2016	1.23				
11/4/2016			2.67	23.7	
12/15/2016				23.1	
1/10/2017	1.24				
1/11/2017		11.2			
1/16/2017			2.45	23.3	1.23
2/21/2017					1.25
3/2/2017		11	2.57		
3/3/2017				25.1	
3/8/2017	1.21				
4/26/2017	1.14				1.03
4/27/2017		11.1	2.38		
4/28/2017				30.7	
5/26/2017				26.2	
6/27/2017		13.8	2.36		
6/28/2017				26.1	
6/30/2017	1.24				1.13
10/3/2017		14	2.21	26.7	
10/4/2017					1.09
10/5/2017	1.11				

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016		21			
6/2/2016	28				
6/8/2016			15	13	25
7/25/2016		20.3			
7/26/2016	24.5				
8/1/2016			14.5	12.2	21.4
9/14/2016		19.7			
9/15/2016	27				
9/20/2016			15.3	12.2	26.3
11/1/2016	25.6	18.4			
11/7/2016			13.8	12.1	26.1
1/11/2017	27.5	20.3			
1/18/2017			15.1	11.5	25.6
2/21/2017			14.6	11.7	
2/23/2017					28.2
3/1/2017		18.6			
3/2/2017	27.5				
4/26/2017	30.4	25.6			
5/3/2017				11.9	
5/8/2017			15.2		27.2
6/28/2017	29.8	23.9			
6/30/2017					27.2
7/10/2017			17.4	12.7	
10/4/2017	29.7	22.1			
10/9/2017					27.3
10/10/2017			15.5	11.4	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	44			
6/9/2016		36	26	12
8/1/2016	36.3			
8/2/2016		35.5	25.8	11.7
9/20/2016	39.5			
9/21/2016		33.2	24.9	11.1
11/7/2016	34.9		25.1	11.4
11/8/2016		33.8		
1/18/2017		33.4	26.1	
1/19/2017	37			12
2/21/2017			29	
2/22/2017	37.6	33.8		11.2
5/5/2017		33.5	28.1	
5/8/2017	35.7			11.2
6/30/2017	36.2			
7/5/2017		33.4		11.9
7/7/2017			28.6	
10/5/2017		36.4		12
10/6/2017	39.8			
10/9/2017			27.3	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/3/2017 10:28 AM
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)
6/1/2016		1.3	1.6		
6/2/2016	4.1				1.9
7/25/2016			1.4		1.7
7/26/2016	4	1.2			
9/13/2016		1.1	1.3		
9/14/2016				1.1	
9/15/2016	4.2				
9/19/2016					1.6
11/1/2016		1.3			1.8
11/2/2016	4.9				
11/4/2016			1.6	1.4	
12/15/2016				2.9	
1/10/2017	4.1				
1/11/2017		1.1			
1/16/2017			1.4	0.98	1.7
2/21/2017					1.7
3/2/2017		1	1.3		
3/3/2017				1.1	
3/8/2017	4.2				
4/26/2017	4.1				1.7
4/27/2017		1	1.3		
4/28/2017				0.91	
5/26/2017				0.93	
6/27/2017		1.1	1.4		
6/28/2017				1	
6/30/2017	3.7				1.8
10/3/2017		1.1	1.7	1.2	
10/4/2017					1.8
10/5/2017	3.8				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016		1.3			
6/2/2016	1.4				
6/8/2016			19	18	14
7/25/2016		1.3			
7/26/2016	1.6				
8/1/2016			17	16	13
9/14/2016		1.3			
9/15/2016	1.5				
9/20/2016			18	18	13
11/1/2016	1.7	1.4			
11/7/2016			17	16	14
1/11/2017	1.2	1.1			
1/18/2017			19	17	14
2/21/2017			18	16	
2/23/2017					14
3/1/2017		1.1			
3/2/2017	1.2				
4/26/2017	1.2	1.1			
5/3/2017				17	
5/8/2017			18		14
6/28/2017	1.3	1.2			
6/30/2017					14
7/10/2017			19	15	
10/4/2017	1.5	1.2			
10/9/2017					14
10/10/2017			19	15	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	22			
6/9/2016		18	19	15
8/1/2016	21			
8/2/2016		18	18	14
9/20/2016	22			
9/21/2016		18	19	14
11/7/2016	24		20	14
11/8/2016		18		
1/18/2017		18	20	
1/19/2017	22			14
2/21/2017			19	
2/22/2017	21	18		13
5/5/2017		19 (o)	21	
5/8/2017	22			15
6/30/2017	21			
7/5/2017		18		14
7/7/2017			20	
10/5/2017		19		15
10/6/2017	21			
10/9/2017			20	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:28 AM
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)
6/1/2016		0.12 (J)	<0.3		
6/2/2016	<0.3				<0.3
7/25/2016			0.06 (J)		0.06 (J)
7/26/2016	0.02 (J)	0.08 (J)			
9/13/2016		0.11 (J)	<0.3		
9/14/2016				0.08 (J)	
9/15/2016	<0.3				
9/19/2016					<0.3
11/1/2016		0.1 (J)			0.07 (J)
11/2/2016	0.04 (J)				
11/4/2016			0.07 (J)	0.12 (J)	
12/15/2016				0.06 (J)	
1/10/2017	<0.3				
1/11/2017		0.05 (J)			
1/16/2017			0.03 (J)	0.1 (J)	<0.3
2/21/2017					0.05 (J)
3/2/2017		0.09 (J)	0.06 (J)		
3/3/2017				0.11 (J)	
3/8/2017	0.04 (J)				
4/26/2017	<0.3				<0.3
4/27/2017		0.04 (J)	0.01 (J)		
4/28/2017				0.06 (J)	
5/26/2017				0.09 (J)	
6/27/2017		0.06 (J)	0.06 (J)		
6/28/2017				0.11 (J)	
6/30/2017	<0.3				0.01 (J)
10/3/2017		0.07 (J)	<0.3	0.12 (J)	
10/4/2017					<0.3
10/5/2017	<0.3				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016		0.15 (J)			
6/2/2016	0.62				
6/8/2016			0.094 (J)	<0.3	0.086 (J)
7/25/2016		0.14 (J)			
7/26/2016	0.49				
8/1/2016			0.08 (J)	0.24 (J)	0.14 (J)
9/14/2016		0.18 (J)			
9/15/2016	0.54				
9/20/2016			0.05 (J)	0.03 (J)	<0.3
11/1/2016	0.68	0.15 (J)			
11/7/2016			0.12 (J)	0.44	0.12 (J)
1/11/2017	0.49	0.09 (J)			
1/18/2017			0.11 (J)	0.07 (J)	0.08 (J)
2/21/2017			0.1 (J)	0.11 (J)	
2/23/2017					0.08 (J)
3/1/2017		0.2 (J)			
3/2/2017	0.48				
4/26/2017	0.48	0.08 (J)			
5/3/2017				0.16 (J)	
5/8/2017			0.08 (J)		0.07 (J)
6/28/2017	0.47	0.12 (J)			
6/30/2017					0.03 (J)
7/10/2017			0.04 (J)	0.04 (J)	
10/4/2017	0.47	0.1 (J)			
10/9/2017					0.07 (J)
10/10/2017			<0.3	<0.3	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	0.12 (J)			
6/9/2016		0.098 (J)	0.16 (J)	0.085 (J)
8/1/2016	0.22 (J)			
8/2/2016		0.38	0.5	0.09 (J)
9/20/2016	0.32			
9/21/2016		0.08 (J)	0.25 (J)	0.09 (J)
11/7/2016	0.2 (J)		0.27 (J)	0.11 (J)
11/8/2016		0.24 (J)		
1/18/2017		0.12 (J)	0.34	
1/19/2017	0.25 (J)			0.06 (J)
2/21/2017			0.27 (J)	
2/22/2017	0.21 (J)	0.15 (J)		0.09 (J)
5/5/2017		0.08 (J)	0.2 (J)	
5/8/2017	0.19 (J)			0.06 (J)
6/30/2017	0.2 (J)			
7/5/2017		0.11 (J)		0.08 (J)
7/7/2017			0.18 (J)	
10/5/2017		0.08 (J)		0.09 (J)
10/6/2017	0.15 (J)			
10/9/2017			0.25 (J)	

Time Series

Constituent: pH (pH) Analysis Run 11/3/2017 10:28 AM
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)
6/1/2016		7.46	6.33		
6/2/2016	5.46				5.75
7/25/2016			6.21		5.82
7/26/2016	5.45	7.43			
9/13/2016		7.44	6.16	7.41	
9/15/2016	5.45				
9/19/2016					5.78 (D)
11/1/2016		7.24			5.62
11/2/2016	5.41				
11/4/2016			6.29	7.12	
12/15/2016				7.24	
1/10/2017	5.37				
1/11/2017		7.3			
1/16/2017			6.29	7.24	5.72
2/21/2017					5.67
3/2/2017		7.23	6.28		
3/3/2017				7.22	
3/8/2017	5.41				
4/26/2017	5.02 (o)				5.56
4/27/2017		6.99	6.09		
4/28/2017				7.21	
5/26/2017				7.13	
6/27/2017		6.87	6.21		
6/28/2017				7.06	
6/30/2017	5.39				5.72
10/3/2017		6.81	5.98	6.99	
10/4/2017					5.87
10/5/2017	5.49				

Time Series

Constituent: pH (pH) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016		7.72			
6/2/2016	7.84				
6/8/2016			5.85	5.24	6.32
7/25/2016		7.74			
7/26/2016	7.88				
8/1/2016			5.83	5.17	6.34
9/14/2016		7.65			
9/15/2016	7.74				
9/20/2016			5.89	5.35	6.36
11/1/2016	7.75	7.7			
11/7/2016			5.91	5.35	6.3
1/11/2017	7.66	7.53			
1/18/2017			5.84	5.2	6.31
2/21/2017			5.79	5.14	
2/23/2017					6.18
3/1/2017		7.42			
3/2/2017	7.68				
4/26/2017	7.45	7.4			
5/3/2017				5.28	
5/8/2017			5.84		6.24
6/28/2017	7.65	7.5			
6/30/2017					6.21
7/10/2017			5.92	5.25	
10/4/2017	7.49	7.45			
10/9/2017					6.26
10/10/2017			5.84	5.17	

Time Series

Constituent: pH (pH) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	6.24			
6/9/2016		6.42	6.39	6.19
8/1/2016	6.12			
8/2/2016		6.43	6.35	6.17
9/20/2016	6.3			
9/21/2016		6.45	6.39	6.2
11/7/2016	6.25		6.36	6.1
11/8/2016		6.37		
1/18/2017		6.27	6.23	
1/19/2017	6.2			6.22
2/21/2017			6.42	
2/22/2017	6.14	6.35		6.12
5/5/2017		6.36	6.4	
5/8/2017	6.11			6.11
6/30/2017	6.17			
7/5/2017		6.4		6.17
7/7/2017			6.46	
10/5/2017		6.43		6.17
10/6/2017	6.13			
10/9/2017			6.37	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/3/2017 10:28 AM
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)
6/1/2016		5	4.2		
6/2/2016	6.6				1.3
7/25/2016			3.7		1.2
7/26/2016	6.1	5.4			
9/13/2016		2.9	5.2		
9/14/2016				9.4	
9/15/2016	6.1				
9/19/2016					1.2
11/1/2016		3.9			1.3
11/2/2016	6.3				
11/4/2016			5	13	
12/15/2016				1.8	
1/10/2017	5.9				
1/11/2017		3.7			
1/16/2017			7.9	11	1.4
2/21/2017					1.4
3/2/2017		4.6	7.4		
3/3/2017				8.8	
3/8/2017	7				
4/26/2017	7				1.4
4/27/2017		5.2	7.4		
4/28/2017				10	
5/26/2017				12	
6/27/2017		5.9	6.4		
6/28/2017				11	
6/30/2017	6.5				1.5
10/3/2017		6.6	5.9	7.9	
10/4/2017					1.4
10/5/2017	7.9				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016		12			
6/2/2016	5.8				
6/8/2016			81	110	3.2
7/25/2016		8.4			
7/26/2016	6.7				
8/1/2016			75	96	3.6
9/14/2016		8.6			
9/15/2016	6				
9/20/2016			78	100	5.6
11/1/2016	4.9	8.9			
11/7/2016			81	100	5.4
1/11/2017	4.5	8.6			
1/18/2017			95	100	3.5
2/21/2017			80	96	
2/23/2017					4.9
3/1/2017		9.3			
3/2/2017	4.4				
4/26/2017	5.1	11			
5/3/2017				100	
5/8/2017			84		3.9
6/28/2017	5.4	12			
6/30/2017					5
7/10/2017			84	100	
10/4/2017	6.2	12			
10/9/2017					5.1
10/10/2017			82	97	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/3/2017 10:28 AM
Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	26			
6/9/2016		8.7	5.2	33
8/1/2016	27			
8/2/2016		7.5	4.5	32
9/20/2016	21			
9/21/2016		8	4.1	32
11/7/2016	24		4.3	33
11/8/2016		8.3		
1/18/2017		8	2.7	
1/19/2017	25			32
2/21/2017			3	
2/22/2017	24	8.2		31
5/5/2017		8.4	4.7	
5/8/2017	23			32
6/30/2017	23			
7/5/2017		8.1		31
7/7/2017			2.7	
10/5/2017		8.6		31
10/6/2017	23			
10/9/2017			2.9	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:28 AM

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)
6/1/2016		120	54		
6/2/2016	46				36
7/25/2016			48		50
7/26/2016	54	94			
9/13/2016		105	67		
9/14/2016				152	
9/15/2016	54				
9/19/2016					35
11/1/2016		44			<25
11/2/2016	71				
11/4/2016			60	148	
12/15/2016				191	
1/10/2017	45				
1/11/2017		107			
1/16/2017			65	180	47
2/21/2017					<25
3/2/2017		98	61		
3/3/2017				156	
3/8/2017	178 (o)				
4/26/2017	52				55
4/27/2017		116	31		
4/28/2017				130	
5/26/2017				223	
6/27/2017		89	42		
6/28/2017				166	
6/30/2017	45				42
10/3/2017		119	58	153	
10/4/2017					31
10/5/2017	40				

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:28 AM

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWA-3D (bg)	YGWA-3I (bg)	YGWC-26I	YGWC-26S	YGWC-27I
6/1/2016		150			
6/2/2016	130				
6/8/2016			220	200	190
7/25/2016		135			
7/26/2016	141				
8/1/2016			211	191	191
9/14/2016		127			
9/15/2016	153				
9/20/2016			217	213	205
11/1/2016	92	75			
11/7/2016			301	284	264
1/11/2017	159	148			
1/18/2017			265 (D)	158 (D)	167 (D)
2/21/2017			158	137	
2/23/2017					253
3/1/2017		182			
3/2/2017	117				
4/26/2017	181	92			
5/3/2017				269	
5/8/2017			207		174
6/28/2017	169	126			
6/30/2017					193
7/10/2017			219	183	
10/4/2017	141	147			
10/9/2017					185
10/10/2017			194	179	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/3/2017 10:28 AM

Plant Yates Client: Southern Company Data: Yates Ash Pond 2

	YGWC-27S	YGWC-28I	YGWC-28S	YGWC-29I
6/8/2016	210			
6/9/2016		240	210	150
8/1/2016	209			
8/2/2016		226	202	155
9/20/2016	224			
9/21/2016		214	216	138
11/7/2016	291		399	291
11/8/2016		229		
1/18/2017		243 (D)	215 (D)	
1/19/2017	215 (D)			145 (D)
2/21/2017			198	
2/22/2017	262	310		185
5/5/2017		289	347	
5/8/2017	187			114
6/30/2017	209			
7/5/2017		217		136
7/7/2017			236	
10/5/2017		221		139
10/6/2017	183			
10/9/2017			204	



**ATLANTIC COAST
CONSULTING, INC.**

Roswell, GA
630 Colonial Park Drive
Suite 110
Roswell, GA 30075
Phone: 770.594.5998

Savannah, GA
7 East Congress Street
Suite 801
Savannah, GA 31401
Phone: 912.236.3471

Knoxville, TN
212 S. Peters Road
Suite 203
Knoxville, TN 37923
Phone: 865.531.9143