Georgia Power Company
Plant Yates – AP-3 and AP-B/B'

Newnan, Georgia
Coweta County

ANNUAL 2017 GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

Atlantic Coast Consulting, Inc.

ATLANTIC COAST CONSULTING, INC.

CERTIFICATION STATEMENT

This 2017 *Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company – Plant Yates – Ash Ponds 3 and B/B'* has been prepared in compliance with the United States Environmental Protection Agency (EPA) 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.

Evan B. Perry, P.G.
Project Manager

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

GEORGIA REGISTERED No. 27467 PROFESSIONAL ENGINEER RICHARD T. DEASON

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 4
3.1 Groundwater Elevation Measurement 4
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 6
4.1 Statistical Method 6
4.2 Statistical Analyses Results 7
4.3 Appendix IV Background Data 7
5.0 MONITORING PROGRAM STATUS 7
6.0 CONCLUSIONS & FUTURE ACTIONS 7
7.0 REFERENCES 8

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 (EPA) 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 Ponds 3 and B/B' (AP-3 and AP-B/B') 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-3 and AP-B/B' 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 alumnosilicate 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 increasing 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 mulit-unit groundwater monitoring system within the uppermost aquifer at CCR Units AP-3 and AP-B/B'. The multi-unit monitoring system is designed to monitor groundwater passing the waste boundary of the CCR Units 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:

- Eight upgradient groundwater monitoring network wells (YGWA-4I, YGWA-5I, YGWA-5D, YGWA-17S, YGWA-18S, YGWA-18I, YGWA-20S, and YGWA-21I) and five downgradient groundwater monitoring network wells (YGWC-19S, YGWC-23S, YGWC-24S, YGWC-33S, and YGWC-36).
- Water level only non-network wells: YGWA-6S, YGWA-6I, YGWC-22S, YGWC-32S, YGWC-32I, YGWC-34I, PZ-04S, PZ-05S, PZ-06D, PZ-24I, PZ-35, and PZ-48.
- Dedicated QED bladder pumps for groundwater sampling.
- Additionally, one monitoring well (YGWC-19S) and four non-network wells (YGWC-22S, YGWC-32I, YGWC-32S, and YGWC-34I) were abandoned due to proximity to closure activities in January 2018.

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).

Background monitoring (as described in Section 2.2.1 below) was completed for six water level only non-network wells (YGWA-6S, YGWA-6I, YGWC-22S, YGWC-32S, YGWC-32I, YGWC-34I). However, based on an evaluation of groundwater flow conditions it was not necessary to include these locations in the groundwater monitoring system. Non-network locations YGWA-6S and YGWA-6 were redundant with the other 8 upgradient locations. Non-network locations YGWC-22S, YGWC-32S, YGWC-32I, YGWC-34I and network location YGWC-19s were abandoned due to proximity to closure activities.

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 multi-unit well network 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. 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. 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

$$v = \frac{k\,(dh/dl)}{P_e}$$

where:
v = ground water velocity
k = hydraulic conductivity
dh/dl = hydraulic gradient
P_e = effective porosity

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 [9.7×10^{-5} to 3.7×10^{-3} centimeters per second (cm/sec)] and an effective porosity range of 0.20, the flow velocity ranges between 0.0055 to 0.21 feet per day or 2.0 to 76 feet per year. Groundwater flow velocities have been calculated and are tabulated on Table 4, Groundwater Flow Velocity Calculations – October 2017. 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 the multi-unit network 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 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 maintain 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 the multi-unit monitoring network.

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, fluoride, pH, sulfate, and TDS. 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 parameter chloride, groundwater quality data will be evaluated through use of intrawell prediction limits, combined initially with the 1-of-2 resampling strategy. Using this method, background data from the parameter at the well (e.g. chloride at YGWC-23S) 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, an additional sample may be collected to verify the initial result or determine if the result was an outlier.

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 (EPA, 2009) document.

4.2 Statistical Analyses Results

Analytical data from the initial detection monitoring event in October 2017 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-23S, YGWC-33S, and YGWC-36
- Calcium: YGWC-33S
- pH: YGWC-33S
- Sulfate: YGWC-23S, YGWC-33S, and YGWC-36
- TDS: YGWC-33S and YGWC-36

Pursuant to §257.90(e), within 90 days from determining an SSI, GPC will either (1) prepare a demonstration that a source other than the CCR unit(s) 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

The Plant Yates multi-unit network 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 the CCR unit(s) 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 the multi-unit network 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 257and 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

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 PONDS 3 & B/B` MONITORING WELL NETWORK								
YGWA-4I	Upgradient	2075456	1254436	784.18	48.70	745.81	735.48	10
YGWA-5I	Upgradient	2076219	1254401	784.53	57.60	737.26	726.93	10
YGWA-5D	Upgradient	2076224	1254397	784.53	128.80	706.06	655.73	50
YGWA-17S	Upgradient	2076758	1257604	783.03	40.10	753.26	742.93	10
YGWA-18S	Upgradient	2077016	1257117	790.53	40.30	760.56	750.23	10
YGWA-18I	Upgradient	2077016	1257091	790.56	80.00	720.89	710.56	10
YGWA-20S	Upgradient	2077409	1255531	767.30	29.52	748.11	737.78	10
YGWA-21I	Upgradient	2076769	1255537	783.62	80.35	713.60	703.27	10
YGWC-19S*	Downgradient	2075495	1255594	764.48	30.43	744.38	734.05	10
YGWC-23S	Downgradient	2074734	1256367	764.62	29.79	745.16	734.83	10
YGWC-24S	Downgradient	2073886	1258878	764.12	57.57	716.88	706.55	10
YGWC-33S	Downgradient	2074259	1258345	744.54	38.53	716.21	706.01	10
YGWC-36	Downgradient	2073771	1258514	739.53	55.86	694.00	683.67	10
NON-NETWORK LOCATIONS								
YGWA-6S**	Water Level Only	2074786	1260486	782.28	39.60	753.01	742.68	10
YGWA-6I**	Water Level Only	2074790	1260491	782.58	69.10	723.81	713.48	10
YGWC-22S*	Water Level Only	2075086	1257176	751.60	40.13	721.80	711.47	10
YGWC-32S*	Water Level Only	2075015	1257646	757.31	22.98	744.66	734.33	10
YGWC-32I*	Water Level Only	2075022	1257643	758.21	38.71	729.83	719.50	10
YGWC-34I*	Water Level Only	2075232	1257485	773.67	38.75	745.25	734.92	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)

*Well abandoned and no longer sampled due to proximity to closure activities.
**Well no longer sampled due to redundancy in upgradient monitoring network.

TABLE 2
GROUNDWATER SAMPLING EVENT SUMMARY
Georgia Power - Plant Yates Ash Ponds 3 and B/B'

Well ID	Hydraulic Location	Summary of Sampling Events													Status of Monitoring Well
		June 2-8, 2016	July 26 - August 1, 2016	Septemeber 2, 2016	September 14-21, 2016	November 2-14, 2016	January 11-17, 2017	February 28 - March 9, 2017	April 26 - May 9, 2017	June 27 - July 13, 2017	September 22, 2017	September 29, 2017	October 6, 2017	October 3-11, 2017	
Purpose of Sampling Event		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Detection	
ASH PONDS 3 and B/B' MONITORING WELL NETWORK															
YGWA-4I	Upgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWA-5I	Upgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWA-5D	Upgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWA-17S	Upgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWA-18S	Upgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWA-18I	Upgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWA-20S	Upgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWA-21I	Upgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWC-19S*	Downgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWC-23S	Downgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWC-24S	Downgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWC-33S	Downgradient	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	D01	Detection
YGWC-36	Downgradient	--	--	BG01	--	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	D01	Detection

TABLE 2 (Continued)
GROUNDWATER SAMPLING EVENT SUMMARY
Georgia Power - Plant Yates Ash Ponds 3 and B/B'

Well ID	Hydraulic Location	Summary of Sampling Events													Status of Monitoring Well
		June 2-8, 2016	July 26 - August 1, 2016	Septemeber 2, 2016	September 14-21, 2016	November 2-14, 2016	January 11-17, 2017	February 28 - March 9, 2017	April 26 - May 9, 2017	June 27 - July 13, 2017	September 22, 2017	September 29, 2017	October 6, 2017	October 3-11, 2017	
Purpose of Sampling Event		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Detection	
NON-NETWORK LOCATIONS															
YGWA-6S**	Water Level Only	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	--	Detection
YGWA-6I**	Water Level Only	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	--	Detection
YGWC-22S*	Water Level Only	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	--	Detection
YGWC-32S*	Water Level Only	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	--	Detection
YGWC-32I*	Water Level Only	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	--	Detection
YGWC-34I*	Water Level Only	BG01	BG02	--	BG03	BG04	BG05	BG06	BG07	BG08	--	--	--	--	Detection

BGXX = Background Event
DXX = Detection Event Number
– = Did not sample
*Well abandoned and no longer sampled due to proximity to closure activities
**Well no longer sampled due to redundancy in upgradient monitoring network.

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
Georgia Power - Plant Yates Ash Ponds 3 and B/B'

Well ID	Hydraulic Location	Status of Monitoring Well								
		May 31, 2016	July 20, 2016	August 29, 2016	October 31 - November 1, 2016	January 9-10, 2017	February 20, 2017	April 25, 2017	June 26 - J27, 2017	October 2-3, 2017
Purpose of Sampling Event		Background	Background	Background	Background	Background	Background	Background	Background	Detection
ASH PONDS 3 and B/B' MONITORING WELL NETWORK										
YGWA-4I	Upgradient	763.42	759.99	759.84	758.12	758.05	759.46	760.75	760.51	759.57
YGWA-5I	Upgradient	767.31	765.09	763.93	762.29	762.50	764.35	765.81	764.64	763.21
YGWA-5D	Upgradient	774.12	772.17	771.01	769.32	768.93	770.39	769.01	757.89	755.54
YGWA-17S	Upgradient	770.25	768.58	768.24	767.05	769.10	770.33	770.50	771.00	770.09
YGWA-18S	Upgradient	771.30	769.14	768.17	766.77	767.09	768.39	769.53	769.46	763.82
YGWA-18I	Upgradient	768.58	766.75	765.88	764.48	764.70	765.76	766.46	766.42	765.91
YGWA-20S	Upgradient	757.95	757.77	757.68	757.36	757.52	757.56	757.45	755.56	754.92
YGWA-21I	Upgradient	757.54	756.20	755.5	752.33	752.32	752.68	752.66	752.85	750.72
YGWC-19S	Downgradient	749.26	748.67	747.25	746.36	749.96	748.46	748.35	748.93	748.87
YGWC-23S	Downgradient	748.37	747.79	748.53	747.17	749.10	749.71	749.55	750.16	749.71
YGWC-24S	Downgradient	737.40	736.22	735.79	734.98	735.12	735.53	735.63	735.82	735.76
YGWC-33S	Downgradient	736.09	735.63	735.48	735.05	735.79	736.01	735.68	736.26	736.16
YGWC-36*	Downgradient	--	--	729.18	728.86	729.23	729.54	729.14	729.67	729.30

Notes:

Groundwater Elevation in feet above mean sea level (ft msl)

-- = Denotes did not sample

*** Installed July 2017; additional background monitoring completed September-October, 2017.**

PROJECT NUMBER:	I054-103			PAGE:	1 OF	1
PROJECT NAME:	Plant Yates	BY:	MM	DATE:	November 2017	
SUBJECT:	Ash Ponds 3 & B/B`	CHK'D:	EP	DATE:	November 2017	

Table 4
GROUNDWATER FLOW VELOCITY CALCULATIONS
October 2017

Equation

$$v = \frac{k\,(dh/dl)}{P_e}$$

where: v = ground water velocity
k = hydraulic conductivity
dh/dl = hydraulic gradient
P_e = effective porosity

Values Used in Calculation

Value			Source
k_{max} =	3.7E-03	cm/sec	See note 1.
	10	ft/day	
k_{min} =	9.7E-05	cm/sec	
	0.28	ft/day	
i_1 =	0.002	unitless	Hydraulic gradient from YGWA-20S to YGWC-32S
i_2 =	0.006	unitless	YGWC-33S to YGWC-36
i_{avg} =	0.004	unitless	Average
P_e =	0.20	unitless	See note 2.

Minimum Flow Velocity

$$v_{min} = \frac{(0.28)\,(0.004)}{0.20}$$

v_{min} = 0.0055 ft/day, or 2.0 ft/year

Maximum Flow Velocity

$$v_{max} = \frac{(10)\,(0.004)}{0.20}$$

v_{max} = 0.2 ft/day, or 76 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

NOTE:
1. AERIAL PHOTOGRAPH DATED NOVEMBER 2012.

N

900 0 450 900 1,800

SCALE: 1" = 900' (IN FEET)

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

PROJECT:

PLANT YATES
ASH PONDS 3 & B/B'

708 DYER ROAD
NEWNAN, GEORGIA

REVISIONS

Drawn by: MM
Checked by: EP

PROJECT NUMBER:
I054-103
January 2018

SITE LOCATION MAP

FIGURE 1

C:\Users\eperry\Desktop\Plant Yates Ponds 3 And B,B' Well Location Map(revr).dwg 2018-01-30 EVAN PERRY

NOTE:
1. AERIAL PHOTOGRAPH DATED NOVEMBER 2012.

N

600 0 300 600 1,200

SCALE: 1" = 600' (IN FEET)

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

PROJECT:

PLANT YATES
ASH PONDS 3 & B/B'

708 DYER ROAD
NEWNAN, GEORGIA

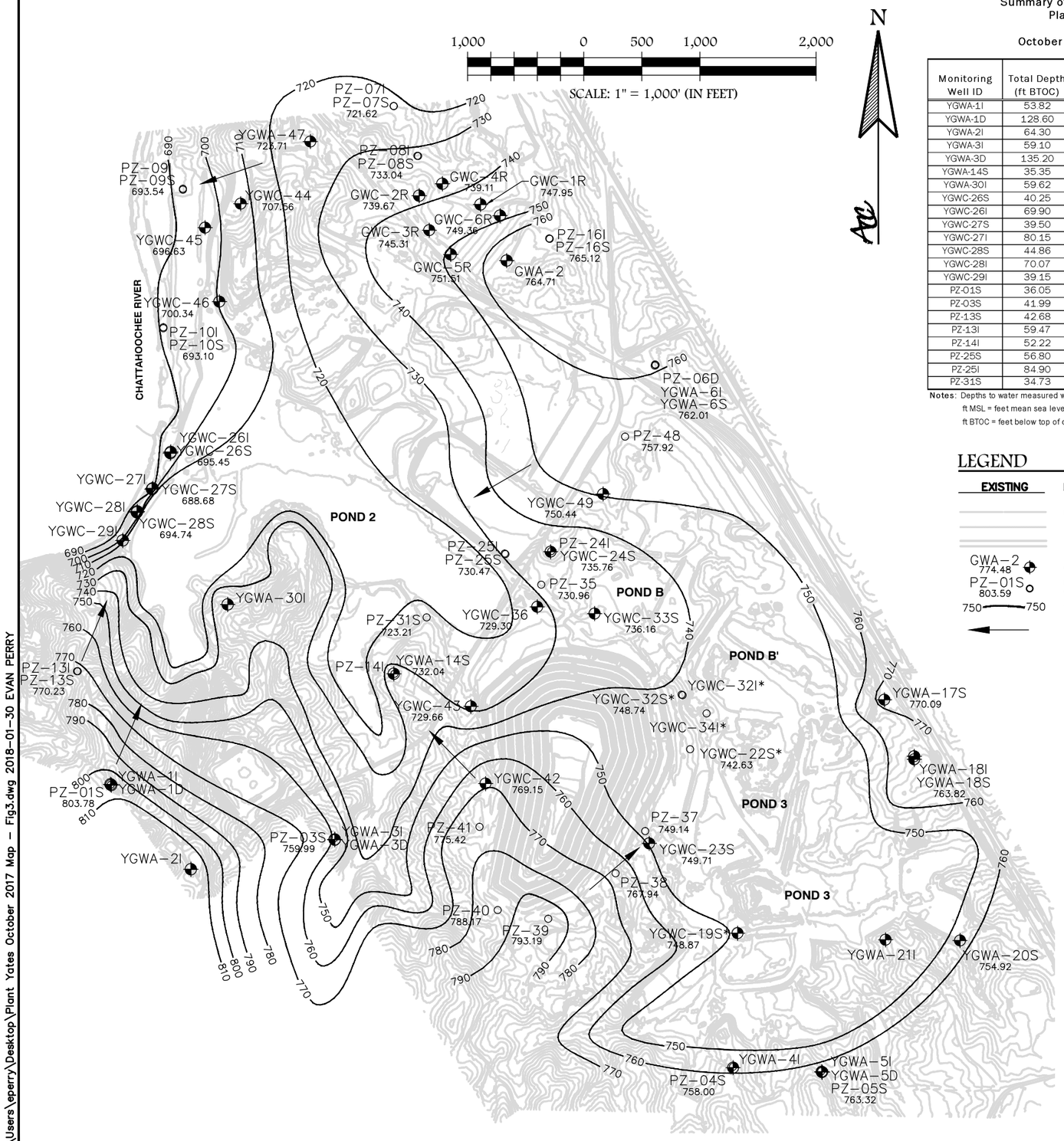
REVISIONS

Drawn by: MM
Checked by: EP

PROJECT NUMBER:
I054-103
January 2018

WELL LOCATION MAP

FIGURE 2



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

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

LEGEND

EXISTING	DESCRIPTION
	PROMINENT CONTOUR (5-FOOT INTERVAL)
	RAILROAD
	ACCESS ROAD
GWA-2 774.48	GROUNDWATER MONITORING WELL GROUNDWATER ELEVATION
PZ-01S 803.59	PIEZOMETER GROUNDWATER ELEVATION
750 750	GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
	GROUNDWATER FLOW DIRECTION

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:
1. AERIAL PHOTOGRAPH DATED MARCH 18, 2017.
2. 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 PONDS 3 & B/B`

708 DYER ROAD
NEWNAN, GEORGIA

REVISIONS

Drawn by: MM
Checked by: EP

PROJECT NUMBER:
I054-103
January 2018

OCTOBER 2017 POTENTIOMETRIC CONTOUR MAP

FIGURE 3

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

APPENDICES

APPENDIX A

BACKGROUND DATA SUMMARY TABLES

Plant Yates Ash Ponds
Analytical Data Summary

Substance		MCL/ (SMCL)	Well ID							
			YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-4I
			6/2/2016	7/26/2016	9/14/2016	11/2/2016	1/13/2017	3/6/2017	5/1/2017	6/29/2017
APPENDIX III	Boron	N/R	ND	ND (0.0047 J)	ND	ND	ND	ND	ND	ND
	Calcium	N/R	8.80	7.69	8.49	7.83	8.08	8.64	13.4	8.81
	Chloride	(250)	3.7	3.6	3.4	4.5	4.2	3.6	4.3	4.2
	Fluoride	4	ND	ND	ND	ND (0.07 J)	ND	ND (0.05 J)	ND	ND (0.02 J)
	Sulfate	(250)	8.0	7.7	7.5	8.2	8.1	8.0	8.4	9.2
	TDS	(500)	96	92	102	115	67	159	107	79
APPENDIX IV	Antimony	0.006	ND	ND (0.0003 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0130	0.0158	0.0143	0.0148	0.0146	0.0141	0.0149	0.0154
	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 (0.00082 J)	ND (0.0012 J)	ND (0.0006 J)	ND	ND (0.0029 J)	ND (0.0006 J)	ND	ND (0.0005 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	0.0130	ND (0.0123 J)	ND (0.0137 J)	ND (0.0136 J)	ND (0.0121 J)	ND (0.0143 J)	ND (0.0132 J)	ND (0.0145 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND (0.00014 J)	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.721	1.26	0.901 U	1.09 U	1.19	0.669 U	0.803 U	1.35
	Selenium	0.05	ND	ND (0.0009 J)	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-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5D
			6/2/2016	7/26/2016	9/14/2016	11/2/2016	1/12/2017	3/7/2017	5/1/2017	6/27/2017
APPENDIX III	Boron	N/R	ND	ND (0.0052 J)	ND (0.0071 J)	ND	ND (0.0076 J)	ND (0.0089 J)	ND (0.0061 J)	ND (0.0079 J)
	Calcium	N/R	33.0	32.3	31.0	30.9	35.7	32.7	37.0	36.5
	Chloride	(250)	7.2	6.6	6.6	7.6	6.8	6.8	7.2	7.0
	Fluoride	4	ND (0.11 J)	ND (0.05 J)	ND (0.04 J)	ND (0.20 J)	ND (0.040 J)	ND (0.09 J)	ND (0.04 J)	ND (0.09 J)
	Sulfate	(250)	20	20	19	20	19	20	20	18
	TDS	(500)	160	177	187	181	202	257	165	189
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND (0.00071 J)	ND (0.0010 J)	ND	ND	ND	ND (0.0012 J)	ND (0.0010 J)	ND (0.0019 J)
	Barium	2	0.0084	0.010	ND (0.0085 J)	ND (0.0091 J)	ND (0.0089 J)	ND (0.0090 J)	ND (0.0083 J)	ND (0.0074 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 (0.0006 J)	ND	ND	ND	ND (0.0012 J)	ND (0.0004 J)	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 (0.0049 J)	ND (0.0063 J)	ND (0.0058 J)	ND (0.0053 J)	ND (0.0054 J)	ND (0.0056 J)	ND (0.0031 J)	ND (0.0018 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND (0.0001 J)	ND	ND
	Molybdenum	N/R	ND (0.0035 J)	ND (0.0042 J)	ND (0.0041 J)	ND (0.0039 J)	ND (0.0041 J)	ND (0.0047 J)	ND (0.0045 J)	ND (0.0040 J)
	Radium	5	5.11	6.92	3.96	4.53	4.43	4.80	4.16	2.80
	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-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I	YGWA-5I
			6/2/2016	7/26/2016	9/14/2016	11/4/2016	1/12/2017	3/7/2017	5/2/2017	6/27/2017
APPENDIX III	Boron	N/R	ND	ND	ND (0.01 J)	ND	ND	ND	ND	ND
	Calcium	N/R	2.40	2.12	2.18	ND (2.17 J)	2.37	2.34	2.17	2.13
	Chloride	(250)	4.3	4.4	3.8	4.8	3.8	4.5	4.6	4.3
	Fluoride	4	ND	ND	ND	ND	ND	ND (0.03 J)	ND	ND
	Sulfate	(250)	1.9	1.8	1.8	2.0	1.9	2.1	2.0	2.1
	TDS	(500)	66	78	73	75	86	108	103	73
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND (0.0006 J)	ND
	Barium	2	0.0190	0.0179	0.0181	0.0165	0.0199	0.0196	0.0202	0.0184
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND (0.00009 J)	ND	ND	ND
	Chromium	0.1	ND	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	ND	ND	ND	ND	ND (0.00007 J)	ND	ND
	Lithium	N/R	ND	ND (0.0027 J)	ND (0.0029 J)	ND	ND (0.0032 J)	ND (0.0035 J)	ND (0.0031 J)	ND (0.0029 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND (0.00013 J)	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.614	1.47	1.27	0.434 U	0.202 U	0.0674 U	0.444 U	0.770 U
	Selenium	0.05	ND	ND (0.0009 J)	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-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-17S
			6/7/2016	7/27/2016	9/16/2016	11/3/2016	1/11/2017	3/2/2017	5/2/2017	6/29/2017
APPENDIX III	Boron	N/R	ND (0.036 J)	ND (0.0080 J)	ND (0.0086 J)	ND (0.0077 J)	ND (0.0092 J)	ND (0.0095 J)	ND	ND (0.0074 J)
	Calcium	N/R	2.20	2.00	1.97	1.99	2.28	2.15	1.95	2.02
	Chloride	(250)	4.5	4.5	4.5	5.4	4.7	4.8	4.6	4.5
	Fluoride	4	ND	ND	ND	ND	ND	ND (0.04 J)	ND	ND (0.02 J)
	Sulfate	(250)	4.4	4.7	4.8	5.3	5.2	5.0	5.0	5.2
	TDS	(500)	28	74	67	41	104	77	142	53
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	0.0120	0.0126	0.0127	0.0128	0.0142	0.0155	0.0138	0.0128
	Beryllium	0.004	ND	ND	ND	ND	ND	ND (0.00008 J)	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND (0.0001 J)	ND	ND	ND
	Chromium	0.1	ND	ND (0.0008 J)	ND	ND	ND	ND (0.0010 J)	ND (0.0007 J)	ND (0.0006 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND (0.00008 J)	ND	ND (0.00008 J)
	Lithium	N/R	ND	ND	ND	ND	ND (0.0035 J)	ND	ND	ND
	Mercury	0.002	ND (0.000095 J)	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.158 U	0.0354 U	1.04	0.314 U	0.340 U	0.746 U	0.111 U	0.576 U
	Selenium	0.05	ND (0.0010 J)	ND (0.0012 J)	ND (0.0015 J)	ND (0.0015 J)	ND (0.0014 J)	ND (0.0017 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							
			YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18I
			6/6/2016	7/27/2016	9/19/2016	11/3/2016	1/11/2017	3/1/2017	4/26/2017	6/28/2017
APPENDIX III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	6.20	4.73	4.76	5.25	4.74	5.37	4.28	4.95
	Chloride	(250)	6.8	6.7	7.0	7.5	6.5	6.9	7.0	7.0
	Fluoride	4	ND	ND	ND	ND	ND	ND (0.03 J)	ND	ND
	Sulfate	(250)	1.2	1.7	1.8	ND (0.69 J)	ND (0.99 J)	1.8	1.6	1.7
	TDS	(500)	120	94	92	104	133	119	162	98
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 (0.0008 J)	ND
	Barium	2	0.0280	0.0294	0.0247	0.0248	0.0266	0.0275	0.0240	0.0237
	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 (0.0012 J)	ND (0.0007 J)	ND	ND	ND	ND (0.0012 J)	ND (0.0005 J)	ND (0.0006 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	0.0088	ND (0.0087 J)	ND (0.0043 J)	ND	ND (0.0052 J)	ND (0.0053 J)	ND (0.0041 J)	ND (0.0039 J)
	Mercury	0.002	ND (0.000074 J)	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.0804 U	0.206 U	1.58	0.342 U	0.365 U	0.395 U	0.507 U	0.892
	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-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S	YGWA-18S
			6/6/2016	7/27/2016	9/16/2016	11/3/2016	1/11/2017	3/1/2017	4/26/2017	6/28/2017
APPENDIX III	Boron	N/R	ND	ND (0.0059 J)	ND (0.0079 J)	ND (0.0082 J)	ND (0.0096 J)	ND (0.0098 J)	ND (0.0091 J)	ND (0.0079 J)
	Calcium	N/R	1.40	1.19	1.50	1.31	1.25	1.26	1.05	1.06
	Chloride	(250)	6.4	6.2	6.1	7.4	6.1	6.0	6.5	6.4
	Fluoride	4	ND	ND	ND	ND	ND	ND (0.03 J)	ND	ND
	Sulfate	(250)	1.8	1.9	1.7	1.9	1.7	1.6	1.9	1.5
	TDS	(500)	58	35	35	48	95	79	36	45
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	0.0190	0.0167	0.0168	0.0159	0.0162	0.0195	0.0182	0.0180
	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	ND (0.0006 J)	ND	ND	ND	ND	ND (0.0003 J)	ND
	Cobalt	N/R	ND (0.00061 J)	ND (0.0004 J)	ND (0.0008 J)	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)
	Lithium	N/R	0.015	ND (0.0049 J)	ND (0.0031 J)	ND (0.0021 J)	ND (0.0025 J)	ND (0.0029 J)	ND (0.0019 J)	ND (0.0016 J)
	Mercury	0.002	ND (0.000076 J)	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.301 U	0.196 U	0.915 U	0.928 U	0.502 U	0.202 U	0.264 U	0.636 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-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-20S
			6/7/2016	7/27/2016	9/19/2016	11/2/2016	1/13/2017	3/6/2017	4/26/2017	6/29/2017
APPENDIX III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	2.30	2.08	1.97	2.13	2.45	2.48	2.30	2.54
	Chloride	(250)	1.9	1.9	1.9	2.6	2.3	1.9	2.0	2.6
	Fluoride	4	ND	ND	ND	ND	ND	ND (0.04 J)	ND	ND (0.03 J)
	Sulfate	(250)	ND	ND (0.08 J)	ND (0.08 J)	ND (0.10 J)	ND (0.10 J)	ND	ND	ND (0.15 J)
	TDS	(500)	38	74	45	53	46	164	34	68
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	0.0140	0.0141	0.0155	0.0157	0.0158	0.0163	0.0177	0.0170
	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 (0.0005 J)	ND (0.0007 J)	ND (0.0005 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND (0.0013 J)	ND	ND	ND	ND
	Lithium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND (0.000096 J)	ND	ND	ND	ND	ND (0.00014 J)	ND	ND (0.000053 J)
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.0191 U	0.541 U	0.826 U	0.791 U	0.296 U	0.518 U	0.282 U	1.12
	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-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-21I
			6/7/2016	7/28/2016	9/19/2016	11/3/2016	1/13/2017	3/6/2017	4/26/2017	6/29/2017
APPENDIX III	Boron	N/R	ND	ND (0.0096 J)	ND	ND	ND	ND	ND	ND
	Calcium	N/R	3.70	3.15	3.17	3.40	4.98	6.28	6.65	6.04
	Chloride	(250)	2.8	2.6	2.4	2.9	2.5	2.1	2.1	2.8
	Fluoride	4	ND	ND (0.02 J)	ND (0.02 J)	ND (0.07 J)	ND	ND (0.09 J)	ND (0.04 J)	ND (0.05 J)
	Sulfate	(250)	5.2	5.1	4.8	5.0	4.3	4.5	4.9	5.5
	TDS	(500)	60	81	68	61	76	167	50	94
APPENDIX IV	Antimony	0.006	ND	ND	ND (0.0010 J)	ND	ND	ND (0.0005 J)	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND (0.0017 J)	ND (0.0017 J)	ND (0.0012 J)
	Barium	2	0.0058	ND (0.0068 J)	ND (0.0071 J)	ND (0.0092 J)	0.0105	0.0105	0.0110	0.0109
	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 (0.0004 J)	ND	ND
	Cobalt	N/R	0.0056	ND (0.0032 J)	ND (0.0047 J)	0.0130	0.0110	0.0110	ND (0.0090 J)	ND (0.0093 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	0.0055	ND (0.0045 J)	ND (0.0054 J)	ND	ND (0.0062 J)	ND (0.0059 J)	ND (0.0054 J)	ND (0.0047 J)
	Mercury	0.002	ND (0.000096 J)	ND	ND	ND	ND	ND (0.00014 J)	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND (0.0007 J)	ND (0.0008 J)	ND
	Radium	5	0.347	0.815 U	0.862 U	0.797 U	0.720 U	0.518 U	1.13 U	0.841 U
	Selenium	0.05	ND (0.00048 J)	ND	ND (0.0014 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-23S	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-23S
			6/7/2016	7/28/2016	9/20/2016	11/8/2016	1/16/2017	3/9/2017	5/2/2017	7/10/2017
APPENDIX III	Boron	N/R	0.99	1.09	1.35	1.50	1.67	1.44	1.20	1.12
	Calcium	N/R	9.60	7.87	9.28	8.60	8.85	8.40	12.9	8.09
	Chloride	(250)	2.9	3.5	2.4	2.8	1.8	1.7	1.8	1.9
	Fluoride	4	ND	ND (0.03 J)	ND	ND	ND	ND (0.03 J)	ND	ND (0.04 J)
	Sulfate	(250)	56	57	68	79	72	69	60	57
	TDS	(500)	130	119	132	146	194	288	221	123
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND (0.0004 J)	ND
	Barium	2	0.0450	0.0511	0.0561	0.0540	0.0528	0.0469	0.0427	0.0395
	Beryllium	0.004	ND	ND	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.00009 J)	ND
	Cadmium	0.005	ND	ND	ND	ND (0.00007 J)	ND	ND	ND	ND
	Chromium	0.1	ND	ND (0.0008 J)	ND	ND	ND	ND (0.0008 J)	ND (0.0007 J)	ND (0.0007 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND (0.00044 J)	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND (0.0019 J)	ND (0.0021 J)	ND (0.0024 J)	ND (0.0022 J)	ND (0.0025 J)	ND (0.0019 J)	ND (0.0018 J)
	Mercury	0.002	ND (0.000098 J)	ND	ND	ND	ND	ND (0.00014 J)	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.303 U	0.386 U	1.47	0.22 U	0.147 U	0.0892 U	0.149 U	0.815 U
	Selenium	0.05	0.0370	0.0385	0.0464	0.0521	0.0469	0.0437	0.0395	0.0386
	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-24S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S	YGWC-24S
			6/8/2016	8/1/2016	9/20/2016	11/8/2016	1/17/2017	3/8/2017	5/2/2017	7/7/2017
APPENDIX III	Boron	N/R	ND	ND (0.0054 J)	ND (0.0111 J)	ND (0.0121 J)	ND (0.0079 J)	ND	ND (0.0099 J)	ND (0.0076 J)
	Calcium	N/R	1.9	1.83	1.78	1.77	1.7	1.77	1.57	1.80
	Chloride	(250)	5.9	5.3	5.5	6.4	5.5	5.4	5.7	5.7
	Fluoride	4	ND	ND	ND	ND (0.02 J)	ND	ND (0.03 J)	ND	ND
	Sulfate	(250)	ND	1.1	ND (0.38 J)	ND (0.39 J)	ND (0.48 J)	ND (0.29 J)	ND (0.29 J)	ND (0.37 J)
	TDS	(500)	66	56	53	58	56	192	113	46
APPENDIX IV	Antimony	0.006	ND	ND	ND (0.0009 J)	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND (0.0005 J)	ND
	Barium	2	0.0200	0.0200	0.0203	0.0191	0.0192	0.0189	0.0190	0.0190
	Beryllium	0.004	ND	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND (0.0022 J)	ND	ND	ND	ND	ND (0.001 J)	ND (0.0011 J)	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	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND (0.00014 J)	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	1.06	0.467 U	0.853 U	0.433 U	0.0759 U	0.479 U	0.506 U	0.713 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-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S	YGWC-33S
			6/8/2016	8/1/2016	9/21/2016	11/14/2016	1/17/2017	3/1/2017	5/3/2017	7/10/2017
APPENDIX III	Boron	N/R	12.0	9.89	11.1	11.0	11.8	8.61	13.4	15.2
	Calcium	N/R	130	136	131	116	126	125	129	139
	Chloride	(250)	7.6	5.7	5.5	6.4	5.3	5.5	6.1	5.6
	Fluoride	4	0.34	ND (0.24 J)	ND (0.22 J)	0.35	ND (0.22 J)	0.33	ND (0.20 J)	0.57
	Sulfate	(250)	910	830	840	750	790	850	800	810
	TDS	(500)	1200	1300	1220	1170	1150	1160	1280	1170
APPENDIX IV	Antimony	0.006	ND	ND (0.0004 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	0.0033	0.0070	0.0054	ND	ND (0.0027 J)	ND (0.0041 J)	ND (0.0037 J)	ND (0.0044 J)
	Barium	2	0.0290	0.0200	0.0183	0.0149	0.0139	0.0142	0.0151	0.0137
	Beryllium	0.004	0.0120	0.0146	0.0149	0.0152	0.0142	0.0150	0.0154	0.0143
	Cadmium	0.005	ND (0.00098 J)	0.0014	0.0017	0.0027	0.0033	0.0031	0.0031	0.0029
	Chromium	0.1	ND (0.0014 J)	ND (0.0021 J)	ND (0.0021 J)	ND (0.0010 J)	ND	ND (0.0014 J)	ND (0.0009 J)	ND (0.0012 J)
	Cobalt	N/R	0.0370	0.0297	0.0237	0.0144	ND (0.0095 J)	0.0125	0.0151	0.0121
	Lead	0.015	ND (0.0012 J)	ND (0.0005 J)	ND (0.0006 J)	ND (0.0012 J)	ND (0.0020 J)	ND (0.0020 J)	ND (0.0017 J)	ND (0.0018 J)
	Lithium	N/R	0.0099	ND (0.0142 J)	ND (0.0145 J)	ND (0.0253 J)	ND (0.0256 J)	ND (0.0219 J)	ND (0.0217 J)	ND (0.0214 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND (0.00095 J)	ND (0.0005 J)	ND	ND	ND	ND	ND	ND
	Radium	5	0.384 U	1.55	2.36	0.851 U	1.41 U	1.13	0.584 U	0.460 U
	Selenium	0.05	ND (0.0011 J)	0.0192	0.0147	ND	0.0122	0.0151	0.0120	0.0106
	Thallium	0.002	ND	ND (0.00006 J)	ND	ND	ND (0.0004 J)	ND (0.0003 J)	ND (0.0002 J)	ND (0.0002 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-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36	YGWC-36
			9/2/2016	11/14/2016	2/28/2017	5/9/2017	7/13/2017	9/22/2017	9/29/2017	10/6/2017
APPENDIX III	Boron	N/R	0.133	0.287	0.215	0.233	0.262	0.238	0.235	0.256
	Calcium	N/R	11.2	7.79	8.37	13.9	16.6	18.4	16.1	16.6
	Chloride	(250)	6.3	6.7	5.4	5.7	5.4	6.9	5.5	5.5
	Fluoride	4	ND (0.05 J)	ND (0.18 J)	ND (0.09 J)	ND (0.009 J)	ND	ND (0.09 J)	ND	ND
	Sulfate	(250)	72	110	110	130	140	160	160	160
	TDS	(500)	243	272	306	303	282	309	273	287
APPENDIX IV	Antimony	0.006	ND	ND (0.0014 J)	ND (0.0004 J)	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND (0.0006 J)	ND (0.0006 J)	ND	ND	ND	ND
	Barium	2	0.0409	0.0182	0.0230	0.0349	0.0484	0.0491	0.0452	0.0508
	Beryllium	0.004	ND (0.0003 J)	ND (0.00009 J)	ND (0.0001 J)	ND (0.0002 J)	ND (0.0003 J)	ND (0.0003 J)	ND (0.0003 J)	ND (0.0003 J)
	Cadmium	0.005	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)	ND (0.0002 J)
	Chromium	0.1	ND	ND (0.0035 J)	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.0006 J)	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND (0.0017 J)	ND (0.0002 J)	ND (0.0003 J)	ND (0.0004 J)	ND (0.0004 J)	ND (0.0003 J)	ND (0.0002 J)	ND (0.0002 J)
	Lithium	N/R	ND (0.0029 J)	ND (0.0044 J)	ND (0.0038 J)	ND (0.0057 J)	ND (0.0070 J)	ND (0.0067 J)	ND (0.0064 J)	ND (0.0065 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND (0.0027 J)	ND (0.0071 J)	ND (0.0038 J)	ND (0.0025 J)	ND (0.0014 J)	ND	ND	ND
	Radium	5	0.873 U	0.0451 U	1.34 U	0.309 U	0.618 U	0.667 U	1.63	0.641 U
	Selenium	0.05	ND (0.0012 J)	ND	ND (0.0017 J)	ND (0.0018 J)	ND (0.0031 J)	ND (0.0024 J)	ND (0.0020 J)	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-6I (WELL NO LONGER SAMPLED - SEE NOTE 10)							
			6/6/2016	7/27/2016	9/15/2016	11/2/2016	1/13/2017	3/2/2017	5/1/2017	6/29/2017
APPENDIX III	Boron	N/R	ND (0.048 J)	ND (0.0533 J)	ND (0.062 J)	ND (0.0569 J)	0.0624	0.0614	0.0538	0.0612
	Calcium	N/R	9.70	7.79	8.23	8.49	9.20	9.27	13.1	8.92
	Chloride	(250)	6.6	6.1	6.3	7.5	7.5	6.6	7.6	7.8
	Fluoride	4	ND	ND	ND	ND (0.16 J)	ND (0.05 J)	ND (0.05 J)	ND	ND (0.01 J)
	Sulfate	(250)	53	55	53	55	54	51	54	65
	TDS	(500)	170	194	156	142	163	165	172	169
APPENDIX IV	Antimony	0.006	ND	ND (0.001 J)	ND (0.001 J)	ND	ND	ND	ND (0.0004 J)	ND
	Arsenic	0.01	ND (0.00086 J)	ND (0.001 J)	ND	ND	ND	ND (0.001 J)	ND (0.0008 J)	ND (0.001 J)
	Barium	2	0.0250	0.0254	0.0215	0.0244	0.0259	0.0284	0.0225	0.0246
	Beryllium	0.004	ND (0.00095 J)	ND	ND	ND	ND	ND (0.0001 J)	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND (0.0011 J)	ND	ND	ND	ND (0.0006 J)	ND	ND (0.0006 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND (0.0001 J)	ND (0.0002 J)	ND (0.0001 J)	ND (0.0004 J)	ND (0.0002 J)	ND (0.0003 J)
	Lithium	N/R	0.0068	ND (0.0072 J)	ND (0.0075 J)	ND (0.0076 J)	ND (0.0081 J)	ND (0.0079 J)	ND (0.0077 J)	ND (0.0081 J)
	Mercury	0.002	ND (0.000077 J)	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND (0.0009 J)	ND	ND	ND	ND (0.001 J)	ND	ND
	Radium	5	2.11	1.61	2.42	1.56	1.89	1.40	1.74	1.46
	Selenium	0.05	0.0014	ND (0.0020 J)	ND (0.0010 J)	ND (0.0010 J)	ND (0.0016 J)	ND (0.0018 J)	ND (0.0015 J)	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.
10. Well no longer sampled due to redundancy in upgradient monitoring network.

Plant Yates Ash Ponds
Analytical Data Summary

Substance		MCL/ (SMCL)	Well ID							
			YGWA-6S (WELL NO LONGER SAMPLED - SEE NOTE 10)							
			6/3/2016	7/27/2016	9/15/2016	11/3/2016	1/13/2017	3/3/2017	5/1/2017	6/29/2017
APPENDIX III	Boron	N/R	ND (0.032 J)	ND (0.0378 J)	ND (0.0482 J)	ND (0.0568 J)	0.0554	0.0589	0.0478	0.0538
	Calcium	N/R	3.40	2.85	3.79	4.90	6.45	5.67	9.82	5.86
	Chloride	(250)	2.1	2.0	2.1	3.0	2.9	2.7	2.9	3.0
	Fluoride	4	ND	ND	ND	ND (0.02 J)	ND	ND (0.04 J)	ND	ND (0.07 J)
	Sulfate	(250)	18	17	22	28	32	29	30	31
	TDS	(500)	70	75	86	70	100	97	121	102
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND (0.0016 J)	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0110	0.0107	0.0142	0.0161	0.0211	0.0212	0.0190	0.0201
	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 (0.0011 J)	ND (0.0015 J)	ND (0.0021 J)	ND (0.0034 J)	ND (0.0056 J)	ND (0.0070 J)	ND (0.0056 J)	ND (0.0071 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	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 (0.0004 J)	ND	ND
	Radium	5	0.241 U	0.559 U	1.56	0.0934 U	0.749 U	0.463 U	0.355 U	0.978
	Selenium	0.05	ND	ND	ND (0.0011 J)	ND (0.0013 J)	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.
10. Well no longer sampled due to redundancy in upgradient monitoring network.

Plant Yates Ash Ponds
Analytical Data Summary

Substance		MCL/ (SMCL)	Well ID							
			YGWC-19S (WELL NO LONGER SAMPLED - SEE NOTE 10)							
			6/7/2016	7/28/2016	9/19/2016	11/9/2016	1/16/2017	3/9/2017	5/2/2017	7/10/2017
APPENDIX III	Boron	N/R	ND (0.041 J)	ND	ND (0.0066 J)	ND (0.0085 J)	ND	ND	ND	ND (0.0195 J)
	Calcium	N/R	1.10	0.988	1.03	1.07	0.943	0.936	0.923	0.964
	Chloride	(250)	2.6	2.6	2.6	3.0	2.5	2.4	2.4	2.7
	Fluoride	4	ND	ND	ND	ND (0.02 J)	ND	ND (0.03 J)	ND	ND
	Sulfate	(250)	ND	ND (0.43 J)	ND (0.40 J)	ND (0.39 J)	ND (0.39 J)	ND (0.25 J)	ND (0.19 J)	ND (0.54 J)
	TDS	(500)	26	ND (18 J)	29	40	47	306	106	ND (24 J)
APPENDIX IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND (0.0005 J)	ND (0.0006 J)	ND
	Barium	2	0.0070	ND (0.0078 J)	ND (0.0077 J)	ND (0.0074 J)	ND (0.0082 J)	ND (0.0066 J)	ND (0.0072 J)	ND (0.0088 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 (0.0004 J)	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND (0.0006 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 (0.00014 J)	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.162 U	0.916 U	0.262 U	0.0543 U	0.511 U	0.279 U	0.414 U	0.760 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.
10. Well no longer sampled due to proximity to closure activities.

Plant Yates Ash Ponds
Analytical Data Summary

Substance		MCL/ (SMCL)	Well ID							
			YGWC-22S (WELL NO LONGER SAMPLED - SEE NOTE 10)							
			6/7/2016	7/28/2016	9/19/2016	11/9/2016	1/16/2017	3/8/2017	5/2/2017	7/5/2017
APPENDIX III	Boron	N/R	5.20	4.30	5.22	5.11	5.90	6.57	4.02	5.98
	Calcium	N/R	55.0	45.8	50.4	47.5	52.0	51.7	56.1	54.4
	Chloride	(250)	25	24	25	25	25	24	26	25
	Fluoride	4	ND	ND (0.02 J)	0.31	ND (0.06 J)	ND (0.04 J)	ND (0.09 J)	ND (0.01 J)	ND
	Sulfate	(250)	310	290	300	320	310	310	300	320
	TDS	(500)	470	497	504	505	507	676	476	459
APPENDIX IV	Antimony	0.006	ND	ND	ND (0.0017 J)	ND	ND	ND	ND	ND (0.0007 J)
	Arsenic	0.01	ND	ND	ND	ND	ND	ND (0.0005 J)	ND (0.0005 J)	ND
	Barium	2	0.0170	0.0191	0.0192	0.0182	0.0188	0.0183	0.0189	0.0188
	Beryllium	0.004	ND (0.00064 J)	ND (0.0007 J)	ND (0.0007 J)	ND (0.0007 J)	ND (0.0007 J)	ND (0.0008 J)	ND (0.0006 J)	ND (0.0007 J)
	Cadmium	0.005	ND	ND (0.0001 J)	ND (0.0001 J)	ND	ND (0.0001 J)	ND (0.00009 J)	ND (0.0001 J)	ND
	Chromium	0.1	ND	ND (0.0005 J)	ND	ND	ND	ND (0.0004 J)	ND	ND
	Cobalt	N/R	ND (0.0011 J)	ND (0.0012 J)	ND (0.0012 J)	ND (0.0012 J)	ND (0.0011 J)	ND (0.0013 J)	ND (0.0011 J)	ND (0.0011 J)
	Lead	0.015	ND	ND (0.0001 J)	ND	ND	ND	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)
	Lithium	N/R	ND	ND (0.0015 J)	ND	ND	ND	ND (0.0017 J)	ND (0.0015 J)	ND (0.0016 J)
	Mercury	0.002	ND (0.00017 J)	ND	ND	ND (0.00007 J)	ND (0.000055 J)	ND (0.00018 J)	ND (0.00008 J)	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.0420 U	0.991 U	3.87	0.0765 U	0.468 U	0.156 U	0.163 U	0.685 U
	Selenium	0.05	0.0250	0.0224	0.0237	0.0209	0.0172	0.0171	0.0149	0.0147
	Thallium	0.002	ND	ND	ND	ND	ND	ND (0.00004 J)	ND	ND (0.00006 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.
10. Well no longer sampled due to proximity to closure activities.

Plant Yates Ash Ponds
Analytical Data Summary

Substance		MCL/ (SMCL)	Well ID							
			YGWC-32I (WELL NO LONGER SAMPLED - SEE NOTE 10)							
			6/8/2016	7/29/2016	9/21/2016	11/10/2016	1/17/2017	3/1/2017	5/3/2017	7/11/2017
APPENDIX III	Boron	N/R	3.90	3.25	4.00	3.59	4.06	3.58	4.84	3.60
	Calcium	N/R	100	82.3	93.4	90.1	97.9	96.7	99.8	106
	Chloride	(250)	14	12	13	14	13	13	14	14
	Fluoride	4	ND	ND (0.17 J)	ND	ND (0.09 J)	ND	ND (0.20 J)	ND (0.04 J)	ND (0.08 J)
	Sulfate	(250)	500	500	410	480	490	480	490	450
	TDS	(500)	750	723	739	741	717	772	864	723
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	0.0250	0.0250	0.0257	0.0245	0.0247	0.0275	0.0257	0.0258
	Beryllium	0.004	ND	ND (0.00009 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0001 J)
	Cadmium	0.005	ND (0.00078 J)	ND (0.0007 J)	ND (0.0007 J)	ND (0.0007 J)	ND (0.0008 J)	ND (0.0009 J)	ND (0.0007 J)	ND (0.0008 J)
	Chromium	0.1	ND	ND (0.0036 J)	ND	ND	ND	ND (0.0006 J)	ND	ND
	Cobalt	N/R	ND (0.0017 J)	ND (0.0016 J)	ND (0.0016 J)	ND (0.0015 J)	ND (0.0015 J)	ND (0.0016 J)	ND (0.0016 J)	ND (0.0017 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND (0.00006 J)	ND	ND
	Lithium	N/R	ND (0.0039 J)	ND (0.0030 J)	ND (0.0033 J)	ND (0.0033 J)	ND (0.0032 J)	ND (0.0036 J)	ND (0.0034 J)	ND (0.0034 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	0.351 U	0.429 U	0.200 U	0.973 U	0.838 U	0.817 U	0.352 U	1.28
	Selenium	0.05	ND (0.00094 J)	ND (0.0020 J)	ND (0.0026 J)	ND (0.0016 J)	ND (0.0027 J)	ND (0.0042 J)	ND (0.0022 J)	ND (0.0046 J)
	Thallium	0.002	ND	ND	ND	ND	ND	ND (0.00005 J)	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.
10. Well no longer sampled due to proximity to closure activities.

Plant Yates Ash Ponds
Analytical Data Summary

Substance		MCL/ (SMCL)	Well ID							
			YGWC-32S (WELL NO LONGER SAMPLED - SEE NOTE 10)							
			6/8/2016	7/29/2016	9/21/2016	11/9/2016	1/17/2017	3/1/2017	5/3/2017	7/11/2017
APPENDIX III	Boron	N/R	3.80	3.34	4.29	2.14	4.58	3.41	4.99	3.92
	Calcium	N/R	120	90.1	101	106	110	111	118	131
	Chloride	(250)	15	15	ND (0.07 J)	16	15	15	18	19
	Fluoride	4	ND	0.32	ND	0.40	ND (0.24 J)	ND (0.22 J)	0.36	ND (0.12 J)
	Sulfate	(250)	360	360	ND	360	350	370	360	320
	TDS	(500)	500	518	531	552	552	561	713	588
APPENDIX IV	Antimony	0.006	ND	ND (0.0003 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND (0.0008 J)	ND (0.0004 J)	ND (0.0007 J)
	Barium	2	0.0210	0.0204	0.0225	0.0230	0.0216	0.0240	0.0208	0.0230
	Beryllium	0.004	0.0029	ND (0.0025 J)	ND (0.0025 J)	ND (0.0023 J)	ND (0.0026 J)	ND (0.0028 J)	ND (0.0026 J)	0.0033
	Cadmium	0.005	ND (0.00067 J)	ND (0.0006 J)	ND (0.0006 J)	ND (0.0005 J)	ND (0.0007 J)	ND (0.0006 J)	ND (0.0006 J)	ND (0.0007 J)
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	0.0040	ND (0.0036 J)	ND (0.0036 J)	ND (0.0044 J)	ND (0.0038 J)	ND (0.0038 J)	ND (0.0042 J)	ND (0.0043 J)
	Lead	0.015	ND	ND (0.0001 J)	ND (0.0001 J)	ND	ND	ND (0.0002 J)	ND (0.0001 J)	ND (0.0001 J)
	Lithium	N/R	ND	ND	ND	ND	ND	ND (0.0012 J)	ND (0.0011 J)	ND
	Mercury	0.002	ND (0.000096 J)	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.212 U	1.82	0.962 U	0.0355 U	0.969 U	0.301 U	0.770 U	0.931
	Selenium	0.05	0.0320	0.0403	0.0458	0.0531	0.0635	0.0704	0.0716	0.0696
	Thallium	0.002	ND	ND (0.0001 J)	ND	ND	ND	ND (0.00006 J)	ND (0.00006 J)	ND (0.00005 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.
10. Well no longer sampled due to proximity to closure activities.

Plant Yates Ash Ponds
Analytical Data Summary

Substance		MCL/ (SMCL)	Well ID							
			YGWC-34I (WELL NO LONGER SAMPLED - SEE NOTE 10)							
			6/8/2016	7/28/2016	9/21/2016	11/9/2016	1/17/2017	2/28/2017	5/2/2017	7/10/2017
APPENDIX III	Boron	N/R	4.40	3.33	4.08	4.25	4.79	3.75	3.26	3.67
	Calcium	N/R	110	87.6	97.3	92.7	93.3	98.2	92.8	93.9
	Chloride	(250)	16	15	14	15	14	14	14	13
	Fluoride	4	ND	0.36	0.36	0.47	ND (0.19 J)	ND (0.24 J)	ND (0.17 J)	ND (0.14 J)
	Sulfate	(250)	370	340	340	170	330	330	300	320
	TDS	(500)	560	561	529	514	487	563	536	467
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	0.0270	0.0272	0.0229	0.0230	0.0208	0.0235	0.0200	0.0199
	Beryllium	0.004	ND (0.00061 J)	ND (0.0007 J)	ND (0.0007 J)	ND (0.0007 J)	ND (0.0006 J)	ND (0.0008 J)	ND (0.0006 J)	ND (0.0007 J)
	Cadmium	0.005	ND	ND (0.0001 J)	ND (0.0002 J)	ND (0.0001 J)	ND (0.0001 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)
	Chromium	0.1	ND	ND (0.0005 J)	ND	ND	ND	ND (0.0005 J)	ND	ND
	Cobalt	N/R	0.0043	ND (0.0050 J)	ND (0.0046 J)	ND (0.0049 J)	ND (0.0049 J)	ND (0.0055 J)	ND (0.0048 J)	ND (0.0051 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND (0.00007 J)	ND	ND
	Lithium	N/R	ND	ND (0.0024 J)	ND (0.0025 J)	ND (0.0026 J)	ND (0.0027 J)	ND (0.0031 J)	ND (0.0027 J)	ND (0.0032 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	0.0260	0.0287	0.0271	0.0261	0.0279	0.0289	0.0255	0.0240
	Radium	5	0.191 U	0.942 U	0.462 U	0.218 U	0.163 U	0.431 U	0.314 U	0.589 U
	Selenium	0.05	0.0600	0.0748	0.0746	0.0814	0.0758	0.0827	0.0734	0.0773
	Thallium	0.002	ND (0.00019 J)	ND (0.0002 J)	ND	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 J)	ND (0.0002 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.
10. Well no longer sampled due to proximity to closure activities.

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: 400-122695-1
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

Cheyenne Whitmire

Authorized for release by:
6/13/2016 5:35:34 PM

Cheyenne Whitmire, Project Manager II
(850)474-1001
cheyenne.whitmire@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Detection Summary 4
Method Summary 5
Sample Summary 6
Client Sample Results 7
Definitions 10
Chronicle 11
QC Association 12
QC Sample Results 14
Chain of Custody 19
Receipt Checklists 21
Certification Summary 22

Job ID: 400-122695-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-122695-1

HPLC/IC
Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: YGWA-6I (400-122695-1). Elevated reporting limits (RLs) are provided.

Metals
Method(s) 7470A: The method blank for prep batch 308799 contained Mercury, Dissolved above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction of samples was not performed.

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122695-1
SDG: AP

Client Sample ID: YGWA-6I — Lab Sample ID: 400-122695-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.6		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	53		5.0	3.5	mg/L	5		300.0	Total/NA
Arsenic	0.00086	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.025		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00095	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Boron	0.048	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	9.7		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0068		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Selenium	0.0014		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.000077	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	170		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-18S — Lab Sample ID: 400-122695-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.4		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.8		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.019		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00061	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.015		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Mercury	0.000076	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	58		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-18I — Lab Sample ID: 400-122695-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.8		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.2		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.028		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	6.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0012	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Lithium	0.0088		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Mercury	0.000074	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	120		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122695-1
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: 400-122695-1
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122695-1	YGWA-6I	Water	06/06/16 14:05	06/08/16 08:27
400-122695-2	YGWA-18S	Water	06/06/16 11:55	06/08/16 08:27
400-122695-3	YGWA-18I	Water	06/06/16 15:30	06/08/16 08:27

Client Sample ID: YGWA-6I

Date Collected: 06/06/16 14:05
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.6**		1.0	0.89	mg/L			06/10/16 17:13	1
Fluoride	<0.082		0.20	0.082	mg/L			06/10/16 17:13	1
Sulfate	**53**		5.0	3.5	mg/L			06/13/16 14:35	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		06/09/16 09:55	06/09/16 16:12	5
Arsenic	**0.00086**	**J**	0.0013	0.00046	mg/L		06/09/16 09:55	06/09/16 16:12	5
Barium	**0.025**		0.0025	0.00049	mg/L		06/09/16 09:55	06/09/16 16:12	5
Beryllium	**0.00095**	**J**	0.0025	0.00034	mg/L		06/09/16 09:55	06/09/16 16:12	5
Boron	**0.048**	**J**	0.050	0.021	mg/L		06/09/16 09:55	06/09/16 16:12	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/09/16 09:55	06/09/16 16:12	5
Calcium	**9.7**		0.25	0.13	mg/L		06/09/16 09:55	06/09/16 16:12	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/09/16 09:55	06/09/16 16:12	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/09/16 09:55	06/09/16 16:12	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/09/16 09:55	06/09/16 16:12	5
Lithium	**0.0068**		0.0050	0.0032	mg/L		06/09/16 09:55	06/09/16 16:12	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/09/16 09:55	06/09/16 16:12	5
Selenium	**0.0014**		0.0013	0.00024	mg/L		06/09/16 09:55	06/09/16 16:12	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/09/16 09:55	06/09/16 16:12	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000077**	**J B**	0.00020	0.000070	mg/L		06/08/16 15:55	06/09/16 12:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**170**		5.0	3.4	mg/L			06/10/16 15:11	1

Client Sample ID: YGWA-18S

Date Collected: 06/06/16 11:55
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.4**		1.0	0.89	mg/L			06/10/16 17:35	1
Fluoride	<0.082		0.20	0.082	mg/L			06/10/16 17:35	1
Sulfate	**1.8**		1.0	0.70	mg/L			06/10/16 17:35	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		06/09/16 09:55	06/09/16 16:34	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/09/16 09:55	06/09/16 16:34	5
Barium	**0.019**		0.0025	0.00049	mg/L		06/09/16 09:55	06/09/16 16:34	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/09/16 09:55	06/09/16 16:34	5
Boron	<0.021		0.050	0.021	mg/L		06/09/16 09:55	06/09/16 16:34	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/09/16 09:55	06/09/16 16:34	5
Calcium	**1.4**		0.25	0.13	mg/L		06/09/16 09:55	06/09/16 16:34	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/09/16 09:55	06/09/16 16:34	5
Cobalt	**0.00061**	**J**	0.0025	0.00040	mg/L		06/09/16 09:55	06/09/16 16:34	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/09/16 09:55	06/09/16 16:34	5
Lithium	**0.015**		0.0050	0.0032	mg/L		06/09/16 09:55	06/09/16 16:34	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/09/16 09:55	06/09/16 16:34	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/09/16 09:55	06/09/16 16:34	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/09/16 09:55	06/09/16 16:34	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000076**	**J B**	0.00020	0.000070	mg/L		06/08/16 15:55	06/09/16 12:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**58**		5.0	3.4	mg/L			06/10/16 15:11	1

Client Sample ID: YGWA-18I

Date Collected: 06/06/16 15:30
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.8**		1.0	0.89	mg/L			06/10/16 17:58	1
Fluoride	<0.082		0.20	0.082	mg/L			06/10/16 17:58	1
Sulfate	**1.2**		1.0	0.70	mg/L			06/10/16 17:58	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		06/09/16 09:55	06/09/16 16:57	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/09/16 09:55	06/09/16 16:57	5
Barium	**0.028**		0.0025	0.00049	mg/L		06/09/16 09:55	06/09/16 16:57	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/09/16 09:55	06/09/16 16:57	5
Boron	<0.021		0.050	0.021	mg/L		06/09/16 09:55	06/09/16 16:57	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/09/16 09:55	06/09/16 16:57	5
Calcium	**6.2**		0.25	0.13	mg/L		06/09/16 09:55	06/09/16 16:57	5
Chromium	**0.0012**	**J**	0.0025	0.0011	mg/L		06/09/16 09:55	06/09/16 16:57	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/09/16 09:55	06/09/16 16:57	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/09/16 09:55	06/09/16 16:57	5
Lithium	**0.0088**		0.0050	0.0032	mg/L		06/09/16 09:55	06/09/16 16:57	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/09/16 09:55	06/09/16 16:57	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/09/16 09:55	06/09/16 16:57	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/09/16 09:55	06/09/16 16:57	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000074**	**J B**	0.00020	0.000070	mg/L		06/08/16 15:55	06/09/16 12:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**120**		5.0	3.4	mg/L			06/10/16 15:11	1

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.

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.

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: 400-122695-1
SDG: AP

Client Sample ID: YGWA-6I
Date Collected: 06/06/16 14:05
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/10/16 17:13	TAJ	TAL PEN
Total/NA	Analysis	300.0		5	309830	06/13/16 14:35	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309219	06/09/16 09:55	GKP	TAL PEN
Total Recoverable	Analysis	6020		5	309444	06/09/16 16:12	GKP	TAL PEN
Total/NA	Prep	7470A			308799	06/08/16 15:55	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309379	06/09/16 12:55	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309518	06/10/16 15:11	CAC	TAL PEN

Client Sample ID: YGWA-18S
Date Collected: 06/06/16 11:55
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/10/16 17:35	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309219	06/09/16 09:55	GKP	TAL PEN
Total Recoverable	Analysis	6020		5	309444	06/09/16 16:34	GKP	TAL PEN
Total/NA	Prep	7470A			308799	06/08/16 15:55	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309379	06/09/16 12:56	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309518	06/10/16 15:11	CAC	TAL PEN

Client Sample ID: YGWA-18I
Date Collected: 06/06/16 15:30
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/10/16 17:58	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309219	06/09/16 09:55	GKP	TAL PEN
Total Recoverable	Analysis	6020		5	309444	06/09/16 16:57	GKP	TAL PEN
Total/NA	Prep	7470A			308799	06/08/16 15:55	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309379	06/09/16 12:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309518	06/10/16 15:11	CAC	TAL PEN

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

HPLC/IC

Analysis Batch: 309508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122626-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
400-122695-1	YGWA-6I	Total/NA	Water	300.0	
400-122695-2	YGWA-18S	Total/NA	Water	300.0	
400-122695-3	YGWA-18I	Total/NA	Water	300.0	
400-122751-A-7 MS	Matrix Spike	Total/NA	Water	300.0	
LCS 400-309508/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-309508/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-309508/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 309830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122695-1	YGWA-6I	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	

Metals

Prep Batch: 308799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122549-J-3-C MS	Matrix Spike	Dissolved	Water	7470A	
400-122549-J-3-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	
400-122695-1	YGWA-6I	Total/NA	Water	7470A	
400-122695-2	YGWA-18S	Total/NA	Water	7470A	
400-122695-3	YGWA-18I	Total/NA	Water	7470A	
LCS 400-308799/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-308799/14-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 309219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122695-1	YGWA-6I	Total Recoverable	Water	3005A	
400-122695-1 MS	YGWA-6I	Total Recoverable	Water	3005A	
400-122695-1 MSD	YGWA-6I	Total Recoverable	Water	3005A	
400-122695-2	YGWA-18S	Total Recoverable	Water	3005A	
400-122695-3	YGWA-18I	Total Recoverable	Water	3005A	
LCS 400-309219/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-309219/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 309379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122549-J-3-C MS	Matrix Spike	Dissolved	Water	7470A	308799
400-122549-J-3-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	308799
400-122695-1	YGWA-6I	Total/NA	Water	7470A	308799
400-122695-2	YGWA-18S	Total/NA	Water	7470A	308799
400-122695-3	YGWA-18I	Total/NA	Water	7470A	308799
LCS 400-308799/15-A	Lab Control Sample	Total/NA	Water	7470A	308799
MB 400-308799/14-A	Method Blank	Total/NA	Water	7470A	308799

Metals (Continued)

Analysis Batch: 309444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122695-1	YGWA-6I	Total Recoverable	Water	6020	309219
400-122695-1 MS	YGWA-6I	Total Recoverable	Water	6020	309219
400-122695-1 MSD	YGWA-6I	Total Recoverable	Water	6020	309219
400-122695-2	YGWA-18S	Total Recoverable	Water	6020	309219
400-122695-3	YGWA-18I	Total Recoverable	Water	6020	309219
LCS 400-309219/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	309219
MB 400-309219/1-A ^5	Method Blank	Total Recoverable	Water	6020	309219

General Chemistry

Analysis Batch: 309518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122695-1	YGWA-6I	Total/NA	Water	SM 2540C	
400-122695-2	YGWA-18S	Total/NA	Water	SM 2540C	
400-122695-3	YGWA-18I	Total/NA	Water	SM 2540C	
400-122756-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 400-309518/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-309518/1	Method Blank	Total/NA	Water	SM 2540C	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-309508/4
Matrix: Water
Analysis Batch: 309508

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			06/10/16 12:03	1
Fluoride	<0.082		0.20	0.082	mg/L			06/10/16 12:03	1
Sulfate	<0.70		1.0	0.70	mg/L			06/10/16 12:03	1

Lab Sample ID: LCS 400-309508/5
Matrix: Water
Analysis Batch: 309508

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	9.37		mg/L		94	90 - 110
Fluoride	10.0	9.81		mg/L		98	90 - 110
Sulfate	10.0	9.52		mg/L		95	90 - 110

Lab Sample ID: LCSD 400-309508/6
Matrix: Water
Analysis Batch: 309508

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	9.28		mg/L		93	90 - 110	1	15
Fluoride	10.0	9.68		mg/L		97	90 - 110	1	15
Sulfate	10.0	9.48		mg/L		95	90 - 110	0	15

Lab Sample ID: 400-122626-A-3 MSD
Matrix: Water
Analysis Batch: 309508

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	190	F1	50.0	233		mg/L		86	80 - 120	2	20
Fluoride	<0.41		50.0	53.8		mg/L		108	80 - 120	1	20
Sulfate	130		50.0	182		mg/L		106	80 - 120	2	20

Lab Sample ID: 400-122751-A-7 MS
Matrix: Water
Analysis Batch: 309508

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	38		10.0	46.5		mg/L		89	80 - 120
Fluoride	<0.082		10.0	11.0		mg/L		110	80 - 120
Sulfate	240	E	10.0	245	E 4	mg/L		60	80 - 120

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

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: 400-122850-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

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-309219/1-A ^5
Matrix: Water
Analysis Batch: 309444

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 309219

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/09/16 09:55	06/09/16 16:03	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/09/16 09:55	06/09/16 16:03	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/09/16 09:55	06/09/16 16:03	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/09/16 09:55	06/09/16 16:03	5
Boron	<0.021		0.050	0.021	mg/L		06/09/16 09:55	06/09/16 16:03	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/09/16 09:55	06/09/16 16:03	5
Calcium	<0.13		0.25	0.13	mg/L		06/09/16 09:55	06/09/16 16:03	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/09/16 09:55	06/09/16 16:03	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/09/16 09:55	06/09/16 16:03	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/09/16 09:55	06/09/16 16:03	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/09/16 09:55	06/09/16 16:03	5

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

Lab Sample ID: MB 400-309219/1-A ^5
Matrix: Water
Analysis Batch: 309444

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 309219

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/09/16 09:55	06/09/16 16:03	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/09/16 09:55	06/09/16 16:03	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/09/16 09:55	06/09/16 16:03	5

Lab Sample ID: LCS 400-309219/2-A ^1
Matrix: Water
Analysis Batch: 309444

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 309219

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0540		mg/L		108	80 - 120
Arsenic	0.0500	0.0543		mg/L		109	80 - 120
Barium	0.0500	0.0479		mg/L		96	80 - 120
Beryllium	0.0500	0.0500		mg/L		100	80 - 120
Boron	0.100	0.103		mg/L		103	80 - 120
Cadmium	0.0500	0.0531		mg/L		106	80 - 120
Calcium	5.00	5.32		mg/L		106	80 - 120
Chromium	0.0500	0.0527		mg/L		105	80 - 120
Cobalt	0.0500	0.0522		mg/L		104	80 - 120
Lead	0.0500	0.0502		mg/L		100	80 - 120
Lithium	0.0500	0.0523		mg/L		105	80 - 120
Molybdenum	0.0500	0.0523		mg/L		105	80 - 120
Selenium	0.0500	0.0524		mg/L		105	80 - 120
Thallium	0.0100	0.0102		mg/L		102	80 - 120

Lab Sample ID: 400-122695-1 MS
Matrix: Water
Analysis Batch: 309444

Client Sample ID: YGWA-6I
Prep Type: Total Recoverable
Prep Batch: 309219

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0538		mg/L		108	75 - 125
Arsenic	0.00086	J	0.0500	0.0551		mg/L		108	75 - 125
Barium	0.025		0.0500	0.0726		mg/L		96	75 - 125
Beryllium	0.00095	J	0.0500	0.0499		mg/L		98	75 - 125
Boron	0.048	J	0.100	0.154		mg/L		106	75 - 125
Cadmium	<0.00034		0.0500	0.0546		mg/L		109	75 - 125
Calcium	9.7		5.00	14.6		mg/L		98	75 - 125
Chromium	<0.0011		0.0500	0.0531		mg/L		106	75 - 125
Cobalt	<0.00040		0.0500	0.0519		mg/L		104	75 - 125
Lead	<0.00035		0.0500	0.0484		mg/L		97	75 - 125
Lithium	0.0068		0.0500	0.0553		mg/L		97	75 - 125
Molybdenum	<0.00085		0.0500	0.0528		mg/L		106	75 - 125
Selenium	0.0014		0.0500	0.0545		mg/L		106	75 - 125
Thallium	<0.000085		0.0100	0.0100		mg/L		100	75 - 125

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

Lab Sample ID: 400-122695-1 MSD — **Client Sample ID: YGWA-6I**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 309444 — **Prep Batch: 309219**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.0010		0.0500	0.0517		mg/L		103	75 - 125	4	20
Arsenic	0.00086	J	0.0500	0.0542		mg/L		107	75 - 125	2	20
Barium	0.025		0.0500	0.0715		mg/L		94	75 - 125	2	20
Beryllium	0.00095	J	0.0500	0.0486		mg/L		95	75 - 125	3	20
Boron	0.048	J	0.100	0.142		mg/L		95	75 - 125	8	20
Cadmium	<0.00034		0.0500	0.0503		mg/L		101	75 - 125	8	20
Calcium	9.7		5.00	14.4		mg/L		94	75 - 125	1	20
Chromium	<0.0011		0.0500	0.0515		mg/L		103	75 - 125	3	20
Cobalt	<0.00040		0.0500	0.0517		mg/L		103	75 - 125	0	20
Lead	<0.00035		0.0500	0.0478		mg/L		96	75 - 125	1	20
Lithium	0.0068		0.0500	0.0556		mg/L		98	75 - 125	1	20
Molybdenum	<0.00085		0.0500	0.0507		mg/L		101	75 - 125	4	20
Selenium	0.0014		0.0500	0.0530		mg/L		103	75 - 125	3	20
Thallium	<0.000085		0.0100	0.0100		mg/L		100	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-308799/14-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309379 — **Prep Batch: 308799**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000784	J	0.00020	0.000070	mg/L		06/06/16 14:47	06/09/16 12:28	1

Lab Sample ID: LCS 400-308799/15-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309379 — **Prep Batch: 308799**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00102		mg/L		101	80 - 120

Lab Sample ID: 400-122549-J-3-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 309379 — **Prep Batch: 308799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000073	J B	0.00201	0.00198		mg/L		95	80 - 120

Lab Sample ID: 400-122549-J-3-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 309379 — **Prep Batch: 308799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000073	J B	0.00201	0.00194		mg/L		93	80 - 120	2	20

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

Lab Sample ID: MB 400-309518/1
Matrix: Water
Analysis Batch: 309518

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			06/10/16 15:11	1

Lab Sample ID: LCS 400-309518/2
Matrix: Water
Analysis Batch: 309518

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	298		mg/L		102	78 - 122		

Lab Sample ID: 400-122756-A-5 DU
Matrix: Water
Analysis Batch: 309518

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	54			54.0		mg/L				0	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: ____

[11] Page 1 of 1

122695

Sample Shipment Date:[8] 6-7-16
Sample Received Date:[9]
Sampled By:[10] Michael Hutchinson

[X] [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

Signature

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

PRESERVATIVE [20]: HNO3 N | Ice I | ~~HNO3~~ N | HNO3 N

ANALYSIS REQUESTED [21]: Metals app. III & IV EPA 6020 & EPA 7470 | Cl, F, SO4 EPA 300 TDS SM2540C | ~~Radium 226 & 228 GaTech~~ | Sb-846 9315 9320

Sample Type Key: [22] G-Grab O-Other C-Composite

Matrix Key: [23] O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [25] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	LAB USE ONLY [25] Comments
	YGWA-18S	6-6-16	1155		G	GW	3	
	YGWA-18I	6-6-16	1530		G	GW	3	

400-122695 COC

LAB USE ONLY: Sample Receipt Information [28]

Relinquished by:[26] — Date/Time 06/07/16 0859
Received by:[27] — Date/Time 06/07/16 0859
Relinquished by: — Date/Time 06/7/16 0925
Received by: — Date/Time 6-7-16 0925

4.7°C (GOEL-IL-UP) ice, coder in good condition, seal, pH<2

Received: 6/8/16 0827

Relinquished by: 6-7-16 @1100 to FedEx

18.5°C 18.0°C, 5.4°C, 0.2°C GK6

Page 19 of 22

6/13/2016

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
122695

Sample Shipment Date:[8] 6/7/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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

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

PRESERVATIVE [20]

HNO3 N	Ice I	~~HNO3 N~~ WB	HNO3 N			

ANALYSIS REQUESTED [21]

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium-226 & 228~~ WB ~~Ga Tech~~	SW-846 9315 and 9320				LAB USE ONLY [25] Comments
	VGWA-6I	6/6/16	1405		G	GW	3	X	X		X				

Relinquished by:[26]	[signature]	Date/Time	6/7/16 0809
Received by:[27]	[signature]	Date/Time	6/7/16 0809
Relinquished by:	[signature]	Date/Time	6/7/16 0:20
Received by:	[signature]	Date/Time	6-7-16 @925

LAB USE ONLY: Sample Receipt Information [28]
4.7°C (GPEL-IR-4P) ice, cooler in good condition, seal, pH<2

Relinquished By: [signature] 6-7-16 @1100 to FedEx
~~18.5°C~~, 18.0°C, 5.4°C
JJ 6/8/16
Received [signature] 6/8/16 0827

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122695-1
SDG Number: AP

Login Number: 122695
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	
Cooler Temperature is recorded.	True	0.2, 5.4, 18.0 & 18.5°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: 400-122695-1
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: 400-122695-2
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 6:57:18 PM

Cheyenne Whitmire, Project Manager II
(850)474-1001
cheyenne.whitmire@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Method Summary 4
Sample Summary 5
Client Sample Results 6
Definitions 8
Chronicle 9
QC Association 10
QC Sample Results 11
Chain of Custody 13
Receipt Checklists 15
Certification Summary 16

Case Narrative

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122695-2
SDG: AP

Job ID: 400-122695-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-122695-2

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-256371: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: YGWA-6I (400-122695-1), YGWA-18S (400-122695-2) and YGWA-18I (400-122695-3). A laboratory control sample/ laboratory sample duplicate (LCS/LCSD) were prepared instead.

Method(s) PrecSep-21: Radium-226 Prep Batch 160-256367: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: YGWA-6I (400-122695-1), YGWA-18S (400-122695-2) and YGWA-18I (400-122695-3). 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: 400-122695-2
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: 400-122695-2
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122695-1	YGWA-6I	Water	06/06/16 14:05	06/08/16 08:27
400-122695-2	YGWA-18S	Water	06/06/16 11:55	06/08/16 08:27
400-122695-3	YGWA-18I	Water	06/06/16 15:30	06/08/16 08:27

Client Sample ID: YGWA-6I

Date Collected: 06/06/16 14:05
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-1

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	**1.88**		0.195	0.258	1.00	0.0701	pCi/L	06/14/16 17:17	07/06/16 07:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*06/14/16 17:17*	*07/06/16 07:26*	*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	0.218	0.219	1.00	0.351	pCi/L	06/14/16 18:02	06/29/16 17:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*06/14/16 18:02*	*06/29/16 17:20*	*1*
Y Carrier	*86.7*		*40 - 110*	*06/14/16 18:02*	*06/29/16 17:20*	*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	**2.11**		0.293	0.338	5.00	0.351	pCi/L		07/08/16 20:20	1

Client Sample ID: YGWA-18S

Date Collected: 06/06/16 11:55
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-2

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	**0.0983**		0.0550	0.0557	1.00	0.0695	pCi/L	06/14/16 17:17	07/06/16 07:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*06/14/16 17:17*	*07/06/16 07:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.202	U	0.200	0.201	1.00	0.324	pCi/L	06/14/16 18:02	06/29/16 17:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*06/14/16 18:02*	*06/29/16 17:20*	*1*
Y Carrier	*88.2*		*40 - 110*	*06/14/16 18:02*	*06/29/16 17:20*	*1*

Client Sample ID: YGWA-18S

Lab Sample ID: 400-122695-2
Date Collected: 06/06/16 11:55
Matrix: Water
Date Received: 06/08/16 08:27

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	0.301	U	0.208	0.209	5.00	0.324	pCi/L		07/08/16 20:20	1

Client Sample ID: YGWA-18I

Lab Sample ID: 400-122695-3
Date Collected: 06/06/16 15:30
Matrix: Water
Date Received: 06/08/16 08:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.204**		0.0717	0.0740	1.00	0.0698	pCi/L	06/14/16 17:17	07/06/16 07:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*06/14/16 17:17*	*07/06/16 07:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.124	U	0.172	0.173	1.00	0.336	pCi/L	06/14/16 18:02	06/29/16 17:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*06/14/16 18:02*	*06/29/16 17:20*	*1*
Y Carrier	*90.8*		*40 - 110*	*06/14/16 18:02*	*06/29/16 17:20*	*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	0.0804	U	0.187	0.188	5.00	0.336	pCi/L		07/08/16 20:20	1

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: 400-122695-2
SDG: AP

Client Sample ID: YGWA-6I
Date Collected: 06/06/16 14:05
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256367	06/14/16 17:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	259384	07/06/16 07:26	ALS	TAL SL
Total/NA	Prep	PrecSep_0			256371	06/14/16 18:02	MCJ	TAL SL
Total/NA	Analysis	9320		1	258541	06/29/16 17:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:20	RTM	TAL SL

Client Sample ID: YGWA-18S
Date Collected: 06/06/16 11:55
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256367	06/14/16 17:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	259384	07/06/16 07:26	ALS	TAL SL
Total/NA	Prep	PrecSep_0			256371	06/14/16 18:02	MCJ	TAL SL
Total/NA	Analysis	9320		1	258541	06/29/16 17:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:20	RTM	TAL SL

Client Sample ID: YGWA-18I
Date Collected: 06/06/16 15:30
Date Received: 06/08/16 08:27

Lab Sample ID: 400-122695-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256367	06/14/16 17:17	MCJ	TAL SL
Total/NA	Analysis	9315		1	259384	07/06/16 07:27	ALS	TAL SL
Total/NA	Prep	PrecSep_0			256371	06/14/16 18:02	MCJ	TAL SL
Total/NA	Analysis	9320		1	258541	06/29/16 17:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:20	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: 400-122695-2
SDG: AP

Rad

Prep Batch: 256367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122695-1	YGWA-6I	Total/NA	Water	PrecSep-21	
400-122695-2	YGWA-18S	Total/NA	Water	PrecSep-21	
400-122695-3	YGWA-18I	Total/NA	Water	PrecSep-21	
LCS 160-256367/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-256367/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
MB 160-256367/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 256371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122695-1	YGWA-6I	Total/NA	Water	PrecSep_0	
400-122695-2	YGWA-18S	Total/NA	Water	PrecSep_0	
400-122695-3	YGWA-18I	Total/NA	Water	PrecSep_0	
LCS 160-256371/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-256371/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
MB 160-256371/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-256367/1-A
Matrix: Water
Analysis Batch: 259384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256367

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08190		0.0568	0.0573	1.00	0.0819	pCi/L	06/14/16 17:17	07/06/16 07:26	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*06/14/16 17:17*	*07/06/16 07:26*	*1*

Lab Sample ID: LCS 160-256367/2-A
Matrix: Water
Analysis Batch: 259384

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256367

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.2	13.56		1.32	1.00	0.0899	pCi/L	121	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.5*		*40 - 110*

Lab Sample ID: LCSD 160-256367/3-A
Matrix: Water
Analysis Batch: 259384

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 256367

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.2	13.28		1.30	1.00	0.0953	pCi/L	119	68 - 137	0.11	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*81.8*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-256371/1-A
Matrix: Water
Analysis Batch: 258541

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256371

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.07614	U	0.208	0.208	1.00	0.361	pCi/L	06/14/16 18:02	06/29/16 17:19	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*06/14/16 18:02*	*06/29/16 17:19*	*1*
Y Carrier	*86.4*		*40 - 110*	*06/14/16 18:02*	*06/29/16 17:19*	*1*

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

Lab Sample ID: LCS 160-256371/2-A
Matrix: Water
Analysis Batch: 258541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256371

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			14.9	18.22		1.89	1.00	0.325	pCi/L	122	56 - 140		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.5*		*40 - 110*
Y Carrier	*87.5*		*40 - 110*

Lab Sample ID: LCSD 160-256371/3-A
Matrix: Water
Analysis Batch: 258541

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 256371

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			14.9	17.76		1.87	1.00	0.447	pCi/L	119	56 - 140	0.12	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*81.8*		*40 - 110*
Y Carrier	*89.0*		*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. 122695 — Reviewed By:

[11] Page 1 of 1

Sample Shipment Date:[8] 6-7-16
Sample Received Date:[9]
Sampled By:[10] Michael Hutchinson

[X] [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

Signature

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

PRESERVATIVE [20]: HNO3 N | Ice I | ~~HNO3~~ N | HNO3 N

ANALYSIS REQUESTED [21]: Metals app. III & IV EPA 6020 & EPA 7470 | Cl, F, SO4 EPA 300 TDS SM2540C | ~~Radium 226 & 228 GaTech~~ | Sb-846 9315 & 9320

Sample Type Key: [22] G-Grab O-Other C-Composite

Matrix Key: [23] O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [25] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228 GaTech~~	Sb-846 9315 & 9320			LAB USE ONLY [25] Comments
	YGWA-18S	6-6-16	1155		G	GW	3	X	X		X			
	YGWA-18I	6-6-16	1530		G	GW	3	X	X		X			

400-122695 COC

LAB USE ONLY: Sample Receipt Information [28]

Relinquished by:[26] — Date/Time 06/07/16 0859
Received by:[27] — Date/Time 06/07/16 0859
Relinquished by: — Date/Time 06/7/16 0925
Received by: — Date/Time 6-7-16 0925

4.7°C (GOEL-IL-UP) ice, coder in good condition, seal, pH<2

Relinquished by: 6-7-16 @1100 to FedEx

Received: 6/8/16 0827

18.5°C 18.0°C, 5.4°C, 0.2°C SLB

Page 13 of 17

7/11/2016

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. 122695
Reviewed By:

[11] Page 1 of 1

Sample Shipment Date:[8] 6/7/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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

Signature

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

PRESERVATIVE [20]: HNO3 N | Ice I | ~~HNO3 N~~ HCl | HNO3 N

ANALYSIS REQUESTED [21]

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	[17] Sample Type	[18] Matrix	[19] No. of Containers	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ HB ~~Ca Tech~~	SW-846 9315 and 9320			LAB USE ONLY [25] Comments
	VGWA-6I	6/6/16	1405		G	GW	3	X	X		X			

Sample Type Key: [22] G-Grab O-Other C-Composite

Matrix Key: [23] O-Oil 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 I-Ice U-Unpreserved

Relinquished by:[26]	Date/Time 6/7/16 0800	LAB USE ONLY Sample Receipt Information [28]: 4.7°C (GOEL-IR-4P) ice, cooler in good condition, seal, pH<2
Received by:[27]	Date/Time 6/7/16 0805	
Relinquished by:	Date/Time 6/7/16 0:20	
Received by:	Date/Time 6-7-16 @925	

Relinquished By: 6-7-16 @1100 to FedEx 16.5, 18.0°C, 5.4°C JJ 6/8/16

Received 6/8/16 0827

Page 14 of 17

7/11/2016

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122695-2
SDG Number: AP

Login Number: 122695
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	
Cooler Temperature is recorded.	True	0.2, 5.4, 18.0 & 18.5°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: 400-122695-2
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: 400-122695-2
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

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: 400-122759-1
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:
6/16/2016 4:45:34 PM
Carolyn Hooper, Project Manager I
(850)474-1001
carolyn.hooper@testamericainc.com

Designee for

Cheyenne Whitmire, Project Manager II
(850)474-1001
cheyenne.whitmire@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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.

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 18
Chronicle 19
QC Association 22
QC Sample Results 25
Chain of Custody 31
Receipt Checklists 34
Certification Summary 35

Job ID: 400-122759-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-122759-1

HPLC/IC
Method 300.0: The CCV failed to injected properly, but the preceding and subsequent CCV passed, so the data is reported (CCV 400-309735/50)

Method 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: YGWC-23S (400-122759-3) and YGWC-22S (400-122759-6). Elevated reporting limits (RLs) are provided.

Metals
Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-309439 and analytical batch 400-309544 were outside control limits for Boron, Barium, and Calcium. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: The following sample was diluted to bring the concentration of target analytes within the calibration range: YGWC-22S (400-122759-6). Elevated reporting limits (RLs) are provided.

Detection Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-1
SDG: AP

Client Sample ID: YGWC-19S — Lab Sample ID: 400-122759-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.6		1.0	0.89	mg/L	1		300.0	Total/NA
Barium	0.0070		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.041	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-02 — Lab Sample ID: 400-122759-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.025	J	0.050	0.021	mg/L	5		6020	Total Recoverable

Client Sample ID: YGWC-23S — Lab Sample ID: 400-122759-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.9		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	56		5.0	3.5	mg/L	5		300.0	Total/NA
Barium	0.045		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.99		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	9.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Lead	0.00044	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Selenium	0.037		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.000098	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	130		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-17S — Lab Sample ID: 400-122759-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.5		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	4.4		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.012		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.036	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	2.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Selenium	0.0010	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.000095	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	28		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-2 — Lab Sample ID: 400-122759-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.5		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	4.4		1.0	0.70	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: 400-122759-1
SDG: AP

Client Sample ID: DUP-2 (Continued) — Lab Sample ID: 400-122759-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.011		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.028	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	2.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Selenium	0.0010	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.000097	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	62		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWC-22S — Lab Sample ID: 400-122759-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	25		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	310		10	7.0	mg/L	10		300.0	Total/NA
Barium	0.017		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00064	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	55		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Selenium	0.025		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Boron - DL	5.2		1.0	0.42	mg/L	100		6020	Total Recoverable
Mercury	0.00017	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	470		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-2 — Lab Sample ID: 400-122759-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.088		0.050	0.021	mg/L	5		6020	Total Recoverable

Client Sample ID: YGWA-20S — Lab Sample ID: 400-122759-8

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
Barium	0.014		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Mercury	0.000096	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	38		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: YGWA-21I — Lab Sample ID: 400-122759-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.8		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	5.2		1.0	0.70	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: YGWA-21I (Continued)

Lab Sample ID: 400-122759-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0058		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	3.7		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0056		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0055		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Selenium	0.00048	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.000096	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	60		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-1
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: 400-122759-1
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122759-1	YGWC-19S	Water	06/07/16 10:10	06/09/16 08:51
400-122759-2	EB-02	Water	06/07/16 11:00	06/09/16 08:51
400-122759-3	YGWC-23S	Water	06/07/16 13:10	06/09/16 08:51
400-122759-4	YGWA-17S	Water	06/07/16 10:15	06/09/16 08:51
400-122759-5	DUP-2	Water	06/07/16 10:50	06/09/16 08:51
400-122759-6	YGWC-22S	Water	06/07/16 14:25	06/09/16 08:51
400-122759-7	FB-2	Water	06/07/16 15:00	06/09/16 08:51
400-122759-8	YGWA-20S	Water	06/07/16 10:54	06/09/16 08:51
400-122759-9	YGWA-21I	Water	06/07/16 14:11	06/09/16 08:51

Client Sample ID: YGWC-19S

Date Collected: 06/07/16 10:10
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.6**		1.0	0.89	mg/L			06/10/16 22:32	1
Fluoride	<0.082		0.20	0.082	mg/L			06/10/16 22:32	1
Sulfate	<0.70		1.0	0.70	mg/L			06/10/16 22:32	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 08:45	06/10/16 16:44	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 16:44	5
Barium	**0.0070**		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 16:44	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 16:44	5
Boron	**0.041**	**J**	0.050	0.021	mg/L		06/10/16 08:45	06/10/16 16:44	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 16:44	5
Calcium	**1.1**		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 16:44	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 16:44	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 16:44	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 16:44	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 16:44	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 16:44	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 16:44	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 16:44	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		06/09/16 12:14	06/10/16 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**26**		5.0	3.4	mg/L			06/11/16 10:54	1

Client Sample ID: EB-02

Date Collected: 06/07/16 11:00
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-2

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			06/10/16 22:55	1
Fluoride	<0.082		0.20	0.082	mg/L			06/10/16 22:55	1
Sulfate	<0.70		1.0	0.70	mg/L			06/10/16 22:55	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 08:45	06/10/16 16:49	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 16:49	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 16:49	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 16:49	5
Boron	**0.025**	**J**	0.050	0.021	mg/L		06/10/16 08:45	06/10/16 16:49	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 16:49	5
Calcium	<0.13		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 16:49	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 16:49	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 16:49	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 16:49	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 16:49	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 16:49	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 16:49	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 16:49	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		06/09/16 12:14	06/10/16 12:49	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			06/10/16 16:50	1

Client Sample ID: YGWC-23S

Date Collected: 06/07/16 13:10
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.9**		1.0	0.89	mg/L			06/11/16 00:03	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 00:03	1
Sulfate	**56**		5.0	3.5	mg/L			06/13/16 21:26	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 08:45	06/10/16 16:53	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 16:53	5
Barium	**0.045**		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 16:53	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 16:53	5
Boron	**0.99**		0.050	0.021	mg/L		06/10/16 08:45	06/10/16 16:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 16:53	5
Calcium	**9.6**		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 16:53	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 16:53	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 16:53	5
Lead	**0.00044**	**J**	0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 16:53	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 16:53	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 16:53	5
Selenium	**0.037**		0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 16:53	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 16:53	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000098**	**J**	0.00020	0.000070	mg/L		06/09/16 12:14	06/10/16 12:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**130**		5.0	3.4	mg/L			06/10/16 16:50	1

Client Sample ID: YGWA-17S

Date Collected: 06/07/16 10:15
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.5**		1.0	0.89	mg/L			06/11/16 00:26	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 00:26	1
Sulfate	**4.4**		1.0	0.70	mg/L			06/11/16 00:26	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 08:45	06/10/16 16:58	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 16:58	5
Barium	**0.012**		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 16:58	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 16:58	5
Boron	**0.036**	**J**	0.050	0.021	mg/L		06/10/16 08:45	06/10/16 16:58	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 16:58	5
Calcium	**2.2**		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 16:58	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 16:58	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 16:58	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 16:58	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 16:58	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 16:58	5
Selenium	**0.0010**	**J**	0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 16:58	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 16:58	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000095**	**J**	0.00020	0.000070	mg/L		06/09/16 12:14	06/10/16 12:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**28**		5.0	3.4	mg/L			06/11/16 10:54	1

Client Sample ID: DUP-2

Date Collected: 06/07/16 10:50
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.5**		1.0	0.89	mg/L			06/11/16 00:49	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 00:49	1
Sulfate	**4.4**		1.0	0.70	mg/L			06/11/16 00:49	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 08:45	06/10/16 17:02	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 17:02	5
Barium	**0.011**		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 17:02	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:02	5
Boron	**0.028**	**J**	0.050	0.021	mg/L		06/10/16 08:45	06/10/16 17:02	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:02	5
Calcium	**2.2**		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 17:02	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 17:02	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 17:02	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 17:02	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 17:02	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 17:02	5
Selenium	**0.0010**	**J**	0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 17:02	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 17:02	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000097**	**J**	0.00020	0.000070	mg/L		06/09/16 12:14	06/10/16 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**62**		5.0	3.4	mg/L			06/10/16 16:50	1

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-1
SDG: AP

Client Sample ID: YGWC-22S

Date Collected: 06/07/16 14:25
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25**		1.0	0.89	mg/L			06/11/16 01:12	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 01:12	1
Sulfate	**310**		10	7.0	mg/L			06/13/16 21:49	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 08:45	06/10/16 17:07	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 17:07	5
Barium	**0.017**		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 17:07	5
Beryllium	**0.00064**	**J**	0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:07	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:07	5
Calcium	**55**		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 17:07	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 17:07	5
Cobalt	**0.0011**	**J**	0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 17:07	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 17:07	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 17:07	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 17:07	5
Selenium	**0.025**		0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 17:07	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 17:07	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**5.2**		1.0	0.42	mg/L		06/10/16 08:45	06/13/16 12:21	100

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00017**	**J**	0.00020	0.000070	mg/L		06/09/16 12:14	06/10/16 12:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**470**		5.0	3.4	mg/L			06/11/16 10:54	1

Client Sample ID: FB-2

Date Collected: 06/07/16 15:00
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-7

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 01:34	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 01:34	1
Sulfate	<0.70		1.0	0.70	mg/L			06/11/16 01:34	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 08:45	06/10/16 17:11	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 17:11	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 17:11	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:11	5
Boron	**0.088**		0.050	0.021	mg/L		06/10/16 08:45	06/10/16 17:11	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:11	5
Calcium	<0.13		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 17:11	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 17:11	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 17:11	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 17:11	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 17:11	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 17:11	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 17:11	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 17:11	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		06/09/16 12:14	06/10/16 12:55	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			06/11/16 10:54	1

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-1
SDG: AP

Client Sample ID: YGWA-20S
Date Collected: 06/07/16 10:54
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-8
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			06/11/16 01:57	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 01:57	1
Sulfate	<0.70		1.0	0.70	mg/L			06/11/16 01:57	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 08:45	06/10/16 17:34	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 17:34	5
Barium	**0.014**		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 17:34	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:34	5
Boron	<0.021		0.050	0.021	mg/L		06/10/16 08:45	06/10/16 17:34	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:34	5
Calcium	**2.3**		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 17:34	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 17:34	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 17:34	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 17:34	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 17:34	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 17:34	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 17:34	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 17:34	5

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		06/09/16 12:14	06/10/16 12:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**38**		5.0	3.4	mg/L			06/11/16 10:54	1

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-1
SDG: AP

Client Sample ID: YGWA-21I
Date Collected: 06/07/16 14:11
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-9
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.8**		1.0	0.89	mg/L			06/11/16 03:28	1
Fluoride	<0.082		0.20	0.082	mg/L			06/11/16 03:28	1
Sulfate	**5.2**		1.0	0.70	mg/L			06/11/16 03:28	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 08:45	06/10/16 17:39	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 17:39	5
Barium	**0.0058**		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 17:39	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:39	5
Boron	<0.021		0.050	0.021	mg/L		06/10/16 08:45	06/10/16 17:39	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 17:39	5
Calcium	**3.7**		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 17:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 17:39	5
Cobalt	**0.0056**		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 17:39	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 17:39	5
Lithium	**0.0055**		0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 17:39	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 17:39	5
Selenium	**0.00048**	**J**	0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 17:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 17:39	5

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		06/09/16 12:14	06/10/16 12:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**60**		5.0	3.4	mg/L			06/11/16 10:54	1

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.

Metals

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.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

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: 400-122759-1
SDG: AP

Client Sample ID: YGWC-19S
Date Collected: 06/07/16 10:10
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/10/16 22:32	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 16:44	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:35	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309632	06/11/16 10:54	CAC	TAL PEN

Client Sample ID: EB-02
Date Collected: 06/07/16 11:00
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/10/16 22:55	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 16:49	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:49	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309570	06/10/16 16:50	CAC	TAL PEN

Client Sample ID: YGWC-23S
Date Collected: 06/07/16 13:10
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/11/16 00:03	TAJ	TAL PEN
Total/NA	Analysis	300.0		5	309830	06/13/16 21:26	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 16:53	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:50	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309570	06/10/16 16:50	CAC	TAL PEN

Client Sample ID: YGWA-17S
Date Collected: 06/07/16 10:15
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/11/16 00:26	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 16:58	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:52	JAP	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-1
SDG: AP

Client Sample ID: YGWA-17S
Date Collected: 06/07/16 10:15
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	309632	06/11/16 10:54	CAC	TAL PEN

Client Sample ID: DUP-2
Date Collected: 06/07/16 10:50
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/11/16 00:49	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 17:02	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:53	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309570	06/10/16 16:50	CAC	TAL PEN

Client Sample ID: YGWC-22S
Date Collected: 06/07/16 14:25
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/11/16 01:12	TAJ	TAL PEN
Total/NA	Analysis	300.0		10	309830	06/13/16 21:49	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 17:07	RJB	TAL PEN
Total Recoverable	Prep	3005A	DL		309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020	DL	100	309819	06/13/16 12:21	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:54	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309632	06/11/16 10:54	CAC	TAL PEN

Client Sample ID: FB-2
Date Collected: 06/07/16 15:00
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/11/16 01:34	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 17:11	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:55	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309632	06/11/16 10:54	CAC	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-1
SDG: AP

Client Sample ID: YGWA-20S

Date Collected: 06/07/16 10:54
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	309508	06/11/16 01:57	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 17:34	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:56	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309632	06/11/16 10:54	CAC	TAL PEN

Client Sample ID: YGWA-21I

Date Collected: 06/07/16 14:11
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-9

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 03:28	TAJ	TAL PEN
Total Recoverable	Prep	3005A			309439	06/10/16 08:45	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	309544	06/10/16 17:39	RJB	TAL PEN
Total/NA	Prep	7470A			309346	06/09/16 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	309516	06/10/16 12:58	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	309632	06/11/16 10:54	CAC	TAL PEN

Laboratory References:

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

HPLC/IC

Analysis Batch: 309508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122626-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
400-122751-A-7 MS	Matrix Spike	Total/NA	Water	300.0	
400-122759-1	YGWC-19S	Total/NA	Water	300.0	
400-122759-2	EB-02	Total/NA	Water	300.0	
400-122759-3	YGWC-23S	Total/NA	Water	300.0	
400-122759-4	YGWA-17S	Total/NA	Water	300.0	
400-122759-5	DUP-2	Total/NA	Water	300.0	
400-122759-6	YGWC-22S	Total/NA	Water	300.0	
400-122759-7	FB-2	Total/NA	Water	300.0	
400-122759-8	YGWA-20S	Total/NA	Water	300.0	
LCS 400-309508/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-309508/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-309508/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 309735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122759-9	YGWA-21I	Total/NA	Water	300.0	
400-122759-9 MS	YGWA-21I	Total/NA	Water	300.0	
400-122759-9 MSD	YGWA-21I	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	
400-122759-3	YGWC-23S	Total/NA	Water	300.0	
400-122759-6	YGWC-22S	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	

Metals

Prep Batch: 309346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122759-1	YGWC-19S	Total/NA	Water	7470A	
400-122759-1 MS	YGWC-19S	Total/NA	Water	7470A	
400-122759-1 MSD	YGWC-19S	Total/NA	Water	7470A	
400-122759-2	EB-02	Total/NA	Water	7470A	
400-122759-3	YGWC-23S	Total/NA	Water	7470A	
400-122759-4	YGWA-17S	Total/NA	Water	7470A	
400-122759-5	DUP-2	Total/NA	Water	7470A	
400-122759-6	YGWC-22S	Total/NA	Water	7470A	
400-122759-7	FB-2	Total/NA	Water	7470A	
400-122759-8	YGWA-20S	Total/NA	Water	7470A	
400-122759-9	YGWA-21I	Total/NA	Water	7470A	
LCS 400-309346/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-309346/14-A	Method Blank	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 309439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122751-B-1-C MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-122751-B-1-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
400-122759-1	YGWC-19S	Total Recoverable	Water	3005A	
400-122759-2	EB-02	Total Recoverable	Water	3005A	
400-122759-3	YGWC-23S	Total Recoverable	Water	3005A	
400-122759-4	YGWA-17S	Total Recoverable	Water	3005A	
400-122759-5	DUP-2	Total Recoverable	Water	3005A	
400-122759-6	YGWC-22S	Total Recoverable	Water	3005A	
400-122759-6 - DL	YGWC-22S	Total Recoverable	Water	3005A	
400-122759-7	FB-2	Total Recoverable	Water	3005A	
400-122759-8	YGWA-20S	Total Recoverable	Water	3005A	
400-122759-9	YGWA-21I	Total Recoverable	Water	3005A	
LCS 400-309439/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-309439/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 309516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122759-1	YGWC-19S	Total/NA	Water	7470A	309346
400-122759-1 MS	YGWC-19S	Total/NA	Water	7470A	309346
400-122759-1 MSD	YGWC-19S	Total/NA	Water	7470A	309346
400-122759-2	EB-02	Total/NA	Water	7470A	309346
400-122759-3	YGWC-23S	Total/NA	Water	7470A	309346
400-122759-4	YGWA-17S	Total/NA	Water	7470A	309346
400-122759-5	DUP-2	Total/NA	Water	7470A	309346
400-122759-6	YGWC-22S	Total/NA	Water	7470A	309346
400-122759-7	FB-2	Total/NA	Water	7470A	309346
400-122759-8	YGWA-20S	Total/NA	Water	7470A	309346
400-122759-9	YGWA-21I	Total/NA	Water	7470A	309346
LCS 400-309346/15-A	Lab Control Sample	Total/NA	Water	7470A	309346
MB 400-309346/14-A	Method Blank	Total/NA	Water	7470A	309346

Analysis Batch: 309544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122751-B-1-C MS ^5	Matrix Spike	Total Recoverable	Water	6020	309439
400-122751-B-1-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	309439
400-122759-1	YGWC-19S	Total Recoverable	Water	6020	309439
400-122759-2	EB-02	Total Recoverable	Water	6020	309439
400-122759-3	YGWC-23S	Total Recoverable	Water	6020	309439
400-122759-4	YGWA-17S	Total Recoverable	Water	6020	309439
400-122759-5	DUP-2	Total Recoverable	Water	6020	309439
400-122759-6	YGWC-22S	Total Recoverable	Water	6020	309439
400-122759-7	FB-2	Total Recoverable	Water	6020	309439
400-122759-8	YGWA-20S	Total Recoverable	Water	6020	309439
400-122759-9	YGWA-21I	Total Recoverable	Water	6020	309439
LCS 400-309439/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	309439
MB 400-309439/1-A ^5	Method Blank	Total Recoverable	Water	6020	309439

Analysis Batch: 309819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122759-6 - DL	YGWC-22S	Total Recoverable	Water	6020	309439

General Chemistry

Analysis Batch: 309570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122751-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	
400-122759-2	EB-02	Total/NA	Water	SM 2540C	
400-122759-3	YGWC-23S	Total/NA	Water	SM 2540C	
400-122759-5	DUP-2	Total/NA	Water	SM 2540C	
LCS 400-309570/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-309570/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 309632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122678-B-1 DU	Duplicate	Total/NA	Water	SM 2540C	
400-122759-1	YGWC-19S	Total/NA	Water	SM 2540C	
400-122759-4	YGWA-17S	Total/NA	Water	SM 2540C	
400-122759-6	YGWC-22S	Total/NA	Water	SM 2540C	
400-122759-7	FB-2	Total/NA	Water	SM 2540C	
400-122759-8	YGWA-20S	Total/NA	Water	SM 2540C	
400-122759-9	YGWA-21I	Total/NA	Water	SM 2540C	
LCS 400-309632/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-309632/1	Method Blank	Total/NA	Water	SM 2540C	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-309508/4
Matrix: Water
Analysis Batch: 309508

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			06/10/16 12:03	1
Fluoride	<0.082		0.20	0.082	mg/L			06/10/16 12:03	1
Sulfate	<0.70		1.0	0.70	mg/L			06/10/16 12:03	1

Lab Sample ID: LCS 400-309508/5
Matrix: Water
Analysis Batch: 309508

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	9.37		mg/L		94	90 - 110
Fluoride	10.0	9.81		mg/L		98	90 - 110
Sulfate	10.0	9.52		mg/L		95	90 - 110

Lab Sample ID: LCSD 400-309508/6
Matrix: Water
Analysis Batch: 309508

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	9.28		mg/L		93	90 - 110	1	15
Fluoride	10.0	9.68		mg/L		97	90 - 110	1	15
Sulfate	10.0	9.48		mg/L		95	90 - 110	0	15

Lab Sample ID: 400-122626-A-3 MSD
Matrix: Water
Analysis Batch: 309508

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	190	F1	50.0	233		mg/L		86	80 - 120	2	20
Fluoride	<0.41		50.0	53.8		mg/L		108	80 - 120	1	20
Sulfate	130		50.0	182		mg/L		106	80 - 120	2	20

Lab Sample ID: 400-122751-A-7 MS
Matrix: Water
Analysis Batch: 309508

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	38		10.0	46.5		mg/L		89	80 - 120
Fluoride	<0.082		10.0	11.0		mg/L		110	80 - 120
Sulfate	240	E	10.0	245	E 4	mg/L		60	80 - 120

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

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: 400-122759-9 MS
Matrix: Water
Analysis Batch: 309735

Client Sample ID: YGWA-21I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.8		10.0	12.7		mg/L		99	80 - 120
Fluoride	<0.082		10.0	10.4		mg/L		104	80 - 120
Sulfate	5.2		10.0	15.3		mg/L		101	80 - 120

Lab Sample ID: 400-122759-9 MSD
Matrix: Water
Analysis Batch: 309735

Client Sample ID: YGWA-21I
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: 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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

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 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

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-309439/1-A ^5
Matrix: Water
Analysis Batch: 309544

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 309439

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 08:45	06/10/16 14:20	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/10/16 08:45	06/10/16 14:20	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/10/16 08:45	06/10/16 14:20	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 14:20	5
Boron	<0.021		0.050	0.021	mg/L		06/10/16 08:45	06/10/16 14:20	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/10/16 08:45	06/10/16 14:20	5
Calcium	<0.13		0.25	0.13	mg/L		06/10/16 08:45	06/10/16 14:20	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/10/16 08:45	06/10/16 14:20	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/10/16 08:45	06/10/16 14:20	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/10/16 08:45	06/10/16 14:20	5
Lithium	<0.0032	^	0.0050	0.0032	mg/L		06/10/16 08:45	06/10/16 14:20	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/10/16 08:45	06/10/16 14:20	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/10/16 08:45	06/10/16 14:20	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/10/16 08:45	06/10/16 14:20	5

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

Lab Sample ID: LCS 400-309439/2-A ^1
Matrix: Water
Analysis Batch: 309544

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 309439

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0587		mg/L		117	80 - 120
Arsenic	0.0500	0.0564		mg/L		113	80 - 120
Barium	0.0500	0.0515		mg/L		103	80 - 120
Beryllium	0.0500	0.0544		mg/L		109	80 - 120
Boron	0.100	0.112		mg/L		112	80 - 120
Cadmium	0.0500	0.0553		mg/L		111	80 - 120
Calcium	5.00	5.43		mg/L		109	80 - 120
Chromium	0.0500	0.0556		mg/L		111	80 - 120
Cobalt	0.0500	0.0545		mg/L		109	80 - 120
Lead	0.0500	0.0532		mg/L		106	80 - 120
Lithium	0.0500	0.0569	^	mg/L		114	80 - 120
Molybdenum	0.0500	0.0543		mg/L		109	80 - 120
Selenium	0.0500	0.0542		mg/L		108	80 - 120
Thallium	0.0100	0.0107		mg/L		107	80 - 120

Lab Sample ID: 400-122751-B-1-C MS ^5
Matrix: Water
Analysis Batch: 309544

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 309439

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00020		0.0500	0.0564		mg/L		113	75 - 125
Arsenic	0.00018	J	0.0500	0.0564		mg/L		112	75 - 125
Barium	0.0051	F1	0.0500	0.0745	F1	mg/L		139	75 - 125
Beryllium	<0.000068		0.0500	0.0528		mg/L		106	75 - 125
Boron	0.020	F1	0.100	0.187	F1	mg/L		166	75 - 125
Cadmium	<0.000068		0.0500	0.0536		mg/L		107	75 - 125
Calcium	7.9	F1	5.00	45.7	F1	mg/L		755	75 - 125
Chromium	<0.00022		0.0500	0.0545		mg/L		109	75 - 125
Cobalt	0.00013	J	0.0500	0.0548		mg/L		109	75 - 125
Lead	<0.000070		0.0500	0.0511		mg/L		102	75 - 125
Lithium	<0.00064	^	0.0500	0.0533		mg/L		107	75 - 125
Molybdenum	0.00063	J	0.0500	0.0584		mg/L		115	75 - 125
Selenium	0.000048	J	0.0500	0.0541		mg/L		108	75 - 125
Thallium	<0.000017		0.0100	0.0107		mg/L		107	75 - 125

Lab Sample ID: 400-122751-B-1-D MSD ^5
Matrix: Water
Analysis Batch: 309544

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 309439

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00020		0.0500	0.0566		mg/L		113	75 - 125	0	20
Arsenic	0.00018	J	0.0500	0.0577		mg/L		115	75 - 125	2	20
Barium	0.0051	F1	0.0500	0.0743	F1	mg/L		138	75 - 125	0	20
Beryllium	<0.000068		0.0500	0.0553		mg/L		111	75 - 125	5	20
Boron	0.020	F1	0.100	0.191	F1	mg/L		170	75 - 125	2	20
Cadmium	<0.000068		0.0500	0.0542		mg/L		108	75 - 125	1	20
Calcium	7.9	F1	5.00	45.6	F1	mg/L		753	75 - 125	0	20
Chromium	<0.00022		0.0500	0.0555		mg/L		111	75 - 125	2	20

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

Lab Sample ID: 400-122751-B-1-D MSD ^5
Matrix: Water
Analysis Batch: 309544

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 309439

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	0.00013	J	0.0500	0.0553		mg/L		110	75 - 125	1	20
Lead	<0.000070		0.0500	0.0520		mg/L		104	75 - 125	2	20
Lithium	<0.00064	^	0.0500	0.0541		mg/L		108	75 - 125	2	20
Molybdenum	0.00063	J	0.0500	0.0587		mg/L		116	75 - 125	1	20
Selenium	0.000048	J	0.0500	0.0555		mg/L		111	75 - 125	2	20
Thallium	<0.000017		0.0100	0.0111		mg/L		111	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-309346/14-A
Matrix: Water
Analysis Batch: 309516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309346

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/09/16 12:08	06/10/16 12:32	1

Lab Sample ID: LCS 400-309346/15-A
Matrix: Water
Analysis Batch: 309516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309346

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00106		mg/L		105	80 - 120

Lab Sample ID: 400-122759-1 MS
Matrix: Water
Analysis Batch: 309516

Client Sample ID: YGWC-19S
Prep Type: Total/NA
Prep Batch: 309346

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00205		mg/L		102	80 - 120

Lab Sample ID: 400-122759-1 MSD
Matrix: Water
Analysis Batch: 309516

Client Sample ID: YGWC-19S
Prep Type: Total/NA
Prep Batch: 309346

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00206		mg/L		102	80 - 120	1	20

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

Lab Sample ID: MB 400-309570/1
Matrix: Water
Analysis Batch: 309570

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			06/10/16 16:50	1

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

Lab Sample ID: LCS 400-309570/2
Matrix: Water
Analysis Batch: 309570

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	302		mg/L		103	78 - 122

Lab Sample ID: 400-122751-A-2 DU
Matrix: Water
Analysis Batch: 309570

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	580		584		mg/L		2	5

Lab Sample ID: MB 400-309632/1
Matrix: Water
Analysis Batch: 309632

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			06/11/16 10:54	1

Lab Sample ID: LCS 400-309632/2
Matrix: Water
Analysis Batch: 309632

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	248		mg/L		85	78 - 122

Lab Sample ID: 400-122678-B-1 DU
Matrix: Water
Analysis Batch: 309632

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	910		920		mg/L		0.7	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:

[11] Page 1 of 1

122759

Sample Shipment Date:[8] 6-8-16
Sample Received Date:[9]
Sampled By:[10] Michael Hutchinson

[X] [12] Standard Turnaround Time
[ ] # of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Company:[1] Southern Company Services
Report To
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
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

LAB USE ONLY [39] LAB ID	Sample Number [14]	Collection [15] Date	Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	PRESERVATIVE [20] HNO3 N	Ice I	HNO3 N	HNO3 N	ANALYSIS REQUESTED [21] Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ GaTech	SW-846 9315 & 9320				LAB USE ONLY [25] Comments
	YGWC-19S	6-7-16	1010		G	GW	3	X	X						X				
	EB-02	6-7-16	1100	Equipment Blank	G	DW	3	X	X						X				
	YGWC-23S	6-7-16	1310		G	GW	3	X	X						X				

Sample Type Key: [22] G-Grab O-Other C-Composite

Matrix Key: [23] O-Oil 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 I-Ice U-Unpreserved

400-122759 COC

LAB USE ONLY: Sample Receipt Information [28]	
Relinquished by:[26]	Date/Time 6/8/16 0658
Received by:[27]	Date/Time 6/8/16 0658
Relinquished by:	Date/Time 6/10/16 810
Received by:	Date/Time 6/8/16 @ 8:10 6/9/16 0851

Relinquished by: to FedEx.

Page 31 of 35

6/16/2016

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] 6/8/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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

Signature

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

PRESERVATIVE [20]: HNO3 N | Ice I | ~~HNO3 N~~ WB | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite

Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ WB ~~Ga Tech~~	SW-846 9315 and 9320				LAB USE ONLY [25] Comments
	YGWA-17S	6/7/16	1015		G	GW	3	X	X		X				
	DUP-2	6/7/16	1050	Duplicate	G	GW	3	X	X		X				
	YGWC-22S	6/7/16	1425		G	GW	3	X	X		X				
	FB-2	6/7/16	1500	Field Blank	O	DW	3	X	X		X				

Relinquished by:[26]	[signature]	Date/Time	6/8/16 0658
Received by:[27]	[signature]	Date/Time	6/8/16 0658
Relinquished by:	[signature]	Date/Time	6/8/16 810
Received by:	[signature]	Date/Time	6/8/16 @ 8:10

Relinquished by [signature] to FedEx.

LAB USE ONLY: Sample Receipt Information [28]

[signature] 06/9/16 0851

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] 6-8-16
Sample Received Date:[9]
Sampled By:[10] Charles Watson

[X] [12] Standard Turnaround Time
[ ] # of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Company:[1] Southern Company Services
Report To Address:[2] Joju Abraham
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
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE[20]: HNO3 N | Ice I | ~~HNO3 N~~ W | HNO3 N

ANALYSIS REQUESTED[21]: Metals app. III & IV EPA 6020 & EPA 7470 | Cl, F, SO4 EPA 300 TDS SM2540C | ~~Radium 226 & 228~~ W ~~Ga Tech~~ | SW-846 3915 + 3920

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[18] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ W ~~Ga Tech~~	SW-846 3915 + 3920				LAB USE ONLY[25] Comments
	YGWA-20S	6/7/16	1054		G	GW	3	X	X		X				
	YGWA-21I	6/7/16	1411		G	GW	3	X	X		X				

Relinquished by:[26]	[signature]	Date/Time	6/8/16 0658
Received by:[27]	[signature]	Date/Time	6/8/16 0658
Relinquished by:	[signature]	Date/Time	6/8/16 810
Received by:	[signature]	Date/Time	6/8/16 8:10

Relinquished by [signature] to FedEx.

LAB USE ONLY: Sample Receipt Information[28]
10.0°C 23.7°C, 23.9°C, 12.3°C, 0.0°C 0.0°C 0.0°C 1R-6
RCVD [signature] TAPEN 6/9/16 0851

Page 33 of 35
6/16/2016

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122759-1
SDG Number: AP

Login Number: 122759
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	
Cooler Temperature is recorded.	True	0.0°C ,0.0°C ,0.0°C ,10.0°C ,12.3°C ,23.7°C & 23.9°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: 400-122759-1
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		P330-16-00172	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: 400-122759-2
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 6:57:40 PM

Cheyenne Whitmire, Project Manager II
(850)474-1001
cheyenne.whitmire@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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.

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

Job ID: 400-122759-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-122759-2

RAD

Method(s) PrecSep_0: Radium 228 Batch 160-256817: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: YGWC-19S (400-122759-1), EB-02 (400-122759-2), YGWC-23S (400-122759-3), YGWA-17S (400-122759-4), DUP-2 (400-122759-5), YGWC-22S (400-122759-6), FB-2 (400-122759-7), YGWA-20S (400-122759-8) and YGWA-21I (400-122759-9). A laboratory control sample/ laboratory sample duplicate (LCS/LCSD) were prepared instead

Method(s) PrecSep-21: Radium 226 Batch 160-256814: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: YGWC-19S (400-122759-1), EB-02 (400-122759-2), YGWC-23S (400-122759-3), YGWA-17S (400-122759-4), DUP-2 (400-122759-5), YGWC-22S (400-122759-6), FB-2 (400-122759-7), YGWA-20S (400-122759-8) and YGWA-21I (400-122759-9). 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: 400-122759-2
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: 400-122759-2
SDG: AP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122759-1	YGWC-19S	Water	06/07/16 10:10	06/09/16 08:51
400-122759-2	EB-02	Water	06/07/16 11:00	06/09/16 08:51
400-122759-3	YGWC-23S	Water	06/07/16 13:10	06/09/16 08:51
400-122759-4	YGWA-17S	Water	06/07/16 10:15	06/09/16 08:51
400-122759-5	DUP-2	Water	06/07/16 10:50	06/09/16 08:51
400-122759-6	YGWC-22S	Water	06/07/16 14:25	06/09/16 08:51
400-122759-7	FB-2	Water	06/07/16 15:00	06/09/16 08:51
400-122759-8	YGWA-20S	Water	06/07/16 10:54	06/09/16 08:51
400-122759-9	YGWA-21I	Water	06/07/16 14:11	06/09/16 08:51

Client Sample ID: YGWC-19S

Date Collected: 06/07/16 10:10
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-1
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	0.0605	U	0.0512	0.0515	1.00	0.0791	pCi/L	06/16/16 16:07	07/08/16 06:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:31*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.102	U	0.245	0.245	1.00	0.420	pCi/L	06/16/16 16:36	06/22/16 13:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:28*	*1*
Y Carrier	*91.6*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:28*	*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	0.162	U	0.250	0.250	5.00	0.420	pCi/L		07/08/16 20:20	1

Client Sample ID: EB-02

Date Collected: 06/07/16 11:00
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-2
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	0.0512	U	0.0501	0.0503	1.00	0.0798	pCi/L	06/16/16 16:07	07/08/16 06:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:31*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0463	U	0.219	0.220	1.00	0.384	pCi/L	06/16/16 16:36	06/22/16 13:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:28*	*1*
Y Carrier	*95.7*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:28*	*1*

Client Sample ID: EB-02

Lab Sample ID: 400-122759-2
Date Collected: 06/07/16 11:00
Matrix: Water
Date Received: 06/09/16 08:51

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	0.0974	U	0.225	0.225	5.00	0.384	pCi/L		07/08/16 20:20	1

Client Sample ID: YGWC-23S

Lab Sample ID: 400-122759-3
Date Collected: 06/07/16 13:10
Matrix: Water
Date Received: 06/09/16 08:51

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.132**		0.0575	0.0587	1.00	0.0692	pCi/L	06/16/16 16:07	07/08/16 06:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.1*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.171	U	0.242	0.243	1.00	0.405	pCi/L	06/16/16 16:36	06/22/16 13:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.1*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:29*	*1*
Y Carrier	*93.8*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:29*	*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	0.303	U	0.249	0.250	5.00	0.405	pCi/L		07/08/16 20:20	1

Client Sample ID: YGWA-17S

Lab Sample ID: 400-122759-4
Date Collected: 06/07/16 10:15
Matrix: Water
Date Received: 06/09/16 08:51

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0133	U	0.0348	0.0348	1.00	0.0727	pCi/L	06/16/16 16:07	07/08/16 06:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:47*	*1*

Client Sample ID: YGWA-17S

Lab Sample ID: 400-122759-4
Date Collected: 06/07/16 10:15
Matrix: Water
Date Received: 06/09/16 08:51

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.171	U	0.205	0.206	1.00	0.338	pCi/L	06/16/16 16:36	06/22/16 13:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:29*	*1*
Y Carrier	*94.2*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:29*	*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	0.158	U	0.208	0.208	5.00	0.338	pCi/L		07/08/16 20:20	1

Client Sample ID: DUP-2

Lab Sample ID: 400-122759-5
Date Collected: 06/07/16 10:50
Matrix: Water
Date Received: 06/09/16 08:51

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00453	U	0.0284	0.0284	1.00	0.0560	pCi/L	06/16/16 16:07	07/08/16 06:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:47*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0779	U	0.232	0.232	1.00	0.425	pCi/L	06/16/16 16:36	06/22/16 13:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:29*	*1*
Y Carrier	*94.2*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:29*	*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	-0.0733	U	0.234	0.234	5.00	0.425	pCi/L		07/08/16 20:26	1

Client Sample ID: YGWC-22S

Date Collected: 06/07/16 14:25
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-6
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	0.0937		0.0529	0.0536	1.00	0.0725	pCi/L	06/16/16 16:07	07/08/16 06:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0518	U	0.203	0.203	1.00	0.373	pCi/L	06/16/16 16:36	06/22/16 13:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:29*	*1*
Y Carrier	*95.3*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:29*	*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	0.0420	U	0.209	0.210	5.00	0.373	pCi/L		07/08/16 20:26	1

Client Sample ID: FB-2

Date Collected: 06/07/16 15:00
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-7
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	0.0518	U	0.0416	0.0418	1.00	0.0607	pCi/L	06/16/16 16:07	07/08/16 06:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.2*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.187	U	0.267	0.268	1.00	0.447	pCi/L	06/16/16 16:36	06/22/16 13:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.2*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:30*	*1*
Y Carrier	*88.6*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:30*	*1*

Client Sample ID: FB-2

Lab Sample ID: 400-122759-7
Date Collected: 06/07/16 15:00
Matrix: Water
Date Received: 06/09/16 08:51

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	0.239	U	0.270	0.271	5.00	0.447	pCi/L		07/08/16 20:26	1

Client Sample ID: YGWA-20S

Lab Sample ID: 400-122759-8
Date Collected: 06/07/16 10:54
Matrix: Water
Date Received: 06/09/16 08:51

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.130**		0.0535	0.0548	1.00	0.0577	pCi/L	06/16/16 16:07	07/08/16 06:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.111	U	0.217	0.217	1.00	0.408	pCi/L	06/16/16 16:36	06/22/16 13:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:30*	*1*
Y Carrier	*94.6*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:30*	*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	0.0191	U	0.223	0.224	5.00	0.408	pCi/L		07/08/16 20:26	1

Client Sample ID: YGWA-21I

Lab Sample ID: 400-122759-9
Date Collected: 06/07/16 14:11
Matrix: Water
Date Received: 06/09/16 08:51

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.186**		0.0721	0.0740	1.00	0.0900	pCi/L	06/16/16 16:07	07/08/16 06:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:46*	*1*

Client Sample Results

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-2
SDG: AP

Client Sample ID: YGWA-21I
Date Collected: 06/07/16 14:11
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-9
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	0.161	U	0.202	0.203	1.00	0.336	pCi/L	06/16/16 16:36	06/22/16 13:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:31*	*1*
Y Carrier	*94.2*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:31*	*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	**0.347**		0.215	0.216	5.00	0.336	pCi/L		07/08/16 20:26	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-2
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: 400-122759-2
SDG: AP

Client Sample ID: YGWC-19S
Date Collected: 06/07/16 10:10
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259733	07/08/16 06:31	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:20	RTM	TAL SL

Client Sample ID: EB-02
Date Collected: 06/07/16 11:00
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259733	07/08/16 06:31	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:20	RTM	TAL SL

Client Sample ID: YGWC-23S
Date Collected: 06/07/16 13:10
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259730	07/08/16 06:46	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:20	RTM	TAL SL

Client Sample ID: YGWA-17S
Date Collected: 06/07/16 10:15
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259730	07/08/16 06:47	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:20	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-2
SDG: AP

Client Sample ID: DUP-2
Date Collected: 06/07/16 10:50
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259730	07/08/16 06:47	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:26	RTM	TAL SL

Client Sample ID: YGWC-22S
Date Collected: 06/07/16 14:25
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259730	07/08/16 06:46	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:26	RTM	TAL SL

Client Sample ID: FB-2
Date Collected: 06/07/16 15:00
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259730	07/08/16 06:46	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:26	RTM	TAL SL

Client Sample ID: YGWA-20S
Date Collected: 06/07/16 10:54
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259730	07/08/16 06:46	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:26	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR Plant Yates

TestAmerica Job ID: 400-122759-2
SDG: AP

Client Sample ID: YGWA-21I

Date Collected: 06/07/16 14:11
Date Received: 06/09/16 08:51

Lab Sample ID: 400-122759-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			256814	06/16/16 16:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	259730	07/08/16 06:46	RTM	TAL SL
Total/NA	Prep	PrecSep_0			256817	06/16/16 16:36	MCJ	TAL SL
Total/NA	Analysis	9320		1	257503	06/22/16 13:31	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	259792	07/08/16 20:26	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: 400-122759-2
SDG: AP

Rad

Prep Batch: 256814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122759-1	YGWC-19S	Total/NA	Water	PrecSep-21	
400-122759-2	EB-02	Total/NA	Water	PrecSep-21	
400-122759-3	YGWC-23S	Total/NA	Water	PrecSep-21	
400-122759-4	YGWA-17S	Total/NA	Water	PrecSep-21	
400-122759-5	DUP-2	Total/NA	Water	PrecSep-21	
400-122759-6	YGWC-22S	Total/NA	Water	PrecSep-21	
400-122759-7	FB-2	Total/NA	Water	PrecSep-21	
400-122759-8	YGWA-20S	Total/NA	Water	PrecSep-21	
400-122759-9	YGWA-21I	Total/NA	Water	PrecSep-21	
LCS 160-256814/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-256814/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
MB 160-256814/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 256817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122759-1	YGWC-19S	Total/NA	Water	PrecSep_0	
400-122759-2	EB-02	Total/NA	Water	PrecSep_0	
400-122759-3	YGWC-23S	Total/NA	Water	PrecSep_0	
400-122759-4	YGWA-17S	Total/NA	Water	PrecSep_0	
400-122759-5	DUP-2	Total/NA	Water	PrecSep_0	
400-122759-6	YGWC-22S	Total/NA	Water	PrecSep_0	
400-122759-7	FB-2	Total/NA	Water	PrecSep_0	
400-122759-8	YGWA-20S	Total/NA	Water	PrecSep_0	
400-122759-9	YGWA-21I	Total/NA	Water	PrecSep_0	
LCS 160-256817/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-256817/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
MB 160-256817/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-256814/1-A
Matrix: Water
Analysis Batch: 259733

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256814

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02776	U	0.0375	0.0375	1.00	0.0629	pCi/L	06/16/16 16:07	07/08/16 06:30	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*06/16/16 16:07*	*07/08/16 06:30*	*1*

Lab Sample ID: LCS 160-256814/2-A
Matrix: Water
Analysis Batch: 259733

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256814

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.2	15.33		1.46	1.00	0.0606	pCi/L	137	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*88.6*		*40 - 110*

Lab Sample ID: LCSD 160-256814/3-A
Matrix: Water
Analysis Batch: 259733

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 256814

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.2	15.28		1.46	1.00	0.0645	pCi/L	137	68 - 137	0.02	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*90.0*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-256817/1-A
Matrix: Water
Analysis Batch: 257505

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256817

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.07390	U	0.237	0.237	1.00	0.433	pCi/L	06/16/16 16:36	06/22/16 13:20	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:20*	*1*
Y Carrier	*90.8*		*40 - 110*	*06/16/16 16:36*	*06/22/16 13:20*	*1*

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

Lab Sample ID: LCS 160-256817/2-A
Matrix: Water
Analysis Batch: 257505

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256817

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			15.0	17.14		1.81	1.00	0.392	pCi/L	114	56 - 140		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*88.6*		*40 - 110*
Y Carrier	*92.7*		*40 - 110*

Lab Sample ID: LCSD 160-256817/3-A
Matrix: Water
Analysis Batch: 257505

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 256817

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			15.0	16.99		1.78	1.00	0.351	pCi/L	113	56 - 140	0.04	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*90.0*		*40 - 110*
Y Carrier	*93.1*		*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:

[11] Page 1 of 1

Sample Shipment Date:[8] 6-8-16
Sample Received Date:[9]
Sampled By:[10] Michael Hutchinson

[X] [12] Standard Turnaround Time 122759
[ ] # of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Company:[1] Southern Company Services
Report To Address:[2] Joju Abraham
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
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE[20]: HNO3 N; Ice I; ~~HNO3 N~~ MH; HNO3 N

ANALYSIS REQUESTED[21]: Metals app. III & IV EPA 6020 & EPA 7470; Cl, F, SO4 EPA 300 TDS SM2540C; ~~Radium 226 & 228~~ MH ~~Ga Tech~~; SW 846 9315 & 9320

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ MH ~~Ga Tech~~	SW 846 9315 & 9320				LAB USE ONLY[25] Comments
	YGWC-19S	6-7-16	1010		G	GW	3	X	X		X				
	EB-02	6-7-16	1100	Equipment Blank	G	DW	3	X	X		X				
	YGWC-23S	6-7-16	1310		G	GW	3	X	X		X				

400-122759 COC

LAB USE ONLY: Sample Receipt Information[26]

Relinquished by:[26]	[signature]	Date/Time	6/8/16 0658
Received by:[27]	[signature]	Date/Time	6/8/16 0658
Relinquished by:	[signature]	Date/Time	6/8/16 810
Received by:	[signature]	Date/Time	6/8/16 @ 8:10 [signature] 6/9/16 0851

Relinquished by: [signature] to FedEx.

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] 6/8/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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

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

PRESERVATIVE[20]: HNO3 N | Ice I | ~~HNO3~~ WB N | ~~HNO3~~ N

ANALYSIS REQUESTED[21]

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ WB ~~Ge Tech~~	SW-846 9315 and 9320				LAB USE ONLY[25] Comments
	VGWA-17S	6/7/16	1015		G	GW	3	X	X		X				
	DUP-2	6/7/16	1050	Duplicate	G	GW	3	X	X		X				
	VGWC-22S	6/7/16	1425		G	GW	3	X	X		X				
	FB-2	6/7/16	1500	Field Blank	O	DW	3	X	X		X				

Page 20 of 24

Relinquished by:[26]		Date/Time 6/8/16 0658
Received by:[27]		Date/Time 6/8/16 0658
Relinquished by:		Date/Time 6/8/16 EOD
Received by:		Date/Time 6/8/16 @8:10

LAB USE ONLY: Sample Receipt Information[28]
06/09/16 0851

Relinquished by Joju Abraham to FedEx.

7/11/2016

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] 6-8-16
Sample Received Date:[9]
Sampled By:[10] Charles Watson

[X] [12] Standard Turnaround Time
[ ] # of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Company:[1] Southern Company Services
Report To Address:[2] Joju Abraham
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
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE[20]: HNO3 N | Ice I | ~~HNO3 N~~ W | HNO3 N

ANALYSIS REQUESTED[21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite
Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY[18] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ W ~~Ga Tech~~	SW-846 3915 + 3920				LAB USE ONLY[25] Comments
	YGWA-20S	6/7/16	1054		G	GW	3	X	X		X				
	YGWA-21I	6/7/16	1411		G	GW	3	X	X		X				

Relinquished by:[26]	[signature]	Date/Time	6/8/16 0658
Received by:[27]	[signature]	Date/Time	6/8/16 0658
Relinquished by:	[signature]	Date/Time	6/8/16 8:10
Received by:	[signature]	Date/Time	6/8/16 8:10

Relinquished by [signature] to FedEx.

LAB USE ONLY: Sample Receipt Information[28]
10.0°C 23.7°C, 23.9°C, 12.3°C, 0.0°C 0.0°C 0.0°C 1R-6
RCVD [signature] TAPEN 6/9/16 0851

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-122759-2
SDG Number: AP

Login Number: 122759
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	
Cooler Temperature is recorded.	True	0.0°C ,0.0°C ,0.0°C ,10.0°C ,12.3°C ,23.7°C & 23.9°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: 400-122759-2
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: 400-122759-2
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.

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: AZI0094
September 14, 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.

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

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 14, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-36	AZI0094-01	Ground Water	09/02/16 12:20	09/02/16 15:34

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

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 14, 2016

Report No.: AZI0094
Client ID: YGWC-36
Date/Time Sampled: 9/2/2016 12:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0094-01
Date/Time Received: 9/2/2016 3:34:00PM

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	09/07/16 21:25	09/07/16 21:25	6090136	JPT
Inorganic Anions											
Chloride	6.3	0.25	0.01	mg/L	EPA 300.0	B-01	1	09/05/16 10:11	09/06/16 04:18	6090088	RLC
Fluoride	0.05	0.30	0.02	mg/L	EPA 300.0	J	1	09/05/16 10:11	09/06/16 04:18	6090088	RLC
Sulfate	72	5.0	0.26	mg/L	EPA 300.0		5	09/05/16 10:11	09/07/16 07:06	6090088	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Barium	0.0409	0.0100	0.0004	mg/L	EPA 6020B		1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Beryllium	0.0003	0.0030	0.00008	mg/L	EPA 6020B	J	1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Boron	0.133	0.100	0.0064	mg/L	EPA 6020B		1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Calcium	11.2	2.50	0.155	mg/L	EPA 6020B		5	09/08/16 10:40	09/12/16 16:46	6090169	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Cobalt	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Lead	0.0017	0.0050	0.0001	mg/L	EPA 6020B	J	1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Molybdenum	0.0027	0.0100	0.0017	mg/L	EPA 6020B	J	1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Selenium	0.0012	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Lithium	0.0029	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/08/16 10:40	09/09/16 19:33	6090169	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/06/16 11:30	09/06/16 17:44	6090109	MTC

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

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 14, 2016

Report No.: AZI0094

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090136 - SM 2540 C											
Blank (6090136-BLK1)						Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6090136-BS1)						Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	407	25	10	mg/L	400.00		102	84-108			
Duplicate (6090136-DUP1)		**Source: AZI0077-07**				Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	694	25	10	mg/L		702			1	10	
Duplicate (6090136-DUP2)		**Source: AZI0094-01**				Prepared & Analyzed: 09/07/16					
Total Dissolved Solids	228	25	10	mg/L		243			6	10	

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

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 14, 2016

Report No.: AZI0094

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090088 - EPA 300.0											
Blank (6090088-BLK1)						Prepared & Analyzed: 09/05/16					
Chloride	0.05	0.25	0.01	mg/L							J
Fluoride	ND	0.30	0.02	mg/L							
Sulfate	ND	1.0	0.05	mg/L							
LCS (6090088-BS1)						Prepared & Analyzed: 09/05/16					
Chloride	10.1	0.25	0.01	mg/L	10.010		101	90-110			
Fluoride	10.0	0.30	0.02	mg/L	10.010		100	90-110			
Sulfate	10.2	1.0	0.05	mg/L	10.010		102	90-110			
Matrix Spike (6090088-MS1)		**Source: AZI0050-01**				Prepared & Analyzed: 09/05/16					
Chloride	466	0.25	0.01	mg/L	10.010	478	NR	90-110			QM-02
Fluoride	11.8	0.30	0.02	mg/L	10.010	0.34	114	90-110			QM-05
Sulfate	275	1.0	0.05	mg/L	10.010	291	NR	90-110			QM-02
Matrix Spike (6090088-MS2)		**Source: AZI0059-03**				Prepared: 09/05/16 Analyzed: 09/06/16					
Chloride	13.9	0.25	0.01	mg/L	10.010	3.33	105	90-110			
Fluoride	10.9	0.30	0.02	mg/L	10.010	0.20	107	90-110			
Sulfate	12.7	1.0	0.05	mg/L	10.010	2.66	101	90-110			
Matrix Spike Dup (6090088-MSD1)		**Source: AZI0050-01**				Prepared & Analyzed: 09/05/16					
Chloride	486	0.25	0.01	mg/L	10.010	478	84	90-110	4	15	QM-02
Fluoride	11.7	0.30	0.02	mg/L	10.010	0.34	114	90-110	0.4	15	QM-05
Sulfate	275	1.0	0.05	mg/L	10.010	291	NR	90-110	0.1	15	QM-02

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

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 14, 2016

Report No.: AZI0094

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090109 - EPA 7470A											
Blank (6090109-BLK1)						Prepared & Analyzed: 09/06/16					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (6090109-BS1)						Prepared & Analyzed: 09/06/16					
Mercury	0.00236	0.00050	0.000041	mg/L	2.5000E-3		94	80-120			
Matrix Spike (6090109-MS1)			**Source: AZI0077-04**			Prepared & Analyzed: 09/06/16					
Mercury	0.00236	0.00050	0.000041	mg/L	2.5000E-3	ND	95	75-125			
Matrix Spike Dup (6090109-MSD1)			**Source: AZI0077-04**			Prepared & Analyzed: 09/06/16					
Mercury	0.00237	0.00050	0.000041	mg/L	2.5000E-3	ND	95	75-125	0.1	20	
Post Spike (6090109-PS1)			**Source: AZI0077-04**			Prepared & Analyzed: 09/06/16					
Mercury	1.68			ug/L	1.6667	0.00330	100	80-120			
Batch 6090169 - EPA 3005A											
Blank (6090169-BLK1)						Prepared: 09/08/16 Analyzed: 09/09/16					
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							

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

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 14, 2016

Report No.: AZI0094

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090169 - EPA 3005A											
LCS (6090169-BS1)						Prepared: 09/08/16 Analyzed: 09/09/16					
Antimony	0.106	0.0030	0.0008	mg/L	0.10000		106	80-120			
Arsenic	0.0993	0.0050	0.0016	mg/L	0.10000		99	80-120			
Barium	0.0945	0.0100	0.0004	mg/L	0.10000		94	80-120			
Beryllium	0.0976	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	0.103	0.0010	0.00007	mg/L	0.10000		103	80-120			
Calcium	0.979	0.500	0.0311	mg/L	1.0000		98	80-120			
Chromium	0.103	0.0100	0.0009	mg/L	0.10000		103	80-120			
Cobalt	0.0986	0.0100	0.0005	mg/L	0.10000		99	80-120			
Copper	0.0990	0.0050	0.0005	mg/L	0.10000		99	80-120			
Lead	0.102	0.0050	0.0001	mg/L	0.10000		102	80-120			
Molybdenum	0.0997	0.0100	0.0017	mg/L	0.10000		100	80-120			
Nickel	0.0987	0.0050	0.0006	mg/L	0.10000		99	80-120			
Selenium	0.0990	0.0100	0.0010	mg/L	0.10000		99	80-120			
Silver	0.100	0.0050	0.0005	mg/L	0.10000		100	80-120			
Thallium	0.100	0.0010	0.0002	mg/L	0.10000		100	80-120			
Vanadium	0.0993	0.0100	0.0071	mg/L	0.10000		99	80-120			
Zinc	0.100	0.0100	0.0021	mg/L	0.10000		100	80-120			
Lithium	0.0988	0.0500	0.0021	mg/L	0.10000		99	80-120			
Matrix Spike (6090169-MS1)		**Source: AZI0077-17**				Prepared: 09/08/16 Analyzed: 09/09/16					
Antimony	0.106	0.0030	0.0008	mg/L	0.10000	ND	106	75-125			
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000	ND	102	75-125			
Barium	0.169	0.0100	0.0004	mg/L	0.10000	0.0759	93	75-125			
Beryllium	0.0930	0.0030	0.00008	mg/L	0.10000	ND	93	75-125			
Boron	1.94	1.00	0.0642	mg/L	1.0000	0.888	105	75-125			
Cadmium	0.0991	0.0010	0.00007	mg/L	0.10000	0.0004	99	75-125			
Calcium	96.8	5.00	0.311	mg/L	1.0000	95.9	82	75-125			
Chromium	0.105	0.0100	0.0009	mg/L	0.10000	ND	105	75-125			
Cobalt	0.0997	0.0100	0.0005	mg/L	0.10000	ND	100	75-125			
Copper	0.0960	0.0050	0.0005	mg/L	0.10000	ND	96	75-125			
Lead	0.0960	0.0050	0.0001	mg/L	0.10000	ND	96	75-125			
Molybdenum	0.125	0.0100	0.0017	mg/L	0.10000	0.0266	98	75-125			
Nickel	0.102	0.0050	0.0006	mg/L	0.10000	0.0011	101	75-125			
Selenium	0.0978	0.0100	0.0010	mg/L	0.10000	ND	98	75-125			
Silver	0.0977	0.0050	0.0005	mg/L	0.10000	ND	98	75-125			
Thallium	0.0966	0.0010	0.0002	mg/L	0.10000	ND	97	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	0.0027	98	75-125			
Lithium	0.0941	0.0500	0.0021	mg/L	0.10000	0.0024	92	75-125			

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

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 14, 2016

Report No.: AZI0094

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6090169 - EPA 3005A											
Matrix Spike Dup (6090169-MSD1)		**Source: AZI0077-17**			Prepared: 09/08/16 Analyzed: 09/09/16						
Antimony	0.103	0.0030	0.0008	mg/L	0.10000	ND	103	75-125	3	20	
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000	ND	101	75-125	0.8	20	
Barium	0.168	0.0100	0.0004	mg/L	0.10000	0.0759	92	75-125	0.7	20	
Beryllium	0.0960	0.0030	0.00008	mg/L	0.10000	ND	96	75-125	3	20	
Boron	1.96	1.00	0.0642	mg/L	1.0000	0.888	107	75-125	0.8	20	
Cadmium	0.0992	0.0010	0.00007	mg/L	0.10000	0.0004	99	75-125	0.09	20	
Calcium	98.6	5.00	0.311	mg/L	1.0000	95.9	263	75-125	2	20	QM-02
Chromium	0.107	0.0100	0.0009	mg/L	0.10000	ND	107	75-125	2	20	
Cobalt	0.100	0.0100	0.0005	mg/L	0.10000	ND	100	75-125	0.5	20	
Copper	0.0975	0.0050	0.0005	mg/L	0.10000	ND	97	75-125	2	20	
Lead	0.0973	0.0050	0.0001	mg/L	0.10000	ND	97	75-125	1	20	
Molybdenum	0.126	0.0100	0.0017	mg/L	0.10000	0.0266	100	75-125	1	20	
Nickel	0.100	0.0050	0.0006	mg/L	0.10000	0.0011	99	75-125	2	20	
Selenium	0.0955	0.0100	0.0010	mg/L	0.10000	ND	95	75-125	2	20	
Silver	0.0938	0.0050	0.0005	mg/L	0.10000	ND	94	75-125	4	20	
Thallium	0.0982	0.0010	0.0002	mg/L	0.10000	ND	98	75-125	2	20	
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000	ND	106	75-125	3	20	
Zinc	0.104	0.0100	0.0021	mg/L	0.10000	0.0027	102	75-125	4	20	
Lithium	0.0983	0.0500	0.0021	mg/L	0.10000	0.0024	96	75-125	4	20	
Post Spike (6090169-PS1)		**Source: AZI0077-17**			Prepared: 09/08/16 Analyzed: 09/09/16						
Antimony	101			ug/L	100.00	0.299	101	80-120			
Arsenic	102			ug/L	100.00	0.235	101	80-120			
Barium	175			ug/L	100.00	75.9	99	80-120			
Beryllium	97.5			ug/L	100.00	0.0116	97	80-120			
Boron	1910			ug/L	1000.0	888	102	80-120			
Cadmium	101			ug/L	100.00	0.400	101	80-120			
Calcium	98600			ug/L	1000.0	95900	262	80-120			QM-02
Chromium	101			ug/L	100.00	0.306	101	80-120			
Cobalt	95.3			ug/L	100.00	0.465	95	80-120			
Copper	93.2			ug/L	100.00	0.123	93	80-120			
Lead	94.2			ug/L	100.00	0.0087	94	80-120			
Molybdenum	128			ug/L	100.00	26.6	101	80-120			
Nickel	94.4			ug/L	100.00	1.09	93	80-120			
Selenium	95.4			ug/L	100.00	-0.575	96	80-120			
Silver	97.8			ug/L	100.00	0.0070	98	80-120			
Thallium	95.3			ug/L	100.00	0.0424	95	80-120			
Vanadium	98.9			ug/L	100.00	0.409	99	80-120			
Zinc	101			ug/L	100.00	2.66	98	80-120			
Lithium	101			ug/L	100.00	2.37	98	80-120			

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

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 14, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: 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
LLMILLET@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER
CONTAINER TYPE:								P	P	P	
PRESERVATION								3	7	3	
9/2/16	1220	GW		X	VGWC-36	3		1	1	1	1

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Wesley Brown
DATE/TIME: 9/2/16

RELINQUISHED BY:
DATE/TIME: 9/2/16 1534

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME: 9/2/16 1534

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 5°C Min: 5°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZE0094
Entered into LIMS: 604
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: 9/14/2016 3:14:08PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 09/02/16 15:34

Work Order: AZI0094
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 1 **#Containers:** 3

Minimum Temp(C): 5.0 **Maximum Temp(C):** 5.0 **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:

PDF created with FinePrint pdfFactory Pro trial version www.pdffactory.com

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 04, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Yates AP CCR GW
Pace Project No.: 30195137

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on September 06, 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Yates AP CCR GW
Pace Project No.: 30195137

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Yates AP CCR GW
Pace Project No.: 30195137

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30195137001	**YGWC-36**	Water	09/02/16 12:20	09/06/16 08:50

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Yates AP CCR GW
Pace Project No.: 30195137

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30195137001	**YGWC-36**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30195137

Sample: YGWC-36 **Lab ID: 30195137001** Collected: 09/02/16 12:20 Received: 09/06/16 08:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.172 ± 0.157 (0.298) C:96% T:NA**	pCi/L	09/28/16 11:36	13982-63-3	
Radium-228	EPA 9320	**0.701 ± 0.479 (0.914) C:69% T:77%**	pCi/L	09/23/16 22:09	15262-20-1	
Total Radium	Total Radium Calculation	**0.873 ± 0.636 (1.21)**	pCi/L	10/04/16 15:39	7440-14-4	

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30195137

QC Batch: 232981 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30195137001

METHOD BLANK: 1141806 Matrix: Water
Associated Lab Samples: 30195137001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0211 ± 0.0919 (0.290) C:86% T:NA	pCi/L	09/28/16 11:34	

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30195137

QC Batch: 232987
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Associated Lab Samples: 30195137001

METHOD BLANK: 1141823
Matrix: Water
Associated Lab Samples: 30195137001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.450 ± 0.440 (0.907) C:80% T:77%	pCi/L	09/23/16 22:33	

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Yates AP CCR GW
Pace Project No.: 30195137

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.

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

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com
LLMILLET@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
9/2/16	1220	GW		X	YGWC-36	3	1	1	1	001

WO#:30195137

30195137

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Wesley Brown — DATE/TIME: 9/2/16

RECEIVED BY: [illegible] Rose/Pace — DATE/TIME: 9-6-16/0550

RELINQUISHED BY: — DATE/TIME: 9/2/16 @

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: — DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: (Yes) No NA — Ice: Yes (No) NA — Temperature: Min: Max:

Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

Pace COC Plant Yates AP CCR GW

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace, GA Project # 30195137

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

Tracking #: 6812 5098 8849

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: AMR 9-6-16

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. No Signature
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed AMR 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: AMR Date: 9-6-16

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

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	WRR
Date:	9/26/2016
Worklist:	31362
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1141806
MB concentration:	-0.021
M/B Counting Uncertainty:	0.092
MB MDC:	0.290
MB Numerical Performance Indicator:	-0.45
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS31362	LCSD31362
Count Date:	9/28/2016	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.677	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.504	
Target Conc. (pCi/L, g, F):	8.870	
Uncertainty (Calculated):	0.417	
Result (pCi/L, g, F):	7.482	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.849	
Numerical Performance Indicator:	-2.87	
Percent Recovery:	84.36%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30195128008	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30195128008DUP	
Sample Result (pCi/L, g, F):	0.625	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.301	
Sample Duplicate Result (pCi/L, g, F):	0.359	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.228	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.384	30195128008
Duplicate RPD:	54.21%	30195128008DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

10/4/16

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	9/15/2016
Worklist:	31367
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1141823
MB concentration:	0.450
M/B Counting Uncertainty:	0.432
MB MDC:	0.907
MB Numerical Performance Indicator:	2.04
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)? LCS31367	N LCSD31367
Count Date:	9/23/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.595	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.813	
Target Conc. (pCi/L, g, F):	6.293	
Uncertainty (Calculated):	0.453	
Result (pCi/L, g, F):	7.559	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.863	
Numerical Performance Indicator:	2.55	
Percent Recovery:	120.12%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30195128008	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30195128008DUP	
Sample Result (pCi/L, g, F):	1.816	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.475	
Sample Duplicate Result (pCi/L, g, F):	1.232	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.428	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.791	30195128008
Duplicate RPD:	38.33%	30195128008DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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 TotalAccess

Have a Question? Ask The Expert

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.

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

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.

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 Recoverable
Lithium	0.013		0.0050	0.0032	mg/L	5		6020	Total Recoverable
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 Recoverable
Calcium	1.2		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-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 Recoverable
Calcium	28		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0013	J	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	0.018		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.0093	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
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 Recoverable
Calcium	2.4		0.25	0.13	mg/L	5		6020	Total Recoverable
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.

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.

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 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

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 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

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

Date Collected: 06/02/16 13:25
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-3

Matrix: Water

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: Southern Company
Project/Site: CCR Plant Yates

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

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: 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

Date Collected: 06/02/16 10:32
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-7

Matrix: Water

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

Date Collected: 06/02/16 14:15
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-8

Matrix: Water

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

Date Collected: 06/02/16 16:35
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-9

Matrix: Water

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 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

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.
¤	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

Lab Sample ID: 400-122569-4

Date Collected: 06/02/16 13:46
Date Received: 06/04/16 09:30

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

Lab Sample ID: 400-122569-5

Date Collected: 06/02/16 16:29
Date Received: 06/04/16 09:30

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

Lab Sample ID: 400-122569-6

Date Collected: 06/02/16 00:00
Date Received: 06/04/16 09:30

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

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	

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

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	

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

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	%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	%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

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	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

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

Lab Sample ID: 400-122549-K-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308985 — **Prep Batch: 308725**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00204		mg/L		101	80 - 120

Lab Sample ID: 400-122549-K-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 308985 — **Prep Batch: 308725**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00197		mg/L		98	80 - 120	3	20

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

Lab Sample ID: MB 400-309137/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309137

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 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309137

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 — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309137

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	410		424		mg/L		3	5

Lab Sample ID: MB 400-309184/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309184

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 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	256		mg/L		87	78 - 122

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

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

Sample Shipment Date:[8] 6/3/16
Sample Received Date:[9]
Sampled By:[10] L Hilliard

[X] [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

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

PRESERVATIVE [20]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite
Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

400-122569 COC

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Ga Tech					LAB USE ONLY [25] Comments
	YGWA-6S	6/3/16	09:16		G	GW	3	1	1	1					

LAB USE ONLY: Sample Receipt Information [28]

Relinquished by:[26]	Date/Time	6/3/16 1247
Received by:[27]	Date/Time	6-3-16 @ 1248
Relinquished by:	Date/Time	6/3/16 @ 12:50
Received by:	Date/Time	6-4-16 [illegible]

12.6°C 12.0°C

Page 32 of 36
6/9/2016

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

Sample Shipment Date:[8] 6/3/16
Sample Received Date:[9]
Sampled By:[10] R. Hilliard

[X] [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

[signature]
Signature

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

PRESERVATIVE [20]						
HNO3 N	Ice I	HNO3 N				

ANALYSIS REQUESTED [21]

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Ga Tech					LAB USE ONLY [25] Comments
	YGWA-30I	6/2/16	10:16		G	GW	3	1	1	1					
	YGWA-14S	6/2/16	13:25		G	GW	3	1	1	1					
	FB-1	6/2/16	13:46	Field Blank	G	DW	3	1	1	1					
	YGWA-4I	6/2/16	16:29		G	GW	3	1	1	1					
	DUP-1	6/2/16	—	Field Duplicate	G	GW	3	1	1	1					

Relinquished by:[26]	Wesley Bowen	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	6/3/16 @ 8:20

LAB USE ONLY: Sample Receipt Information [28]

Relinquished by: [signature] to FedEx.
[signature] 6-4-16 930

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] 6/3/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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

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

Sample Type Key: [22] G-Grab O-Other C-Composite

Matrix Key: [23] O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	PRESERVATIVE [20] HNO3 N	Ice I	HNO3 N	ANALYSIS REQUESTED [21] Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Ga Tech	LAB USE ONLY [25] Comments
	YG-WA-3D	6/2/16	1032		G	GW	3	X	X	X				
	YG-WA-5I	6/2/16	1415		G	GW	3	X	X	X				
	YG-WA-5D	6/2/16	1635		G	GW	3	X	X	X				
	EB-01	6/2/16	1520	Equipment Blank	G	DW	3	X	X	X				

LAB USE ONLY: Sample Receipt Information [26]

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 6/3/16 8:30

Relinquished by: to Fed Ex 6/3/16

6-4-16 930

Page 34 of 36

6/9/2016

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 </= 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 <6mm (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 TotalAccess

Have a Question? Ask The Expert

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.

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

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 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 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

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
Date Collected: 06/02/16 13:25
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-3
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	0.0488	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
Date Collected: 06/02/16 13:46
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-4
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	0.0352	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 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: 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

Lab Sample ID: 400-122569-5
Date Collected: 06/02/16 16:29
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	**0.619**		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 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

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

Lab Sample ID: 400-122569-7
Date Collected: 06/02/16 10:32
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	**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 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 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: 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

Date Collected: 06/02/16 15:20
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-10

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	**0.0748**		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
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	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
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	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
Date Collected: 06/02/16 10:32
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-7
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-5I
Date Collected: 06/02/16 14:15
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-8
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-5D

Date Collected: 06/02/16 16:35
Date Received: 06/04/16 09:30

Lab Sample ID: 400-122569-9

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 07:02	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

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	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	

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 Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
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 Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.2	13.92		1.35	1.00	0.0764	pCi/L	125	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*93.4*		*40 - 110*

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 Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.2	14.61		1.42	1.00	0.0841	pCi/L	131	68 - 137	0.25	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*90.3*		*40 - 110*

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 Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*40 - 110*	*06/08/16 14:41*	*06/24/16 13:46*	*1*
Y Carrier	*88.2*		*40 - 110*	*06/08/16 14:41*	*06/24/16 13:46*	*1*

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*

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 _____

Sample Shipment Date:[8] 6/3/16
Sample Received Date:[9] _____
Sampled By:[10] L Hilliard

[X] [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

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

PRESERVATIVE [20]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite
Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

400-122569 COC

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Ga Tech					LAB USE ONLY [25] Comments
	YGWA-6S	6/3/16	09:16		G	GW	3	1	1	1					

LAB USE ONLY: Sample Receipt Information [28]

Relinquished by:[26]	[signature]	Date/Time 6/3/16 1247
Received by:[27]	[signature]	Date/Time 6-3-16 @ 1248
Relinquished by:	[signature]	Date/Time 6/3/16 @ 12:50
Received by:	[signature]	Date/Time 6-4-16 [illegible]

12.6°C 120°C

Page 19 of 24
7/11/2016

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

Sample Shipment Date:[8] 6/3/16
Sample Received Date:[9]
Sampled By:[10] R. Hilliard

[X] [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

Signature

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

Sample Type Key: [22] G-Grab O-Other C-Composite

Matrix Key: [23] O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	[17] Sample Type	[18] Matrix	[19] No. of Containers	PRESERVATIVE [20] HNO3 N	PRESERVATIVE [20] Ice I	PRESERVATIVE [20] HNO3 N	ANALYSIS REQUESTED [21] Metals app. III & IV EPA 6020 & EPA 7470	ANALYSIS REQUESTED [21] Cl, F, SO4 EPA 300 TDS SM2540C	ANALYSIS REQUESTED [21] Radium 226 & 228 Ga Tech	LAB USE ONLY [25] Comments
	YGWA-30I	6/2/16	10:16		G	GW	3	1	1	1				
	YGWA-14S	6/2/16	13:25		G	GW	3	1	1	1				
	FB-1	6/2/16	13:46	Field Blank	G	DW	3	1	1	1				
	YGWA-4I	6/2/16	16:29		G	GW	3	1	1	1				
	DUP-1	6/2/16	—	Field Duplicate	G	GW	3	1	1	1				

LAB USE ONLY: Sample Receipt Information [26]

Relinquished by:[26] Wesley Bowen Date/Time 6/3/16 0715
Received by:[27] Date/Time 6/3/16 0715
Relinquished by: Date/Time 6/3/16 0816
Received by: Date/Time 6/3/16@8:20

Relinquished by: to FedEx.
DO 6-4-16 930

Page 23 of 24
7/11/2016

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] 6/3/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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

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

Sample Type Key: [22] G-Grab O-Other C-Composite

Matrix Key: [23] O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	PRESERVATIVE [20] HNO3 N	Ice I	HNO3 N	ANALYSIS REQUESTED [21] Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228 Ga Tech	LAB USE ONLY [25] Comments
	YG-WA-3D	6/2/16	1032		G	GW	3	X	X	X				
	YG-WA-5I	6/2/16	1415		G	GW	3	X	X	X				
	YG-WA-5D	6/2/16	1635		G	GW	3	X	X	X				
	EB-01	6/2/16	1520	Equipment Blank	G	DW	3	X	X	X				

		LAB USE ONLY: Sample Receipt Information [28]
Relinquished by:[26]	Date/Time 06/3/16 0715	
Received by:[27]	Date/Time 6/3/16 0715	
Relinquished by:	Date/Time 6/3/16 0816	
Received by:	Date/Time 6/3/16 8:20	

Relinquished by [illegible] to Fed Ex 6/3/16

6-4-16 930

Page 21 of 24

7/11/2016

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 </= 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 <6mm (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.

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

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 TotalAccess

Have a Question? Ask The Expert

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.

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

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.

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.

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.

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.

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 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

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 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 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: 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 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: 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 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 ID: YGWC-26I

Date Collected: 06/08/16 13:15
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-6

Matrix: Water

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 ID: YGWC-27I

Date Collected: 06/08/16 15:20
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-7

Matrix: Water

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 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: 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 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: 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 ID: YGWC-32I

Date Collected: 06/08/16 10:32
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-10

Matrix: Water

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 ID: YGWC-32S

Date Collected: 06/08/16 13:43
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-11

Matrix: Water

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

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.
¤	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)

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

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

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

Date Collected: 06/08/16 13:43
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-11

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 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

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	

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

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	

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	

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

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

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

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

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	<0.000085		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	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	<0.000085		0.0100	0.0104		mg/L		104	75 - 125	2	20

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	%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	%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	%Rec. Limits	RPD	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	%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	RPD Limit
Total Dissolved Solids	5200		5110		mg/L		2	5

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-32I
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

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]
Sampled By:[10] Wesley Bowen

[X] [12] Standard Turnaround Time
[ ] # of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Company:[1] Southern Company Services
Report To Address:[2] Joju Abraham
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
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE[20]: HNO3 N; Ice I; ~~HNO3 N~~ WB; HNO3 N

ANALYSIS REQUESTED[21]: Metals app. III & IV EPA 6020 & EPA 7470; Cl, F, SO4 EPA 300 TDS SM2540C; ~~Radium 226 & 228 WB Ga Tech~~; SW-846 9315 and 9320

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228 WB Ga Tech~~	SW-846 9315 and 9320				LAB USE ONLY[25] Comments
	YGWC-24S	6/8/16	1125		G	GW	3	X	X		X				
	EB-03	6/8/16	1210		O	DW	3	X	X		X				
	YGWC-27S	6/8/16	1600		G	GW	3	X	X		X				

400-122843 COC

Relinquished by:[26]	Date/Time 6/8/16 0707	LAB USE ONLY: Sample Receipt Information[28]	11.5°C 10.6°C 20.6°C 23.0°C IR-6
Received by:[27]	Date/Time 6/9/16 0707		0.0°C 0.0°C 0.0°C
Relinquished by:	Date/Time 6/9/16 0817		
Received by:	Date/Time 6/9/16 8:17		RCVD TA 6/10/16 0855

Relinquished by: to FedEx.

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]
Sampled By:[10] Michael Hutchinson

[X] [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

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

PRESERVATIVE [20]: HNO3 N | Ice I | ~~HNO3 N~~ MH | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite
Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ ~~Ga Tech~~ MH	SW-846 9315 + 9320				LAB USE ONLY [25] Comments
	YGWC-26S	6-8-16	1005		G	GW	3	X	X		X				
	DUP-3	6-8-16	—		G	GW	3	X	X		X				
	YGWC-26I	6-8-16	1315		G	GW	3	X	X		X				
	YGWC-27I	6-8-16	1520		G	GW	3	X	X		X				

Relinquished by:[26]	[signature]	Date/Time	06/9/16 0707
Received by:[27]	[signature]	Date/Time	06/9/16 0707
Relinquished by:	[signature]	Date/Time	06/9/16 0817
Received by:	[signature]	Date/Time	6/9/16 8:17

LAB USE ONLY: Sample Receipt Information [28]
RCVD [signature] TA 6/10/16 0855

Relinquished by: [signature] to FedEx.

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]
Sampled By:[10] Rachel Samuels

[X] [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

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

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228 Ga-Tech~~ Rms	SW-846 9315 and 9320				LAB USE ONLY[25] Comments
								PRESERVATIVE[20]							
								HNO3 N	Ice I	~~HNO3 N~~	HNO3 N				
								ANALYSIS REQUESTED[21]							
	YGWC-34I	6/8/16	1315		G	GW	3	1	1		1				
	YGWC-33S	6/8/16	1703		G	GW	3	1	1		1				

Relinquished by:[26]	[signature]	Date/Time	6/9/16 0707
Received by:[27]	[signature]	Date/Time	6/9/16 0707
Relinquished by:	[signature]	Date/Time	6/9/16 0817
Received by:	[signature]	Date/Time	6/9/16 8:17

LAB USE ONLY: Sample Receipt Information[28]
RCVD [signature] TA 6/10/16 0855

Relinquished by: [signature] to FedEx.

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]
Sampled By:[10] Charles Watson

[X] [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

Wesley Bowen for Charles Watson
Signature

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

PRESERVATIVE [20]: HNO3 N; Ice I; ~~HNO3 N~~

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite

Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium-226 & 228 Ga-Tech~~	SW-846 9315 and 9320				LAB USE ONLY [25] Comments
	YGWC-32I	6/8/16	1032		G	GW	3	X	X		X				
	YGWC-32S	6/8/16	1343		G	GW	3	X	X		X				

Relinquished by:[26]	[signature]	Date/Time	06/09/16 0707
Received by:[27]	[signature]	Date/Time	06/9/16 0707
Relinquished by:	[signature]	Date/Time	06/9/16 0817
Received by:	[signature]	Date/Time	6/9/16 8:17

LAB USE ONLY: Sample Receipt Information [28]

RCVD [signature] TA 6/10/16 0855

Relinquished by: [signature] to FedEx.

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 TotalAccess

Have a Question? Ask The Expert

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.

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

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 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

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

Date Collected: 06/08/16 12:10
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-2

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	0.0216	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 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: 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

Lab Sample ID: 400-122843-3
Date Collected: 06/08/16 16:00
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	0.144		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

Lab Sample ID: 400-122843-4
Date Collected: 06/08/16 10:05
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	0.0741	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 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 ID: YGWC-26I

Date Collected: 06/08/16 13:15
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-6

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	0.165		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-27I

Date Collected: 06/08/16 15:20
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-7

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	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 ID: YGWC-27I

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 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 ID: YGWC-32S

Date Collected: 06/08/16 13:43
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-11

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	0.0894		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

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-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	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-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	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-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	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
Date Collected: 06/08/16 17:03
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-9
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-32I
Date Collected: 06/08/16 10:32
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-10
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-32S
Date Collected: 06/08/16 13:43
Date Received: 06/10/16 08:55

Lab Sample ID: 400-122843-11
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

Laboratory References:

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

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	

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 Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
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 Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.2	14.93		1.44	1.00	0.0756	pCi/L	134	68 - 137		

Carrier	*LCS %Yield*	*LCS 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 Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.2	14.27		1.38	1.00	0.0794	pCi/L	128	68 - 137	0.23	1

Carrier	*LCSD %Yield*	*LCSD 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 Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*06/17/16 14:44*	*07/05/16 13:37*	*1*
Y Carrier	*89.7*		*40 - 110*	*06/17/16 14:44*	*07/05/16 13:37*	*1*

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:

11 Page 1 of 1

Sample Shipment Date:[8] 6/9/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [12] Standard Turnaround Time
[ ] # of Business Days (Rush)
(Must be cleared through Env. Lab. Prior to shipment)

Company:[1] Southern Company Services
Report To Address:[2] Joju Abraham
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
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE[20]: HNO3 N; Ice I; ~~HNO3 N~~ WB; HNO3 N

ANALYSIS REQUESTED[21]: Metals app. III & IV EPA 6020 & EPA 7470; Cl, F, SO4 EPA 300 TDS SM2540C; ~~Radium 226 & 228 WB Ga Tech~~; SW-846 9315 and 9320

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228 WB Ga Tech~~	SW-846 9315 and 9320				LAB USE ONLY[25] Comments
	YGWC-24S	6/8/16	1125		G	GW	3	X	X		X				
	EB-03	6/8/16	1210		O	DW	3	X	X		X				
	YGWC-27S	6/8/16	1600		G	GW	3	X	X		X				

400-122843 COC

Relinquished by:[26]	Date/Time 6/8/16 0707	LAB USE ONLY: Sample Receipt Information[28]	11.5°C 10.6°C 20.6°C 23.0°C IR-6
Received by:[27]	Date/Time 6/9/16 0707		0.0°C 0.0°C 0.0°C
Relinquished by:	Date/Time 6/9/16 0817		
Received by:	Date/Time 6/9/16 8:17		RCVD TA 6/10/16 0855

Relinquished by: to FedEx.

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]
Sampled By:[10] Michael Hutchinson

[X] [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

Signature

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

PRESERVATIVE[20]: HNO3 N | Ice I | ~~HNO3~~ N | HNO3 N

ANALYSIS REQUESTED[21]: Metals app. III & IV EPA 6020 & EPA 7470 | Cl, F, SO4 EPA 300 TDS SM2540C | ~~Radium 226 & 228~~ Ga Tech — MH | SW-846 9315 & 9320

Sample Type Key:[22] G-Grab O-Other C-Composite

Matrix Key:[23] O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228~~ Ga Tech — MH	SW-846 9315 & 9320				LAB USE ONLY[25] Comments
	YGWC-26S	6-8-16	1005		G	GW	3	X	X		X				
	DUP-3	6-8-16	—		G	GW	3	X	X		X				
	YGWC-26I	6-8-16	1315		G	GW	3	X	X		X				
	YGWC-27I	6-8-16	1520		G	GW	3	X	X		X				

LAB USE ONLY: Sample Receipt Information[28]

Relinquished by:[26] Date/Time 06/9/16 0707
Received by:[27] Date/Time 06/9/16 0707
Relinquished by: Date/Time 06/9/16 0811
Received by: Date/Time 6/9/16 8:17 RCVD TA 6/10/16 0855

Relinquished by: to Fedex.

Page 21 of 26

7/13/2016

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]
Sampled By:[10] Rachel Samuels

[X] [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

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

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium 226 & 228 Ga-Tech~~ Rms	SW-846 9315 and 9320				LAB USE ONLY[25] Comments
								PRESERVATIVE[20]							
								HNO3 N	Ice I	~~HNO3 N~~	HNO3 N				
								ANALYSIS REQUESTED[21]							
	YGWC-34I	6/8/16	1315		G	GW	3	1	1		1				
	YGWC-33S	6/8/16	1703		G	GW	3	1	1		1				

Relinquished by:[26]	[signature]	Date/Time	6/9/16 0707
Received by:[27]	[signature]	Date/Time	6/9/16 0707
Relinquished by:	[signature]	Date/Time	6/9/16 0817
Received by:	[signature]	Date/Time	6/9/16 8:17

LAB USE ONLY: Sample Receipt Information[28]
RCVD [signature] TA 6/10/16 0855

Relinquished by: [signature] to FedEx.

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]
Sampled By:[10] Charles Watson

[X] [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

Wesley Bowen for Charles Watson
Signature

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

PRESERVATIVE [20]: HNO3 N; Ice I; ~~HNO3 N~~

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite
Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	~~Radium-226 & 228 Ga-Tech~~	SW-846 9315 and 9320				LAB USE ONLY [25] Comments
	YGWC-32I	6/8/16	1032		G	GW	3	X	X		X				
	YGWC-32S	6/8/16	1343		G	GW	3	X	X		X				

Relinquished by:[26]	[signature]	Date/Time	06/09/16 0707
Received by:[27]	[signature]	Date/Time	06/9/16 0707
Relinquished by:	[signature]	Date/Time	06/9/16 0817
Received by:	[signature]	Date/Time	6/9/16 8:17

LAB USE ONLY: Sample Receipt Information [28]

RCVD [signature] TA 6/10/16 0855

Relinquished by: [signature] to FedEx.

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.

Product Name: Low-Flow System

Date: 2016-06-02 16:27:54

Project Information:		Pump Information:	
Operator Name	R. Hilliard	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	polyethylene
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-4I	Tubing Length	50 ft
Latitude	33º 27' 46.78"		
Longitude	-84º -53' -53.27"		
Sonde SN	440275		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	43 ft

Well Information:		Pumping Information:	
Well ID	YGWA-4I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.3131711 L
Well Total Depth	48.80 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	25.3 in
Depth to Water	20.85 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	16:05:23	2999.97	19.24	6.39	140.98	1.06	22.94	4.40	94.70
Last 5	16:10:23	3299.97	18.97	6.41	141.50	1.22	22.95	4.30	94.07
Last 5	16:15:23	3599.97	19.04	6.40	141.02	1.24	22.96	4.27	94.51
Last 5	16:20:23	3899.97	19.11	6.36	140.68	1.20	22.96	4.09	95.41
Last 5	16:25:23	4199.97	19.10	6.36	139.97	2.72	22.96	3.93	95.76
Variance 0			0.07	-0.02	-0.47			-0.04	0.44
Variance 1			0.07	-0.03	-0.34			-0.18	0.91
Variance 2			-0.01	-0.00	-0.71			-0.15	0.35

Notes

Clear with scattered sun showers, 90F

Sample Time: 16:29

Grab Samples

YGWA-4I

Up gradient AP-3

Product Name: Low-Flow System

Date: 2016-06-02 16:34:22

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-5D	Tubing Length	130 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	457516		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	124 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	175 mL/min
Well diameter	2 in	Total System Volume	0.670245 L
Well Total Depth	129.05 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.59 in
Depth to Water	10.47 ft	Total Volume Pumped	6.85 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	16:12:59	900.02	18.92	7.62	267.74	--1.25	--11.07	1.86	-109.66
Last 5	16:17:59	1200.02	18.92	7.64	268.16	--1.10	--11.08	1.68	-113.89
Last 5	16:22:59	1500.02	18.88	7.65	268.43	--1.20	--11.07	1.58	-114.32
Last 5	16:27:59	1800.02	18.97	7.66	266.82	--0.80	--11.05	1.53	-114.47
Last 5	16:32:59	2100.03	18.87	7.67	265.11	--1.10	--11.06	1.56	-113.62
Variance 0			-0.04	0.01	0.27			-0.10	-0.43
Variance 1			0.09	0.01	-1.61			-0.05	-0.15
Variance 2			-0.10	0.01	-1.70			0.03	0.85

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-02 14:14:41

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-5I	Tubing Length	65 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	457516		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.3801225 L
Well Total Depth	57.65 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.39 in
Depth to Water	17.31 ft	Total Volume Pumped	7.17 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	13:52:31	1500.02	19.53	5.76	80.94	--4.61	--17.70	6.10	109.18
Last 5	13:57:31	1800.02	19.25	5.76	80.05	--5.35	--17.69	6.09	110.02
Last 5	14:02:31	2100.02	19.35	5.76	80.21	--4.05	--17.69	6.09	110.84
Last 5	14:07:31	2400.02	19.43	5.75	79.59	--3.56	--17.69	6.05	112.26
Last 5	14:12:31	2699.99	19.50	5.75	79.64	--3.53	--17.69	6.05	113.56
Variance 0			0.10	-0.00	0.16			0.00	0.82
Variance 1			0.08	-0.01	-0.61			-0.04	1.42
Variance 2			0.07	0.00	0.05			-0.00	1.30

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-06 15:00:25

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	sample pro
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-6I	Tubing Length	70 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	457516		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	62 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.5024396 L
Well Total Depth	68.72 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	425.16 in
Depth to Water	18.57 ft	Total Volume Pumped	31.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	13:38:06	8099.95	19.50	6.51	224.63	0.85	53.95	4.60	110.16
Last 5	13:43:06	8399.94	19.63	6.52	223.83	0.87	53.93	4.47	107.18
Last 5	13:48:06	8699.94	19.72	6.51	222.08	0.73	53.97	4.62	106.39
Last 5	13:53:06	8999.94	19.64	6.50	221.39	0.55	53.97	4.50	105.46
Last 5	13:58:07	9300.94	19.41	6.50	219.04	0.92	54.00	4.44	104.81
Variance 0			0.09	-0.01	-1.75			0.14	-0.79
Variance 1			-0.08	-0.00	-0.69			-0.12	-0.93
Variance 2			-0.23	-0.01	-2.35			-0.06	-0.65

Notes

At 13:34 reduced pumping rate to 100 mL/min. Well stabilized at 13:49 and continued to collect 3 additional readings. Acidity QC check on Radium sample container is ~ a pH of 2.0

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-03 09:15:18

Project Information:		Pump Information:	
Operator Name	R. Hilliard	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	polyethylene
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-6S	Tubing Length	40 ft
Latitude	33º 27' 46.47"		
Longitude	-84º -53' -53.35"		
Sonde SN	440275		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	39.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	14.5 in
Depth to Water	18.11 ft	Total Volume Pumped	3.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	08:51:36	900.01	18.37	6.03	87.52	1.00	19.33	7.14	97.47
Last 5	08:56:36	1200.07	18.53	6.01	86.94	0.87	19.33	7.07	99.24
Last 5	09:01:36	1500.05	18.58	6.01	86.08	0.93	19.33	7.02	101.16
Last 5	09:06:36	1800.00	18.45	6.01	85.80	0.67	19.32	7.04	102.74
Last 5	09:11:36	2100.01	18.61	6.00	85.33	0.90	19.32	7.02	105.09
Variance 0			0.05	-0.00	-0.86			-0.05	1.91
Variance 1			-0.13	-0.00	-0.28			0.02	1.59
Variance 2			0.16	-0.01	-0.47			-0.02	2.34

Notes

Sample Time: 09:16

Grab Samples

YGWA-6S

Plant Yates

Product Name: Low-Flow System

Date: 2016-06-07 10:09:14

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-17S	Tubing Length	41 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	457516		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWA-17S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2730004 L
Well Total Depth	40.12 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.43 in
Depth to Water	13.00 ft	Total Volume Pumped	5.05 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	09:47:01	1200.01	19.67	5.60	64.69	0.00	13.29	1.28	119.82
Last 5	09:52:01	1500.01	19.73	5.60	64.75	0.00	13.29	1.26	120.45
Last 5	09:57:01	1800.02	19.39	5.60	64.69	0.00	13.40	1.19	120.35
Last 5	10:02:01	2100.01	19.32	5.62	64.54	0.00	13.42	1.15	119.42
Last 5	10:07:01	2400.01	19.32	5.62	65.19	0.00	13.43	1.13	118.61
Variance 0			-0.33	0.00	-0.06			-0.07	-0.10
Variance 1			-0.07	0.01	-0.15			-0.04	-0.94
Variance 2			-0.01	0.00	0.65			-0.02	-0.81

Notes

Increased flow rate at 09:58 to 150 mL/min. Will collect DUP-2

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-06 15:30:09

Project Information:		Pump Information:	
Operator Name	Michael Hutchinson	Pump Model/Type	Bladder Pump
Company Name	AECOM	Tubing Type	poly
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-18I	Tubing Length	80 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	440275		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	74.99 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18I	Final Pumping Rate	125 mL/min
Well diameter	2 in	Total System Volume	0.5470738 L
Well Total Depth	80.06 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	22.19 ft	Total Volume Pumped	14.375 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	15:07:47	5999.96	18.33	6.15	119.58	5.49	22.36	2.70	105.63
Last 5	15:12:47	6299.96	18.48	6.16	121.37	5.18	22.36	2.57	104.96
Last 5	15:17:47	6599.96	18.43	6.17	122.13	4.69	22.36	2.51	103.85
Last 5	15:22:47	6899.96	18.44	6.17	122.70	4.93	22.36	2.51	103.27
Last 5	15:27:46	7199.89	18.48	6.17	123.08	4.44	22.36	2.52	103.18
Variance 0			-0.04	0.01	0.76			-0.06	-1.11
Variance 1			0.00	-0.00	0.57			-0.01	-0.58
Variance 2			0.04	0.00	0.38			0.01	-0.09

Notes

Sample Time: 1530

Grab Samples

YGWA-18I

Sample Time: 1530

Product Name: Low-Flow System

Date: 2016-06-06 11:57:11

Project Information:		Pump Information:	
Operator Name	Michael Hutchinson	Pump Model/Type	Peristaltic
Company Name	AECOM	Tubing Type	poly
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-18S	Tubing Length	37 ft
Latitude	33º 27' 46.94"		
Longitude	-84º -53' -53.11"		
Sonde SN	440275		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	0 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2551467 L
Well Total Depth	40.37 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	19.48 ft	Total Volume Pumped	3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:33:27	900.01	19.42	5.70	70.14	5.76	20.33	2.15	139.36
Last 5	11:38:27	1200.01	19.33	5.71	69.62	7.20	20.39	2.07	136.70
Last 5	11:43:27	1500.01	19.23	5.70	69.70	4.06	20.42	2.02	133.93
Last 5	11:48:27	1800.01	19.25	5.71	69.47	3.81	20.44	1.95	131.28
Last 5	11:53:27	2100.01	19.47	5.71	68.85	3.12	20.45	1.89	128.41
Variance 0			-0.10	-0.00	0.08			-0.05	-2.77
Variance 1			0.02	0.00	-0.23			-0.08	-2.65
Variance 2			0.22	0.00	-0.62			-0.06	-2.87

Notes

Sample time: 1155

Grab Samples

YGWA-18S

Time: 1155

Product Name: Low-Flow System

Date: 2016-06-07 11:05:24

Project Information:		Pump Information:	
Operator Name	Charles Watson	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	Poly
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-20S	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	25 ft

Well Information:		Pumping Information:	
Well ID	YGWA-20S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7.44 in
Depth to Water	9.30 ft	Total Volume Pumped	3.78 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%	+/- 5		+/- 0.2	+/- 20
Last 5	10:30:11	600.02	18.39	5.77	51.34	4.70	9.90	5.18	135.06
Last 5	10:35:12	900.83	18.12	5.77	51.38	3.95	9.92	5.21	127.78
Last 5	10:40:12	1200.83	18.08	5.77	51.40	4.23	9.92	5.27	121.19
Last 5	10:45:12	1500.83	17.97	5.77	51.55	4.42	9.92	5.24	118.05
Last 5	10:50:12	1800.83	17.90	5.77	51.46	4.44	9.92	5.26	116.87
Variance 0			-0.04	-0.00	0.02			0.06	-6.59
Variance 1			-0.11	0.00	0.15			-0.03	-3.14
Variance 2			-0.07	0.00	-0.10			0.02	-1.18

Notes

Sunny 75F humid. Well site in good condition.
No rate changes. Sampling started at 1054 am.

Grab Samples
YGWA-20S

Product Name: Low-Flow System

Date: 2016-06-07 14:17:11

Project Information:		Pump Information:	
Operator Name	Charles Watson	Pump Model/Type	bladder
Company Name	AECOM	Tubing Type	Poly
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-21I	Tubing Length	85 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA-21I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.569391 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	48 in
Depth to Water	26.25 ft	Total Volume Pumped	8.13 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%	+/- 5		+/- 0.2	+/- 20
Last 5	13:49:44	3299.92	20.96	6.11	94.62	1.51	29.77	1.71	84.42
Last 5	13:54:44	3599.92	21.04	6.10	94.64	1.50	29.86	1.71	85.40
Last 5	13:59:44	3899.92	21.02	6.10	94.72	1.31	30.02	1.70	86.19
Last 5	14:04:44	4199.92	21.06	6.10	94.41	1.34	30.13	1.69	86.57
Last 5	14:09:44	4499.92	20.91	6.10	94.66	1.24	30.25	1.69	87.74
Variance 0			-0.02	-0.00	0.07			-0.01	0.79
Variance 1			0.05	0.00	-0.31			-0.02	0.38
Variance 2			-0.15	0.00	0.25			0.01	1.16

Notes

Sunny 75F. Well site in good condition

No rate changes. Sampling started at 14:11

Grab Samples

YGWA-21I

Product Name: Low-Flow System

Date: 2016-06-07 10:46:09

Project Information:		Pump Information:	
Operator Name	Michael Hutchinson	Pump Model/Type	Peristalitic
Company Name	AECOM	Tubing Type	poly
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-19S	Tubing Length	30 ft
Latitude	33º 27' 29.08"		
Longitude	-84º -53' -50.18"		
Sonde SN	440275		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	0 ft

Well Information:		Pumping Information:	
Well ID	YGWC-19S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	30.44 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.48 in
Depth to Water	15.36 ft	Total Volume Pumped	5.75 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	09:44:51	1200.02	19.37	5.61	42.35	3.75	15.65	4.42	107.48
Last 5	09:49:51	1500.02	19.33	5.62	42.06	5.43	15.66	4.32	103.43
Last 5	09:54:51	1800.02	19.42	5.63	42.00	3.04	15.65	4.30	101.66
Last 5	09:59:51	2100.02	19.39	5.62	41.50	4.77	15.65	4.26	100.55
Last 5	10:04:51	2400.08	19.42	5.61	41.40	4.19	15.65	4.16	99.78
Variance 0			0.08	0.00	-0.06			-0.02	-1.77
Variance 1			-0.03	-0.00	-0.50			-0.04	-1.11
Variance 2			0.03	-0.01	-0.10			-0.10	-0.77

Notes

Equipment Blank

Grab Samples

YGWC-19S

1010

EB-02

1100

Product Name: Low-Flow System

Date: 2016-06-07 14:21:59

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates AP	Tubing Diameter	0.17 in
Site Name	YGWC-22S	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	457516		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-22S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	40.13 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.37 in
Depth to Water	9.71 ft	Total Volume Pumped	13.05 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	13:58:00	5399.97	22.84	4.98	590.58	2.18	10.08	3.42	210.25
Last 5	14:03:00	5699.97	22.86	4.97	580.59	0.00	10.08	3.36	224.68
Last 5	14:08:00	5999.97	22.71	4.97	570.49	0.27	10.08	3.26	227.39
Last 5	14:13:00	6299.97	22.64	4.97	559.80	0.49	10.07	3.19	224.60
Last 5	14:18:00	6599.97	22.92	4.98	554.81	0.31	10.08	3.06	224.66
Variance 0			-0.15	-0.00	-10.10			-0.10	2.71
Variance 1			-0.07	0.00	-10.68			-0.07	-2.79
Variance 2			0.28	0.01	-5.00			-0.14	0.06

Notes

At 12:38 increased pump to 150 mL/min. At 13:18 decreased pump to 100 mL/min to stabilize DO. pH check is between 1.5 and 2.0.

Grab Samples

Product Name: Low-Flow System

Date: 2016-06-07 13:06:24

Project Information:		Pump Information:	
Operator Name	Michael Hutchinson	Pump Model/Type	Peristaltic
Company Name	AECOM	Tubing Type	Poly
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-23S	Tubing Length	29.8 ft
Latitude	33º 27' 29.08"		
Longitude	-84º -53' -50.18"		
Sonde SN	440275		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	0 ft

Well Information:		Pumping Information:	
Well ID	YGWC-23S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.22301 L
Well Total Depth	29.80 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6.36 in
Depth to Water	16.30 ft	Total Volume Pumped	12.75 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	12:44:38	3899.94	19.73	5.57	186.33	6.45	16.83	5.92	120.27
Last 5	12:49:38	4199.93	19.86	5.57	185.12	6.18	16.83	5.89	121.07
Last 5	12:54:38	4499.95	19.95	5.56	184.70	4.22	16.83	5.89	121.36
Last 5	12:59:38	4799.94	19.81	5.56	183.93	4.37	16.83	5.89	121.51
Last 5	13:04:38	5099.94	19.99	5.57	183.96	4.86	16.83	5.87	122.14
Variance 0			0.09	-0.01	-0.42			0.00	0.29
Variance 1			-0.14	0.00	-0.77			0.01	0.15
Variance 2			0.19	0.00	0.03			-0.02	0.64

Notes

Grab Samples
YGWC-23S
1310

Product Name: Low-Flow System

Date: 2016-06-08 11:39:21

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	sample pro
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates AP	Tubing Diameter	0.17 in
Site Name	YGWC-24S	Tubing Length	57 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	457516		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWC-24S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.4444151 L
Well Total Depth	57.65 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.39 in
Depth to Water	26.90 ft	Total Volume Pumped	3.48 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	10:59:03	600.02	19.36	5.63	63.86	4.90	27.28	6.31	124.57
Last 5	11:04:03	900.01	19.15	5.64	63.36	4.66	27.30	6.50	132.01
Last 5	11:09:03	1200.01	19.15	5.64	62.63	3.21	27.27	6.41	136.09
Last 5	11:14:03	1500.06	19.15	5.65	62.66	3.23	27.28	6.41	138.07
Last 5	11:19:03	1800.05	19.01	5.65	61.92	2.42	27.29	6.57	139.78
Variance 0			-0.00	0.00	-0.73			-0.09	4.08
Variance 1			-0.00	0.00	0.03			-0.00	1.98
Variance 2			-0.13	0.00	-0.74			0.16	1.72

Notes

Stable recharge rate at 100 mL/min. pH check is ~2.0. Will collect equipment blank EB-03.

Grab Samples

AECOM GROUNDWATER SAMPLING LOG

SITE NAME:	Georgia Power Company Plant Yates	SITE LOCATION:	708 Dyer Rd Newnan, GA
WELL NO:	YGWC-32I	SAMPLE ID:	YGWC-32I
FIELD TECHNICIAN:	Charles Wasson	DATE:	6/8/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 29.66 feet to 39.66 feet	STATIC DEPTH TO WATER (feet): 19.82	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 = (39.99 feet – 19.82 feet) X 0.65 liters/foot ~ 13.11 liters 3x ~ 39.33 L / 6555

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = 0 liters + (45 feet X 0.005 liters/foot) + 0.1 liters ~ 0.33 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 35	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 35	PURGING INITIATED AT: 945	PURGING ENDED AT: 1030	TOTAL VOLUME PURGED (liters): 4.33
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll LaMotte 2020we	SERIAL NO(S):	449474 7009-1416	

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)
3.10	950	0.33	0.33	0.10	19.97	3.54	5.79	816.5	-139.9	1.20	24.28
3.10	955	0.50	0.83	0.10	19.99	3.68	5.44	931.1	-62.4	0.57	22.10
3.10	1000	0.50	1.33	0.10	20.01	4.38	5.48	922.6	-85.5	0.44	22.03
3.10	1005	0.50	1.83	0.10	20.01	2.51	5.47	924.5	-81.4	0.36	21.91
3.10	1010	0.50	2.33	0.10	20.01	2.02	5.47	921.7	-80.3	0.32	22.09
3.10	1015	0.50	2.83	0.10	20.02	2.46	5.45	923.1	-74.6	0.28	22.18
3.10	1020	0.50	3.33	0.10	20.02	2.39	5.43	924.6	-64.7	0.25	22.31
3.10	1025	0.50	3.83	0.10	20.02	1.08	5.42	926.3	-48.9	0.23	22.41
3.10	1030	0.50	4.33	0.10	20.02	1.96	5.41	926.9	-24.6	0.22	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 ; ⅜" = 0.022 ; ½ " = 0.04 ; ⅝" = 0.06 ; ¾ " = 0.09 ; ⅞" = 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**)

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Charles Watson / AECOM		6/8/16	1032
PUMP OR TUBING DEPTH IN WELL (feet): 35	**SAMPLE PUMP FLOW RATE (L per minute):** 0.10	**TUBING MATERIAL CODE:** PE	**SAMPLING ENDED AT:** 1130
FIELD DECONTAMINATION: (Y) N	**FIELD-FILTERED:** Y (N) **FILTER SIZE:** ____ µm Filtration Equipment Type: ____	QC Sample Collected: Y (N) ☐ Duplicate ☐Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWC-32I	1	0.5 L	PE	HNO_3	Metals app. III & IV	APP
YGWC-32I	1	0.5 L	PE	N/A	Cl, F, SO_4, TDS	APP
YGWC-32I	1	1 GAL	PE	HNO_3	~~Ra 226/228~~ 9315 + 9320	APP

REMARKS:

FINAL DEPTH TO WATER: 20.01 **DEPTH TO BOTTOM:** 39.99

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)

Product Name: Low-Flow System

Date: 2016-06-08 13:44:06

Project Information:		Pump Information:	
Operator Name	Charles Watson	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	Poly
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-32S	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	17 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	23.22 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8.16 in
Depth to Water	15.85 ft	Total Volume Pumped	17.75 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%	+/- 5		+/- 0.2	+/- 20
Last 5	13:20:02	4500.12	21.84	4.74	716.92	8.79	16.54	0.42	314.73
Last 5	13:25:02	4800.12	22.07	4.74	714.78	5.20	16.54	0.45	315.80
Last 5	13:30:01	5100.04	22.11	4.74	713.30	3.98	16.54	0.50	310.03
Last 5	13:35:01	5400.03	22.20	4.74	711.13	3.08	16.54	0.50	322.44
Last 5	13:40:01	5700.04	22.18	4.73	710.85	2.61	16.53	0.50	321.57
Variance 0			0.04	-0.00	-1.48			0.05	-5.77
Variance 1			0.09	0.01	-2.17			-0.00	12.41
Variance 2			-0.02	-0.01	-0.28			0.01	-0.87

Notes

Sunny 85F. Well site in good condition. Water level is below screen. Using the Well volume purge method
Rate changes: 100 to 150 mL/min at 1205. 150 to 175 mL/min at 1225. 175 to 200 mL/min at 1245. Sampling started at 1343

Grab Samples

YGWC-32S

13:43

Product Name: Low-Flow System

Date: 2016-06-08 16:57:43

Project Information:		Pump Information:	
Operator Name	Rachel Samuels	Pump Model/Type	Peristaltic
Company Name	AECOM	Tubing Type	polyethylene
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	YGWC-33S	Tubing Length	50 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	456959		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.6131712 L
Well Total Depth	38.56 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	8.47 ft	Total Volume Pumped	12 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	16:35:38	5410.99	22.17	5.09	1399.26	6.36	9.00	0.08	-44.05
Last 5	16:40:38	5710.99	22.11	5.10	1400.36	5.89	9.04	0.07	-43.10
Last 5	16:45:38	6010.99	22.20	5.08	1402.90	4.58	9.04	0.07	-40.87
Last 5	16:50:38	6310.99	22.26	5.08	1394.53	4.97	9.04	0.07	-37.93
Last 5	16:55:38	6610.99	22.43	5.07	1401.87	4.71	9.04	0.07	-36.85
Variance 0			0.09	-0.02	2.54			0.00	2.23
Variance 1			0.07	-0.01	-8.37			-0.01	2.95
Variance 2			0.17	-0.00	7.34			0.00	1.08

Notes

Changed flow rate from .1 to .15 L/min at 1635

Grab Samples

YGWC-33S

Plant Yates

Product Name: Low-Flow System

Date: 2016-06-08 13:10:55

Project Information:		Pump Information:	
Operator Name	Rachel Samuels	Pump Model/Type	Bladder
Company Name	AECOM	Tubing Type	polyethylene
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	PZ-34I	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	456959		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	PZ-34I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.5685369 L
Well Total Depth	38.73 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	22.10 ft	Total Volume Pumped	10.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:53:57	300.08	20.57	4.85	781.84	1.42	22.39	0.12	121.87
Last 5	12:58:57	600.02	20.56	4.85	780.30	1.30	22.39	0.11	118.31
Last 5	13:03:57	900.02	20.44	4.85	780.61	1.36	22.39	0.11	115.68
Last 5	13:08:57	1200.02	20.52	4.85	779.83	1.24	22.39	0.11	113.86
Last 5									
Variance 0			-0.02	-0.00	-1.54			-0.00	-3.56
Variance 1			-0.12	-0.00	0.31			-0.00	-2.63
Variance 2			0.09	0.00	-0.78			-0.00	-1.82

Notes

iPad overheated at 1243; restarted sampling to attain 3.0L of well log data.

Grab Samples

PZ-34I

Plant Yates

Product Name: Low-Flow System

Date: 2016-09-02 12:17:39

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-36	Tubing Length	60 ft
Latitude	33º 27' 29.12"		
Longitude	-84º -53' -49.78"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	51 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.3578054 L
Well Total Depth	55.90 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	10.50 ft	Total Volume Pumped	0 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:54:31	16504.02	20.11	5.85	254.95	20.60	13.33	1.99	50.00
Last 5	11:59:31	16804.02	20.08	5.86	255.39	19.80	13.38	1.96	49.75
Last 5	12:04:31	17104.02	19.98	5.85	256.44	19.40	13.35	1.91	49.85
Last 5	12:09:31	17404.02	19.99	5.85	256.49	19.90	13.33	1.95	50.67
Last 5	12:14:31	17704.03	19.82	5.84	255.27	19.80	13.32	1.98	51.47
Variance 0			-0.10	-0.00	1.05			-0.05	0.11
Variance 1			0.01	-0.01	0.05			0.04	0.81
Variance 2			-0.17	-0.01	-1.21			0.03	0.81

Notes

9-2-16 purging subsequent redevelopment on 8-29-16.
Collect sample at 12:20. Filtered and unfiltered samples are required per Southern Company project managers.

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:

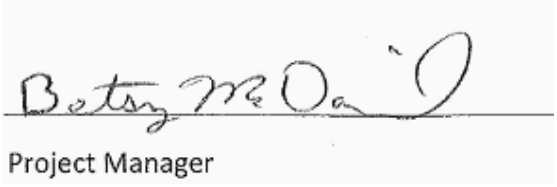
Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: **Mr. Joju Abraham**

Report Number: **AZG0797**
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-6S	AZG0797-01	Ground Water	07/27/16 08:59	07/28/16 08:40
YGWA-17S	AZG0797-02	Ground Water	07/27/16 11:30	07/28/16 08:40
YGWA-20S	AZG0797-03	Ground Water	07/27/16 14:25	07/28/16 08:40
EQB-3	AZG0797-04	DI Water	07/27/16 16:04	07/28/16 08:40
Dup-3	AZG0797-05	Ground Water	07/27/16 00:00	07/28/16 08:40
YGWA-6I	AZG0797-06	Ground Water	07/27/16 10:03	07/28/16 08:40
YGWA-18S	AZG0797-07	Ground Water	07/27/16 12:15	07/28/16 08:40
YGWA-18I	AZG0797-08	Ground Water	07/27/16 14:06	07/28/16 08:40
FB-3	AZG0797-09	DI Water	07/27/16 15:20	07/28/16 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 04, 2016

Report No.: AZG0797
Client ID: YGWA-6S
Date/Time Sampled: 7/27/2016 8:59:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0797-01
Date/Time Received: 7/28/2016 8:40:00AM

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	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	2.0	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 11:50	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 11:50	6070672	RNB
Sulfate	17	1.0	0.05	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 11:50	6070672	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Barium	0.0107	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Boron	0.0378	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Calcium	2.85	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Chromium	0.0015	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:27	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:18	6080030	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.: AZG0797
Client ID: YGWA-17S
Date/Time Sampled: 7/27/2016 11:30:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0797-02
Date/Time Received: 7/28/2016 8:40:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	74	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	4.5	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 12:11	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 12:11	6070672	RNB
Sulfate	4.7	1.0	0.05	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 12:11	6070672	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Barium	0.0126	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Boron	0.0080	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Calcium	2.00	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Chromium	0.0008	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Selenium	0.0012	0.0100	0.0009	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:33	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:20	6080030	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

August 04, 2016

Attention: Mr. Joju Abraham

Report No.: AZG0797
Client ID: YGWA-20S
Date/Time Sampled: 7/27/2016 2:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0797-03
Date/Time Received: 7/28/2016 8:40:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	74	25	10	mg/L	SM 2540 C		1	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	1.9	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 12:31	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 12:31	6070672	RNB
Sulfate	0.08	1.0	0.05	mg/L	EPA 300.0	J	1	07/29/16 09:53	07/29/16 12:31	6070672	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Barium	0.0141	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Calcium	2.08	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Chromium	0.0005	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:39	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:22	6080030	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

August 04, 2016

Attention: Mr. Joju Abraham

Report No.: AZG0797
Client ID: EQB-3
Date/Time Sampled: 7/27/2016 4:04:00PM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZG0797-04
Date/Time Received: 7/28/2016 8:40:00AM

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	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 13:33	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 13:33	6070672	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 13:33	6070672	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Calcium	ND	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:44	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:25	6080030	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.: AZG0797
Client ID: Dup-3
Date/Time Sampled: 7/27/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0797-05
Date/Time Received: 7/28/2016 8:40:00AM

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	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	4.2	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 13:53	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 13:53	6070672	RNB
Sulfate	4.7	1.0	0.05	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 13:53	6070672	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Barium	0.0123	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Boron	0.0058	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Calcium	1.87	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Chromium	0.0006	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Selenium	0.0019	0.0100	0.0009	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 15:50	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:44	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.: AZG0797
Client ID: YGWA-6I
Date/Time Sampled: 7/27/2016 10:03:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0797-06
Date/Time Received: 7/28/2016 8:40:00AM

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	07/28/16 17:15	07/28/16 17:15	6070639	JPT
Inorganic Anions											
Chloride	6.1	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 14:14	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 14:14	6070672	RNB
Sulfate	55	2.0	0.10	mg/L	EPA 300.0		2	07/29/16 09:53	08/02/16 22:31	6070672	RNB
Metals, Total											
Antimony	0.0010	0.0030	0.0002	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Arsenic	0.0010	0.0050	0.0007	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Barium	0.0254	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Boron	0.0533	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Calcium	7.79	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Chromium	0.0011	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Molybdenum	0.0009	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Selenium	0.0020	0.0100	0.0009	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Lithium	0.0072	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:17	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:47	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.: AZG0797
Client ID: YGWA-18S
Date/Time Sampled: 7/27/2016 12:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0797-07
Date/Time Received: 7/28/2016 8:40:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	35	25	10	mg/L	SM 2540 C		1	07/29/16 14:05	07/29/16 14:05	6070663	JPT
Inorganic Anions											
Chloride	6.2	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 14:35	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 14:35	6070672	RNB
Sulfate	1.9	1.0	0.05	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 14:35	6070672	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Barium	0.0167	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Boron	0.0059	0.100	0.0044	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Calcium	1.19	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Chromium	0.0006	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Cobalt	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Lithium	0.0049	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:23	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:49	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.: AZG0797
Client ID: YGWA-18I
Date/Time Sampled: 7/27/2016 2:06:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0797-08
Date/Time Received: 7/28/2016 8:40:00AM

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	07/29/16 14:05	07/29/16 14:05	6070663	JPT
Inorganic Anions											
Chloride	6.7	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 14:55	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 14:55	6070672	RNB
Sulfate	1.7	1.0	0.05	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 14:55	6070672	RNB
Metals, Total											
Antimony	0.0005	0.0030	0.0002	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Barium	0.0294	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Calcium	4.73	0.500	0.0126	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Chromium	0.0007	0.0100	0.0004	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Lithium	0.0087	0.0500	0.0012	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:29	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:51	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.: AZG0797
Client ID: FB-3
Date/Time Sampled: 7/27/2016 3:20:00PM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZG0797-09
Date/Time Received: 7/28/2016 8:40:00AM

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	07/29/16 14:05	07/29/16 14:05	6070663	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 16:39	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 16:39	6070672	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 16:39	6070672	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Calcium	0.0193	0.500	0.0126	mg/L	EPA 6020B	J	1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	07/29/16 08:40	07/29/16 16:35	6070653	KLH
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/01/16 10:05	08/01/16 16:54	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.: AZG0797

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	
Batch 6070663 - SM 2540 C											
Blank (6070663-BLK1)						Prepared & Analyzed: 07/29/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6070663-BS1)						Prepared & Analyzed: 07/29/16					
Total Dissolved Solids	393	25	10	mg/L	400.00		98	84-108			
Duplicate (6070663-DUP1)		**Source: AZG0805-05**				Prepared & Analyzed: 07/29/16					
Total Dissolved Solids	114	25	10	mg/L		107			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

August 04, 2016

Report No.: AZG0797

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070672 - EPA 300.0											
Blank (6070672-BLK1)						Prepared & Analyzed: 07/29/16					
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 (6070672-BS1)						Prepared & Analyzed: 07/29/16					
Chloride	9.98	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	9.89	1.0	0.05	mg/L	10.010		99	90-110			
Matrix Spike (6070672-MS1)			**Source: AZG0797-03**			Prepared & Analyzed: 07/29/16					
Chloride	11.3	0.25	0.01	mg/L	10.010	1.92	94	90-110			
Fluoride	10.2	0.30	0.02	mg/L	10.010	ND	102	90-110			
Sulfate	9.58	1.0	0.05	mg/L	10.010	0.08	95	90-110			
Matrix Spike (6070672-MS2)			**Source: AZG0805-06**			Prepared & Analyzed: 07/29/16					
Chloride	11.6	0.25	0.01	mg/L	10.010	2.10	95	90-110			
Fluoride	10.5	0.30	0.02	mg/L	10.010	ND	105	90-110			
Sulfate	13.6	1.0	0.05	mg/L	10.010	4.19	94	90-110			
Matrix Spike Dup (6070672-MSD1)			**Source: AZG0797-03**			Prepared & Analyzed: 07/29/16					
Chloride	11.7	0.25	0.01	mg/L	10.010	1.92	97	90-110	3	15	
Fluoride	10.5	0.30	0.02	mg/L	10.010	ND	105	90-110	3	15	
Sulfate	9.87	1.0	0.05	mg/L	10.010	0.08	98	90-110	3	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 04, 2016

Report No.: AZG0797

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.: AZG0797

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.: AZG0797

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.: AZG0797

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			
Batch 6080030 - EPA 7470A											
Blank (6080030-BLK1)						Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	ND	0.00050	0.00013	mg/L							
LCS (6080030-BS1)						Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00241	0.00050	0.00013	mg/L	2.5000E-3		97	80-120			
Matrix Spike (6080030-MS1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00231	0.00050	0.00013	mg/L	2.5000E-3	ND	92	75-125			
Matrix Spike Dup (6080030-MSD1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00229	0.00050	0.00013	mg/L	2.5000E-3	ND	92	75-125	1	20	
Post Spike (6080030-PS1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	1.47			ug/L	1.6667	0.00167	88	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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
110 Technology Pkwy,
Peachtree Corners, GA 30092

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY — Work Order No. AZG-0797 — Reviewed By:

[11] Page 1 of 1

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] 7/28/16
Sample Received Date:[9]
Sampled By:[10] John Corbin

[X] [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.

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	[17] Sample Type	[18] Matrix	[19] No. of Containers	PRESERVATIVE[20] HNO3 N	Ice I	HNO3 N	ANALYSIS REQUESTED[21] Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	SW-846 9315 & 9320	LAB USE ONLY[28] Comments
	YGWA-6S	7/27/16	0859			GW	3	x	x	x				1
	YGWA-6S 2nd Rad Bottle	7/27/16	0859			GW	1 [W]			x				1
	YGWA-17S	7/27/16	1130			GW	3	x	x	x				2
	YGWA-20S	7/27/16	1425			GW	3	x	x	x				3
	EQB-3	7/27/16	1604			DW	3	x	x	x				4
	DUP-3	7/27/16	—			GW	3	x	x	x				5

Sample Type Key: 22
G-Grab O-Other C-Composite

Matrix Key: 23
O-Oil 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 SS-Sodium Bisulfate P-Prosponic Acid ST-Sodium Thiosulfate I-Ice U-Unpreserved

Relinquished by:[26]		Date/Time 7/28/16 0663
Received by:[27]		Date/Time 7/28/16 0663
Relinquished by:		Date/Time 7/28/16
Received by:		Date/Time

LAB USE ONLY: Sample Receipt Information[28]
Charles Hanks — 7/28/16 0840 4.5°C Ice Present
Seal Intact

Pace Analytical
110 Technology Pkwy,
Peachtree Corners, GA 30092

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY — Work Order No.: A2G0797 — Reviewed By:

[11] Page 1 of 1

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] 7/28/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite

Matrix Key: 23 — O-Oil, 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, SS-Sodium Bisulfate, P-Phosphoric Acid, ST-Sodium Thiosulfate, Hce, U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	[17] Sample Type	[18] Matrix	[19] No. of Containers	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	SW-846 9315 & 9320				LAB USE ONLY [25] Comments
	YGWA-6I	7/27/16	1003		G	GW	3	X	X	X				6
	YGWA-18S	7/27/16	1215		G	GW	3	X	X	X				7
	YGWA-18I	7/27/16	1406		G	GW	3	X	X	X				8
	FB-3	7/27/16	1520		G	DW	3	X	X	X				9

Relinquished by:[26]	Date/Time 7/28/16 0653	LAB USE ONLY: Sample Receipt Information [28] Charles Fuller 7/28/16 0840 T2°c Ice Present Seal Intact
Received by:[27]	Date/Time 7/28/16 0653	
Relinquished by:	Date/Time 7/28/16	
Received by:	Date/Time	

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 10:21:32AM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 07/28/16 08:40

Work Order: AZG0797
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 9 **#Containers:** 28

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 26, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30191565

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on July 29, 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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191565

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191565

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191565001	**YGWA-6S**	Water	07/27/16 08:59	07/29/16 10:20
30191565002	**YGWA-17S**	Water	07/27/16 11:30	07/29/16 10:20
30191565003	**YGWA-20S**	Water	07/27/16 14:25	07/29/16 10:20
30191565004	**EQB-3**	Water	07/27/16 16:04	07/29/16 10:20
30191565005	**DUP-3**	Water	07/27/16 00:01	07/29/16 10:20

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30191565

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191565001	**YGWA-6S**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191565002	**YGWA-17S**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191565003	**YGWA-20S**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191565004	**EQB-3**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191565005	**DUP-3**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191565

Sample: YGWA-6S **Lab ID: 30191565001** Collected: 07/27/16 08:59 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.114 ± 0.140 (0.293) C:94% T:NA**	pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	**0.445 ± 0.371 (0.734) C:76% T:74%**	pCi/L	08/23/16 12:37	15262-20-1	
Total Radium	Total Radium Calculation	**0.559 ± 0.511 (1.03)**	pCi/L	08/26/16 09:42	7440-14-4	

Sample: YGWA-17S **Lab ID: 30191565002** Collected: 07/27/16 11:30 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0342 ± 0.0921 (0.221) C:93% T:NA**	pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	**0.00120 ± 0.305 (0.719) C:77% T:75%**	pCi/L	08/23/16 12:37	15262-20-1	
Total Radium	Total Radium Calculation	**0.0354 ± 0.397 (0.940)**	pCi/L	08/26/16 09:42	7440-14-4	

Sample: YGWA-20S **Lab ID: 30191565003** Collected: 07/27/16 14:25 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0697 ± 0.118 (0.263) C:97% T:NA**	pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	**0.471 ± 0.379 (0.750) C:78% T:78%**	pCi/L	08/23/16 12:37	15262-20-1	
Total Radium	Total Radium Calculation	**0.541 ± 0.497 (1.01)**	pCi/L	08/26/16 09:42	7440-14-4	

Sample: EQB-3 **Lab ID: 30191565004** Collected: 07/27/16 16:04 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.134 ± 0.154 (0.317) C:87% T:NA**	pCi/L	08/18/16 10:38	13982-63-3	
Radium-228	EPA 9320	**-0.0395 ± 0.305 (0.729) C:72% T:79%**	pCi/L	08/23/16 12:38	15262-20-1	
Total Radium	Total Radium Calculation	**0.0945 ± 0.459 (1.05)**	pCi/L	08/26/16 09:42	7440-14-4	

Sample: DUP-3 **Lab ID: 30191565005** Collected: 07/27/16 00:01 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0492 ± 0.135 (0.317) C:95% T:NA**	pCi/L	08/18/16 14:41	13982-63-3	
Radium-228	EPA 9320	**0.245 ± 0.312 (0.658) C:78% T:73%**	pCi/L	08/23/16 12:38	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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191565

Sample: DUP-3 **Lab ID: 30191565005** Collected: 07/27/16 00:01 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**0.294 ± 0.447 (0.975)**	pCi/L	08/26/16 09:42	7440-14-4	

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191565

QC Batch: 229520 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30191565001, 30191565002, 30191565003, 30191565004, 30191565005

METHOD BLANK: 1124726 Matrix: Water
Associated Lab Samples: 30191565001, 30191565002, 30191565003, 30191565004, 30191565005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.352 ± 0.388 (0.807) C:76% T:72%	pCi/L	08/23/16 12:36	

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, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191565

QC Batch: 229661 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30191565005

METHOD BLANK: 1125794 Matrix: Water
Associated Lab Samples: 30191565005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.132 ± 0.110 (0.189) C:97% T:NA	pCi/L	08/18/16 14:41	

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.

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191565

QC Batch:	229660	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium

Associated Lab Samples: 30191565001, 30191565002, 30191565003, 30191565004

Results presented on 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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191565

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.

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

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
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] 7/28/16
Sample Received Date:[9]
Sampled By:[10] John Corbin

[X] [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]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite

Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	SW-846 9315 & 9320					LAB USE ONLY [25] Comments
	YGWA-6S	7/27/16	0859			GW	3	X	X	X					001
	YGWA-6S 2nd Rad Bottle	7/27/16	0859			GW	[illegible]			X					
	YGWA-17S	7/27/16	1130			GW	3	X	X	X					002
	YGWA-20S	7/27/16	1425			GW	3	X	X	X					003
	EQB-3	7/27/16	1604			DW	3	X	X	X					004
	DUP-3	7/27/16	—			GW	3	X	X	X					005

WO#:30191565
30191565

LAB

Relinquished by:[26] [signature] Date/Time 7/28/16 0653
Received by:[27] [signature] Date/Time 7/28/16 0653
Relinquished by: [signature] Date/Time 7/28/16
Received by: Ashley Rice / Pace Date/Time 7-29-16/1020

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: GA Power Project # 30191565

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

Tracking #: 6812 5098 0002

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: DNR

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. No Signature
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: DNR 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: DNR Date: 7-29-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/15/2016
Worklist:	30875
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	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	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30191359001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30191359001
Duplicate RPD:	9.84%	30191359001dup
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

8/26/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
Date:	8/16/2016
Worklist:	30871
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1124726
MB concentration:	0.352
M/B Counting Uncertainty:	0.383
MB MDC:	0.807
MB Numerical Performance Indicator:	1.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS30871	LCSD30871
Count Date:	8/23/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.862	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.800	
Target Conc. (pCi/L, g, F):	6.465	
Uncertainty (Calculated):	0.466	
Result (pCi/L, g, F):	8.191	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.916	
Numerical Performance Indicator:	3.29	
Percent Recovery:	126.68%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30191710003	Enter Duplicate
Duplicate Sample I.D.	30191710003DUP	sample IDs if
Sample Result (pCi/L, g, F):	1.673	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.490	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.497	the space below.
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:	3.637	30191710003
Duplicate RPD:	108.33%	30191710003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
Date:	8/16/2016
Worklist:	30871
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1124726
MB concentration:	0.352
M/B Counting Uncertainty:	0.383
MB MDC:	0.807
MB Numerical Performance Indicator:	1.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS30871	LCSD30871
Count Date:	8/23/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.862	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.800	
Target Conc. (pCi/L, g, F):	6.465	
Uncertainty (Calculated):	0.466	
Result (pCi/L, g, F):	8.191	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.916	
Numerical Performance Indicator:	3.29	
Percent Recovery:	126.68%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30191710003	Enter Duplicate
Duplicate Sample I.D.	30191710003DUP	sample IDs if
Sample Result (pCi/L, g, F):	1.673	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.490	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.497	the space below.
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:	3.637	30191710003
Duplicate RPD:	108.33%	30191710003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

Aimee 8/25/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	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	
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	Enter Duplicate
Duplicate Sample I.D.	30191359001dup	sample IDs if
Sample Result (pCi/L, g, F):	0.164	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.153	LCS/LCSD in the
Sample Duplicate Result (pCi/L, g, F):	0.148	space below.
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	30191359001
Duplicate RPD:	9.84%	30191359001dup
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:	
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:

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: Plant Yates
Pace Project No.: 30191566

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on July 29, 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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191566

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191566

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191566001	**YGWA-6I**	Water	07/27/16 10:03	07/29/16 10:20
30191566002	**YGWA-18S**	Water	07/27/16 12:15	07/29/16 10:20
30191566003	**YGWA-18I**	Water	07/27/16 14:06	07/29/16 10:20
30191566004	**FB-3**	Water	07/27/16 15:20	07/29/16 10:20

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30191566

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191566001	**YGWA-6I**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191566002	**YGWA-18S**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191566003	**YGWA-18I**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30191566004	**FB-3**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191566

Sample: YGWA-6I **Lab ID: 30191566001** Collected: 07/27/16 10:03 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.748 ± 0.261 (0.283) C:89% T:NA**	pCi/L	08/18/16 14:41	13982-63-3	
Radium-228	EPA 9320	**0.863 ± 0.450 (0.769) C:76% T:70%**	pCi/L	08/23/16 12:38	15262-20-1	
Total Radium	Total Radium Calculation	**1.61 ± 0.711 (1.05)**	pCi/L	08/26/16 09:42	7440-14-4	

Sample: YGWA-18S **Lab ID: 30191566002** Collected: 07/27/16 12:15 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0966 ± 0.113 (0.227) C:90% T:NA**	pCi/L	08/18/16 14:41	13982-63-3	
Radium-228	EPA 9320	**0.0996 ± 0.332 (0.751) C:75% T:81%**	pCi/L	08/23/16 12:38	15262-20-1	
Total Radium	Total Radium Calculation	**0.196 ± 0.445 (0.978)**	pCi/L	08/26/16 09:42	7440-14-4	

Sample: YGWA-18I **Lab ID: 30191566003** Collected: 07/27/16 14:06 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0946 ± 0.140 (0.305) C:91% T:NA**	pCi/L	08/18/16 14:42	13982-63-3	
Radium-228	EPA 9320	**0.111 ± 0.421 (0.954) C:77% T:70%**	pCi/L	08/30/16 13:14	15262-20-1	
Total Radium	Total Radium Calculation	**0.206 ± 0.561 (1.26)**	pCi/L	08/30/16 17:49	7440-14-4	

Sample: FB-3 **Lab ID: 30191566004** Collected: 07/27/16 15:20 Received: 07/29/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**-0.00932 ± 0.0858 (0.238) C:96% T:NA**	pCi/L	08/18/16 14:42	13982-63-3	
Radium-228	EPA 9320	**0.322 ± 0.393 (0.830) C:75% T:74%**	pCi/L	08/30/16 12:42	15262-20-1	
Total Radium	Total Radium Calculation	**1.12 ± 0.546 (0.917)**	pCi/L	08/29/16 16:00	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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191566

QC Batch: 229520 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30191566001, 30191566002, 30191566003, 30191566004

METHOD BLANK: 1124726 Matrix: Water
Associated Lab Samples: 30191566001, 30191566002, 30191566003, 30191566004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.352 ± 0.388 (0.807) C:76% T:72%	pCi/L	08/23/16 12:36	

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.

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191566

QC Batch: 229661 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30191566001, 30191566002, 30191566003, 30191566004

METHOD BLANK: 1125794 Matrix: Water
Associated Lab Samples: 30191566001, 30191566002, 30191566003, 30191566004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.132 ± 0.110 (0.189) C:97% T:NA	pCi/L	08/18/16 14:41	

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, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191566

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.

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

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
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] 7/28/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED [21]

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	[17] Sample Type	[18] Matrix	[19] No. of Containers	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	SW-846 9315 & 9320	LAB USE ONLY [25] Comments
	YGWA-6I	7/27/16	1003		G	GW	3	X	X	X	001
	YGWA-18S	7/27/16	1215		G	GW	3	X	X	X	002
	YGWA-18I	7/27/16	1406		G	GW	3	X	X	X	003
	FB-3	7/27/16	1520		G	DW	3	X	X	X	004

Sample Type Key: 22 — G-Grab O-Other C-Composite

Matrix Key: 23 — O-Oil 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 I-Ice U-Unpreserved

WO#:30191566

Relinquished by:[26]		Date/Time 7/28/16 0653
Received by:[27]		Date/Time 7/28/16 0653
Relinquished by:		Date/Time 7/28/16
Received by	Ashley Pace/Pace	Date/Time 7-29-16/1020

LAB USE ONLY: Sample Receipt Information [28]

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: GA Power Project # 30191566

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

Tracking #: 6812 5098 0002

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: GMR

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. No Signature
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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: -Pace Containers Used:	X /	/ X		10.
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked. All containers needing preservation are found to be in compliance with EPA recommendation.	X / X			13. pH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: GMR 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: GMR Date: 7-29-16

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

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
Date:	8/16/2016
Worklist:	30871
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1124726
MB concentration:	0.352
M/B Counting Uncertainty:	0.382
MB MDC:	0.805
MB Numerical Performance Indicator:	1.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS30871	LCSD30871
Count Date:	8/23/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.862	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.800	
Target Conc. (pCi/L, g, F):	6.465	
Uncertainty (Calculated):	0.466	
Result (pCi/L, g, F):	8.185	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.915	
Numerical Performance Indicator:	3.28	
Percent Recovery:	126.59%	
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.:	30191710003	
Duplicate Sample I.D.	30191710003DUP	
Sample Result (pCi/L, g, F):	0.826	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.482	
Sample Duplicate Result (pCi/L, g, F):	0.497	
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:	1.028 *	30191710003
Duplicate RPD:	49.75%	30191710003DUP
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:	

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

Comments: * Numerical Indicator is acceptable.

8/30/16

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/15/2016
Worklist:	30876
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1125794
MB concentration:	0.132
M/B Counting Uncertainty:	0.109
MB MDC:	0.189
MB Numerical Performance Indicator:	2.38
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS30876	LCSD30876
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):	0.501	
Target Conc. (pCi/L, g, F):	8.918	
Uncertainty (Calculated):	0.420	
Result (pCi/L, g, F):	7.122	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.662	
Numerical Performance Indicator:	-4.49	
Percent Recovery:	79.86%	
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):	
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:	

Duplicate Sample Assessment

Sample I.D.:	30191710003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30191710003DUP	
Sample Result (pCi/L, g, F):	0.116	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.110	
Sample Duplicate Result (pCi/L, g, F):	0.175	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.127	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.687 *	30191710003
Duplicate RPD:	40.60%	30191710003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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 Indicator is acceptable

***Batch must be re-prepped due to unacceptable precision.

8/30/16

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.: 30191694

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on August 01, 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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Yates AP CCR GW
Pace Project No.: 30191694

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Yates AP CCR GW
Pace Project No.: 30191694

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191694001	**YGWC-32I**	Water	07/29/16 09:03	08/01/16 09:35
30191694002	**FB-4**	Water	07/29/16 09:45	08/01/16 09:35

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Yates AP CCR GW
Pace Project No.: 30191694

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191694001	**YGWC-32I**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30191694002	**FB-4**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30191694

Sample: YGWC-32I **Lab ID: 30191694001** Collected: 07/29/16 09:03 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.142 ± 0.139 (0.275) C:101% T:NA**	pCi/L	08/18/16 14:45	13982-63-3	
Radium-228	EPA 9320	**0.287 ± 0.400 (0.858) C:77% T:70%**	pCi/L	08/30/16 12:43	15262-20-1	
Total Radium	Total Radium Calculation	**0.429 ± 0.539 (1.13)**	pCi/L	08/30/16 15:54	7440-14-4	

Sample: FB-4 **Lab ID: 30191694002** Collected: 07/29/16 09:45 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**-0.0359 ± 0.0852 (0.258) C:96% T:NA**	pCi/L	08/18/16 14:45	13982-63-3	
Radium-228	EPA 9320	**0.823 ± 0.496 (0.930) C:79% T:71%**	pCi/L	08/30/16 12:44	15262-20-1	
Total Radium	Total Radium Calculation	**0.787 ± 0.581 (1.19)**	pCi/L	08/30/16 15:54	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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30191694

QC Batch: 229520 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30191694001, 30191694002

METHOD BLANK: 1124726 Matrix: Water
Associated Lab Samples: 30191694001, 30191694002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.352 ± 0.388 (0.807) C:76% T:72%	pCi/L	08/23/16 12:36	

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, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30191694

QC Batch: 229661 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30191694001, 30191694002

METHOD BLANK: 1125794 Matrix: Water
Associated Lab Samples: 30191694001, 30191694002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.132 ± 0.110 (0.189) C:97% T:NA	pCi/L	08/18/16 14:41	

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, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Yates AP CCR GW
Pace Project No.: 30191694

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.

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

WO#:30191694 0605

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS
(770) 734-4200 : FAX (770) 734-4201

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd. SE B10185
Atlanta, GA 30308

REPORT TO: John Abraham

CC: MRPADILL@Southernco.com
CHMCCORK@Southernco.com
LLMILLET@Southernco.com

REQUESTED COMPLETION DATE: Standard

PO #:

PROJECT NAME/STATE: Yates AP CCR GW

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals app. III + III EPA 6020 + EPA 7470	Cl, F, SO4 EPA 300 TDS SM 2540C	Radium 226 + 228; SW-846 9315 + 9320	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
7/29/16	0903	GW		X	YGWC-32I	3	1	1	1	001
7/29/16	0945	DW		X	FB-4	3	1	1	1	002

ANALYSIS REQUESTED

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE:

DATE/TIME: 07/29/16 @ 1125

RELINQUISHED BY:

DATE/TIME: 07/29/16 @ 1125

RECEIVED BY:

DATE/TIME: 07/29/16 @ 1125

RELINQUISHED BY:

DATE/TIME: 8-1-16 0935

FOR LAB USE ONLY
LAB #:
Entered into LIMS:

RECEIVED BY LAB:

DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #:

pH checked: Yes No NA

Ice: Yes No NA

Temperature: Min: Max:

Custody Seal: Intact Broken Not Present

# of Coolers

Cooler ID:

30191694

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: GA Power Project #

Courier: [X] Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 681250980610

Custody Seal on Cooler/Box Present: ☐ yes [X] 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 8-1-16

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed NJV 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: NJV Date: 8-1-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/15/2016
Worklist:	30876
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1125794
MB concentration:	0.132
M/B Counting Uncertainty:	0.109
MB MDC:	0.189
MB Numerical Performance Indicator:	2.38
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS30876	LCSD30876
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):	0.501	
Target Conc. (pCi/L, g, F):	8.918	
Uncertainty (Calculated):	0.420	
Result (pCi/L, g, F):	7.122	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.662	
Numerical Performance Indicator:	-4.49	
Percent Recovery:	79.86%	
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):	
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:	

Duplicate Sample Assessment

Sample I.D.:	30191710003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30191710003DUP	
Sample Result (pCi/L, g, F):	0.116	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.110	
Sample Duplicate Result (pCi/L, g, F):	0.175	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.127	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.687 *	30191710003
Duplicate RPD:	40.60%	30191710003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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 Indicator is acceptable

***Batch must be re-prepped due to unacceptable precision.

8/30/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
Date:	8/16/2016
Worklist:	30871
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1124726
MB concentration:	0.352
M/B Counting Uncertainty:	0.382
MB MDC:	0.805
MB Numerical Performance Indicator:	1.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS30871	LCSD30871
Count Date:	8/23/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.862	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.800	
Target Conc. (pCi/L, g, F):	6.465	
Uncertainty (Calculated):	0.466	
Result (pCi/L, g, F):	8.185	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.915	
Numerical Performance Indicator:	3.28	
Percent Recovery:	126.59%	
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):	
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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30191710003	
Duplicate Sample I.D.	30191710003DUP	
Sample Result (pCi/L, g, F):	0.826	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.482	
Sample Duplicate Result (pCi/L, g, F):	0.497	
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:	1.028 *	30191710003
Duplicate RPD:	49.75%	30191710003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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: * Numerical Indicator is acceptable.

8/30/16

***Batch must be re-prepped due to unacceptable precision.

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.: 30191693

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on August 01, 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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Yates AP CCR GW
Pace Project No.: 30191693

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Yates AP CCR GW
Pace Project No.: 30191693

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191693001	**YGWC-32S**	Water	07/29/16 09:58	08/01/16 09:35

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Yates AP CCR GW
Pace Project No.: 30191693

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191693001	**YGWC-32S**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30191693

Sample: YGWC-32S **Lab ID: 30191693001** Collected: 07/29/16 09:58 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0805 ± 0.107 (0.228) C:108% T:NA**	pCi/L	08/18/16 14:44	13982-63-3	
Radium-228	EPA 9320	**1.74 ± 0.498 (0.573) C:76% T:83%**	pCi/L	08/19/16 01:19	15262-20-1	
Total Radium	Total Radium Calculation	**1.82 ± 0.605 (0.801)**	pCi/L	08/29/16 16:00	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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30191693

QC Batch: 229519 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30191693001

METHOD BLANK: 1124725 Matrix: Water
Associated Lab Samples: 30191693001

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Yates AP CCR GW
Pace Project No.: 30191693

QC Batch: 229661 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30191693001

METHOD BLANK: 1125794 Matrix: Water
Associated Lab Samples: 30191693001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.132 ± 0.110 (0.189) C:97% T:NA	pCi/L	08/18/16 14:41	

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, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Yates AP CCR GW
Pace Project No.: 30191693

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.

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

WO#:30191693

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, G
(770) 734-4200 : FAX (770) 734-4201

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd. SE B10185
Atlanta, GA 30308

REPORT TO: John Abraham

CC: MRPADILL@SouthernCo.com
CHMCCORK@SouthernCo.com

REQUESTED COMPLETION DATE: Standard

PO #: LLMILLET@SouthernCo.com

PROJECT NAME/STATE: Yates AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals app. III + III EPA 6020 + EPA 7470	Cl, F, SO4 EPA 300 TDS SM 2540C	Radium 226 + 228; SW-846 9315 + 9320							LAB ID NUMBER
CONTAINER TYPE:								P	P	P							
PRESERVATION:								3	7	3							
7/29/16	0958	GW		X	YG-WC-32S	3		1	1	1							001

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: [signature]
DATE/TIME: 7/29/16 @ 1125

RELINQUISHED BY: [signature]
DATE/TIME: 7/29/16 @ 1125

RECEIVED BY: [signature]
DATE/TIME: 7/29/16 @ 1125

RELINQUISHED BY: [signature]
DATE/TIME: 8-1-16 0935

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

Sample Condition Upon Receipt Pittsburgh

30191693

Pace Analytical

Client Name: GA Power Project #

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [ ] Pace Other

Tracking #: 681250980610

Custody Seal on Cooler/Box Present: [ ] yes [X] 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 8-1-16

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed NJV 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: NJV Date: 8-1-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/15/2016
Worklist:	30876
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1125794
MB concentration:	0.132
M/B Counting Uncertainty:	0.109
MB MDC:	0.189
MB Numerical Performance Indicator:	2.38
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS30876	LCSD30876
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):	0.501	
Target Conc. (pCi/L, g, F):	8.918	
Uncertainty (Calculated):	0.420	
Result (pCi/L, g, F):	7.122	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.662	
Numerical Performance Indicator:	-4.49	
Percent Recovery:	79.86%	
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):	
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:	

Duplicate Sample Assessment

Sample I.D.:	30191710003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30191710003DUP	
Sample Result (pCi/L, g, F):	0.116	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.110	
Sample Duplicate Result (pCi/L, g, F):	0.175	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.127	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.687 *	30191710003
Duplicate RPD:	40.60%	30191710003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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 Indicator is acceptable

***Batch must be re-prepped due to unacceptable precision.

8/30/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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
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	LCSD (Y or N)? LCS30870	N LCSD30870
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***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30191359001
30191359001DUP

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:	

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.

* Numerical Indicator is acceptable.

** Does not affect results less than RL

8/30/16

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 31, 2016

Eben D. Buchanan, Jr.
Pace Analytical Atlanta
110 Technology Parkway
Peachtree Corners, GA 30092

RE: Project: Plant Yates
Pace Project No.: 30191710

Dear Eben Buchanan, Jr.:
Enclosed are the analytical results for sample(s) received by the laboratory on August 01, 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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191710

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191710

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191710001	**YGWC-19S**	Water	07/28/16 09:00	08/01/16 09:35
30191710002	**YGWC-22S**	Water	07/28/16 11:28	08/01/16 09:35
30191710003	**YGWC-34I**	Water	07/28/16 13:33	08/01/16 09:35
30191710004	**EQB-4**	Water	07/28/16 14:08	08/01/16 09:35

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30191710

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191710001	**YGWC-19S**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30191710002	**YGWC-22S**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30191710003	**YGWC-34I**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30191710004	**EQB-4**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191710

Sample: YGWC-19S **Lab ID: 30191710001** Collected: 07/28/16 09:00 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0362 ± 0.116 (0.279) C:90% T:NA**	pCi/L	08/18/16 14:45	13982-63-3	
Radium-228	EPA 9320	**0.880 ± 0.530 (0.989) C:80% T:64%**	pCi/L	08/30/16 12:44	15262-20-1	
Total Radium	Total Radium Calculation	**0.916 ± 0.646 (1.27)**	pCi/L	08/30/16 15:54	7440-14-4	

Sample: YGWC-22S **Lab ID: 30191710002** Collected: 07/28/16 11:28 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0680 ± 0.102 (0.219) C:99% T:NA**	pCi/L	08/18/16 14:45	13982-63-3	
Radium-228	EPA 9320	**0.923 ± 0.538 (0.991) C:77% T:64%**	pCi/L	08/30/16 12:44	15262-20-1	
Total Radium	Total Radium Calculation	**0.991 ± 0.640 (1.21)**	pCi/L	08/30/16 15:54	7440-14-4	

Sample: YGWC-34I **Lab ID: 30191710003** Collected: 07/28/16 13:33 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.116 ± 0.112 (0.213) C:102% T:NA**	pCi/L	08/18/16 14:46	13982-63-3	
Radium-228	EPA 9320	**0.826 ± 0.505 (0.955) C:79% T:73%**	pCi/L	08/30/16 12:44	15262-20-1	
Total Radium	Total Radium Calculation	**0.942 ± 0.617 (1.17)**	pCi/L	08/30/16 15:54	7440-14-4	

Sample: EQB-4 **Lab ID: 30191710004** Collected: 07/28/16 14:08 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**-0.0409 ± 0.0901 (0.266) C:93% T:NA**	pCi/L	08/18/16 14:46	13982-63-3	
Radium-228	EPA 9320	**0.432 ± 0.428 (0.881) C:72% T:77%**	pCi/L	08/23/16 12:40	15262-20-1	
Total Radium	Total Radium Calculation	**0.391 ± 0.518 (1.15)**	pCi/L	08/29/16 15:31	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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191710

QC Batch: 229520 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30191710001, 30191710002, 30191710003, 30191710004

METHOD BLANK: 1124726 Matrix: Water
Associated Lab Samples: 30191710001, 30191710002, 30191710003, 30191710004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.352 ± 0.388 (0.807) C:76% T:72%	pCi/L	08/23/16 12:36	

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, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191710

QC Batch: 229661 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30191710001, 30191710002, 30191710003, 30191710004

METHOD BLANK: 1125794 Matrix: Water
Associated Lab Samples: 30191710001, 30191710002, 30191710003, 30191710004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.132 ± 0.110 (0.189) C:97% T:NA	pCi/L	08/18/16 14:41	

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.

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191710

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.

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

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. AZG0867
Reviewed By:

11 Page 1 of 1
30191710

Sample Shipment Date:[8] 7/29/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] 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

Signature

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

PRESERVATIVE[20]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED[21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite
Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app.III& IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228: SW-846 9315 and 9320					LAB USE ONLY[25] Comments
	YGWC-19S	7/28/16	0900		G	GW	3	1	1	1					001 1
	YGWC-22S	7/28/16	1128		G	GW	3	1	1	1					002 2
	YGWC-34I	7/28/16	1333		G	GW	4	1	1	2					003 3
	EQB-4	7/28/16	1408		G	DW	3	1	1	1					004 4

WO#:30191710

30191710

Relinquished by:[26]	Wesley Bowen	Date/Time	7/29/16 0700
Received by:[27]	[signature]	Date/Time	7/29/16 0710
Relinquished by:		Date/Time	
Received by:	[signature]	Date/Time	8-1-16 0935

LAB USE ONLY: Sample Receipt Information[28]
Charles Hanks 7/29/16 @ 0845 T2°c Ice Present
Seal Intact

30191710

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: GA Power Project #

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

Tracking #: 7871

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 8-1-16

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: NJV 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: NJV Date: 8-1-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/15/2016
Worklist:	30876
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1125794
MB concentration:	0.132
M/B Counting Uncertainty:	0.109
MB MDC:	0.189
MB Numerical Performance Indicator:	2.38
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS30876	LCSD30876
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):	0.501	
Target Conc. (pCi/L, g, F):	8.918	
Uncertainty (Calculated):	0.420	
Result (pCi/L, g, F):	7.122	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.662	
Numerical Performance Indicator:	-4.49	
Percent Recovery:	79.86%	
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):	
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:	

Duplicate Sample Assessment

Sample I.D.:	30191710003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30191710003DUP	
Sample Result (pCi/L, g, F):	0.116	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.110	
Sample Duplicate Result (pCi/L, g, F):	0.175	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.127	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.687 *	30191710003
Duplicate RPD:	40.60%	30191710003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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 Indicator is acceptable

***Batch must be re-prepped due to unacceptable precision.

8/30/16

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
Date:	8/16/2016
Worklist:	30871
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1124726
MB concentration:	0.352
M/B Counting Uncertainty:	0.382
MB MDC:	0.805
MB Numerical Performance Indicator:	1.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS30871	LCSD30871
Count Date:	8/23/2016	
Spike I.D.:	16-025	
Spike Concentration (pCi/mL):	25.862	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.800	
Target Conc. (pCi/L, g, F):	6.465	
Uncertainty (Calculated):	0.466	
Result (pCi/L, g, F):	8.185	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.915	
Numerical Performance Indicator:	3.28	
Percent Recovery:	126.59%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	

Duplicate Sample Assessment		
Sample I.D.:	30191710003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30191710003DUP	
Sample Result (pCi/L, g, F):	0.826	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.482	
Sample Duplicate Result (pCi/L, g, F):	0.497	
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:	1.028 *	30191710003
Duplicate RPD:	49.75%	30191710003DUP
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:	

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

Comments: * Numerical Indicator is acceptable.

8/30/16

***Batch must be re-prepped due to unacceptable precision.

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 29, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30191713

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on August 01, 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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30191713

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30191713

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30191713001	**YGWA-21I**	Water	07/28/16 10:28	08/01/16 09:35
30191713002	**YGWA-23S**	Water	07/28/16 13:29	08/01/16 09:35

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30191713

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30191713001	**YGWA-21I**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1
30191713002	**YGWA-23S**	EPA 9315	WRR	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191713

Sample: YGWA-21I **Lab ID: 30191713001** Collected: 07/28/16 10:28 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.237 ± 0.155 (0.214) C:80% T:NA**	pCi/L	08/22/16 07:56	13982-63-3	
Radium-228	EPA 9320	**0.578 ± 0.366 (0.677) C:77% T:78%**	pCi/L	08/23/16 22:20	15262-20-1	
Total Radium	Total Radium Calculation	**0.815 ± 0.521 (0.891)**	pCi/L	08/29/16 15:31	7440-14-4	

Sample: YGWA-23S **Lab ID: 30191713002** Collected: 07/28/16 13:29 Received: 08/01/16 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0307 ± 0.121 (0.314) C:63% T:NA**	pCi/L	08/22/16 07:56	13982-63-3	
Radium-228	EPA 9320	**0.355 ± 0.319 (0.641) C:79% T:79%**	pCi/L	08/23/16 22:20	15262-20-1	
Total Radium	Total Radium Calculation	**0.386 ± 0.440 (0.955)**	pCi/L	08/29/16 15:31	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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191713

QC Batch: 229716 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30191713001, 30191713002

METHOD BLANK: 1125954 Matrix: Water
Associated Lab Samples: 30191713001, 30191713002

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30191713

QC Batch: 229662 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30191713001, 30191713002

METHOD BLANK: 1125795 Matrix: Water
Associated Lab Samples: 30191713001, 30191713002

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30191713

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.

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

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. AZG-0867
Reviewed By:

[11] Page 1 of 1

30191713

Sample Shipment Date:[8] 7/29/16
Sample Received Date:[9]
Sampled By:[10] John Corbin

[X] [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

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

PRESERVATIVE [20]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab O-Other C-Composite

Matrix Key: 23 — O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Time	Sample Description [16]	[17] Sample Type	[18] Matrix	[19] No. of Containers	Metals app.III& IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228: SW-846 9315 and 9320					LAB USE ONLY [25] Comments
	YGWA-21I	7/28/16	1025		G	GW	3	1	1	1				001	
	YGWA-23S	7/28/16	1329		G	GW	3	1	1	1				002	Labeled YGWC-23S CDH 7/29/16

WO#:30191713
30191713

Relinquished by:[26]	Date/Time 7/29/16 0700	LAB USE ONLY: Sample Receipt Information [28] Charles Hawks 7/29/16 @ 0845 T2°C Ice Present Seal Intact
Received by:[27]	Date/Time 7/29/16 0710	
Relinquished by:	Date/Time	
Received by:	Date/Time 8-1-16 0935	

Sample Condition Upon Receipt Pittsburgh

30191713

Pace Analytical

Client Name: GA Power Project #

Courier: [X] Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 7091

Custody Seal on Cooler/Box Present: ☐ yes [X] 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: NTV 8-1-16

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			Initial when completed NTV 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: NTV Date: 8-1-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/19/2016
Worklist:	30877
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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:	1.05
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS30877	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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30191936005
Duplicate RPD:	61.69%	30191936005Dup
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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: *Duplicate Numerical Indicator is acceptable.

8/29/16

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
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:	5.52
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Fail*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS30904	LCSD30904
Count Date:	8/23/2016	8/23/2016
Spike I.D.:	16-025	16-025
Spike Concentration (pCi/mL):	25.859	25.859
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.802	0.813
Target Conc. (pCi/L, g, F):	6.446	6.363
Uncertainty (Calculated):	0.464	0.458
Result (pCi/L, g, F):	6.102	6.190
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.743	0.701
Numerical Performance Indicator:	-0.77	-0.41
Percent Recovery:	94.66%	97.27%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	LCS30904	
Duplicate Sample I.D.	LCSD30904	
Sample Result (pCi/L, g, F):	6.102	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.743	
Sample Duplicate Result (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	

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:

*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.

*Reported Sample results < 1.0.

8/29/16

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:

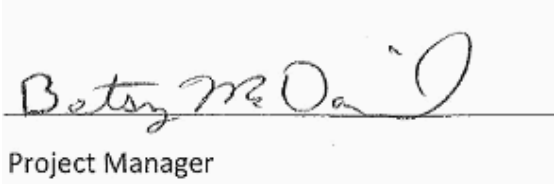
Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: **Mr. Joju Abraham**

Report Number: **AZG0887**
August 05, 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 05, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-32I	AZG0887-01	Ground Water	07/29/16 09:03	07/29/16 13:15
FB-4	AZG0887-02	DI Water	07/29/16 09:45	07/29/16 13:15
YGWC-32S	AZG0887-03	Ground Water	07/29/16 09:58	07/29/16 13:15

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 05, 2016

Report No.: AZG0887
Client ID: YGWC-32I
Date/Time Sampled: 7/29/2016 9:03:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0887-01
Date/Time Received: 7/29/2016 1:15:00PM

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	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	12	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 06:52	6080044	RLC
Fluoride	0.17	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 06:52	6080044	RLC
Sulfate	500	20	1.0	mg/L	EPA 300.0		20	08/02/16 09:48	08/03/16 19:36	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Barium	0.0250	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Beryllium	0.00009	0.0030	0.00009	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Boron	3.25	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Cadmium	0.0007	0.0010	0.0001	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Calcium	82.3	5.00	0.126	mg/L	EPA 6020B		10	08/02/16 08:50	08/03/16 14:15	6070697	CSW
Chromium	0.0036	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Cobalt	0.0016	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Selenium	0.0020	0.0100	0.0009	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Lithium	0.0030	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:38	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:58	6080030	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 05, 2016

Report No.: AZG0887
Client ID: FB-4
Date/Time Sampled: 7/29/2016 9:45:00AM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZG0887-02
Date/Time Received: 7/29/2016 1:15:00PM

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	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 07:13	6080044	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 07:13	6080044	RLC
Sulfate	0.22	1.0	0.05	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 07:13	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Boron	0.0138	0.100	0.0044	mg/L	EPA 6020B	B-01, J	1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Calcium	ND	0.500	0.0126	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:44	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 16:00	6080030	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

August 05, 2016

Attention: Mr. Joju Abraham

Report No.: AZG0887
Client ID: YGWC-32S
Date/Time Sampled: 7/29/2016 9:58:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0887-03
Date/Time Received: 7/29/2016 1:15:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	518	25	10	mg/L	SM 2540 C		1	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	15	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 07:34	6080044	RLC
Fluoride	0.32	0.30	0.02	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 07:34	6080044	RLC
Sulfate	360	20	1.0	mg/L	EPA 300.0		20	08/02/16 09:48	08/03/16 19:57	6080044	RLC
Metals, Total											
Antimony	0.0003	0.0030	0.0002	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Barium	0.0204	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Beryllium	0.0025	0.0030	0.00009	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Boron	3.34	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Cadmium	0.0006	0.0010	0.0001	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Calcium	90.1	5.00	0.126	mg/L	EPA 6020B		10	08/02/16 08:50	08/03/16 14:21	6070697	CSW
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Cobalt	0.0036	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Lead	0.0001	0.0050	0.00008	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Selenium	0.0403	0.0100	0.0009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Thallium	0.0001	0.0010	0.00006	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 15:12	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 16:08	6080030	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 05, 2016

Report No.: AZG0887

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080007 - SM 2540 C											
Blank (6080007-BLK1)						Prepared & Analyzed: 08/01/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6080007-BS1)						Prepared & Analyzed: 08/01/16					
Total Dissolved Solids	391	25	10	mg/L	400.00		98	84-108			
Duplicate (6080007-DUP1)		**Source: AZG0867-03**				Prepared & Analyzed: 08/01/16					
Total Dissolved Solids	549	25	10	mg/L		561			2	10	
Duplicate (6080007-DUP2)		**Source: AZG0904-04**				Prepared & Analyzed: 08/01/16					
Total Dissolved Solids	16	25	10	mg/L		17			6	10	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

August 05, 2016

Report No.: AZG0887

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 05, 2016

Report No.: AZG0887

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070697 - EPA 3005A											
Blank (6070697-BLK1)						Prepared & Analyzed: 08/02/16					
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	0.0098	0.100	0.0044	mg/L							J
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	0.0024	0.0100	0.0013	mg/L							J
Lithium	ND	0.0500	0.0012	mg/L							
LCS (6070697-BS1)						Prepared & Analyzed: 08/02/16					
Antimony	0.107	0.0030	0.0002	mg/L	0.10000		107	80-120			
Arsenic	0.101	0.0050	0.0007	mg/L	0.10000		101	80-120			
Barium	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Beryllium	0.0991	0.0030	0.00009	mg/L	0.10000		99	80-120			
Boron	0.949	0.100	0.0044	mg/L	1.0000		95	80-120			
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000		102	80-120			
Calcium	0.992	0.500	0.0126	mg/L	1.0000		99	80-120			
Chromium	0.102	0.0100	0.0004	mg/L	0.10000		102	80-120			
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000		102	80-120			
Copper	0.0992	0.0250	0.0004	mg/L	0.10000		99	80-120			
Lead	0.101	0.0050	0.00008	mg/L	0.10000		101	80-120			
Molybdenum	0.107	0.0100	0.0005	mg/L	0.10000		107	80-120			
Nickel	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Selenium	0.101	0.0100	0.0009	mg/L	0.10000		101	80-120			
Silver	0.107	0.0100	0.0002	mg/L	0.10000		107	80-120			
Thallium	0.0999	0.0010	0.00006	mg/L	0.10000		100	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	0.104	0.0500	0.0012	mg/L	0.10000		104	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 05, 2016

Report No.: AZG0887

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070697 - EPA 3005A											
Matrix Spike (6070697-MS1)		**Source: AZG0805-02**			Prepared & Analyzed: 08/02/16						
Antimony	0.105	0.0030	0.0002	mg/L	0.10000	0.0023	103	75-125			
Arsenic	0.103	0.0050	0.0007	mg/L	0.10000	ND	103	75-125			
Barium	0.111	0.0100	0.0003	mg/L	0.10000	0.0104	100	75-125			
Beryllium	0.0941	0.0030	0.00009	mg/L	0.10000	ND	94	75-125			
Boron	0.953	0.100	0.0044	mg/L	1.0000	0.0108	94	75-125			
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000	ND	102	75-125			
Calcium	22.4	2.50	0.0628	mg/L	1.0000	21.7	70	75-125			QM-02
Chromium	0.108	0.0100	0.0004	mg/L	0.10000	0.0006	107	75-125			
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125			
Copper	0.130	0.0250	0.0004	mg/L	0.10000	ND	130	75-125			QM-05
Lead	0.0987	0.0050	0.00008	mg/L	0.10000	ND	99	75-125			
Molybdenum	0.111	0.0100	0.0005	mg/L	0.10000	ND	111	75-125			
Nickel	0.112	0.0100	0.0005	mg/L	0.10000	ND	112	75-125			
Selenium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125			
Silver	0.105	0.0100	0.0002	mg/L	0.10000	ND	105	75-125			
Thallium	0.0993	0.0010	0.00006	mg/L	0.10000	0.0001	99	75-125			
Vanadium	0.105	0.0100	0.0016	mg/L	0.10000	ND	105	75-125			
Zinc	0.111	0.0100	0.0013	mg/L	0.10000	0.0029	108	75-125			
Lithium	0.0974	0.0500	0.0012	mg/L	0.10000	ND	97	75-125			
Matrix Spike Dup (6070697-MSD1)		**Source: AZG0805-02**			Prepared & Analyzed: 08/02/16						
Antimony	0.105	0.0030	0.0002	mg/L	0.10000	0.0023	103	75-125	0	20	
Arsenic	0.103	0.0050	0.0007	mg/L	0.10000	ND	103	75-125	0	20	
Barium	0.111	0.0100	0.0003	mg/L	0.10000	0.0104	100	75-125	0	20	
Beryllium	0.0941	0.0030	0.00009	mg/L	0.10000	ND	94	75-125	0	20	
Boron	0.953	0.100	0.0044	mg/L	1.0000	0.0108	94	75-125	0	20	
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000	ND	102	75-125	0	20	
Calcium	22.1	2.50	0.0628	mg/L	1.0000	21.7	38	75-125	1	20	QM-02
Chromium	0.108	0.0100	0.0004	mg/L	0.10000	0.0006	107	75-125	0	20	
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125	0	20	
Copper	0.130	0.0250	0.0004	mg/L	0.10000	ND	130	75-125	0	20	QM-05
Lead	0.0987	0.0050	0.00008	mg/L	0.10000	ND	99	75-125	0	20	
Molybdenum	0.111	0.0100	0.0005	mg/L	0.10000	ND	111	75-125	0	20	
Nickel	0.112	0.0100	0.0005	mg/L	0.10000	ND	112	75-125	0	20	
Selenium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125	0	20	
Silver	0.105	0.0100	0.0002	mg/L	0.10000	ND	105	75-125	0	20	
Thallium	0.0993	0.0010	0.00006	mg/L	0.10000	0.0001	99	75-125	0	20	
Vanadium	0.105	0.0100	0.0016	mg/L	0.10000	ND	105	75-125	0	20	
Zinc	0.111	0.0100	0.0013	mg/L	0.10000	0.0029	108	75-125	0	20	
Lithium	0.0974	0.0500	0.0012	mg/L	0.10000	ND	97	75-125	0	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 05, 2016

Report No.: AZG0887

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070697 - EPA 3005A											
Post Spike (6070697-PS1)		**Source: AZG0805-02**				Prepared & Analyzed: 08/02/16					
Antimony	92.7			ug/L	100.00	2.25	90	80-120			
Arsenic	99.4			ug/L	100.00	0.389	99	80-120			
Barium	108			ug/L	100.00	10.4	97	80-120			
Beryllium	92.3			ug/L	100.00	0.0493	92	80-120			
Boron	893			ug/L	1000.0	10.8	88	80-120			
Cadmium	100			ug/L	100.00	0.0237	100	80-120			
Calcium	22000			ug/L	1000.0	21700	29	80-120			QM-02
Chromium	103			ug/L	100.00	0.579	103	80-120			
Cobalt	95.3			ug/L	100.00	0.0524	95	80-120			
Copper	96.9			ug/L	100.00	0.395	96	80-120			
Lead	96.1			ug/L	100.00	0.0838	96	80-120			
Molybdenum	105			ug/L	100.00	0.354	104	80-120			
Nickel	95.5			ug/L	100.00	0.261	95	80-120			
Selenium	102			ug/L	100.00	-0.0069	102	80-120			
Silver	107			ug/L	100.00	0.0375	107	80-120			
Thallium	97.3			ug/L	100.00	0.131	97	80-120			
Vanadium	102			ug/L	100.00	0.335	102	80-120			
Zinc	105			ug/L	100.00	2.85	102	80-120			
Lithium	91.3			ug/L	100.00	0.788	90	80-120			
Batch 6080030 - EPA 7470A											
Blank (6080030-BLK1)						Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	ND	0.00050	0.00013	mg/L							
LCS (6080030-BS1)						Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00241	0.00050	0.00013	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

August 05, 2016

Report No.: AZG0887

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080030 - EPA 7470A											
Matrix Spike (6080030-MS1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00231	0.00050	0.00013	mg/L	2.5000E-3	ND	92	75-125			
Matrix Spike Dup (6080030-MSD1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00229	0.00050	0.00013	mg/L	2.5000E-3	ND	92	75-125	1	20	
Post Spike (6080030-PS1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	1.47			ug/L	1.6667	0.00167	88	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 05, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®
www.pacelabs.com
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 B1018S Atlanta, GA 30308

REPORT TO: John Abraham

CC: MRPADELL@SouthernCo.com CHMCLORK@SouthernCo.com

REQUESTED COMPLETION DATE: Standard

PO #: LLMILLET@SouthernCo.com

PROJECT NAME/STATE: Yates AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		P Metals app. III + III EPA 6020 → EPA 7470	P Cl, F, SO4 EPA 300 TDS SM 2540C	P Radium 226 + 228: SW-846 9315 + 9320							LAB ID NUMBER
CONTAINER TYPE:								P	P	P							
PRESERVATION:								3	7	3							
7/29/16	0903	GW		X	YGWC-32I	3		1	1	1							1
7/29/16	0945	DW		X	FB-4	3		1	1	1							2

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: [signature]

DATE/TIME: 07/29/16 @ 1125

RELINQUISHED BY: [signature]

DATE/TIME: 07/29/16 @ 1115

RECEIVED BY: [signature]

DATE/TIME: 07/29/16 @ 1125

RELINQUISHED BY: [signature]

DATE/TIME: 7/29/16 1315

RECEIVED BY LAB: MZaliman

DATE/TIME: 07/29/16 1315

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes No NA

Temperature: 2°C Min 2°C Max

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

FOR LAB USE ONLY

LAB #: AZG0887

Entered into LIMS: MR

Tracking #:

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com
Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd. SE B10185
Atlanta, GA 30308

REPORT TO: Jojo Abraham

CC: MRPADILL@SouthernCo.com
CHMCCORK@SouthernCo.com

REQUESTED COMPLETION DATE: Standard

PO #: LLMILLET@SouthernCo.com

PROJECT NAME/STATE: Yates AP CCR GW

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals app. III + III EPA 6020 + EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 + 228: SW-846 9315 + 9320	LAB ID NUMBER
7/29/16	0958	GW		X	YGWC-32S	3	1	1	1	3

ANALYSIS REQUESTED

CONTAINER TYPE: P P P
PRESERVATION: 3 2 3

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: [signature]
DATE/TIME: 07/29/16 @ 1125

RECEIVED BY: [signature]
DATE/TIME: 7/29/16@ 1125

RELINQUISHED BY: [signature]
DATE/TIME: 7/29/16 @1125

RELINQUISHED BY: [signature]
DATE/TIME: 7/29/16 1315

RECEIVED BY/LAB: M Zalman
DATE/TIME: 07/29/16 1315

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 2°C Min: 2°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZG0887
Entered into LIMS: MR
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: 8/5/2016 11:47:57AM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 07/29/16 13:15

Work Order: AZG0887
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 3 **#Containers:** 9

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.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

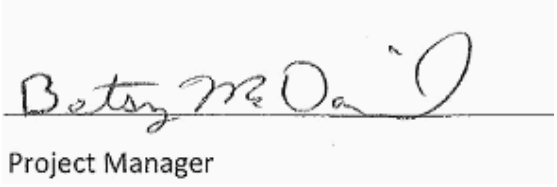
Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: **Mr. Joju Abraham**

Report Number: **AZG0867**
August 05, 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 05, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-19S	AZG0867-01	Ground Water	07/28/16 09:00	07/29/16 08:45
YGWC-22S	AZG0867-02	Ground Water	07/28/16 11:28	07/29/16 08:45
YGWC-34I	AZG0867-03	Ground Water	07/28/16 13:33	07/29/16 08:45
EQB-4	AZG0867-04	DI Water	07/28/16 14:08	07/29/16 08:45
YGWA-21I	AZG0867-05	Ground Water	07/28/16 10:28	07/29/16 08:45
YGWC-23S	AZG0867-06	Ground Water	07/28/16 13:29	07/29/16 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

August 05, 2016

Report No.: AZG0867
Client ID: YGWC-19S
Date/Time Sampled: 7/28/2016 9:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0867-01
Date/Time Received: 7/29/2016 8:45:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	18	25	10	mg/L	SM 2540 C	J	1	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	2.6	0.25	0.01	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 21:49	6070672	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	07/29/16 09:53	07/29/16 21:49	6070672	RNB
Sulfate	0.43	1.0	0.05	mg/L	EPA 300.0	J	1	07/29/16 09:53	07/29/16 21:49	6070672	RNB
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Barium	0.0078	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Boron	ND	0.100	0.0044	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Calcium	0.988	0.500	0.0126	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:04	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:44	6080030	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 05, 2016

Report No.: AZG0867
Client ID: YGWC-22S
Date/Time Sampled: 7/28/2016 11:28:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0867-02
Date/Time Received: 7/29/2016 8:45:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	497	25	10	mg/L	SM 2540 C		1	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	24	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 04:24	6080044	RLC
Fluoride	0.02	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 04:24	6080044	RLC
Sulfate	290	20	1.0	mg/L	EPA 300.0		20	08/02/16 09:48	08/03/16 18:32	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Barium	0.0191	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Beryllium	0.0007	0.0030	0.00009	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Boron	4.30	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Cadmium	0.0001	0.0010	0.0001	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Calcium	45.8	2.50	0.0628	mg/L	EPA 6020B		5	08/02/16 08:50	08/03/16 14:04	6070697	CSW
Chromium	0.0005	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Cobalt	0.0012	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Lead	0.0001	0.0050	0.00008	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Selenium	0.0224	0.0100	0.0009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Lithium	0.0015	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:09	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:46	6080030	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 05, 2016

Report No.: AZG0867
Client ID: YGWC-34I
Date/Time Sampled: 7/28/2016 1:33:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0867-03
Date/Time Received: 7/29/2016 8:45:00AM

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	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	15	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 04:45	6080044	RLC
Fluoride	0.36	0.30	0.02	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 04:45	6080044	RLC
Sulfate	340	20	1.0	mg/L	EPA 300.0		20	08/02/16 09:48	08/03/16 18:53	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Barium	0.0272	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Beryllium	0.0007	0.0030	0.00009	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Boron	3.33	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Cadmium	0.0001	0.0010	0.0001	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Calcium	87.6	5.00	0.126	mg/L	EPA 6020B		10	08/02/16 08:50	08/03/16 14:09	6070697	CSW
Chromium	0.0005	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Cobalt	0.0050	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Molybdenum	0.0287	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Selenium	0.0748	0.0100	0.0009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Thallium	0.0002	0.0010	0.00006	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Lithium	0.0024	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:15	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:48	6080030	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 05, 2016

Report No.: AZG0867
Client ID: EQB-4
Date/Time Sampled: 7/28/2016 2:08:00PM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZG0867-04
Date/Time Received: 7/29/2016 8:45:00AM

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	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 05:06	6080044	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 05:06	6080044	RLC
Sulfate	0.20	1.0	0.05	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 05:06	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Boron	0.0165	0.100	0.0044	mg/L	EPA 6020B	B-01, J	1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Calcium	ND	0.500	0.0126	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Lithium	ND	0.0500	0.0012	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:21	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:51	6080030	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 05, 2016

Report No.: AZG0867
Client ID: YGWA-21I
Date/Time Sampled: 7/28/2016 10:28:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0867-05
Date/Time Received: 7/29/2016 8:45:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	81	25	10	mg/L	SM 2540 C		1	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	2.6	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 05:27	6080044	RLC
Fluoride	0.02	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 05:27	6080044	RLC
Sulfate	5.1	1.0	0.05	mg/L	EPA 300.0		1	08/02/16 09:48	08/03/16 05:27	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Barium	0.0068	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Boron	0.0096	0.100	0.0044	mg/L	EPA 6020B	B-01, J	1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Calcium	3.15	0.500	0.0126	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Chromium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Cobalt	0.0032	0.0100	0.0003	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Selenium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Lithium	0.0045	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:26	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:53	6080030	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

August 05, 2016

Attention: Mr. Joju Abraham

Report No.: AZG0867
Client ID: YGWC-23S
Date/Time Sampled: 7/28/2016 1:29:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0867-06
Date/Time Received: 7/29/2016 8:45:00AM

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	08/01/16 12:50	08/01/16 12:50	6080007	JPT
Inorganic Anions											
Chloride	3.5	0.25	0.01	mg/L	EPA 300.0	B-01	1	08/02/16 09:48	08/03/16 05:48	6080044	RLC
Fluoride	0.03	0.30	0.02	mg/L	EPA 300.0	J	1	08/02/16 09:48	08/03/16 05:48	6080044	RLC
Sulfate	57	2.0	0.10	mg/L	EPA 300.0		2	08/02/16 09:48	08/03/16 19:14	6080044	RLC
Metals, Total											
Antimony	ND	0.0030	0.0002	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Arsenic	ND	0.0050	0.0007	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Barium	0.0511	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Boron	1.09	0.100	0.0044	mg/L	EPA 6020B	B-01	1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Calcium	7.87	0.500	0.0126	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Chromium	0.0008	0.0100	0.0004	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Lead	ND	0.0050	0.00008	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Molybdenum	ND	0.0100	0.0005	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Selenium	0.0385	0.0100	0.0009	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Thallium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Lithium	0.0019	0.0500	0.0012	mg/L	EPA 6020B	J	1	08/02/16 08:50	08/02/16 14:32	6070697	CSW
Mercury	ND	0.00050	0.00013	mg/L	EPA 7470A		1	08/02/16 14:40	08/03/16 15:55	6080030	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 05, 2016

Report No.: AZG0867

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080007 - SM 2540 C											
Blank (6080007-BLK1)						Prepared & Analyzed: 08/01/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6080007-BS1)						Prepared & Analyzed: 08/01/16					
Total Dissolved Solids	391	25	10	mg/L	400.00		98	84-108			
Duplicate (6080007-DUP1)		**Source: AZG0867-03**				Prepared & Analyzed: 08/01/16					
Total Dissolved Solids	549	25	10	mg/L		561			2	10	
Duplicate (6080007-DUP2)		**Source: AZG0904-04**				Prepared & Analyzed: 08/01/16					
Total Dissolved Solids	16	25	10	mg/L		17			6	10	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

August 05, 2016

Report No.: AZG0867

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070672 - EPA 300.0											
Blank (6070672-BLK1)						Prepared & Analyzed: 07/29/16					
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 (6070672-BS1)						Prepared & Analyzed: 07/29/16					
Chloride	9.98	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	9.89	1.0	0.05	mg/L	10.010		99	90-110			
Matrix Spike (6070672-MS1)		**Source: AZG0797-03**				Prepared & Analyzed: 07/29/16					
Chloride	11.3	0.25	0.01	mg/L	10.010	1.92	94	90-110			
Fluoride	10.2	0.30	0.02	mg/L	10.010	ND	102	90-110			
Sulfate	9.58	1.0	0.05	mg/L	10.010	0.08	95	90-110			
Matrix Spike (6070672-MS2)		**Source: AZG0805-06**				Prepared & Analyzed: 07/29/16					
Chloride	11.6	0.25	0.01	mg/L	10.010	2.10	95	90-110			
Fluoride	10.5	0.30	0.02	mg/L	10.010	ND	105	90-110			
Sulfate	13.6	1.0	0.05	mg/L	10.010	4.19	94	90-110			
Matrix Spike Dup (6070672-MSD1)		**Source: AZG0797-03**				Prepared & Analyzed: 07/29/16					
Chloride	11.7	0.25	0.01	mg/L	10.010	1.92	97	90-110	3	15	
Fluoride	10.5	0.30	0.02	mg/L	10.010	ND	105	90-110	3	15	
Sulfate	9.87	1.0	0.05	mg/L	10.010	0.08	98	90-110	3	15	
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							

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 05, 2016

Report No.: AZG0867

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											
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 05, 2016

Report No.: AZG0867

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070697 - EPA 3005A											
Blank (6070697-BLK1)						Prepared & Analyzed: 08/02/16					
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	0.0098	0.100	0.0044	mg/L							J
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	0.0024	0.0100	0.0013	mg/L							J
Lithium	ND	0.0500	0.0012	mg/L							
LCS (6070697-BS1)						Prepared & Analyzed: 08/02/16					
Antimony	0.107	0.0030	0.0002	mg/L	0.10000		107	80-120			
Arsenic	0.101	0.0050	0.0007	mg/L	0.10000		101	80-120			
Barium	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Beryllium	0.0991	0.0030	0.00009	mg/L	0.10000		99	80-120			
Boron	0.949	0.100	0.0044	mg/L	1.0000		95	80-120			
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000		102	80-120			
Calcium	0.992	0.500	0.0126	mg/L	1.0000		99	80-120			
Chromium	0.102	0.0100	0.0004	mg/L	0.10000		102	80-120			
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000		102	80-120			
Copper	0.0992	0.0250	0.0004	mg/L	0.10000		99	80-120			
Lead	0.101	0.0050	0.00008	mg/L	0.10000		101	80-120			
Molybdenum	0.107	0.0100	0.0005	mg/L	0.10000		107	80-120			
Nickel	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Selenium	0.101	0.0100	0.0009	mg/L	0.10000		101	80-120			
Silver	0.107	0.0100	0.0002	mg/L	0.10000		107	80-120			
Thallium	0.0999	0.0010	0.00006	mg/L	0.10000		100	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	0.104	0.0500	0.0012	mg/L	0.10000		104	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 05, 2016

Report No.: AZG0867

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070697 - EPA 3005A											
Matrix Spike (6070697-MS1)		**Source: AZG0805-02**			Prepared & Analyzed: 08/02/16						
Antimony	0.105	0.0030	0.0002	mg/L	0.10000	0.0023	103	75-125			
Arsenic	0.103	0.0050	0.0007	mg/L	0.10000	ND	103	75-125			
Barium	0.111	0.0100	0.0003	mg/L	0.10000	0.0104	100	75-125			
Beryllium	0.0941	0.0030	0.00009	mg/L	0.10000	ND	94	75-125			
Boron	0.953	0.100	0.0044	mg/L	1.0000	0.0108	94	75-125			
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000	ND	102	75-125			
Calcium	22.4	2.50	0.0628	mg/L	1.0000	21.7	70	75-125			QM-02
Chromium	0.108	0.0100	0.0004	mg/L	0.10000	0.0006	107	75-125			
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125			
Copper	0.130	0.0250	0.0004	mg/L	0.10000	ND	130	75-125			QM-05
Lead	0.0987	0.0050	0.00008	mg/L	0.10000	ND	99	75-125			
Molybdenum	0.111	0.0100	0.0005	mg/L	0.10000	ND	111	75-125			
Nickel	0.112	0.0100	0.0005	mg/L	0.10000	ND	112	75-125			
Selenium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125			
Silver	0.105	0.0100	0.0002	mg/L	0.10000	ND	105	75-125			
Thallium	0.0993	0.0010	0.00006	mg/L	0.10000	0.0001	99	75-125			
Vanadium	0.105	0.0100	0.0016	mg/L	0.10000	ND	105	75-125			
Zinc	0.111	0.0100	0.0013	mg/L	0.10000	0.0029	108	75-125			
Lithium	0.0974	0.0500	0.0012	mg/L	0.10000	ND	97	75-125			
Matrix Spike Dup (6070697-MSD1)		**Source: AZG0805-02**			Prepared & Analyzed: 08/02/16						
Antimony	0.105	0.0030	0.0002	mg/L	0.10000	0.0023	103	75-125	0	20	
Arsenic	0.103	0.0050	0.0007	mg/L	0.10000	ND	103	75-125	0	20	
Barium	0.111	0.0100	0.0003	mg/L	0.10000	0.0104	100	75-125	0	20	
Beryllium	0.0941	0.0030	0.00009	mg/L	0.10000	ND	94	75-125	0	20	
Boron	0.953	0.100	0.0044	mg/L	1.0000	0.0108	94	75-125	0	20	
Cadmium	0.102	0.0010	0.0001	mg/L	0.10000	ND	102	75-125	0	20	
Calcium	22.1	2.50	0.0628	mg/L	1.0000	21.7	38	75-125	1	20	QM-02
Chromium	0.108	0.0100	0.0004	mg/L	0.10000	0.0006	107	75-125	0	20	
Cobalt	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125	0	20	
Copper	0.130	0.0250	0.0004	mg/L	0.10000	ND	130	75-125	0	20	QM-05
Lead	0.0987	0.0050	0.00008	mg/L	0.10000	ND	99	75-125	0	20	
Molybdenum	0.111	0.0100	0.0005	mg/L	0.10000	ND	111	75-125	0	20	
Nickel	0.112	0.0100	0.0005	mg/L	0.10000	ND	112	75-125	0	20	
Selenium	0.102	0.0100	0.0009	mg/L	0.10000	ND	102	75-125	0	20	
Silver	0.105	0.0100	0.0002	mg/L	0.10000	ND	105	75-125	0	20	
Thallium	0.0993	0.0010	0.00006	mg/L	0.10000	0.0001	99	75-125	0	20	
Vanadium	0.105	0.0100	0.0016	mg/L	0.10000	ND	105	75-125	0	20	
Zinc	0.111	0.0100	0.0013	mg/L	0.10000	0.0029	108	75-125	0	20	
Lithium	0.0974	0.0500	0.0012	mg/L	0.10000	ND	97	75-125	0	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 05, 2016

Report No.: AZG0867

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070697 - EPA 3005A											
Post Spike (6070697-PS1)		**Source: AZG0805-02**				Prepared & Analyzed: 08/02/16					
Antimony	92.7			ug/L	100.00	2.25	90	80-120			
Arsenic	99.4			ug/L	100.00	0.389	99	80-120			
Barium	108			ug/L	100.00	10.4	97	80-120			
Beryllium	92.3			ug/L	100.00	0.0493	92	80-120			
Boron	893			ug/L	1000.0	10.8	88	80-120			
Cadmium	100			ug/L	100.00	0.0237	100	80-120			
Calcium	22000			ug/L	1000.0	21700	29	80-120			QM-02
Chromium	103			ug/L	100.00	0.579	103	80-120			
Cobalt	95.3			ug/L	100.00	0.0524	95	80-120			
Copper	96.9			ug/L	100.00	0.395	96	80-120			
Lead	96.1			ug/L	100.00	0.0838	96	80-120			
Molybdenum	105			ug/L	100.00	0.354	104	80-120			
Nickel	95.5			ug/L	100.00	0.261	95	80-120			
Selenium	102			ug/L	100.00	-0.0069	102	80-120			
Silver	107			ug/L	100.00	0.0375	107	80-120			
Thallium	97.3			ug/L	100.00	0.131	97	80-120			
Vanadium	102			ug/L	100.00	0.335	102	80-120			
Zinc	105			ug/L	100.00	2.85	102	80-120			
Lithium	91.3			ug/L	100.00	0.788	90	80-120			
Batch 6080030 - EPA 7470A											
Blank (6080030-BLK1)						Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	ND	0.00050	0.00013	mg/L							
LCS (6080030-BS1)						Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00241	0.00050	0.00013	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

August 05, 2016

Report No.: AZG0867

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6080030 - EPA 7470A											
Matrix Spike (6080030-MS1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00231	0.00050	0.00013	mg/L	2.5000E-3	ND	92	75-125			
Matrix Spike Dup (6080030-MSD1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	0.00229	0.00050	0.00013	mg/L	2.5000E-3	ND	92	75-125	1	20	
Post Spike (6080030-PS1)			**Source: AZG0797-01**			Prepared: 08/02/16 Analyzed: 08/03/16					
Mercury	1.47			ug/L	1.6667	0.00167	88	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 05, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

Environmental Monitoring & Laboratory Analysis
110 Technology 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 05, 2016

Report Notes

The sample listed as YGWA-23S on the COC was labeled YGWC-23S. The container label was used for login purposes. CFH

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. AZG0867
Reviewed By:

[11] Page 1 of 1

Sample Shipment Date:[8] 7/29/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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

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

PRESERVATIVE [20]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite
Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	Sample Type [17]	Matrix [18]	No. of Containers [19]	Metals app.III& IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228: SW-846 9315 and 9320					LAB USE ONLY [25] Comments
	YGWC-19S	7/28/16	0900		G	GW	3	1	1	1					1
	YGWC-22S	7/28/16	1128		G	GW	3	1	1	1					2
	YGWC-34I	7/28/16	1333		G	GW	4	1	1	2					3
	EQB-4	7/28/16	1408		G	DW	3	1	1	1					4

Relinquished by:[26]	Wesley Bowen	Date/Time	7/29/16 0700
Received by:[27]	[signature]	Date/Time	7/29/16 0710
Relinquished by:		Date/Time	
Received by:		Date/Time	

LAB USE ONLY: Sample Receipt Information [28]
Charles Hanks 7/29/16 @ 0845 T2°c Ice Present
Seal Intact

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. AZG-0867
Reviewed By:

[11] Page 1 of 1

Sample Shipment Date:[8] 7/29/16
Sample Received Date:[9]
Sampled By:[10] John Corbin

[X] [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

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

PRESERVATIVE [20]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED [21]

Sample Type Key: 22
G-Grab C-Other C-Composite

Matrix Key: 23
O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY [13] LAB ID	Sample Number [14]	Collection [15] Date	Collection [15] Time	Sample Description [16]	[17] Sample Type	[18] Matrix	[19] No. of Containers	Metals app.III& IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	Radium 226 & 228: SW-846 9315 and 9320					LAB USE ONLY [25] Comments
	Y6-WA-21I	7/28/16	1025		G	GW	3	1	1	1					5
	Y6-WA-23S	7/28/16	1329		G	GW	3	1	1	1					Labeled Y6-WC-23S 6
															COA 7/29/16 X 124

Relinquished by:[26]	Date/Time 7/29/16 0710	LAB USE ONLY: Sample Receipt Information [28] Charles Hanks 7/29/16 @ 0845 T2°C Ice Present Seal Intact
Received by:[27]	Date/Time 7/29/16 0710	
Relinquished by:	Date/Time	
Received by:	Date/Time	

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: 8/5/2016 11:38:23AM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 07/29/16 08:45

Work Order: AZG0867
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 6 **#Containers:** 19

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	NO
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:

The sample listed as YGWA-23S on the COC was labeled YGWC-23S. The container label was used for login purposes.
CFH

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:

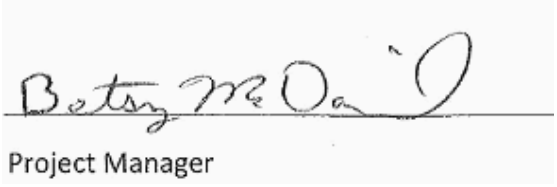
Georgia Power
2480 Maner Road
Atlanta, GA 30339

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
Client ID: YGWA-3D
Date/Time Sampled: 7/26/2016 9:31:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0756-01
Date/Time Received: 7/27/2016 8:50:00AM

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

August 04, 2016

Attention: Mr. Joju Abraham

Report No.: AZG0756
Client ID: YGWA-14S
Date/Time Sampled: 7/26/2016 11:48:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0756-02
Date/Time Received: 7/27/2016 8:50:00AM

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
Client ID: YGWA-4I
Date/Time Sampled: 7/26/2016 2:37:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0756-03
Date/Time Received: 7/27/2016 8:50:00AM

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
Client ID: YGWA-1D
Date/Time Sampled: 7/26/2016 11:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0756-04
Date/Time Received: 7/27/2016 8:50:00AM

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
Client ID: FB-2
Date/Time Sampled: 7/26/2016 12:00:00PM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZG0756-05
Date/Time Received: 7/27/2016 8:50:00AM

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	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

August 04, 2016

Attention: Mr. Joju Abraham

Report No.: AZG0756
Client ID: YGWA-5I
Date/Time Sampled: 7/26/2016 2:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0756-06
Date/Time Received: 7/27/2016 8:50:00AM

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
Client ID: EQB-2
Date/Time Sampled: 7/26/2016 2:36:00PM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZG0756-07
Date/Time Received: 7/27/2016 8:50:00AM

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	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
Client ID: YGWA-5D
Date/Time Sampled: 7/26/2016 3:29:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZG0756-08
Date/Time Received: 7/27/2016 8:50:00AM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY — Work Order No.: AZG0756 — Reviewed By:

[11] Page 1 of 1

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] 7/27/16
Sample Received Date:[9]
Sampled By:[10] John Corbin

[X] [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]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED[21]

Sample Type Key: 22 — G-Grab O-Other C-Composite

Matrix Key: 23 — O-Oil S-Solid SL-Sludge W-Wipe SW-Surface Water DW-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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Time	Sample Description[16]	[17] Sample Type	[18] Matrix	[19] No. of Containers	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	SW-846 9315 & 9320					LAB USE ONLY[25] Comments
	YGWA-3D	7/26/16	0931		G	GW	3	X	X	X					1
	YGWA-14S	7/26/16	1148		G	GW	3	X	X	X					2
	YGWA-4I	7/26/16	1437		G	GW	3	X	X	X					3

Relinquished by:[26]	Date/Time 7/27/16 0654	LAB USE ONLY: Sample Receipt Information[28] Okarla Hanks 7/27/16 0850 T 2°C Ice Present Seal Intact
Received by:[27]	Date/Time 7/27/16 0654	
Relinquished by:	Date/Time	
Received by:	Date/Time	

Pace Analytical
110 Technology Pkwy,
Peachtree Corners, GA 30092

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY — Work Order No.: AZ6-0756 — Reviewed By:

[11] Page 1 of 1

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] 7/27/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [12] Standard Turnaround Time
[ ] # of Business Days (Rush) (Must be cleared through Env. Lab. Prior to shipment)

Signature

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

PRESERVATIVE[20]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED[21]: [17] Sample Type | [18] Matrix | [19] No. of Containers | Metals app. III & IV EPA 6020 & EPA 7470 | Cl, F, SO4 EPA 300 TDS SM2540C | SW-846 9315 & 9320

Sample Type Key: [22] G-Grab D-Other C-Composite

Matrix Key: [23] O-Oil 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 I-Ice U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Time	Sample Description[16]	Sample Type	Matrix	No. of Containers	Metals	Cl, F, SO4	SW-846				LAB USE ONLY[25] Comments
	YGWA-1D	7/26/16	1120		G	GW	3	x	x	x				4
	FB-2	7/26/16	1200		G	DW	3	x	x	x				5
	YGWA-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
	YGWA-5D	7/26/16	1529		G	GW	3	x	x	x				8

Relinquished by:[26]	Date/Time 7/27/16 0654	LAB USE ONLY: Sample Receipt Information[28] Charles Hendrix 7/27/16 0850 T2°C Ice Present Seal Intact
Received by:[27]	Date/Time 7/27/16 0654	
Relinquished by:	Date/Time	
Received by:	Date/Time	

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

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
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] 7/27/16
Sample Received Date:[9]
Sampled By:[10] John Corbin

[X] [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]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED[21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite
Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	SW-846 9315 & 9320					LAB USE ONLY[25] Comments
	YGWA-3D	7/26/16	0931		G	GW	3	X	X	X					001
	YGWA-14S	7/26/16	1148		G	GW	3	X	X	X					002
	YGWA-4I	7/26/16	1437		G	GW	3	X	X	X					003

WO#:30191354
30191354

Relinquished by:[26]	[signature]	Date/Time	7/27/16 0634
Received by:[27]	[signature]	Date/Time	7/27/16 0654
Relinquished by:	[signature]	Date/Time	7-28-16 0940
Received by:		Date/Time	

LAB USE ONLY: Sample Receipt Information[28]

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: GA Power 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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed NJV 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: NJV Date: 7-28-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/15/2016
Worklist:	30875
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	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	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30191359001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30191359001
Duplicate RPD:	9.84%	30191359001dup
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

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
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	LCSD (Y or N)?	N
	LCS30870	LCSD30870
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	Enter Duplicate
Duplicate Sample I.D.	30191359001DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.483	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.330	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.948	the space below.
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	30191359001
Duplicate RPD:	65.00%	30191359001DUP
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:	

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.

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:92% T:NA**	pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	**0.532 ± 0.354 (0.662) C:72% T:82%**	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) C:90% T:NA**	pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	**0.732 ± 0.393 (0.696) C:74% T:78%**	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) C:93% T:NA**	pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	**1.32 ± 0.459 (0.658) C:74% T:83%**	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) C:87% T:NA**	pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	**0.952 ± 0.377 (0.568) C:72% T:85%**	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) C:94% T:NA**	pCi/L	08/18/16 10:37	13982-63-3	
Radium-228	EPA 9320	**1.97 ± 0.560 (0.664) C:74% T:84%**	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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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	

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

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
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] 7/27/16
Sample Received Date:[9]
Sampled By:[10] Wesley Bowen

[X] [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]: HNO3 N | Ice I | HNO3 N

ANALYSIS REQUESTED[21]

Sample Type Key: 22 — G-Grab, O-Other, C-Composite

Matrix Key: 23 — O-Oil, 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, I-Ice, U-Unpreserved

LAB USE ONLY[13] LAB ID	Sample Number[14]	Collection[15] Date	Collection[15] Time	Sample Description[16]	Sample Type[17]	Matrix[18]	No. of Containers[19]	Metals app. III & IV EPA 6020 & EPA 7470	Cl, F, SO4 EPA 300 TDS SM2540C	SW-846 9315 & 9320					LAB USE ONLY[25] Comments
	YGWA-1D	7/26/16	1120		G	GW	3	x	x	x					001
	FB-2	7/26/16	1200		G	DW	3	x	x	x					002
	YGWA-5I	7/26/16	1405		G	GW	3	x	x	x					003
	EQB-2	7/26/16	1436		G	DW	3	x	x	x					004
	YGWA-5D	7/26/16	1529		G	GW	3	x	x	x					005

WO#:30191358
30191358

LAB USE ONLY: Sample Receipt Information[28]

Relinquished by:[26] Date/Time 7/27/16 0654
Received by:[27] Date/Time 7/27/16 0654
Relinquished by: Date/Time 7-28-16 0940
Received by: Date/Time

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed NJV 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: NJV Date: 7-28-16

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

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/15/2016
Worklist:	30875
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	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	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30191359001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30191359001
Duplicate RPD:	9.84%	30191359001dup
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	8/16/2016
Worklist:	30870
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS30870	LCSD30870
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30191359001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30191359001
Duplicate RPD:	65.00%	30191359001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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 result(s) 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.

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30191939

0611

1

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNER
(770) 734-4200 : FAX (770) 734-4201

30191939

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
241 Ralph McGill Blvd. SE B10185
Atlanta, GA 30308

REPORT TO: Jaju Abraham

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: Standard

PO #: LLMILLET@southernco.com

PROJECT NAME/STATE: Yates AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App III + IV EPA 6020 + EPA 7470	Cl, F, SO4, EPA 300 TDS SM2540C	Radium 226 + 228 combined 9315 + 9320	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
8/1/16	0911	GW		X	YGWC-33S	3	1	1	1	001
8/1/16	1112	GW		X	YGWC-24S	3	1	1	1	002
8/1/16	—	GW		X	DUP-4	3	1	1	1	003
8/1/16	1335	GW		X	YGWC-27S	3	1	1	1	004
8/1/16	1430	W		X	EQB-5	3	1	1	1	005

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

001 001
002 005
003 002
004 003
005 004

8-3-16

SAMPLED BY AND TITLE: Welley Bowen
DATE/TIME: 8/1/16 @ 1510

RECEIVED BY:
DATE/TIME: 8/2/16 0635

RELINQUISHED BY:
DATE/TIME: 8/2/16 @ 0655

RELINQUISHED BY:
DATE/TIME: 8-3-16 1006

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA:
UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: Max:
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

Sample Condition Upon Receipt Pittsburgh

30191939

Pace Analytical

Client Name: GA Power Project #

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

Tracking #: 681250181156

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: WT				
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 NJV 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: NJV Date: 8-3-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	8/18/2016
Worklist:	30904
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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:	5.52
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Fail*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS30904	LCSD30904
Count Date:	8/23/2016	8/23/2016
Spike I.D.:	16-025	16-025
Spike Concentration (pCi/mL):	25.859	25.859
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.802	0.813
Target Conc. (pCi/L, g, F):	6.446	6.363
Uncertainty (Calculated):	0.464	0.458
Result (pCi/L, g, F):	6.102	6.190
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.743	0.701
Numerical Performance Indicator:	-0.77	-0.41
Percent Recovery:	94.66%	97.27%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS30904	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD30904	
Sample Result (pCi/L, g, F):	6.102	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.743	
Sample Duplicate Result (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	

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:

*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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	WRR
Date:	8/19/2016
Worklist:	30877
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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:	1.05
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS30877	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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30191936005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30191936005
Duplicate RPD:	61.69%	30191936005Dup
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:81% T:NA**	pCi/L	08/22/16 07:59	13982-63-3	
Radium-228	EPA 9320	**0.466 ± 0.393 (0.774) C:78% T:72%**	pCi/L	08/24/16 01:52	15262-20-1	
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) C:95% T:NA**	pCi/L	08/22/16 07:59	13982-63-3	
Radium-228	EPA 9320	**0.364 ± 0.318 (0.628) C:81% T:80%**	pCi/L	08/24/16 01:53	15262-20-1	
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) C:83% T:NA**	pCi/L	08/22/16 07:59	13982-63-3	
Radium-228	EPA 9320	**1.87 ± 0.516 (0.599) C:81% T:83%**	pCi/L	08/24/16 01:53	15262-20-1	
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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30191938

0607

1

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNE
(770) 734-4200 : FAX (770) 734-4201

30191938

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308

REPORT TO: John Abraham

CC: MRPADILL@SouthernCo.com CHMCCORK@SouthernCo.com

REQUESTED COMPLETION DATE: Standard

PO #: LLMILLET@SouthernCo.com

PROJECT NAME/STATE: Vates AP CCR GW

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App III + IV EPA 6020 + EPA 7470	Cl, F, SO4 EPA 300 TDS SM 2540C	Radium 226 + 228 SW 9315 + 9320	LAB ID NUMBER
8/1/16	0949	GW		X	VGWC-26I	3	1	1	1	001
8/1/16	1133	GW		X	VGWC-26S	3	1	1	1	002
8/1/16	1325	GW		X	VGWC-27I	3	1	1	1	003

ANALYSIS REQUESTED

CONTAINER TYPE: P P P
PRESERVATION: 3 7 3

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

001
002
003

SAMPLED BY AND TITLE:

DATE/TIME: 8/1/16 0810

RELINQUISHED BY:

DATE/TIME: 8/2/16 0655

RECEIVED BY:

DATE/TIME: 8/2/16 0655

RELINQUISHED BY:

DATE/TIME: 8-3-16 1000

RECEIVED BY LAB:

DATE/TIME:

SAMPLE SHIPPED VIA:

UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes No NA

Temperature: Min: Max:

Custody Seal: Intact Broken Not Present

# of Coolers

Cooler ID:

FOR LAB USE ONLY

LAB #:

Entered into LIMS:

Tracking #:

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

30191938

Client Name: GA Power Project #

Courier: [X] Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 681250481156

Custody Seal on Cooler/Box Present: ☐ yes [X] 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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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: -Pace Containers Used:	X	X		10.
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X X			13. Initial when completed NJV 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: NJV Date: 8-3-16

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

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
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:	5.52
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Fail*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS30904	LCSD30904
Count Date:	8/23/2016	8/23/2016
Spike I.D.:	16-025	16-025
Spike Concentration (pCi/mL):	25.859	25.859
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.802	0.813
Target Conc. (pCi/L, g, F):	6.446	6.363
Uncertainty (Calculated):	0.464	0.458
Result (pCi/L, g, F):	6.102	6.190
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.743	0.701
Numerical Performance Indicator:	-0.77	-0.41
Percent Recovery:	94.66%	97.27%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

Duplicate Sample Assessment		
Sample I.D.:	LCS30904	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD30904	
Sample Result (pCi/L, g, F):	6.102	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.743	
Sample Duplicate Result (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.:	
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:	

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

Pace Analytical™ www.pacelabs.com

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:	1.05
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS30877	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	

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:	

Duplicate Sample Assessment

Sample I.D.:	30191936005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30191936005
Duplicate RPD:	61.69%	30191936005Dup
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***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:

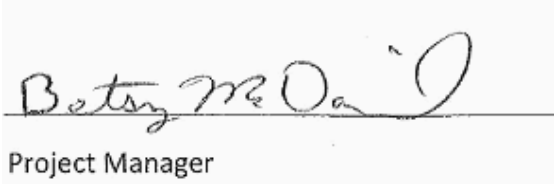
Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: **Mr. Joju Abraham**

Report Number: **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
Client ID: YGWC-33S
Date/Time Sampled: 8/1/2016 9:11:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZH0029-01
Date/Time Received: 8/2/2016 8:40:00AM

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
Client ID: YGWC-24S
Date/Time Sampled: 8/1/2016 11:12:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZH0029-02
Date/Time Received: 8/2/2016 8:40:00AM

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
Client ID: Dup-4
Date/Time Sampled: 8/1/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZH0029-03
Date/Time Received: 8/2/2016 8:40:00AM

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
Client ID: YGWC-27S
Date/Time Sampled: 8/1/2016 1:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZH0029-04
Date/Time Received: 8/2/2016 8:40:00AM

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
Client ID: EQB-5
Date/Time Sampled: 8/1/2016 2:30:00PM
Matrix: DI Water

Project: CCR Event
Lab Number ID: AZH0029-05
Date/Time Received: 8/2/2016 8:40:00AM

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	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
Client ID: YGWC-26I
Date/Time Sampled: 8/1/2016 9:49:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZH0029-06
Date/Time Received: 8/2/2016 8:40:00AM

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
Client ID: YGWC-26S
Date/Time Sampled: 8/1/2016 11:33:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZH0029-07
Date/Time Received: 8/2/2016 8:40:00AM

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
Client ID: YGWC-27I
Date/Time Sampled: 8/1/2016 1:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZH0029-08
Date/Time Received: 8/2/2016 8:40:00AM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®
www.pacelabs.com
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: Jaju Abraham

CC: MRPADILL@SouthernCo.com CHMCCORK@SouthernCo.com

REQUESTED COMPLETION DATE: Standard

PO #: LLJMILLET@SouthernCo.com

PROJECT NAME/STATE: Yates AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	CONTAINER TYPE	PRESERVATION	# of CONTAINERS	Metals App III + III EPA 6020 + EPA 7470	Cl, F, SO4, EPA 300 TDS SM2540C	Radium 226 + 228 SW846 9315 + 9320	LAB ID NUMBER
						P	3		1	1	1	
8/1/16	0911	GW		X	YGWC-33S			3	1	1	1	1
8/1/16	1112	GW		X	YGWC-24S			3	1	1	1	2
8/1/16	—	GW		X	DUP-4			3	1	1	1	3
8/1/16	1335	GW		X	YGWC-27S			3	1	1	1	4
8/1/16	1430	W		X	EQB-5			3	1	1	1	5

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: Wesley Bowen

DATE/TIME: 8/1/16 @ 1510

RELINQUISHED BY:

DATE/TIME: 8/2/16 @ 0655

RECEIVED BY:

DATE/TIME: 8/2/16 0635

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB:

DATE/TIME: 8/2/16 0840

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes No NA

Temperature: 2°C Min: 2°C Max:

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

FOR LAB USE ONLY

LAB #: AZ1+0029

Entered into LIMS: 8/4

Tracking #:

CHAIN OF CUSTODY RECORD

Pace Analytical®
www.pacelabs.com
Pace Analytical Services, Inc
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201

CLIENT NAME: Southern Company Services

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Ralph McGill Blvd SE B10185 Atlanta, GA 30308

REPORT TO: Jolu Abraham

CC: MRPADILL@SouthernCo.com CHMCCORK@SouthernCo.com

REQUESTED COMPLETION DATE: Standard

PO #: LLMILLET@SouthernCo.com

PROJECT NAME/STATE: Yates AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of COTINERS	Metals App III + IV EPA 6020 + EPA 7470	Cl, F, SO4 EPA 300 TDS SM 2540C	Radium 226 + 228: SW 846 9315 + 9320	LAB ID NUMBER
		CONTAINER TYPE:					P	P	P	
		PRESERVATION:					3	1	3	
8/1/16	0949	GW		X	YGWC-26I	3	1	1	1	6
8/1/16	1133	GW		X	YGWC-26S	3	1	1	1	7
8/1/16	1325	GW		X	YGWC-27I	3	1	1	1	8

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: [signature] DATE/TIME: 8/1/16 @ 1510

RELINQUISHED BY: [signature] DATE/TIME: 8/2/16 @ 0655

RECEIVED BY: [signature] DATE/TIME: 8/2/16 0655

RELINQUISHED BY: DATE/TIME:

RECEIVED BY LAB: Charles Hanks DATE/TIME: 8/2/16 0840

FOR LAB USE ONLY
LAB #: AZH0029
Entered Into LIMS: 24

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #:

pH checked: Yes No NA

Ice: Yes No NA

Temperature: °C Min: 2 °C Max:

Custody Seal: Intact Broken Not Present

# of Coolers

Cooler ID:

COC Revised 2016-05-17.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: 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:

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: **AZK0511**
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:

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
YGWA-47	AZK0511-01	Ground Water	11/14/16 11:20	11/15/16 15:38
YGWC-36	AZK0511-02	Ground Water	11/14/16 16:35	11/15/16 15:38
YGWC-45	AZK0511-03	Ground Water	11/14/16 13:30	11/15/16 15:38
Dup-1	AZK0511-04	Ground Water	11/14/16 00:00	11/15/16 15:38
YGWC-49	AZK0511-05	Ground Water	11/15/16 10:35	11/15/16 15:38
FB-1-11-15-16	AZK0511-06	Water	11/15/16 12:25	11/15/16 15:38
YGWC-44	AZK0511-07	Ground Water	11/15/16 13:00	11/15/16 15:38

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.: AZK0511
Client ID: YGWA-47
Date/Time Sampled: 11/14/2016 11:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0511-01
Date/Time Received: 11/15/2016 3:38:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	280	25	10	mg/L	SM 2540 C		1	11/16/16 16:30	11/16/16 16:30	6110421	JPT
Inorganic Anions											
Chloride	6.4	0.25	0.01	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 04:23	6110434	RNB
Fluoride	0.18	0.30	0.02	mg/L	EPA 300.0	J	1	11/16/16 13:05	11/17/16 04:23	6110434	RNB
Sulfate	150	10	0.51	mg/L	EPA 300.0		10	11/16/16 13:05	11/20/16 03:42	6110434	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Barium	0.0383	0.0100	0.0004	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Boron	0.0166	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Calcium	18.6	2.50	0.155	mg/L	EPA 6020B		5	11/17/16 08:30	11/20/16 14:53	6110444	CSW
Chromium	0.0093	0.0100	0.0009	mg/L	EPA 6020B	B-01, J	1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Cobalt	0.0115	0.0100	0.0005	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Lithium	0.0064	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:03	6110444	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 15:13	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.: AZK0511
Client ID: YGWC-36
Date/Time Sampled: 11/14/2016 4:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0511-02
Date/Time Received: 11/15/2016 3:38:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	272	25	10	mg/L	SM 2540 C		1	11/16/16 16:30	11/16/16 16:30	6110421	JPT
Inorganic Anions											
Chloride	6.7	0.25	0.01	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 06:56	6110434	RNB
Fluoride	0.18	0.30	0.02	mg/L	EPA 300.0	J	1	11/16/16 13:05	11/17/16 06:56	6110434	RNB
Sulfate	110	10	0.51	mg/L	EPA 300.0		10	11/16/16 13:05	11/20/16 05:46	6110434	RLC
Metals, Total											
Antimony	0.0014	0.0030	0.0008	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Arsenic	ND	0.0100	0.0016	mg/L	EPA 6020B	R-01	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Barium	0.0182	0.0100	0.0004	mg/L	EPA 6020B		1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Beryllium	0.000090	0.0030	0.00008	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Boron	0.287	0.100	0.0064	mg/L	EPA 6020B	B-01, R-01	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Cadmium	0.000090	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Calcium	7.79	0.500	0.0311	mg/L	EPA 6020B		1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Chromium	0.0035	0.0100	0.0009	mg/L	EPA 6020B	B-01, J	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Lead	0.0002	0.0050	0.0001	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Molybdenum	0.0071	0.0100	0.0017	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Selenium	ND	0.0500	0.0010	mg/L	EPA 6020B	R-01	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Lithium	0.0044	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/17/16 12:42	6110444	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 15:15	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.: AZK0511
Client ID: YGWC-45
Date/Time Sampled: 11/14/2016 1:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0511-03
Date/Time Received: 11/15/2016 3:38:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	445	25	10	mg/L	SM 2540 C		1	11/16/16 16:30	11/16/16 16:30	6110421	JPT
Inorganic Anions											
Chloride	5.8	0.25	0.01	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 07:18	6110434	RNB
Fluoride	0.71	0.30	0.02	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 07:18	6110434	RNB
Sulfate	200	10	0.51	mg/L	EPA 300.0		10	11/16/16 13:05	11/20/16 06:06	6110434	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Barium	0.0701	0.0100	0.0004	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Boron	0.368	0.0400	0.0064	mg/L	EPA 6020B	B-01	1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Calcium	50.6	5.00	0.311	mg/L	EPA 6020B		10	11/17/16 08:30	11/20/16 14:57	6110444	CSW
Chromium	0.0061	0.0100	0.0009	mg/L	EPA 6020B	B-01, J	1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Cobalt	0.0009	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Lithium	0.0175	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:09	6110444	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 15:17	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.: AZK0511
Client ID: Dup-1
Date/Time Sampled: 11/14/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0511-04
Date/Time Received: 11/15/2016 3:38:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	299	25	10	mg/L	SM 2540 C		1	11/16/16 16:30	11/16/16 16:30	6110421	JPT
Inorganic Anions											
Chloride	6.4	0.25	0.01	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 07:40	6110434	RNB
Fluoride	0.52	0.30	0.02	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 07:40	6110434	RNB
Sulfate	150	10	0.51	mg/L	EPA 300.0		10	11/16/16 13:05	11/20/16 06:27	6110434	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Barium	0.0379	0.0100	0.0004	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Boron	0.0178	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Calcium	18.6	2.50	0.155	mg/L	EPA 6020B		5	11/17/16 08:30	11/20/16 15:02	6110444	CSW
Chromium	0.0081	0.0100	0.0009	mg/L	EPA 6020B	B-01, J	1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Cobalt	0.0110	0.0100	0.0005	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Lithium	0.0062	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:16	6110444	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 15:24	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.: AZK0511
Client ID: YGWC-49
Date/Time Sampled: 11/15/2016 10:35:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0511-05
Date/Time Received: 11/15/2016 3:38:00PM

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	11/16/16 16:30	11/16/16 16:30	6110421	JPT
Inorganic Anions											
Chloride	5.8	0.25	0.01	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 08:01	6110434	RNB
Fluoride	0.16	0.30	0.02	mg/L	EPA 300.0	J	1	11/16/16 13:05	11/17/16 08:01	6110434	RNB
Sulfate	94	10	0.51	mg/L	EPA 300.0		10	11/16/16 13:05	11/20/16 06:48	6110434	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Barium	0.0772	0.0100	0.0004	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Boron	0.0074	0.0400	0.0064	mg/L	EPA 6020B	B-01, J	1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Calcium	13.5	2.50	0.155	mg/L	EPA 6020B		5	11/17/16 08:30	11/20/16 15:08	6110444	CSW
Chromium	0.0014	0.0100	0.0009	mg/L	EPA 6020B	B-01, J	1	11/17/16 08:30	11/21/16 17:55	6110444	CSW
Cobalt	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Selenium	0.0056	0.0100	0.0010	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Lithium	0.0044	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:22	6110444	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 15:27	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.: AZK0511
Client ID: FB-1-11-15-16
Date/Time Sampled: 11/15/2016 12:25:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AZK0511-06
Date/Time Received: 11/15/2016 3:38:00PM

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	11/16/16 16:30	11/16/16 16:30	6110421	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 08:23	6110434	RNB
Fluoride	0.04	0.30	0.02	mg/L	EPA 300.0	J	1	11/16/16 13:05	11/17/16 08:23	6110434	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 08:23	6110434	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/17/16 08:30	11/21/16 18:01	6110444	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:28	6110444	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 15:29	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.: AZK0511
Client ID: YGWC-44
Date/Time Sampled: 11/15/2016 1:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0511-07
Date/Time Received: 11/15/2016 3:38:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	356	25	10	mg/L	SM 2540 C		1	11/16/16 16:30	11/16/16 16:30	6110421	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	11/16/16 13:05	11/17/16 08:45	6110434	RNB
Fluoride	0.12	0.30	0.02	mg/L	EPA 300.0	J	1	11/16/16 13:05	11/17/16 08:45	6110434	RNB
Sulfate	150	10	0.51	mg/L	EPA 300.0		10	11/16/16 13:05	11/20/16 07:08	6110434	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Barium	0.115	0.0100	0.0004	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Boron	0.706	0.0400	0.0064	mg/L	EPA 6020B	B-01	1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Calcium	27.8	2.50	0.155	mg/L	EPA 6020B		5	11/17/16 08:30	11/20/16 15:14	6110444	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/17/16 08:30	11/21/16 18:07	6110444	CSW
Cobalt	0.0033	0.0100	0.0005	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Lithium	0.0148	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/17/16 08:30	11/19/16 18:34	6110444	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 15:32	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.: AZK0511

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110421 - SM 2540 C											
Blank (6110421-BLK1)						Prepared & Analyzed: 11/16/16					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (6110421-BS1)						Prepared & Analyzed: 11/16/16					
Total Dissolved Solids	389	25	10	mg/L	400.00		97	84-108			
Duplicate (6110421-DUP1)		**Source: AZK0464-03**				Prepared & Analyzed: 11/16/16					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (6110421-DUP2)		**Source: AZK0511-03**				Prepared & Analyzed: 11/16/16					
Total Dissolved Solids	454	25	10	mg/L		445			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 22, 2016

Report No.: AZK0511

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110434 - EPA 300.0											
Blank (6110434-BLK1)						Prepared: 11/16/16 Analyzed: 11/17/16					
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 (6110434-BS1)						Prepared: 11/16/16 Analyzed: 11/17/16					
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	10.5	1.0	0.05	mg/L	10.020		105	90-110			
Matrix Spike (6110434-MS1)		**Source: AZK0511-01**				Prepared: 11/16/16 Analyzed: 11/17/16					
Chloride	15.1	0.25	0.01	mg/L	10.010	6.40	87	90-110			QM-05
Fluoride	10.3	0.30	0.02	mg/L	10.020	0.18	101	90-110			
Sulfate	127	1.0	0.05	mg/L	10.020	130	NR	90-110			QM-02
Matrix Spike Dup (6110434-MSD1)		**Source: AZK0511-01**				Prepared: 11/16/16 Analyzed: 11/17/16					
Chloride	15.8	0.25	0.01	mg/L	10.010	6.40	94	90-110	4	15	
Fluoride	11.2	0.30	0.02	mg/L	10.020	0.18	110	90-110	8	15	
Sulfate	127	1.0	0.05	mg/L	10.020	130	NR	90-110	0.3	15	QM-02

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.: AZK0511

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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			
Batch 6110444 - EPA 3005A											
Blank (6110444-BLK1)						Prepared & Analyzed: 11/17/16					
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	0.0176	0.0400	0.0064	mg/L							J
Cadmium	ND	0.0010	0.00007	mg/L							
Calcium	ND	0.500	0.0311	mg/L							
Chromium	0.0037	0.0100	0.0009	mg/L							J
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	0.0064	0.0100	0.0021	mg/L							J
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 22, 2016

Report No.: AZK0511

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110444 - EPA 3005A											
LCS (6110444-BS1)						Prepared & Analyzed: 11/17/16					
Antimony	0.104	0.0030	0.0008	mg/L	0.10000		104	80-120			
Arsenic	0.102	0.0050	0.0016	mg/L	0.10000		102	80-120			
Barium	0.100	0.0100	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.109	0.0030	0.00008	mg/L	0.10000		109	80-120			
Boron	1.12	0.0400	0.0064	mg/L	1.0000		112	80-120			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000		102	80-120			
Calcium	1.01	0.500	0.0311	mg/L	1.0000		101	80-120			
Chromium	0.106	0.0100	0.0009	mg/L	0.10000		106	80-120			
Cobalt	0.102	0.0100	0.0005	mg/L	0.10000		102	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	0.104	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	0.0999	0.0100	0.0010	mg/L	0.10000		100	80-120			
Silver	0.100	0.0100	0.0005	mg/L	0.10000		100	80-120			
Thallium	0.104	0.0010	0.0002	mg/L	0.10000		104	80-120			
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000		106	80-120			
Zinc	0.103	0.0100	0.0021	mg/L	0.10000		103	80-120			
Lithium	0.112	0.0500	0.0021	mg/L	0.10000		112	80-120			
Matrix Spike (6110444-MS1)			**Source: AZK0511-02**			Prepared & Analyzed: 11/17/16					
Antimony	0.101	0.0030	0.0008	mg/L	0.10000	0.0014	99	75-125			
Arsenic	0.0931	0.0050	0.0016	mg/L	0.10000	ND	93	75-125			
Barium	0.113	0.0100	0.0004	mg/L	0.10000	0.0182	95	75-125			
Beryllium	0.102	0.0030	0.00008	mg/L	0.10000	0.000090	102	75-125			
Boron	1.29	0.0400	0.0064	mg/L	1.0000	0.287	101	75-125			
Cadmium	0.0989	0.0010	0.00007	mg/L	0.10000	0.000090	99	75-125			
Calcium	8.98	0.500	0.0311	mg/L	1.0000	7.79	119	75-125			
Chromium	0.0940	0.0100	0.0009	mg/L	0.10000	0.0035	91	75-125			
Cobalt	0.0917	0.0100	0.0005	mg/L	0.10000	ND	92	75-125			
Copper	0.0912	0.0250	0.0005	mg/L	0.10000	0.0008	90	75-125			
Lead	0.0979	0.0050	0.0001	mg/L	0.10000	0.0002	98	75-125			
Molybdenum	0.108	0.0100	0.0017	mg/L	0.10000	0.0071	101	75-125			
Nickel	0.0938	0.0100	0.0006	mg/L	0.10000	0.0011	93	75-125			
Selenium	0.0878	0.0100	0.0010	mg/L	0.10000	ND	88	75-125			
Silver	0.0941	0.0100	0.0005	mg/L	0.10000	ND	94	75-125			
Thallium	0.0982	0.0010	0.0002	mg/L	0.10000	ND	98	75-125			
Vanadium	0.0997	0.0100	0.0071	mg/L	0.10000	ND	100	75-125			
Zinc	0.0990	0.0100	0.0021	mg/L	0.10000	0.0052	94	75-125			
Lithium	0.117	0.0500	0.0021	mg/L	0.10000	0.0044	112	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 22, 2016

Report No.: AZK0511

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110444 - EPA 3005A											
Matrix Spike Dup (6110444-MSD1)		**Source: AZK0511-02**			Prepared & Analyzed: 11/17/16						
Antimony	0.100	0.0030	0.0008	mg/L	0.10000	0.0014	99	75-125	0.6	20	
Arsenic	0.0918	0.0050	0.0016	mg/L	0.10000	ND	92	75-125	1	20	
Barium	0.111	0.0100	0.0004	mg/L	0.10000	0.0182	93	75-125	2	20	
Beryllium	0.104	0.0030	0.00008	mg/L	0.10000	0.000090	104	75-125	1	20	
Boron	1.32	0.0400	0.0064	mg/L	1.0000	0.287	103	75-125	2	20	
Cadmium	0.0976	0.0010	0.00007	mg/L	0.10000	0.000090	97	75-125	1	20	
Calcium	8.31	0.500	0.0311	mg/L	1.0000	7.79	52	75-125	8	20	QM-02
Chromium	0.0918	0.0100	0.0009	mg/L	0.10000	0.0035	88	75-125	2	20	
Cobalt	0.0902	0.0100	0.0005	mg/L	0.10000	ND	90	75-125	2	20	
Copper	0.0891	0.0250	0.0005	mg/L	0.10000	0.0008	88	75-125	2	20	
Lead	0.0977	0.0050	0.0001	mg/L	0.10000	0.0002	97	75-125	0.2	20	
Molybdenum	0.109	0.0100	0.0017	mg/L	0.10000	0.0071	102	75-125	1	20	
Nickel	0.0914	0.0100	0.0006	mg/L	0.10000	0.0011	90	75-125	3	20	
Selenium	0.0863	0.0100	0.0010	mg/L	0.10000	ND	86	75-125	2	20	
Silver	0.0927	0.0100	0.0005	mg/L	0.10000	ND	93	75-125	2	20	
Thallium	0.0947	0.0010	0.0002	mg/L	0.10000	ND	95	75-125	4	20	
Vanadium	0.0947	0.0100	0.0071	mg/L	0.10000	ND	95	75-125	5	20	
Zinc	0.0973	0.0100	0.0021	mg/L	0.10000	0.0052	92	75-125	2	20	
Lithium	0.120	0.0500	0.0021	mg/L	0.10000	0.0044	116	75-125	3	20	
Post Spike (6110444-PS1)		**Source: AZK0511-02**			Prepared & Analyzed: 11/17/16						
Antimony	89.7			ug/L	100.00	1.35	88	80-120			
Arsenic	90.2			ug/L	100.00	-1.52	90	80-120			
Barium	111			ug/L	100.00	18.2	93	80-120			
Beryllium	102			ug/L	100.00	0.0900	102	80-120			
Boron	1330			ug/L	1000.0	287	104	80-120			
Cadmium	97.4			ug/L	100.00	0.0900	97	80-120			
Calcium	8260			ug/L	1000.0	7790	47	80-120			QM-02
Chromium	90.7			ug/L	100.00	3.52	87	80-120			
Cobalt	89.8			ug/L	100.00	0.310	89	80-120			
Copper	89.1			ug/L	100.00	0.760	88	80-120			
Lead	97.2			ug/L	100.00	0.230	97	80-120			
Molybdenum	109			ug/L	100.00	7.11	102	80-120			
Nickel	91.1			ug/L	100.00	1.07	90	80-120			
Selenium	86.1			ug/L	100.00	-5.71	86	80-120			
Silver	92.8			ug/L	100.00	0.0100	93	80-120			
Thallium	93.4			ug/L	100.00	0.0300	93	80-120			
Vanadium	95.7			ug/L	100.00	0.570	95	80-120			
Zinc	97.0			ug/L	100.00	5.17	92	80-120			
Lithium	121			ug/L	100.00	4.36	116	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

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®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates Phase II Facilities
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-d-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P						
PRESERVATION:								3	7	3							
11-14-16	1120	GW		✓	YGWA-47	3		1	1	1						1	
11-14-16	1635	GW		✓	YGWC-36	3		1	1	1						2	
11-14-16	1330	GW		✓	YGWC-45	3		1	1	1						3	
11-14-16	—	GW		✓	DUP-1	3		1	1	1						4	
11-15-16	1035	GW		✓	YGWC-49	3		1	1	1						5	
11-15-16	1225	W		✓	FB-1-11-15-16	3		1	1	1						6	
11-15-16	1300	GW		✓	YGWC-44	3		1	1	1						7	

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Parker ACC
DATE/TIME: 11-15-16 1500
RELINQUISHED BY: [signature]
DATE/TIME: 11-15-16 1538
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY LAB: [signature]
DATE/TIME: 11/15/16 1538
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER (CLIENT) OTHER FS
Packed: No NA
Ice: (Yes) No NA
Temperature: 2°C Min: 2°C Max:
Custody Seal: (Intact) Broken Not Present
# of Coolers:
Cooler ID:
Tracking #:

FOR LAB USE ONLY
LAB #: A2K0511
Entered into LIMS: (PT

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 3:46:02PM

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 11/15/16 15:38

Work Order: AZK0511
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 7 **#Containers:** 21

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, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 20, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30202856

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on November 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.

Report replaces previous December 16, 2016 report. Report reissued to include the QC sheets that were omitted from the initial 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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30202856

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30202856

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30202856002	**YGWC-36**	Water	11/14/16 16:35	11/16/16 11:55
30202856003	**YGWC-45**	Water	11/14/16 13:30	11/16/16 11:55
30202856004	**Dup-1**	Water	11/14/16 00:00	11/16/16 11:55
30202856005	**YGWC-49**	Water	11/15/16 10:35	11/16/16 11:55
30202856006	**FB-1-11-15-16**	Water	11/15/16 12:25	11/16/16 11:55
30202856007	**YGWC-44**	Water	11/15/16 13:00	11/16/16 11:55

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30202856

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30202856002	**YGWC-36**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202856003	**YGWC-45**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202856004	**Dup-1**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202856005	**YGWC-49**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202856006	**FB-1-11-15-16**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202856007	**YGWC-44**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202856

Sample: YGWC-36 **Lab ID: 30202856002** Collected: 11/14/16 16:35 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0387 ± 0.162 (0.408) C:86% T:NA**	pCi/L	12/06/16 10:04	13982-63-3	
Radium-228	EPA 9320	**0.00642 ± 0.347 (0.741) C:68% T:89%**	pCi/L	12/16/16 19:20	15262-20-1	
Total Radium	Total Radium Calculation	**0.0451 ± 0.509 (1.15)**	pCi/L	12/19/16 16:46	7440-14-4	

Sample: YGWC-45 **Lab ID: 30202856003** Collected: 11/14/16 13:30 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.614 ± 0.308 (0.424) C:91% T:NA**	pCi/L	12/06/16 10:04	13982-63-3	
Radium-228	EPA 9320	**0.367 ± 0.335 (0.644) C:66% T:89%**	pCi/L	12/16/16 19:20	15262-20-1	
Total Radium	Total Radium Calculation	**0.981 ± 0.642 (1.07)**	pCi/L	12/19/16 16:46	7440-14-4	

Sample: Dup-1 **Lab ID: 30202856004** Collected: 11/14/16 00:00 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.182 ± 0.185 (0.333) C:75% T:NA**	pCi/L	12/07/16 08:32	13982-63-3	
Radium-228	EPA 9320	**0.724 ± 0.409 (0.715) C:65% T:84%**	pCi/L	12/16/16 19:20	15262-20-1	
Total Radium	Total Radium Calculation	**0.906 ± 0.594 (1.05)**	pCi/L	12/19/16 16:46	7440-14-4	

Sample: YGWC-49 **Lab ID: 30202856005** Collected: 11/15/16 10:35 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.238 ± 0.263 (0.544) C:86% T:NA**	pCi/L	12/07/16 08:32	13982-63-3	
Radium-228	EPA 9320	**0.407 ± 0.387 (0.750) C:65% T:88%**	pCi/L	12/16/16 19:20	15262-20-1	
Total Radium	Total Radium Calculation	**0.645 ± 0.650 (1.29)**	pCi/L	12/19/16 16:46	7440-14-4	

Sample: FB-1-11-15-16 **Lab ID: 30202856006** Collected: 11/15/16 12:25 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.00377 ± 0.123 (0.349) C:90% T:NA**	pCi/L	12/07/16 08:32	13982-63-3	
Radium-228	EPA 9320	**0.497 ± 0.388 (0.733) C:63% T:94%**	pCi/L	12/16/16 19:15	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202856

Sample: FB-1-11-15-16 **Lab ID: 30202856006** Collected: 11/15/16 12:25 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**0.501 ± 0.511 (1.08)**	pCi/L	12/19/16 16:46	7440-14-4	

Sample: YGWC-44 **Lab ID: 30202856007** Collected: 11/15/16 13:00 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.195 ± 0.223 (0.460) C:88% T:NA**	pCi/L	12/07/16 08:32	13982-63-3	
Radium-228	EPA 9320	**0.481 ± 0.482 (0.942) C:58% T:83%**	pCi/L	12/16/16 19:15	15262-20-1	
Total Radium	Total Radium Calculation	**0.676 ± 0.705 (1.40)**	pCi/L	12/19/16 16:46	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202856

QC Batch: 241711 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30202856002, 30202856003

METHOD BLANK: 1188125 Matrix: Water
Associated Lab Samples: 30202856002, 30202856003

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202856

QC Batch: 241712 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30202856004, 30202856005, 30202856006, 30202856007

METHOD BLANK: 1188126 Matrix: Water
Associated Lab Samples: 30202856004, 30202856005, 30202856006, 30202856007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.104 ± 0.157 (0.342) C:95% T:NA	pCi/L	12/07/16 09:29	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202856

QC Batch: 242657 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30202856002, 30202856003, 30202856004, 30202856005, 30202856006, 30202856007

METHOD BLANK: 1192648 Matrix: Water
Associated Lab Samples: 30202856002, 30202856003, 30202856004, 30202856005, 30202856006, 30202856007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0888 ± 0.377 (0.792) C:63% T:86%	pCi/L	12/16/16 19:19	

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, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30202856

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.

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

WO# : 30202856

30202856

Chain of Custody

Pace Analytical

Workorder: AZK0511 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 12/16/2016

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	YGWA-47	G	11/14/2016 11:20	AZK0511-01	GW	1	X	001
2	YGWC-36	G	11/14/2016 16:35	AZK0511-02	GW	1	X	002
3	YGWC-45	G	11/14/2016 13:30	AZK0511-03	GW	1	X	003
4	Dup-1	G	11/14/2016 0:00	AZK0511-04	GW	1	X	004
5	YGWC-49	G	11/15/2016 10:35	AZK0511-05	GW	1	X	005
6	FB-1-11-15-16	G	11/15/2016 12:25	AZK0511-06	W	1	X	006
7	YGWC-44	G	11/15/2016 13:00	AZK0511-07	GW	1	X	007
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Karen Hix	11-16-16 1155	
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.

30202856

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates Phase II Facilities
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-d-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
11-14-16	1120	GW		✓	YGWA-47	3	1	1	1	1
11-14-16	1635	GW		✓	YGWC-36	3	1	1	1	2
11-14-16	1330	GW		✓	YGWC-45	3	1	1	1	3
11-14-16	—	GW		✓	DUP-1	3	1	1	1	4
11-15-16	1035	GW		✓	YGWC-49	3	1	1	1	5
11-15-16	1225	W		✓	FB-1-11-15-16	3	1	1	1	6
11-15-16	1300	GW		✓	YGWC-44	3	1	1	1	7

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: Chris Parker ACC
DATE/TIME: 11-15-16 1500
RELINQUISHED BY: [signature]
DATE/TIME: 11-15-16 1538
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY LAB: [signature]
DATE/TIME: 11/15/16 1538
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
pH checked: Yes No NA to
Ice: Yes No NA
Temperature: 2°C Min 2°C Max
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: A20511
Entered into LIMS: [initials]
Tracking #:

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace Georgia Project # 30202856

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

Tracking #: 6812 5100 4285

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

Thermometer Used NA 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 11-17-16

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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: KH Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH Date: 11-17-16

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: One 1/2 gallon per sample Fed Ex Express 11-16-16 1155

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: 12/6/2016
Worklist: 32687
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1188126
MB concentration:	0.104
M/B Counting Uncertainty:	0.157
MB MDC:	0.342
MB Numerical Performance Indicator:	1.31
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS32687	LCSD32687
Count Date:	12/7/2016	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.673	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.501	
Target Conc. (pCi/L, g, F):	8.916	
Uncertainty (Calculated):	0.419	
Result (pCi/L, g, F):	8.412	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.879	
Numerical Performance Indicator:	-1.01	
Percent Recovery:	94.35%	
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):	
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:	

Duplicate Sample Assessment

Sample I.D.:	30203117004
Duplicate Sample I.D.	30203117004DUP
Sample Result (pCi/L, g, F):	0.107
Sample Result Counting Uncertainty (pCi/L, g, F):	0.171
Sample Duplicate Result (pCi/L, g, F):	0.356
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.245
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	-1.635
Duplicate RPD:	107.69%
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.

30203117004
30203117004DUP

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:

LMDC

***Batch must be re-prepped due to unacceptable precision.

12/20/16

Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: JAL
Date: 12/12/2016
Worklist: 32864
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1192648
MB concentration:	0.089
M/B Counting Uncertainty:	0.377
MB MDC:	0.792
MB Numerical Performance Indicator:	0.46
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS32864	LCSD32864
Count Date:	12/16/2016	
Spike I.D.:	16-027	
Spike Concentration (pCi/mL):	25.807	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.801	
Target Conc. (pCi/L, g, F):	6.441	
Uncertainty (Calculated):	0.464	
Result (pCi/L, g, F):	8.521	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.711	
Numerical Performance Indicator:	4.80	
Percent Recovery:	132.29%	
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):	
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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30202831001	
Duplicate Sample I.D.	30202831001DUP	
Sample Result (pCi/L, g, F):	0.133	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.364	
Sample Duplicate Result (pCi/L, g, F):	0.543	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.380	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.527	30202831001
Duplicate RPD:	121.16%	30202831001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

12/12/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	12/5/2016
Worklist:	32686
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS32686	LCSD32686
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):	8.900	
Uncertainty (Calculated):	0.419	
Result (pCi/L, g, F):	8.003	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.944	
Numerical Performance Indicator:	-1.70	
Percent Recovery:	89.92%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30202498008	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30202498008DUP	
Sample 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	30202498008
Duplicate RPD:	216.23%	30202498008DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

LMPC

12/20/16

***Batch must be re-prepped due to unacceptable precision.

Product Name: Low-Flow System

Date: 2016-07-26 15:25:57

Project Information:		Pump Information:	
Operator Name	Corbin	Pump Model/Type	bladder
Company Name	AECOM	Tubing Type	pe
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	YGWA-4i (YGWA-4I)	Tubing Length	60 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	44.7 ft

Well Information:		Pumping Information:	
Well ID	YGWA-4i (YGWA-4I)	Final Pumping Rate	125 mL/min
Well diameter	2 in	Total System Volume	0.4578054 L
Well Total Depth	49.79 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	34.68 in
Depth to Water	23.4 ft	Total Volume Pumped	5.75 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%	+/- 5		+/- 0.2	+/- 20
Last 5	14:12:16	1499.93	18.28	6.28	139.18	6.68	25.75	1.33	48.11
Last 5	14:17:16	1799.93	18.18	6.27	139.13	8.12	25.95	1.30	47.72
Last 5	14:22:16	2099.93	18.25	6.26	138.12	4.61	26.09	1.30	47.49
Last 5	14:27:16	2399.93	18.10	6.24	137.11	3.09	26.21	1.37	47.70
Last 5	14:32:16	2699.93	18.12	6.22	135.65	2.86	26.29	1.45	48.21
Variance 0			0.07	-0.01	-1.01			-0.00	-0.23
Variance 1			-0.16	-0.02	-1.01			0.07	0.21
Variance 2			0.02	-0.02	-1.46			0.08	0.51

Notes

Grab Samples
YGWA-4i
1437

Product Name: Low-Flow System

Date: 2016-07-26 15:26:33

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-5D	Tubing Length	130 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	124 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.670245 L
Well Total Depth	129.05 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.46 in
Depth to Water	12.54 ft	Total Volume Pumped	4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	15:04:38	600.03	20.79	7.63	272.33	1.10	13.00	0.94	-149.26
Last 5	15:09:38	900.03	20.84	7.65	269.82	1.18	13.00	0.91	-142.58
Last 5	15:14:38	1200.03	20.88	7.65	271.83	1.15	13.00	0.94	-137.96
Last 5	15:19:38	1500.03	20.89	7.65	271.43	1.53	13.00	1.03	-134.78
Last 5	15:24:38	1800.03	20.75	7.66	272.24	1.61	13.00	0.90	-132.11
Variance 0			0.04	-0.01	2.00			0.03	4.62
Variance 1			0.01	0.00	-0.40			0.09	3.18
Variance 2			-0.14	0.01	0.81			-0.13	2.68

Notes

Collect sample at 15:29.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-26 14:34:25

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-5I	Tubing Length	65 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.3801225 L
Well Total Depth	57.65 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.33 in
Depth to Water	19.65 ft	Total Volume Pumped	5.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	13:39:08	600.03	23.43	5.76	79.44	3.19	19.98	5.66	176.40
Last 5	13:44:08	900.03	23.22	5.74	79.02	2.94	19.98	5.68	173.72
Last 5	13:49:08	1200.03	23.12	5.73	79.10	2.90	19.98	5.72	171.64
Last 5	13:54:08	1500.03	23.57	5.72	78.34	2.50	19.98	5.65	171.72
Last 5	13:59:08	1800.03	23.48	5.72	76.90	2.75	19.98	5.62	170.89
Variance 0			-0.10	-0.01	0.08			0.05	-2.08
Variance 1			0.45	-0.01	-0.76			-0.08	0.08
Variance 2			-0.09	-0.00	-1.44			-0.03	-0.83

Notes

Sample time is at 14:05. Will collect EQB-2 from the tubing weight. EQB-2 sample time 14:36.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-27 10:03:16

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Sample Pro
Company Name	AECOM	Tubing Type	PE
Project Name	Play Yates	Tubing Diameter	0.17 in
Site Name	YGWA-6I	Tubing Length	70 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	63 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.5024396 L
Well Total Depth	68.72 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	339.48 in
Depth to Water	20.20 ft	Total Volume Pumped	25.34 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	09:40:16	4199.99	19.50	6.35	233.06	2.72	47.52	4.51	87.27
Last 5	09:45:16	4499.99	19.91	6.38	233.59	3.05	47.73	4.02	66.12
Last 5	09:50:16	4799.99	19.99	6.39	233.14	2.70	47.98	3.93	57.81
Last 5	09:55:16	5099.99	19.95	6.40	233.04	3.30	48.24	3.89	51.97
Last 5	10:00:16	5399.99	19.99	6.40	233.22	2.75	48.49	3.84	50.72
Variance 0			0.09	0.01	-0.45			-0.09	-8.31
Variance 1			-0.05	0.01	-0.10			-0.04	-5.83
Variance 2			0.04	0.01	0.18			-0.05	-1.25

Notes

Sample time is 10:03.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-27 10:24:36

Project Information:		Pump Information:	
Operator Name	Corbin	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	pe
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	YGWA-6s (YGWA-6S)	Tubing Length	50 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	34.6 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6s (YGWA-6S)	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.4131711 L
Well Total Depth	39.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	13.44 in
Depth to Water	19.0 ft	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			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	08:29:07	300.10	21.22	5.92	90.57	1.92	20.65	6.52	92.14
Last 5	08:39:07	899.95	21.04	5.90	86.47	1.12	20.93	6.49	83.90
Last 5	08:44:07	1199.94	21.06	5.89	86.61	0.85	20.98	6.56	81.30
Last 5	08:49:07	1499.94	20.88	5.90	85.97	0.65	21.01	6.47	79.57
Last 5	08:54:07	1799.95	20.83	5.90	86.18	1.31	21.02	6.49	78.42
Variance 0			0.02	-0.00	0.14			0.07	-2.60
Variance 1			-0.18	0.00	-0.64			-0.09	-1.73
Variance 2			-0.04	0.00	0.21			0.02	-1.15

Notes

Cloudy, mid 70s

Grab Samples

YGWA-6s

0859

second rad bottle

0859

Product Name: Low-Flow System

Date: 2016-07-27 12:52:14

Project Information:		Pump Information:	
Operator Name	Corbin	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	pe
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	YGWA-17s (YGWA-17S)	Tubing Length	50 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	34.91 ft

Well Information:		Pumping Information:	
Well ID	YGWA-17s (YGWA-17S)	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.4131711 L
Well Total Depth	39.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.84 in
Depth to Water	14.63 ft	Total Volume Pumped	3.48 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%	+/- 5		+/- 0.2	+/- 20
Last 5	11:05:28	300.09	22.22	5.58	65.02	1.11	14.94	1.54	68.89
Last 5	11:10:28	600.02	21.73	5.58	65.26	0.73	14.95	1.41	64.71
Last 5	11:15:28	900.02	21.46	5.58	65.23	0.54	14.95	1.36	60.59
Last 5	11:20:28	1200.02	21.53	5.59	64.94	1.03	14.95	1.33	58.43
Last 5	11:25:28	1500.02	21.45	5.59	65.44	1.69	14.95	1.33	56.00
Variance 0			-0.27	0.00	-0.02			-0.05	-4.12
Variance 1			0.07	0.01	-0.29			-0.02	-2.16
Variance 2			-0.08	-0.00	0.49			-0.00	-2.43

Notes

Cloudy, low 80s

Grab Samples

YGWA-17s

1130

DUP-3

Duplicate

Product Name: Low-Flow System

Date: 2016-07-27 14:03:31

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-18I	Tubing Length	83 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.4604641 L
Well Total Depth	80.06 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.14 in
Depth to Water	24.02 ft	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			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	13:41:26	600.03	22.90	6.17	123.81	5.36	24.14	2.23	113.35
Last 5	13:46:26	900.04	22.37	6.16	122.80	3.05	24.15	1.94	115.50
Last 5	13:51:26	1200.00	22.54	6.17	122.29	2.39	24.15	1.89	115.58
Last 5	13:56:26	1500.00	22.22	6.16	121.63	3.26	24.16	1.90	115.05
Last 5	14:01:26	1800.00	22.18	6.14	120.75	1.71	24.16	1.95	115.17
Variance 0			0.17	0.00	-0.51			-0.05	0.08
Variance 1			-0.32	-0.01	-0.66			0.01	-0.53
Variance 2			-0.05	-0.01	-0.87			0.05	0.12

Notes

Collect sample at 14:06.

FB-3 collected at 15:20

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-27 12:14:10

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWA-18S	Tubing Length	43 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2819272 L
Well Total Depth	40.37 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.88 in
Depth to Water	21.64 ft	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			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	11:51:05	600.03	21.39	5.49	61.12	10.75	22.43	1.49	172.90
Last 5	11:56:05	900.03	21.22	5.47	60.75	4.54	22.49	1.42	171.89
Last 5	12:01:05	1200.03	21.33	5.47	60.19	3.06	22.51	1.38	170.07
Last 5	12:06:05	1500.03	21.46	5.47	60.10	3.15	22.52	1.36	168.35
Last 5	12:11:05	1799.99	21.50	5.46	59.99	3.28	22.52	1.35	166.98
Variance 0			0.11	-0.00	-0.56			-0.04	-1.82
Variance 1			0.14	-0.00	-0.09			-0.02	-1.72
Variance 2			0.04	-0.01	-0.10			-0.01	-1.37

Notes

Collect sample at 12:15.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-27 15:17:20

Project Information:		Pump Information:	
Operator Name	Corbin	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	pe
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	YGWA-20s	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	24.71 ft

Well Information:		Pumping Information:	
Well ID	GWC-5R	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6.96 in
Depth to Water	9.57 ft	Total Volume Pumped	3.15 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%	+/- 5		+/- 0.2	+/- 20
Last 5	14:06:13	300.02	23.70	5.79	50.93	2.14	10.11	5.27	67.73
Last 5	14:11:13	600.02	23.79	5.79	50.90	2.24	10.15	5.21	62.76
Last 5	14:16:13	900.02	23.56	5.80	50.76	2.21	10.16	5.20	62.05
Last 5	14:21:13	1200.02	23.48	5.79	50.93	1.95	10.15	5.23	60.13
Last 5									
Variance 0			0.09	0.01	-0.03			-0.07	-4.97
Variance 1			-0.23	0.01	-0.14			-0.01	-0.71
Variance 2			-0.08	-0.01	0.18			0.04	-1.92

Notes

Pt cloudy, mid 80s

Grab Samples

YGWA-20s

1425

EQB-3

1425

Product Name: Low-Flow System

Date: 2016-07-28 11:48:20

Project Information:		Pump Information:	
Operator Name	Corbin	Pump Model/Type	bladder
Company Name	AECOM	Tubing Type	pe
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	YGWA-21i	Tubing Length	85 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	75.07 ft

Well Information:		Pumping Information:	
Well ID	GWC-5R	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.569391 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	48.72 in
Depth to Water	27.56 ft	Total Volume Pumped	13.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	10:04:03	5099.86	19.05	6.13	92.94	--	--	1.57	43.12
Last 5	10:09:03	5399.86	20.57	6.12	94.04	0.49	31.36	1.67	42.70
Last 5	10:14:03	5699.86	19.49	6.12	92.31	0.33	31.45	1.59	44.83
Last 5	10:19:04	5999.93	19.27	6.12	92.57	0.53	31.54	1.61	44.49
Last 5	10:24:04	6299.88	19.27	6.12	91.88	0.30	31.62	1.68	44.66
Variance 0			-1.08	0.01	-1.73			-0.08	2.12
Variance 1			-0.22	-0.00	0.26			0.02	-0.34
Variance 2			-0.01	-0.00	-0.69			0.07	0.17

Notes

Lowered purge rate from 300 ml to 200 ml then finally to 100 ml due to drawdown. Pump stopped twice due to low battery. Cloudy, mid 70s

Grab Samples

YGWA-21i

1028

Product Name: Low-Flow System

Date: 2016-07-28 08:56:10

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-19S	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	25 ft

Well Information:		Pumping Information:	
Well ID	YGWC-19S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	30.44 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.3 in
Depth to Water	16.24 ft	Total Volume Pumped	5.12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	08:34:02	600.03	18.84	5.67	43.16	2.27	16.55	4.95	152.62
Last 5	08:39:02	900.03	18.87	5.66	42.76	1.42	16.55	4.81	144.10
Last 5	08:44:02	1200.03	18.97	5.64	42.26	1.88	16.54	4.65	138.10
Last 5	08:49:02	1500.03	19.01	5.63	42.02	1.02	16.54	4.65	133.89
Last 5	08:54:02	1800.03	18.97	5.64	42.06	0.64	16.54	4.61	129.87
Variance 0			0.10	-0.02	-0.51			-0.16	-6.01
Variance 1			0.04	-0.01	-0.23			0.00	-4.21
Variance 2			-0.04	0.01	0.03			-0.04	-4.02

Notes

Collect sample at 09:00.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-28 11:25:48

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-22S	Tubing Length	43 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-22S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2819272 L
Well Total Depth	40.13 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8 in
Depth to Water	10.35 ft	Total Volume Pumped	6.05 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	11:00:33	600.03	21.30	4.93	675.48	1.16	11.14	0.59	336.61
Last 5	11:05:33	900.03	21.38	4.92	673.98	0.47	11.15	0.57	335.03
Last 5	11:10:33	1200.03	21.76	4.93	671.49	0.30	11.15	0.54	308.62
Last 5	11:15:33	1500.03	21.65	4.94	667.95	0.65	11.15	0.51	298.70
Last 5	11:20:33	1800.03	21.43	4.94	670.70	0.92	11.15	0.52	294.95
Variance 0			0.39	0.01	-2.49			-0.02	-26.41
Variance 1			-0.12	0.01	-3.54			-0.04	-9.92
Variance 2			-0.22	0.00	2.75			0.01	-3.75

Notes

Collect sample at 11:28.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-28 15:03:14

Project Information:		Pump Information:	
Operator Name	Corbin	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	pe
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	YGWC-23s	Tubing Length	50 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	34.18 ft

Well Information:		Pumping Information:	
Well ID	YGWC-23s	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.3131711 L
Well Total Depth	39.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4.92 in
Depth to Water	16.26 ft	Total Volume Pumped	3.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	13:04:59	600.02	23.67	5.61	222.52	1.67	16.67	5.66	58.01
Last 5	13:09:59	900.02	24.15	5.60	207.85	0.70	16.67	6.01	56.30
Last 5	13:14:59	1200.02	23.58	5.60	200.74	4.01	16.67	6.13	56.66
Last 5	13:19:59	1500.02	23.29	5.60	199.20	2.83	16.67	6.12	56.94
Last 5	13:24:59	1800.02	24.11	5.60	200.08	2.76	16.67	6.17	55.80
Variance 0			-0.57	-0.00	-7.11			0.12	0.37
Variance 1			-0.29	0.00	-1.55			-0.01	0.28
Variance 2			0.82	-0.01	0.88			0.06	-1.15

Notes

Wrong total depth in sampling plan. Bottom is ~29' btoc, tubing was placed ~24' btoc. Well volume = ~8.40 liters. Cloudy, mid 80s

Grab Samples

YGWC-23s

1329

AECOM GROUNDWATER SAMPLING LOG

SITE NAME:	Georgia Power Company Plant Yates	SITE LOCATION:	708 Dyer Road Newnan, GA
WELL NO:	V-WC-24S	SAMPLE ID:	V6WC-24S
FIELD TECHNICIAN:	Wesley Bowen	DATE:	8/1/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 47.65 feet to 57.65 feet	STATIC DEPTH TO WATER (feet): 28.0	PURGE PUMP TYPE OR BAILER: peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (57.65 feet − 28.00 feet) X 0.65 liters/foot ~ 19.27 liters 3x ~ 57.81 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = liters + (60 feet X 0.005 liters/foot) + 0.1 liters ~ 0.40 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 52	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 52	PURGING INITIATED AT: 1035	PURGING ENDED AT: 1108	TOTAL VOLUME PURGED (liters): 4.95
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449474 2279-2612		

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)
8.70	1043	1.2	1.2	0.15	28.38	2.89	5.62	64.70	87.20	5.49	23.25
8.70	1048	0.75	1.95	0.15	28.45	3.0	5.61	65.90	85.40	5.64	22.07
8.70	1053	0.75	2.70	0.15	28.46	1.32	5.59	65.80	84.00	5.60	21.81
8.70	1058	0.75	3.45	0.15	28.46	1.22	5.57	65.90	83.70	5.63	21.64
8.70	1103	0.75	4.20	0.15	28.46	0.81	5.56	65.50	83.20	5.62	21.55
8.70	1108	0.75	4.95	0.15	28.48	0.90	5.57	66.30	82.60	5.65	21.51

☐ 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 ; **⅞"** = 0.12 ; **1"** = 0.16

NOTES:

collect DUP-4

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

Product Name: Low-Flow System

Date: 2016-07-29 09:01:15

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-32I	Tubing Length	42 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2774638 L
Well Total Depth	39.99 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.7 in
Depth to Water	20.10 ft	Total Volume Pumped	4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	08:31:05	600.04	21.06	5.41	920.64	6.69	20.37	0.25	19.18
Last 5	08:36:05	900.03	21.06	5.43	920.54	3.78	20.37	0.21	-4.39
Last 5	08:41:05	1200.07	21.34	5.43	920.13	1.88	20.37	0.18	-13.93
Last 5	08:46:05	1500.06	21.50	5.41	919.16	1.10	20.37	0.17	-14.56
Last 5	08:51:05	1800.03	21.66	5.39	917.72	0.65	20.37	0.17	-7.91
Variance 0			0.28	-0.00	-0.41			-0.03	-9.54
Variance 1			0.16	-0.01	-0.97			-0.01	-0.63
Variance 2			0.16	-0.02	-1.44			-0.00	6.65

Notes

Collect sample @ 09:03. Will collect FB-4.

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-29 10:41:28

Project Information:		Pump Information:	
Operator Name	Corbin	Pump Model/Type	peristaltic
Company Name	AECOM	Tubing Type	pe
Project Name	Plant Yates	Tubing Diameter	.17 in
Site Name	YGWC-32s (YGWC-32S)	Tubing Length	30 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	465016		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	19.84 ft

Well Information:		Pumping Information:	
Well ID	~~GWC-5R~~ YGWC-32S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	23.22 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7.08 in
Depth to Water	16.46 ft	Total Volume Pumped	13.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 20
Last 5	09:28:30	3899.81	22.67	4.63	737.03	6.13	17.05	0.54	495.54
Last 5	09:33:30	4199.81	22.58	4.63	735.57	4.34	17.05	0.49	506.33
Last 5	09:38:30	4499.81	22.62	4.64	736.58	4.27	17.05	0.54	504.12
Last 5	09:48:30	5099.74	22.91	4.64	737.97	1.11	17.05	0.48	502.19
Last 5	09:53:30	5399.72	23.30	4.64	733.61	1.66	17.05	0.53	500.19
Variance 0			0.04	0.00	1.01			0.05	-2.22
Variance 1			0.29	0.00	1.40			-0.06	-1.93
Variance 2			0.39	0.01	-4.37			0.05	-2.00

Notes

Pt cloudy, mid 70s.

Grab Samples

YGWC-32S

0958

Product Name: Low-Flow System

Date: 2016-08-01 09:08:23

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-33S	Tubing Length	41 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2730004 L
Well Total Depth	38.56 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.4 in
Depth to Water	8.83 ft	Total Volume Pumped	6.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	08:45:25	600.03	21.23	4.71	1409.50	7.72	9.38	0.27	-14.42
Last 5	08:50:25	900.03	21.15	4.64	1409.34	5.20	9.38	0.22	-5.54
Last 5	08:55:25	1200.03	21.40	4.64	1408.13	3.71	9.38	0.23	-1.92
Last 5	09:00:25	1500.03	21.61	4.62	1406.06	2.69	9.37	0.18	0.77
Last 5	09:05:25	1800.03	21.73	4.62	1394.21	2.61	9.37	0.18	3.50
Variance 0			0.24	-0.00	-1.20			0.01	3.62
Variance 1			0.22	-0.02	-2.07			-0.05	2.69
Variance 2			0.12	0.00	-11.85			-0.00	2.73

Notes

Sample collected at 09:11

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-28 13:30:11

Project Information:		Pump Information:	
Operator Name	WB	Pump Model/Type	Proactive Alexis
Company Name	AECOM	Tubing Type	PE
Project Name	Plant Yates	Tubing Diameter	0.17 in
Site Name	YGWC-34I	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	449474		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC-34I	Final Pumping Rate	100 mL/min
Well diameter	3 in	Total System Volume	0.2685369 L
Well Total Depth	38.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	24 ft	Total Volume Pumped	4.76 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	13:01:19	600.03	21.22	4.90	760.98	0.14	24.20	0.33	223.42
Last 5	13:06:19	899.98	21.40	4.88	763.89	0.12	24.20	0.26	209.68
Last 5	13:11:19	1199.99	21.55	4.87	760.94	0.26	24.21	0.23	193.53
Last 5	13:16:19	1499.99	21.46	4.86	761.24	0.13	24.21	0.22	191.82
Last 5	13:21:19	1799.98	21.37	4.84	760.31	0.26	24.20	0.20	179.36
Variance 0			0.15	-0.01	-2.94			-0.03	-16.15
Variance 1			-0.09	-0.01	0.30			-0.01	-1.71
Variance 2			-0.09	-0.02	-0.94			-0.02	-12.46

Notes

collect sample at 13:33. Will collect EQB-4.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-14 16:31:23

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Peristaltic
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	teflon
Project Name	Plant Yates - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Phase 2	Tubing Length	55 ft
Latitude	33º 27' 27.49"		
Longitude	-84º -53' -49.95"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	50 ft

Well Information:		Pumping Information:	
Well ID	YGWC 36	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3354883 L
Well Total Depth	55.86 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	31.8 in
Depth to Water	10.55 ft	Total Volume Pumped	24 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	16:08:38	5699.95	19.12	6.28	448.76	5.16	13.30	0.24	65.58
Last 5	16:13:38	5999.93	19.15	6.28	444.04	5.31	13.20	0.26	63.89
Last 5	16:18:38	6299.92	19.16	6.28	446.12	4.93	13.20	0.23	63.60
Last 5	16:23:38	6599.92	19.10	6.29	443.22	4.53	13.20	0.23	60.91
Last 5	16:28:38	6899.92	19.11	6.28	439.04	4.75	13.20	0.24	60.85
Variance 0			0.01	-0.01	2.08			-0.03	-0.29
Variance 1			-0.05	0.01	-2.90			0.00	-2.68
Variance 2			0.01	-0.00	-4.17			0.01	-0.06

Notes

Sample collected at 16:35. Sunny 60's.

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:

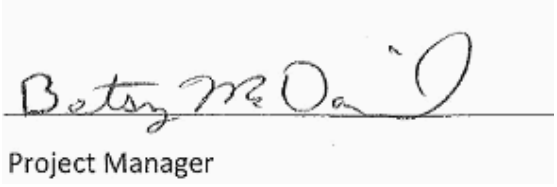
Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: **Mr. Joju Abraham**

Report Number: **AZI0561**
September 23, 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 23, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-17S	AZI0561-01	Ground Water	09/16/16 08:47	09/16/16 13:00
YGWA-18S	AZI0561-02	Ground Water	09/16/16 09:38	09/16/16 13:00

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 23, 2016

Report No.: AZI0561
Client ID: YGWA-17S
Date/Time Sampled: 9/16/2016 8:47:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0561-01
Date/Time Received: 9/16/2016 1:00:00PM

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	09/19/16 16:00	09/19/16 16:00	6090483	JPT
Inorganic Anions											
Chloride	4.5	0.25	0.01	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 08:07	6090603	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 08:07	6090603	RLC
Sulfate	4.8	1.0	0.05	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 08:07	6090603	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Barium	0.0127	0.0100	0.0004	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Boron	0.0086	0.100	0.0064	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Calcium	1.97	0.500	0.0311	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Selenium	0.0015	0.0100	0.0010	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:29	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:23	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 23, 2016

Report No.: AZI0561
Client ID: YGWA-18S
Date/Time Sampled: 9/16/2016 9:38:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0561-02
Date/Time Received: 9/16/2016 1:00:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	35	25	10	mg/L	SM 2540 C		1	09/19/16 16:00	09/19/16 16:00	6090483	JPT
Inorganic Anions											
Chloride	6.1	0.25	0.01	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 08:28	6090603	RLC
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 08:28	6090603	RLC
Sulfate	1.7	1.0	0.05	mg/L	EPA 300.0		1	09/21/16 16:48	09/22/16 08:28	6090603	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Barium	0.0168	0.0100	0.0004	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Boron	0.0079	0.100	0.0064	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Calcium	1.50	0.500	0.0311	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Cobalt	0.0008	0.0100	0.0005	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Lithium	0.0031	0.0500	0.0021	mg/L	EPA 6020B	J	1	09/19/16 09:15	09/19/16 19:34	6090463	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	09/19/16 10:00	09/19/16 15:26	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 23, 2016

Report No.: AZI0561

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)			**Source: AZI0541-01**			Prepared & Analyzed: 09/19/16					
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 23, 2016

Report No.: AZI0561

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 23, 2016

Report No.: AZI0561

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 23, 2016

Report No.: AZI0561

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 23, 2016

Report No.: AZI0561

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 23, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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).

Note: Unless otherwise noted, all results are reported on an as received basis.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER
9/16/16	0847	GW		X	YGWA-175	3	1	1	1	1

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Charles Watson
DATE/TIME: 9/16/16

RELINQUISHED BY:
DATE/TIME: 9/16/16 1300

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 09/16/16 1300

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH Checked: Yes No NA
Ice: Yes No NA
Temperature: 5°C Min: 5°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZ10561
Entered into LIMS: MR
Tracking #:

file

CHAIN OF CUSTODY RECORD

Pace Analytical®
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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
9/16/16	0938	GW		X	VGWA-18S	3	1	1	1	2	

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Wesley Bowen
DATE/TIME: 09/16/16

RELINQUISHED BY:
DATE/TIME: 09/16/16 1020

RECEIVED BY:
DATE/TIME: 9/16/16 1020

RELINQUISHED BY:
DATE/TIME: 09/16/16 1300

RECEIVED BY/LAB: MZaleman
DATE/TIME: 09/16/16 1300

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 5°C Min: 5°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZ10561
Entered into LIMS: MR
Tracking #:

file

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: 9/23/2016 4:00:08PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 09/16/16 13:00

Work Order: AZI0561
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 2 **#Containers:** 6

Minimum Temp(C): 5.0 **Maximum Temp(C):** 5.0 **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 17, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: YATES AP CCR GW
Pace Project No.: 30196379

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: YATES AP CCR GW
Pace Project No.: 30196379

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196379

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196379001	**YGWA-17S**	Water	09/16/16 08:47	09/19/16 09:40

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
Pace Project No.: 30196379

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196379001	**YGWA-17S**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196379

Sample: YGWA-17S **Lab ID: 30196379001** Collected: 09/16/16 08:47 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	**0.0474 ± 0.165 (0.406) C:83% T:NA**	pCi/L	10/05/16 08:17	13982-63-3	
Radium-228	EPA 9320	**0.993 ± 0.391 (0.577) C:72% T:77%**	pCi/L	10/04/16 02:42	15262-20-1	
Total Radium	Total Radium Calculation	**1.04 ± 0.556 (0.983)**	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196379

QC Batch: 234855 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196379001

METHOD BLANK: 1152654 Matrix: Water
Associated Lab Samples: 30196379001

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196379

QC Batch: 234856 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30196379001

METHOD BLANK: 1152655 Matrix: Water
Associated Lab Samples: 30196379001

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196379

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.

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

WO#:30196379

CHAIN OF CUSTODY RECORD

Pace Analytical®

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30(
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

30196379

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

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER
CONTAINER TYPE:							P	P	P	
PRESERVATION:							3	7	3	
9/16/16	0847	GW		X	YGWA-17S	3	1	1	1	001

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Charles Watson
DATE/TIME: 9/16/16

RELINQUISHED BY:
DATE/TIME: 9/16/16 1300

RECEIVED BY:
DATE/TIME: 9-19-16 0940

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes (No) NA
Temperature: NA Min: Max:

Custody Seal: Intact Broken (Not Present)
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

Sample Condition Upon Receipt Pittsburgh

30196379

Pace Analytical

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 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 9-19-16

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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH ≤ 2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH / Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH / Date: 9-19-16

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

Pace Analytical™ www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS31648	LCSD31648
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD In the space below.
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	30196635005
Duplicate RPD:	28.14%	30196635005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	10/1/2016
Worklist:	31649
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
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

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS31649	LCSD31649
Count Date:	10/4/2016	
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):	6.306	
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196636002
Duplicate RPD:	104.31%	30196636002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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.: 30196380

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: YATES AP CCR GW
Pace Project No.: 30196380

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: YATES AP CCR GW
Pace Project No.: 30196380

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30196380001	**YGWA-18S**	Water	09/16/16 09:38	09/19/16 09:40

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: YATES AP CCR GW
Pace Project No.: 30196380

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30196380001	**YGWA-18S**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196380

Sample: YGWA-18S **Lab ID: 30196380001** Collected: 09/16/16 09:38 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	**0.126 ± 0.166 (0.350) C:83% T:NA**	pCi/L	10/05/16 08:17	13982-63-3	
Radium-228	EPA 9320	**0.789 ± 0.378 (0.620) C:72% T:76%**	pCi/L	10/04/16 03:04	15262-20-1	
Total Radium	Total Radium Calculation	**0.915 ± 0.544 (0.970)**	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196380

QC Batch: 234855 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30196380001

METHOD BLANK: 1152654 Matrix: Water
Associated Lab Samples: 30196380001

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196380

QC Batch: 234856
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Associated Lab Samples: 30196380001

METHOD BLANK: 1152655
Matrix: Water
Associated Lab Samples: 30196380001

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: YATES AP CCR GW
Pace Project No.: 30196380

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.

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

WO#:30196380

CHAIN OF CUSTODY RECORD

Pace Analytical®

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.pasi-lab.com

30196380

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

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER
9/16/16	0938	GW		X	VGWA-18S	3	1	1	1	

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Wesley Bowen
DATE/TIME: 09/16/16

RELINQUISHED BY:
DATE/TIME: 09/16/16 1020

RECEIVED BY:
DATE/TIME: 9/16/16 1020

RELINQUISHED BY:
DATE/TIME: 09/16/16 1700

RECEIVED BY LAB: Kiara E. Hill
DATE/TIME: 9-14-16 0940

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes No NA

Temperature: MA
Min: Max:

Custody Seal: Intact Broken Not Present

# of Coolers

Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

30196380

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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 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 9-19-16

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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. PH <2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH Date: 9-19-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/3/2016
Worklist:	31648
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS31648	LCSD31648
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196635005
Duplicate RPD:	28.14%	30196635005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	10/1/2016
Worklist:	31649
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1152655
MB concentration:	0.522
M/B Counting Uncertainty:	0.344
MB MDC:	0.662
MB Numerical Performance Indicator:	2.88
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS31649	LCSD31649
Count Date:	10/4/2016	
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):	6.306	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196636002	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196636002
Duplicate RPD:	104.31%	30196636002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

March 24, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAC0053 Plant Yates
Pace Project No.: 30212422

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on March 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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAC0053 Plant Yates
Pace Project No.: 30212422

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAC0053 Plant Yates
Pace Project No.: 30212422

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30212422001	**YGWC-49**	Water	02/27/17 13:10	03/03/17 09:45
30212422002	**FB-1-2-28-17**	Water	02/28/17 10:00	03/03/17 09:45
30212422003	**YGWC-44**	Water	02/28/17 10:30	03/03/17 09:45
30212422004	**YGWC-36**	Water	02/28/17 14:00	03/03/17 09:45

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAC0053 Plant Yates
Pace Project No.: 30212422

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30212422001	**YGWC-49**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212422002	**FB-1-2-28-17**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212422003	**YGWC-44**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212422004	**YGWC-36**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0053 Plant Yates
Pace Project No.: 30212422

Sample: YGWC-49 **Lab ID: 30212422001** Collected: 02/27/17 13:10 Received: 03/03/17 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	**0.174 ± 0.114 (0.158) C:94% T:NA**	pCi/L	03/20/17 10:26	13982-63-3	
Radium-228	EPA 9320	**0.0703 ± 0.319 (0.730) C:81% T:79%**	pCi/L	03/18/17 15:46	15262-20-1	
Total Radium	Total Radium Calculation	**0.244 ± 0.433 (0.888)**	pCi/L	03/23/17 11:14	7440-14-4	

Sample: FB-1-2-28-17 **Lab ID: 30212422002** Collected: 02/28/17 10:00 Received: 03/03/17 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	**0.0124 ± 0.0654 (0.175) C:99% T:NA**	pCi/L	03/20/17 10:26	13982-63-3	
Radium-228	EPA 9320	**-0.0875 ± 0.354 (0.848) C:74% T:83%**	pCi/L	03/18/17 15:47	15262-20-1	
Total Radium	Total Radium Calculation	**0.0124 ± 0.419 (1.02)**	pCi/L	03/23/17 11:14	7440-14-4	

Sample: YGWC-44 **Lab ID: 30212422003** Collected: 02/28/17 10:30 Received: 03/03/17 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	**0.0926 ± 0.104 (0.207) C:94% T:NA**	pCi/L	03/20/17 10:26	13982-63-3	
Radium-228	EPA 9320	**0.148 ± 0.367 (0.820) C:70% T:81%**	pCi/L	03/18/17 15:47	15262-20-1	
Total Radium	Total Radium Calculation	**0.241 ± 0.471 (1.03)**	pCi/L	03/23/17 11:14	7440-14-4	

Sample: YGWC-36 **Lab ID: 30212422004** Collected: 02/28/17 14:00 Received: 03/03/17 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	**0.130 ± 0.127 (0.245) C:85% T:NA**	pCi/L	03/20/17 10:26	13982-63-3	
Radium-228	EPA 9320	**1.21 ± 0.776 (1.45) C:41% T:78%**	pCi/L	03/18/17 15:47	15262-20-1	
Total Radium	Total Radium Calculation	**1.34 ± 0.903 (1.70)**	pCi/L	03/23/17 11:14	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0053 Plant Yates
Pace Project No.: 30212422

QC Batch: 251731 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30212422001, 30212422002, 30212422003, 30212422004

METHOD BLANK: 1238369 Matrix: Water
Associated Lab Samples: 30212422001, 30212422002, 30212422003, 30212422004

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0053 Plant Yates
Pace Project No.: 30212422

QC Batch: 251828 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30212422001, 30212422002, 30212422003, 30212422004

METHOD BLANK: 1238974 Matrix: Water
Associated Lab Samples: 30212422001, 30212422002, 30212422003, 30212422004

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAC0053 Plant Yates
Pace Project No.: 30212422

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.

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

WO#:30212422

30212422

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: AAC0053 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 3/24/2017

Report To:	Subcontract To:
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

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Radium 226, 228, Total	LAB USE ONLY	
1	YGWC-49	G	2/27/2017 13:10	AAC0053-01	GW	2	X		001
2	FB-1-2-28-17	G	2/28/2017 10:00	AAC0053-02	GW	2	X		002
3	YGWC-44	G	2/28/2017 10:30	AAC0053-03	GW	2	X		003
4	YGWC-36	G	2/28/2017 14:00	AAC0053-04	GW	2	X		004
5									
6									
7									
8									
9									
10									

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	Charles Hartley	3/2/17 1730	[illegible]	3-3-17 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.

30212422

CHAIN OF CUSTODY RECORD

Pace Analytical

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION		3	7	3	
2-27-17	1310	GW		✓	YGWC-49	4	1	1	2	1
2-28-17	1000	W		✓	FB-1-2-28-17	4	1	1	2	2
2-28-17	1030	GW		✓	YGWC-44	4	1	1	2	3
2-28-17	1400	GW		✓	YGWC-36	4	1	1	2	4

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: C. Parker, R. Walker ACC
DATE/TIME: 3-1-17 0845
RELINQUISHED BY: [signature]
DATE/TIME: 3-1-17 1650

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: [signature]
DATE/TIME: 3/1/17 1650
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH Checked: Yes No NA
pH: Yes No NA
Temperature: 1.4 °C Min: 1.4 °C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAC0053
Entered into LIMS: 1/4
Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace Ga. Project # 30212422

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

Tracking #: 6812 5102 7312

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 3-3-17

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	X		4. jaw 3/6/17
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X X			10.
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. All containers needing preservation are found to be in compliance with EPA recommendation.	X X			15.
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: ML 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: ML Date: 3-3-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	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
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	LCSD (Y or N)?	N
	LCS34495	LCSD34495
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	

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:

Duplicate Sample Assessment		
Sample I.D.:	30211899003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30211899003
Duplicate RPD:	22.69%	30211899003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:

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

Comments:

Apr 3/24/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJY
Date:	3/13/2017
Worklist:	34513
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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
	LCS34513	LCSD34513
Count Date:	3/18/2017	3/18/2017
Spike I.D.:	17-005	17-005
Spike Concentration (pCi/mL):	25.008	25.008
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.807	0.806
Target Conc. (pCi/L, g, F):	6.198	6.204
Uncertainty (Calculated):	0.446	0.447
Result (pCi/L, g, F):	4.807	3.854
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.605	0.565
Numerical Performance Indicator:	-3.63	-6.39
Percent Recovery:	77.55%	62.13%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS34513	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD34513	
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	

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:

3/14/17

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: AAC0053
March 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:

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 08, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-49	AAC0053-01	Ground Water	02/27/17 13:10	03/01/17 16:50
FB-1-2-28-17	AAC0053-02	Water	02/28/17 10:00	03/01/17 16:50
YGWC-44	AAC0053-03	Ground Water	02/28/17 10:30	03/01/17 16:50
YGWC-36	AAC0053-04	Ground Water	02/28/17 14:00	03/01/17 16:50

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

March 08, 2017

Report No.: AAC0053
Client ID: YGWC-49
Date/Time Sampled: 2/27/2017 1:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0053-01
Date/Time Received: 3/1/2017 4:50:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	382	25	10	mg/L	SM 2540 C		1	03/03/17 10:25	03/03/17 10:25	7030106	JPT
Inorganic Anions											
Chloride	4.6	0.25	0.01	mg/L	EPA 300.0		1	03/05/17 16:25	03/06/17 14:25	7030132	RLC
Fluoride	0.06	0.30	0.004	mg/L	EPA 300.0	J	1	03/05/17 16:25	03/06/17 14:25	7030132	RLC
Sulfate	84	10	0.92	mg/L	EPA 300.0		10	03/05/17 16:25	03/07/17 01:02	7030132	RLC
Metals, Total											
Antimony	0.0011	0.0030	0.0003	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Barium	0.0888	0.0100	0.0003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Cadmium	0.00007	0.0010	0.000060	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Calcium	12.5	2.50	0.0522	mg/L	EPA 6020B		5	03/02/17 12:35	03/06/17 21:27	7030080	CSW
Chromium	0.0016	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Cobalt	0.0008	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Molybdenum	0.0007	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Selenium	0.0098	0.0100	0.0014	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Thallium	0.00009	0.0010	0.00003	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Lithium	0.0036	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:46	7030080	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/02/17 11:10	03/02/17 14:40	7030045	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 08, 2017

Report No.: AAC0053
Client ID: FB-1-2-28-17
Date/Time Sampled: 2/28/2017 10:00:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAC0053-02
Date/Time Received: 3/1/2017 4:50:00PM

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	03/03/17 15:10	03/03/17 15:10	7030156	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	03/05/17 16:25	03/06/17 14:46	7030132	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	03/05/17 16:25	03/06/17 14:46	7030132	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	03/05/17 16:25	03/06/17 14:46	7030132	RLC
Metals, Total											
Antimony	0.0004	0.0030	0.0003	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Calcium	0.0200	0.500	0.0104	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:52	7030080	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/02/17 11:10	03/02/17 14:47	7030045	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 08, 2017

Report No.: AAC0053
Client ID: YGWC-44
Date/Time Sampled: 2/28/2017 10:30:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0053-03
Date/Time Received: 3/1/2017 4:50:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	483	25	10	mg/L	SM 2540 C		1	03/03/17 10:25	03/03/17 10:25	7030106	JPT
Inorganic Anions											
Chloride	12	0.25	0.01	mg/L	EPA 300.0		1	03/05/17 16:25	03/06/17 15:07	7030132	RLC
Fluoride	0.07	0.30	0.004	mg/L	EPA 300.0	J	1	03/05/17 16:25	03/06/17 15:07	7030132	RLC
Sulfate	130	10	0.92	mg/L	EPA 300.0		10	03/05/17 16:25	03/07/17 01:23	7030132	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Arsenic	0.0005	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Barium	0.121	0.0100	0.0003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Boron	0.623	0.0400	0.0060	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Calcium	26.4	5.00	0.104	mg/L	EPA 6020B		10	03/02/17 12:35	03/06/17 21:04	7030080	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Cobalt	0.0017	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Molybdenum	0.0005	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Lithium	0.0124	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 20:58	7030080	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/02/17 11:10	03/02/17 14:49	7030045	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 08, 2017

Report No.: AAC0053
Client ID: YGWC-36
Date/Time Sampled: 2/28/2017 2:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0053-04
Date/Time Received: 3/1/2017 4:50:00PM

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	03/03/17 15:10	03/03/17 15:10	7030156	JPT
Inorganic Anions											
Chloride	5.4	0.25	0.01	mg/L	EPA 300.0		1	03/05/17 16:25	03/06/17 15:29	7030132	RLC
Fluoride	0.09	0.30	0.004	mg/L	EPA 300.0	J	1	03/05/17 16:25	03/06/17 15:29	7030132	RLC
Sulfate	110	10	0.92	mg/L	EPA 300.0		10	03/05/17 16:25	03/07/17 01:44	7030132	RLC
Metals, Total											
Antimony	0.0004	0.0030	0.0003	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Arsenic	0.0006	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Barium	0.0230	0.0100	0.0003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Boron	0.215	0.0400	0.0060	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Cadmium	0.0001	0.0010	0.000060	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Calcium	8.37	0.500	0.0104	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Lead	0.0003	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Molybdenum	0.0038	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Selenium	0.0017	0.0100	0.0014	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Lithium	0.0038	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/02/17 12:35	03/06/17 21:09	7030080	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	03/02/17 11:10	03/02/17 14:52	7030045	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 08, 2017

Report No.: AAC0053

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030106 - SM 2540 C											
Blank (7030106-BLK1)						Prepared & Analyzed: 03/03/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7030106-BS1)						Prepared & Analyzed: 03/03/17					
Total Dissolved Solids	356	25	10	mg/L	400.00		89	84-108			
Duplicate (7030106-DUP1)		**Source: AAC0053-04**				Prepared & Analyzed: 03/03/17					
Total Dissolved Solids	526	25	10	mg/L		441			18	10	QR-03
Batch 7030156 - SM 2540 C											
Blank (7030156-BLK1)						Prepared & Analyzed: 03/06/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7030156-BS1)						Prepared & Analyzed: 03/06/17					
Total Dissolved Solids	426	25	10	mg/L	400.00		106	84-108			
Duplicate (7030156-DUP1)		**Source: AAC0053-02RE1**				Prepared & Analyzed: 03/06/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7030156-DUP2)		**Source: AAC0053-04RE1**				Prepared & Analyzed: 03/06/17					
Total Dissolved Solids	286	25	10	mg/L		306			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

March 08, 2017

Report No.: AAC0053

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030132 - EPA 300.0											
Blank (7030132-BLK1)						Prepared: 03/05/17 Analyzed: 03/06/17					
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 (7030132-BS1)						Prepared: 03/05/17 Analyzed: 03/06/17					
Chloride	9.75	0.25	0.01	mg/L	10.010		97	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 (7030132-MS1)		**Source: AAB0913-01**				Prepared: 03/05/17 Analyzed: 03/06/17					
Chloride	15.1	0.25	0.01	mg/L	10.010	5.47	96	90-110			
Fluoride	10.6	0.30	0.004	mg/L	10.020	0.05	105	90-110			
Sulfate	105	1.0	0.09	mg/L	10.020	107	NR	90-110			QM-02
Matrix Spike (7030132-MS2)		**Source: AAB0913-04**				Prepared: 03/05/17 Analyzed: 03/06/17					
Chloride	14.3	0.25	0.01	mg/L	10.010	4.69	96	90-110			
Fluoride	10.7	0.30	0.004	mg/L	10.020	0.06	106	90-110			
Sulfate	399	1.0	0.09	mg/L	10.020	422	NR	90-110			QM-02
Matrix Spike Dup (7030132-MSD1)		**Source: AAB0913-01**				Prepared: 03/05/17 Analyzed: 03/06/17					
Chloride	15.1	0.25	0.01	mg/L	10.010	5.47	96	90-110	0.07	15	
Fluoride	10.6	0.30	0.004	mg/L	10.020	0.05	105	90-110	0.1	15	
Sulfate	105	1.0	0.09	mg/L	10.020	107	NR	90-110	0.04	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 08, 2017

Report No.: AAC0053

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030045 - EPA 7470A											
Blank (7030045-BLK1)						Prepared & Analyzed: 03/02/17					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7030045-BS1)						Prepared & Analyzed: 03/02/17					
Mercury	0.00236	0.00050	0.000041	mg/L	2.5000E-3		94	80-120			
Matrix Spike (7030045-MS1)		**Source: AAC0053-01**				Prepared & Analyzed: 03/02/17					
Mercury	0.00232	0.00050	0.000041	mg/L	2.5000E-3	ND	93	75-125			
Matrix Spike Dup (7030045-MSD1)		**Source: AAC0053-01**				Prepared & Analyzed: 03/02/17					
Mercury	0.00233	0.00050	0.000041	mg/L	2.5000E-3	ND	93	75-125	0.4	20	
Post Spike (7030045-PS1)		**Source: AAC0053-01**				Prepared & Analyzed: 03/02/17					
Mercury	1.66			ug/L	1.6667	-0.00660	99	80-120			
Batch 7030080 - EPA 3005A											
Blank (7030080-BLK1)						Prepared: 03/02/17 Analyzed: 03/06/17					
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							

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology 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 08, 2017

Report No.: AAC0053

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030080 - EPA 3005A											
LCS (7030080-BS1)						Prepared: 03/02/17 Analyzed: 03/06/17					
Antimony	0.104	0.0030	0.0003	mg/L	0.10000		104	80-120			
Arsenic	0.0954	0.0050	0.0004	mg/L	0.10000		95	80-120			
Barium	0.0993	0.0100	0.0003	mg/L	0.10000		99	80-120			
Beryllium	0.0908	0.0030	0.00007	mg/L	0.10000		91	80-120			
Boron	0.954	0.0400	0.0060	mg/L	1.0000		95	80-120			
Cadmium	0.0958	0.0010	0.000060	mg/L	0.10000		96	80-120			
Calcium	0.988	0.500	0.0104	mg/L	1.0000		99	80-120			
Chromium	0.105	0.0100	0.0003	mg/L	0.10000		105	80-120			
Cobalt	0.100	0.0100	0.0005	mg/L	0.10000		100	80-120			
Copper	0.100	0.0250	0.0002	mg/L	0.10000		100	80-120			
Lead	0.102	0.0050	0.00005	mg/L	0.10000		102	80-120			
Molybdenum	0.109	0.0100	0.0002	mg/L	0.10000		109	80-120			
Nickel	0.0989	0.0100	0.0003	mg/L	0.10000		99	80-120			
Selenium	0.0952	0.0100	0.0014	mg/L	0.10000		95	80-120			
Silver	0.102	0.0100	0.0003	mg/L	0.10000		102	80-120			
Thallium	0.102	0.0010	0.00003	mg/L	0.10000		102	80-120			
Vanadium	0.102	0.0100	0.0014	mg/L	0.10000		102	80-120			
Zinc	0.101	0.0100	0.0013	mg/L	0.10000		101	80-120			
Lithium	0.0913	0.0500	0.0011	mg/L	0.10000		91	80-120			
Matrix Spike (7030080-MS1)			**Source: AAC0053-02**			Prepared: 03/02/17 Analyzed: 03/06/17					
Antimony	0.105	0.0030	0.0003	mg/L	0.10000	0.0004	104	75-125			
Arsenic	0.0966	0.0050	0.0004	mg/L	0.10000	ND	97	75-125			
Barium	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125			
Beryllium	0.0966	0.0030	0.00007	mg/L	0.10000	ND	97	75-125			
Boron	0.991	0.0400	0.0060	mg/L	1.0000	ND	99	75-125			
Cadmium	0.0980	0.0010	0.000060	mg/L	0.10000	ND	98	75-125			
Calcium	1.06	0.500	0.0104	mg/L	1.0000	0.0200	104	75-125			
Chromium	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125			
Cobalt	0.0996	0.0100	0.0005	mg/L	0.10000	ND	100	75-125			
Copper	0.0995	0.0250	0.0002	mg/L	0.10000	ND	99	75-125			
Lead	0.104	0.0050	0.00005	mg/L	0.10000	ND	104	75-125			
Molybdenum	0.105	0.0100	0.0002	mg/L	0.10000	ND	105	75-125			
Nickel	0.0998	0.0100	0.0003	mg/L	0.10000	ND	100	75-125			
Selenium	0.0969	0.0100	0.0014	mg/L	0.10000	ND	97	75-125			
Silver	0.105	0.0100	0.0003	mg/L	0.10000	ND	105	75-125			
Thallium	0.105	0.0010	0.00003	mg/L	0.10000	ND	105	75-125			
Vanadium	0.100	0.0100	0.0014	mg/L	0.10000	ND	100	75-125			
Zinc	0.105	0.0100	0.0013	mg/L	0.10000	ND	105	75-125			
Lithium	0.0957	0.0500	0.0011	mg/L	0.10000	ND	96	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

March 08, 2017

Report No.: AAC0053

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030080 - EPA 3005A											
Matrix Spike Dup (7030080-MSD1)		**Source: AAC0053-02**			Prepared: 03/02/17 Analyzed: 03/06/17						
Antimony	0.106	0.0030	0.0003	mg/L	0.10000	0.0004	106	75-125	2	20	
Arsenic	0.0938	0.0050	0.0004	mg/L	0.10000	ND	94	75-125	3	20	
Barium	0.104	0.0100	0.0003	mg/L	0.10000	ND	104	75-125	1	20	
Beryllium	0.0988	0.0030	0.00007	mg/L	0.10000	ND	99	75-125	2	20	
Boron	1.01	0.0400	0.0060	mg/L	1.0000	ND	101	75-125	1	20	
Cadmium	0.0996	0.0010	0.000060	mg/L	0.10000	ND	100	75-125	2	20	
Calcium	1.05	0.500	0.0104	mg/L	1.0000	0.0200	103	75-125	0.3	20	
Chromium	0.101	0.0100	0.0003	mg/L	0.10000	ND	101	75-125	2	20	
Cobalt	0.0973	0.0100	0.0005	mg/L	0.10000	ND	97	75-125	2	20	
Copper	0.0995	0.0250	0.0002	mg/L	0.10000	ND	99	75-125	0.006	20	
Lead	0.103	0.0050	0.00005	mg/L	0.10000	ND	103	75-125	0.8	20	
Molybdenum	0.108	0.0100	0.0002	mg/L	0.10000	ND	108	75-125	3	20	
Nickel	0.101	0.0100	0.0003	mg/L	0.10000	ND	101	75-125	0.7	20	
Selenium	0.0982	0.0100	0.0014	mg/L	0.10000	ND	98	75-125	1	20	
Silver	0.105	0.0100	0.0003	mg/L	0.10000	ND	105	75-125	0.06	20	
Thallium	0.105	0.0010	0.00003	mg/L	0.10000	ND	105	75-125	0.1	20	
Vanadium	0.103	0.0100	0.0014	mg/L	0.10000	ND	103	75-125	3	20	
Zinc	0.102	0.0100	0.0013	mg/L	0.10000	ND	102	75-125	3	20	
Lithium	0.102	0.0500	0.0011	mg/L	0.10000	ND	102	75-125	6	20	
Post Spike (7030080-PS1)		**Source: AAC0053-02**			Prepared: 03/02/17 Analyzed: 03/06/17						
Antimony	99.0			ug/L	100.00	0.350	99	80-120			
Arsenic	96.2			ug/L	100.00	0.0026	96	80-120			
Barium	101			ug/L	100.00	0.0641	101	80-120			
Beryllium	97.7			ug/L	100.00	0.0039	98	80-120			
Boron	971			ug/L	1000.0	0.0913	97	80-120			
Cadmium	100			ug/L	100.00	0.0138	100	80-120			
Calcium	1060			ug/L	1000.0	20.0	104	80-120			
Chromium	104			ug/L	100.00	0.158	104	80-120			
Cobalt	99.4			ug/L	100.00	0.0071	99	80-120			
Copper	102			ug/L	100.00	0.146	102	80-120			
Lead	102			ug/L	100.00	0.0150	102	80-120			
Molybdenum	109			ug/L	100.00	0.0580	109	80-120			
Nickel	101			ug/L	100.00	0.0629	100	80-120			
Selenium	100			ug/L	100.00	0.589	100	80-120			
Silver	105			ug/L	100.00	0.0028	105	80-120			
Thallium	103			ug/L	100.00	0.0170	103	80-120			
Vanadium	105			ug/L	100.00	-0.323	105	80-120			
Zinc	106			ug/L	100.00	0.540	106	80-120			
Lithium	101			ug/L	100.00	0.0163	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

March 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-dd-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
2-27-17	1310	GW		✓	YGWC-49	4	1	1	2	1
2-28-17	1000	W		✓	FB-1-2-28-17	4	1	1	2	2
2-28-17	1030	GW		✓	YGWC-44	4	1	1	2	3
2-28-17	1400	GW		✓	YGWC-36	4	1	1	2	4

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker ACC
DATE/TIME: 3-1-17 0845
RELINQUISHED BY: [signature]
DATE/TIME: 3-1-17 1650

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: [signature]
DATE/TIME: 3/1/17 1650
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH Checked: Yes No NA
Ice: Yes No NA
Temperature: 1.4°C Min: 1.4°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAC0053
Entered into LIMS: 1/4
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: 3/2/2017 10:01:29AM

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 03/01/17 16:50

Work Order: AAC0053
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 4 **#Containers:** 16

Minimum Temp(C): 1.4 **Maximum Temp(C):** 1.4 **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:

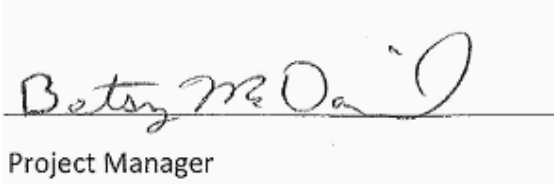
Georgia Power
2480 Maner Road
Atlanta, GA 30339

Attention: **Mr. Joju Abraham**

Report Number: **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
Client ID: YGWA-4I
Date/Time Sampled: 9/14/2016 9:19:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0473-01
Date/Time Received: 9/15/2016 9:00:00AM

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
Client ID: EQB-1
Date/Time Sampled: 9/14/2016 10:00:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AZI0473-02
Date/Time Received: 9/15/2016 9:00:00AM

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	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
Client ID: YGWA-5I
Date/Time Sampled: 9/14/2016 12:04:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0473-03
Date/Time Received: 9/15/2016 9:00:00AM

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
Client ID: YGWA-5D
Date/Time Sampled: 9/14/2016 1:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0473-04
Date/Time Received: 9/15/2016 9:00:00AM

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
Client ID: FB-1
Date/Time Sampled: 9/14/2016 11:30:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AZI0473-05
Date/Time Received: 9/15/2016 9:00:00AM

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	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
Client ID: YGWA-3I
Date/Time Sampled: 9/14/2016 11:42:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0473-06
Date/Time Received: 9/15/2016 9:00:00AM

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
Client ID: YGWA-2I
Date/Time Sampled: 9/14/2016 1:38:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0473-07
Date/Time Received: 9/15/2016 9:00:00AM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER
9/14/16	0919	GW			YGWA-4I	3		1	1	1	1
9/14/16	1000	W			EQB-1	3		1	1	1	2
9/14/16	1204	GW			YGWA-5I	3		1	1	1	3
9/14/16	1305	GW			YGWA-5D	3		1	1	1	4

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Wesley Bowen
DATE/TIME: 9/14/16 @ 1405

RELINQUISHED BY:
DATE/TIME: 9/15/16 0700

RECEIVED BY:
DATE/TIME: 9/15/16 0700

RELINQUISHED BY:
DATE/TIME: 9/15/16 0854

RECEIVED BY LAB:
DATE/TIME: 09/15/16 0900

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 2° Min: 2° Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Sealer ID:

FOR LAB USE ONLY
LAB #: AZF0473
Entered into LIMS: [illegible]
Tracking #:

file

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
9/14/16	1130	W		X	FB-1	3	1	1	1	5	
9/14/16	1142	GW		X	YGWA-3I	3	1	1	1	6	
9/14/16	1338	GW		X	YGWA-2I	3	1	1	1	7	

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Charles Watson
DATE/TIME: 9/14/16 @ 1600

RELINQUISHED BY:
DATE/TIME: 9/15/16 0700

RECEIVED BY:
DATE/TIME: 9/15/16 0700

RELINQUISHED BY:
DATE/TIME: 9/15/16 0854

RECEIVED BY/LAB:
DATE/TIME: 09/15/16 0900

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 2° Min: 2° Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Seal ID:

FOR LAB USE ONLY
LAB #: AZ10473
Entered into LIMS: 12H
Tracking #:

file

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: 9/22/2016 4:39:28PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 09/15/16 09:00

Work Order: AZI0473
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 7 **#Containers:** 21

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, 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:85% T:NA**	pCi/L	09/30/16 11:45	13982-63-3	
Radium-228	EPA 9320	**0.615 ± 0.428 (0.824) C:75% T:78%**	pCi/L	10/06/16 15:42	15262-20-1	
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) C:92% T:NA**	pCi/L	09/30/16 11:45	13982-63-3	
Radium-228	EPA 9320	**0.413 ± 0.354 (0.704) C:75% T:82%**	pCi/L	10/06/16 15:42	15262-20-1	
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) C:87% T:NA**	pCi/L	09/30/16 11:45	13982-63-3	
Radium-228	EPA 9320	**1.27 ± 0.492 (0.714) C:76% T:75%**	pCi/L	10/06/16 15:42	15262-20-1	
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) C:87% T:NA**	pCi/L	10/03/16 11:34	13982-63-3	
Radium-228	EPA 9320	**1.07 ± 0.492 (0.799) C:74% T:78%**	pCi/L	10/06/16 15:42	15262-20-1	
Total Radium	Total Radium Calculation	**3.96 ± 1.20 (1.41)**	pCi/L	10/12/16 15:25	7440-14-4	

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30196259

CHAIN OF CUSTODY RECORD

Pace Analytical®

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA
(770) 734-4200 : FAX (770) 734-4201 : www.pasLab.com

30196259

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

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
9/14/16	0919	GW			YGWA-4I	3	1	1	1	001
9/14/16	1000	W			EQB-1	3	1	1	1	002
9/14/16	1204	GW			YGWA-5I	3	1	1	1	003
9/14/16	1305	GW			YGWA-5D	3	1	1	1	004

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: Wesley Bowen

DATE/TIME: 9/14/16 @ 1405

RELINQUISHED BY:

DATE/TIME: 9/15/16

RECEIVED BY: Kevin E. Hill

DATE/TIME: 9-16-16 0955

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB:

DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes (No) NA

Temperature: N/A Min: Max:

Custody Seal: Intact Broken (Not Present)

# of Coolers:

Cooler ID:

FOR LAB USE ONLY

LAB #:

Entered into LIMS:

Tracking #:

file

Sample Condition Upon Receipt Pittsburgh

30196259

Pace Analytical

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:	✓			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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH <2
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	✓			Initial when completed: KH Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH Date: 9-17-16

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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
	LCS31520	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	
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	

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:	

Duplicate Sample Assessment

		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196056002
Duplicate RPD:	71.82%	30196056002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

10/13/16

Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: JLW
Date: 9/26/2016
Worklist: 31522
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS31522	LCSD31522
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	

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:	

Duplicate Sample Assessment	
Sample I.D.:	30196056002
Duplicate Sample I.D.	30196056002DUP
Sample 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

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.

***Batch must be re-prepped due to unacceptable precision.

10/13/16

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.: 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196258

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0197 ± 0.137 (0.367) C:89% T:NA**	pCi/L	09/30/16 11:45	13982-63-3	
Radium-228	EPA 9320	**0.977 ± 0.502 (0.880) C:77% T:73%**	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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.113 ± 0.152 (0.313) C:93% T:NA**	pCi/L	09/30/16 11:45	13982-63-3	
Radium-228	EPA 9320	**0.708 ± 0.430 (0.789) C:76% T:76%**	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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.162 ± 0.175 (0.338) C:88% T:NA**	pCi/L	09/30/16 11:45	13982-63-3	
Radium-228	EPA 9320	**0.818 ± 0.453 (0.803) C:74% T:73%**	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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®

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA :
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

30196258

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

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
9/14/16	1130	W		X	FB-1	3	1	1	1	001
9/14/16	1142	GW		X	YGWA-3I	3	1	1	1	002
9/14/16	1335	GW		X	YGWA-2I	3	1	1	1	003

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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: Charles Watson
DATE/TIME: 9/14/16

RECEIVED BY: Kirsten E. Hill
DATE/TIME: 9-16-16 0945

RELINQUISHED BY:
DATE/TIME: 9/15/16

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: (Yes) No NA

Ice: Yes (No) NA

Temperature: N/A Min: Max:

Custody Seal: Intact Broken (Not Present)

# of Coolers:

Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

Sample Condition Upon Receipt Pittsburgh

30196258

Pace Analytical

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:	✓			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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH / Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH / Date: 9-17-16

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

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 10/3/2016
Worklist: 31520
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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
	LCS31520	LCSD31520
Count Date:	9/30/2016	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.877	
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	

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:	

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***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30196056002
30196056002DUP

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	9/26/2016
Worklist:	31522
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS31522	LCSD31522
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30196056002	
Duplicate Sample I.D.	30196056002DUP	
Sample 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	30196056002
Duplicate RPD:	57.34%	30196056002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

***Batch must be re-prepped due to unacceptable precision.

10/13/16

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196377

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.803 ± 0.317 (0.341) C:80% T:NA**	pCi/L	10/05/16 08:16	13982-63-3	
Radium-228	EPA 9320	**3.44 ± 0.807 (0.637) C:68% T:82%**	pCi/L	10/04/16 02:42	15262-20-1	
Total Radium	Total Radium Calculation	**4.24 ± 1.12 (0.978)**	pCi/L	10/12/16 15:41	7440-14-4	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.258 ± 0.199 (0.355) C:89% T:NA**	pCi/L	10/05/16 08:16	13982-63-3	
Radium-228	EPA 9320	**0.785 ± 0.451 (0.803) C:63% T:72%**	pCi/L	10/04/16 03:04	15262-20-1	
Total Radium	Total Radium Calculation	**1.04 ± 0.650 (1.16)**	pCi/L	10/17/16 11:34	7440-14-4	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0141 ± 0.124 (0.333) C:81% T:NA**	pCi/L	10/05/16 08:16	13982-63-3	
Radium-228	EPA 9320	**1.08 ± 0.446 (0.698) C:66% T:79%**	pCi/L	10/04/16 02:42	15262-20-1	
Total Radium	Total Radium Calculation	**1.09 ± 0.570 (1.03)**	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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®

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, C
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

30196377

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

PO #:

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, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320

LAB ID NUMBER

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
9/15/16	0920	GW		X	YGWA-3D	3	1	1	1		001
9/15/16	1245	GW		X	YGWA-14S	3	1	1	1		002
9/15/16	—	GW		X	DUP-2	3	1	1	1		003

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Charles Watson — DATE/TIME: 9/15/16

RELINQUISHED BY: [signature] — DATE/TIME: 09/16/16 @ 0653

RECEIVED BY: [signature] — DATE/TIME: 9/16/16 0653

RELINQUISHED BY: [signature] — DATE/TIME: 9/16/16

RECEIVED BY LAB: Kevin E. Hill — DATE/TIME: 9-19-16 0940

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA — Ice: Yes No NA — Temperature: N/A Min: Max:

Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

30196377

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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 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 9-19-16

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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH < 2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH; Date/time of preservation; Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH Date: 9-19-16

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

Pace Analytical™ www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS31648	LCSD31648
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD In the space below.
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	30196635005
Duplicate RPD:	28.14%	30196635005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	10/1/2016
Worklist:	31649
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
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

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS31649	LCSD31649
Count Date:	10/4/2016	
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):	6.306	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196636002	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196636002
Duplicate RPD:	104.31%	30196636002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:90% T:NA**	pCi/L	09/30/16 11:33	13982-63-3	
Radium-228	EPA 9320	**1.46 ± 0.556 (0.862) C:72% T:73%**	pCi/L	10/06/16 20:02	15262-20-1	
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) C:93% T:NA**	pCi/L	09/30/16 11:42	13982-63-3	
Radium-228	EPA 9320	**1.47 ± 0.599 (0.963) C:70% T:68%**	pCi/L	10/06/16 20:17	15262-20-1	
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) C:88% T:NA**	pCi/L	10/05/16 08:16	13982-63-3	
Radium-228	EPA 9320	**0.422 ± 0.382 (0.754) C:68% T:75%**	pCi/L	10/04/16 02:42	15262-20-1	
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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196376

QC Batch: 234856
QC Batch Method: EPA 9320
Analysis 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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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®

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS,
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

30196376

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

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:							P	P	P		
PRESERVATION:							3	7	3		
9/15/16	0920	GW		X	YGWA-6S	4	1	1	2		001
9/15/16	1300	GW		X	YGWA-6I	3	1	1	1		002
9/15/16	1345	W		X	FB-2	3	1	1	1		003

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Wesley Brown
DATE/TIME: 9/15/16

RECEIVED BY: [signature]
DATE/TIME: 9/16/16 0653

RELINQUISHED BY: [signature]
DATE/TIME: 9/16/16 @ 0653

RELINQUISHED BY: [signature]
DATE/TIME: 9/16/16

RECEIVED BY LAB: Karen F. Zier
DATE/TIME: 9-19-16 0940

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes (No) NA

Temperature: N/A Min: Max:

Custody Seal: Intact Broken (Not Present)

# of Coolers

Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

Sample Condition Upon Receipt Pittsburgh

30196376

Pace Analytical

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 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 9-19-16

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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH <2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH Date: 9-19-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/3/2016
Worklist:	31520
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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
	LCS31520	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	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196056002	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196056002
Duplicate RPD:	71.82%	30196056002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/3/2016
Worklist:	31648
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS31648	LCSD31648
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196635005
Duplicate RPD:	28.14%	30196635005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	LCSD (Y or N)? LCS31522	N LCSD31522
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196056002	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30196056002DUP	
Sample 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	30196056002
Duplicate RPD:	57.34%	30196056002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	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

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS31649	LCSD31649
Count Date:	10/4/2016	
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):	6.306	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196636002	Enter Duplicate
Duplicate Sample I.D.	30196636002DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.233	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.291	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.740	the space below.
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	30196636002
Duplicate RPD:	104.31%	30196636002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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:

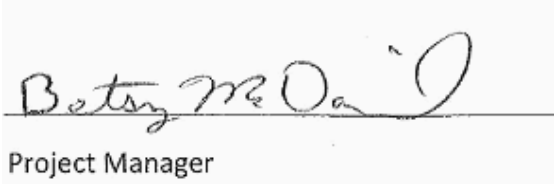
Georgia Power
2480 Maner Road
Atlanta, GA 30339

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
Client ID: YGWC-28S
Date/Time Sampled: 9/21/2016 9:10:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0741-01
Date/Time Received: 9/22/2016 9:00:00AM

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
Client ID: YGWC-28I
Date/Time Sampled: 9/21/2016 11:18:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0741-02
Date/Time Received: 9/22/2016 9:00:00AM

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
Client ID: FB-4
Date/Time Sampled: 9/21/2016 11:55:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AZI0741-03
Date/Time Received: 9/22/2016 9:00:00AM

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	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
Client ID: YGWC-29I
Date/Time Sampled: 9/21/2016 3:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0741-04
Date/Time Received: 9/22/2016 9:00:00AM

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
Client ID: YGWC-32S
Date/Time Sampled: 9/21/2016 11:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0741-05
Date/Time Received: 9/22/2016 9:00:00AM

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
Client ID: YGWC-32I
Date/Time Sampled: 9/21/2016 12:23:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0741-06
Date/Time Received: 9/22/2016 9:00:00AM

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
Client ID: YGWC-33S
Date/Time Sampled: 9/21/2016 2:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0741-07
Date/Time Received: 9/22/2016 9:00:00AM

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
Client ID: YGWC-34I
Date/Time Sampled: 9/21/2016 4:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0741-08
Date/Time Received: 9/22/2016 9:00:00AM

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
Client ID: Dup-4
Date/Time Sampled: 9/21/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0741-09
Date/Time Received: 9/22/2016 9:00:00AM

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
Client ID: EQB-4
Date/Time Sampled: 9/21/2016 12:46:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AZI0741-10
Date/Time Received: 9/22/2016 9:00:00AM

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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB #
9/21/16	0910	GW		X	YGWC-28S	4	1	1	2	1
9/21/16	1118	GW		X	YGWC-28I	3	1	1	1	2
9/21/16	1155	W		X	FB-4	3	1	1	1	3
9/21/16	1545	GW		X	YGWC-29I	3	1	1	1	4

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: Charles Watson
DATE/TIME: 9/21/16 1555
RELINQUISHED BY:
DATE/TIME: 9/22/16 0900

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: MZahman
DATE/TIME: 09/22/16 0900
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZ10741
Entered into LIMS:
Tracking #:

file

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER
9/21/16	1120	GW		X	YGWC-32S	3		1	1	1	5
9/21/16	1223	GW		X	YGWC-32I	3		1	1	1	6
9/21/16	1440	GW		X	YGWC-33S	3		1	1	1	7
9/21/16	1630	GW		X	YGWC-34I	4		1	1	2	8
9/21/16	—	GW		X	DUP-4	3		1	1	1	9
9/21/16	1246	W		X	EQB-4	3		1	1	1	10

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Wesley Bowen
DATE/TIME: 9/21/16 1700

RELINQUISHED BY:
DATE/TIME: 9/21/16 1720

RECEIVED BY:
DATE/TIME: 9/21/16 1720

RELINQUISHED BY:
DATE/TIME: 9/22/16 900

RECEIVED BY/LAB: M Dalman
DATE/TIME: 09/22/16 0900

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:

Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZI0741
Entered into LIMS: MR
Tracking #:

file

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:

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.: 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:95% T:NA**	pCi/L	10/14/16 09:43	13982-63-3	
Radium-228	EPA 9320	**0.401 ± 0.342 (0.683) C:66% T:89%**	pCi/L	10/12/16 14:49	15262-20-1	
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) C:94% T:NA**	pCi/L	10/14/16 09:44	13982-63-3	
Radium-228	EPA 9320	**0.0614 ± 0.299 (0.686) C:70% T:83%**	pCi/L	10/12/16 14:49	15262-20-1	
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) C:88% T:NA**	pCi/L	10/14/16 08:44	13982-63-3	
Radium-228	EPA 9320	**0.237 ± 0.254 (0.525) C:80% T:86%**	pCi/L	10/12/16 14:49	15262-20-1	
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) C:89% T:NA**	pCi/L	10/14/16 08:44	13982-63-3	
Radium-228	EPA 9320	**0.695 ± 0.718 (1.49) C:41% T:83%**	pCi/L	10/11/16 11:56	15262-20-1	
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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AP CCR GW
Pace Project No.: 30196936

QC Batch: 235797
QC Batch Method: EPA 9320
Analysis 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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
9/21/16	0910	GW		X	YGWC-28S	4	1	1	2		001
9/21/16	1118	GW		X	YGWC-28I	3	1	1	1		002
9/21/16	1155	W		X	FB-4	3	1	1	1		003
9/21/16	1545	GW		X	YGWC-29I	3	1	1	1		004

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

WO#:30196936

SAMPLED BY AND TITLE: Charles Watson
DATE/TIME: 9/21/16 1555

RELINQUISHED BY:
DATE/TIME: 9/22/16 0900

RECEIVED BY:
DATE/TIME: 9-23-16 1030

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed NJV / 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: NJV / Date: 9-23-16

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

Pace Analytical™
www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS31774	LCSD31774
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196937001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196937001
Duplicate RPD:	39.03%	30196937001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS31686	LCSD31686
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196936001
Duplicate RPD:	22.90%	30196936001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
Date:	10/7/2016
Worklist:	31776
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1158148
MB concentration:	0.128
M/B 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	LCSD (Y or N)? LCS31776	N LCSD31776
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30196938004	
Duplicate Sample I.D.	30196938004DUP	
Sample Result (pCi/L, g, F):	0.462	
Sample Result Counting Uncertainty (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	30196938004
Duplicate RPD:	82.67%	30196938004DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

LMK 10/21/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	LCSD (Y or N)? LCS31687	N LCSD31687
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196936001
Duplicate RPD:	248.14%	30196936001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

10/21/16

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB NUMBER	REMARKS/ADDITIONAL INFORMATION
					CONTAINER TYPE:		P	P	P		
					PRESERVATION:		3	7	3		
9/21/16	1120	GW		X	YGWC-32S	3	1	1	1		001
9/21/16	1223	GW		X	YGWC-32I	3	1	1	1		002
9/21/16	1440	GW		X	YGWC-33S	3	1	1	1		003
9/21/16	1630	GW		X	YGWC-34I	4	1	1	2		004
9/21/16	—	GW		X	DUP-4	3	1	1	1		005
9/21/16	1246	W		X	EQB-4	3	1	1	1		006

WO#: 30196938

30196938

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: Wesley Bowen
DATE/TIME: 9/21/16 1700

RELINQUISHED BY:
DATE/TIME: 9/21/16 1720

RECEIVED BY:
DATE/TIME: 9/21/16 1720

RELINQUISHED BY:
DATE/TIME: 9/22/16 900

RECEIVED BY/LAB:
DATE/TIME: 9-23-16 1030

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes No NA

Temperature: Min: Max:

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace GA Project # 30196938

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed NJV / 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: NJV / Date: 9-23-16

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

Pace Analytical™
www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS31774	LCSD31774
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196937001	Enter Duplicate
Duplicate Sample I.D.	30196937001DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.250	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.169	LCS/LCSD in the
Sample Duplicate Result (pCi/L, g, F):	0.371	space below.
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	30196937001
Duplicate RPD:	39.03%	30196937001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
Date:	10/7/2016
Worklist:	31776
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1158148
MB concentration:	0.128
M/B 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	LCSD (Y or N)?	N
	LCS31776	LCSD31776
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196938004	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30196938004DUP	
Sample Result (pCi/L, g, F):	0.462	
Sample Result Counting Uncertainty (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	30196938004
Duplicate RPD:	82.67%	30196938004DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

Lmpc 10/24/16

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.: 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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

CHAIN OF CUSTODY RECORD

Pace Analytical®

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 3009
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

WO#:30196785

30196785

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

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER
9/20/16	0956	GW		X	VGWC-23S	3	1	1	1	001
9/20/16	1127	GW		X	VGWC-24S	3	1	1	1	002
9/20/16	1520	GW		X	VGWC-27S	3	1	1	1	003
9/20/16	—	GW		X	DUP-3	3	1	1	1	004

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤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: Josh Barwell
DATE/TIME: 9/20/16 @ 1600

RECEIVED BY: [signature]
DATE/TIME: 9-22-16 950

RELINQUISHED BY: [signature]
DATE/TIME: 9/21/16 @

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: Max:

Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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: -Pace Containers Used:	X	X		10. ½ gallons
Containers Intact:	X			11.
Filtered volume received for Dissolved tests		X		12.
All containers needing preservation have been checked. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X X			13. PH<2 Initial when completed ML 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: ML Date: 9-22-16

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

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/10/2016
Worklist:	31686
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS31686	LCSD31686
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196936001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196936001
Duplicate RPD:	22.90%	30196936001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS31687	LCSD31687
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196936001
Duplicate RPD:	248.14%	30196936001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

CHAIN OF CUSTODY RECORD

Pace Analytical®

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

WO#: 30196786

30196786

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

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
					CONTAINER TYPE:	P	P	P			
					PRESERVATION:	3	7	3			
9/20/16	0956	GW		X	YGWC-26S	3	1	1	1		001
9/20/16	1128	GW		X	YGWC-26I	3	1	1	1		002
9/20/16	1215	W		X	EQB-3	3	1	1	1		003
9/20/16	1423	GW		X	YGWC-27I	3	1	1	1		004

ANALYSIS REQUESTED

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: Charles Watson
DATE/TIME: 9/20/16 1600

RELINQUISHED BY:
DATE/TIME: 9/21/16 @

RECEIVED BY:
DATE/TIME: 9-22-16 950

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:
Tracking #:

file

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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: -Includes date/time/ID/Analysis Matrix: WT	X			5.
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. ½ gallons
-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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: ML 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: ML Date: 9-22-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/10/2016
Worklist:	31686
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS31686	LCSD31686
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30196936001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196936001
Duplicate RPD:	22.90%	30196936001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	10/6/2016
Worklist:	31687
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)? LCS31687	N LCSD31687
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30196936001
Duplicate RPD:	248.14%	30196936001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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:

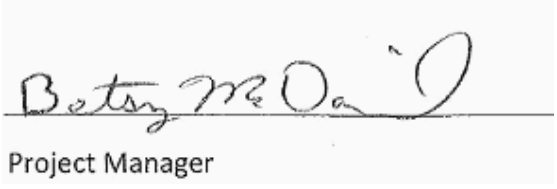
Georgia Power
2480 Maner Road
Atlanta, GA 30339

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
Client ID: YGWC-23S
Date/Time Sampled: 9/20/2016 9:56:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0670-01
Date/Time Received: 9/21/2016 9:20:00AM

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
Client ID: YGWC-24S
Date/Time Sampled: 9/20/2016 11:27:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0670-02
Date/Time Received: 9/21/2016 9:20:00AM

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
Client ID: YGWC-27S
Date/Time Sampled: 9/20/2016 3:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0670-03
Date/Time Received: 9/21/2016 9:20:00AM

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
Client ID: Dup-3
Date/Time Sampled: 9/20/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0670-04
Date/Time Received: 9/21/2016 9:20:00AM

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
Client ID: YGWC-26S
Date/Time Sampled: 9/20/2016 9:56:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0670-05
Date/Time Received: 9/21/2016 9:20:00AM

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
Client ID: YGWC-26I
Date/Time Sampled: 9/20/2016 11:28:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0670-06
Date/Time Received: 9/21/2016 9:20:00AM

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
Client ID: EQB-3
Date/Time Sampled: 9/20/2016 12:15:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AZI0670-07
Date/Time Received: 9/21/2016 9:20:00AM

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	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
Client ID: YGWC-27I
Date/Time Sampled: 9/20/2016 2:23:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0670-08
Date/Time Received: 9/21/2016 9:20:00AM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER
9/20/16	0956	GW		X	VGWC-23S	3		1	1	1	1
9/20/16	1127	GW		X	VGWC-24S	3		1	1	1	2
9/20/16	1520	GW		X	VGWC-27S	3		1	1	1	3
9/20/16	-	GW		X	DUP-3	3		1	1	1	4

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: Wes Bowen	DATE/TIME: 9/20/16 @ 1600	RELINQUISHED BY:	DATE/TIME: 9/21/16 @ 0651
RECEIVED BY:	DATE/TIME: 9/21/16 0651	RELINQUISHED BY:	DATE/TIME: 9/21/16 9:15
RECEIVED BY LAB:	DATE/TIME: 09/21/16 0920	SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS	
pH checked: Yes No NA	Ice: Yes No NA	Temperature: 1°C Min: 1°C Max:	Custody Seal: Intact Broken Not Present; # of Coolers; Cooler ID:

FOR LAB USE ONLY
LAB #: AZI0670
Entered into LIMS: MA
Tracking #:

file

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER
9/20/16	0956	GW		X	YGWC-26S	3		1	1	1	5
9/20/16	1128	GW		X	YGWC-26I	3		1	1	1	6
9/20/16	1215	W		X	EQB-3	3		1	1	1	7
9/20/16	1423	GW		X	YGWC-27I	3		1	1	1	8

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: Charles Watson
DATE/TIME: 9/20/16 1600

RECEIVED BY:
DATE/TIME: 9/21/16 0851

RELINQUISHED BY:
DATE/TIME: 9/21/16 @ 0851

RELINQUISHED BY:
DATE/TIME: 9/22/16 9:16

RECEIVED BY LAB:
DATE/TIME: 09/21/16 0920

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes No NA

Temperature: 1°C Min: 1°C Max:

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

FOR LAB USE ONLY
LAB #: AZI 0670
Entered into LIMS: MR
Tracking #:

file

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:

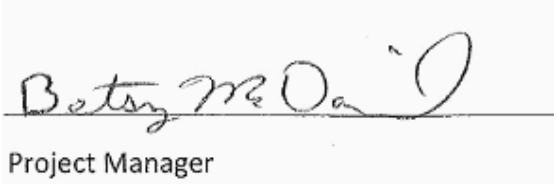
Georgia Power
2480 Maner Road
Atlanta, GA 30339

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
Client ID: YGWA-3D
Date/Time Sampled: 9/15/2016 9:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0541-01
Date/Time Received: 9/16/2016 8:45:00AM

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
Client ID: YGWA-14S
Date/Time Sampled: 9/15/2016 12:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0541-02
Date/Time Received: 9/16/2016 8:45:00AM

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
Client ID: Dup-2
Date/Time Sampled: 9/15/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0541-03
Date/Time Received: 9/16/2016 8:45:00AM

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
Client ID: YGWA-6S
Date/Time Sampled: 9/15/2016 9:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0541-04
Date/Time Received: 9/16/2016 8:45:00AM

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
Client ID: YGWA-6I
Date/Time Sampled: 9/15/2016 1:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZI0541-05
Date/Time Received: 9/16/2016 8:45:00AM

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
Client ID: FB-2
Date/Time Sampled: 9/15/2016 1:45:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AZI0541-06
Date/Time Received: 9/16/2016 8:45:00AM

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	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)		**Source: AZI0541-01**				Prepared & Analyzed: 09/19/16					
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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

CONTAINER TYPE:	P	P	P
PRESERVATION:	3	7	3

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV EPA 6020/7470	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C	Radium 226 & 228 SW-846 9315/9320	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
9/15/16	0920	GW		X	YGWA-3D	3	1	1	1	1	
9/15/16	1245	GW		X	YGWA-14S	3	1	1	1	2	
9/15/16	—	GW		X	DUP-2	3	1	1	1	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_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Charles Watson
DATE/TIME: 9/15/16

RELINQUISHED BY: [signature]
DATE/TIME: 09/16/16 @ 0653

RECEIVED BY: [signature]
DATE/TIME: 9/16/16 0653

RELINQUISHED BY: [signature]
DATE/TIME: 9/16/16 9:42

RECEIVED BY LAB: [signature]
DATE/TIME: 9/16/16 0845

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AZI0541
Entered into LIMS: [initials]
Tracking #:

file

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Joju Abraham
JABRAHAM@southernco.com

CC: MRPADILL@southernco.com
CHMCCORK@southernco.com

REQUESTED COMPLETION DATE: STANDARD

PO #:

PROJECT NAME/STATE: YATES AP CCR GW

PROJECT #:

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV EPA 6020/7470 (P, 3)	IC (Cl, F, SO4) EPA 300.0, TDS SM 2540C (P, 7)	Radium 226 & 228 SW-846 9315/9320 (P, 3)	LAB ID NUMBER
9/15/16	0920	GW		X	YGWA-6S	4		1	1	2	4
9/15/16	1300	GW		X	YGWA-6I	3		1	1	1	5
9/15/16	1345	W		X	FB-2	3		1	1	1	6

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Wesley Bowen — DATE/TIME: 9/15/16

RECEIVED BY: — DATE/TIME: 9/16/16 0653

RECEIVED BY LAB: — DATE/TIME: 9/16/16 0845

pH checked: Yes No NA — Ice: Yes No NA — Temperature: 1°C Min: 1°C Max:

RELINQUISHED BY: — DATE/TIME: 9/16/16 @ 0653

RELINQUISHED BY: — DATE/TIME: 9/16/16 8:45

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID:

FOR LAB USE ONLY

LAB #: AZI8541

Entered into LIMS:

Tracking #:

file

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

Attention: Mr. Joju Abraham

December 28, 2016

Report No.: AZL0694
Client ID: YGWA-2I
Date/Time Sampled: 12/15/2016 1:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZL0694-01
Date/Time Received: 12/16/2016 9:55:00AM

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)		**Source: AZL0694-01**				Prepared & Analyzed: 12/19/16					
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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:								P	P	P	P					
PRESERVATION:								3	7	3						
12-15-16	1330	GW		✓	YGWA-2I	3		1	1	1						1

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Packer (ACC)
DATE/TIME: 12/15/2016 1900
RELINQUISHED BY:
DATE/TIME: 12/16/16 0955

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 12/16/16 0955
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Packed: No NA
Ice: Yes No NA
Temperature: 2°C Min: 2°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZL0694
Entered into LIMS: JH
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: 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

January 27, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30206178

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on December 20, 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30206178

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30206178

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30206178001	**YGWA-2I**	Water	12/15/16 13:30	12/20/16 12:20

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30206178

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30206178001	**YGWA-2I**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	JAL	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30206178

Sample: YGWA-2I **Lab ID: 30206178001** Collected: 12/15/16 13:30 Received: 12/20/16 12:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0233 ± 0.100 (0.275) C:78% T:NA**	pCi/L	01/20/17 10:09	13982-63-3	
Radium-228	EPA 9320	**0.0477 ± 0.387 (0.896) C:59% T:78%**	pCi/L	01/25/17 11:54	15262-20-1	
Total Radium	Total Radium Calculation	**0.0710 ± 0.487 (1.17) C:NA T:NA**	pCi/L	01/25/17 18:34	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30206178

QC Batch: 246698 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30206178001

METHOD BLANK: 1213121 Matrix: Water
Associated Lab Samples: 30206178001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.181 ± 0.312 (0.785) C:66% T:77%	pCi/L	01/25/17 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30206178

QC Batch: 246693 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30206178001

METHOD BLANK: 1213109 Matrix: Water
Associated Lab Samples: 30206178001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.233 ± 0.182 (0.280) C:90% T:NA	pCi/L	01/20/17 10:09	

Results presented on 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30206178

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.

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

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AZL0694 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 1/11/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWA-2I	G	12/15/2016 13:30	AZL0694-01	GW	1	X	001
2								
3								
4								
5								
6								
7								
8								
9								
10								

WO#:30206178

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Ashley Novel/Pace	12-20-16/1220	
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.

30206178

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
					CONTAINER TYPE:		P	P	P		
					PRESERVATION:		3	7	3		
12-15-16	1330	GW		✓	YGWA-2I	3	1	1	1	1	

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: Chris Parker (ACC)
DATE/TIME: 12/15/2016 1900
RELINQUISHED BY: [signature]
DATE/TIME: 12/16/16 0955

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: [signature]
DATE/TIME: 12/16/16 0955
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1° Min. 2° Max.
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZL0694
Entered into LIMS:
Tracking #:

Sample Condition Upon Receipt Pittsburgh 30206178

Pace Analytical

Client Name: Pace Atlanta Project #

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

Tracking #: 6812 5101 2147

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

Thermometer Used NA 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: PC 12-20-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3. 12/21/16
Sampler Name & Signature on COC:	✓			4.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	✓			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.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	✓ ✓			13. pH < 2 Initial when completed PC Date/time of preservation 12-20-16 Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: PC Date: 12-20-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	1/19/2017
Worklist:	33557
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1213121
MB concentration:	-0.181
M/B Counting Uncertainty:	0.310
MB MDC:	0.785
MB Numerical Performance Indicator:	-1.14
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS33557	LCSD33557
Count Date:	1/25/2017	
Spike I.D.:	16-027	
Spike Concentration (pCi/mL):	25.471	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.802	
Target Conc. (pCi/L, g, F):	6.352	
Uncertainty (Calculated):	0.457	
Result (pCi/L, g, F):	7.485	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.739	
Numerical Performance Indicator:	2.55	
Percent Recovery:	117.83%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30207573004	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30207573004DUP	
Sample Result (pCi/L, g, F):	0.484	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.408	
Sample Duplicate Result (pCi/L, g, F):	1.198	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.366	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-2.553	30207573004
Duplicate RPD:	84.92%	30207573004DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

results < 5x MDC may use numerical indicator to assess precision
< 3 acceptable for WT

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ CM 1/26/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	1/19/2017
Worklist:	33555
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1213109
MB concentration:	0.233
M/B Counting Uncertainty:	0.179
MB MDC:	0.280
MB Numerical Performance Indicator:	2.55
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS33555	LCSD33555
Count Date:	1/20/2017	
Spike I.D.:	16-026	
Spike Concentration (pCi/mL):	44.671	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.508	
Target Conc. (pCi/L, g, F):	8.793	
Uncertainty (Calculated):	0.414	
Result (pCi/L, g, F):	7.393	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.833	
Numerical Performance Indicator:	-2.95	
Percent Recovery:	84.09%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30207573005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30207573005DUP	
Sample Result (pCi/L, g, F):	0.397	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.225	
Sample Duplicate Result (pCi/L, g, F):	0.189	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.232	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.263	30207573005
Duplicate RPD:	~~71.14%~~	30207573005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

result < MDC N/A

Comments:

~~**Batch must be re-prepped due to unacceptable precision.~~ AR 1/26/17

AECOM GROUNDWATER SAMPLING LOG

SITE NAME:	Georgia Power Company Plant Yates	SITE LOCATION:	708 Dyer Road Newnan, GA
WELL NO:	VGWA-4I	SAMPLE ID:	VGWA-4I
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/14/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 38.83 feet to 48.83 feet	STATIC DEPTH TO WATER (feet): 24.81	PURGE PUMP TYPE OR BAILER: Peristaltic pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (48.83 feet − 24.81 feet) X 0.65 liters/foot ~ 15.61 liters 3x ~ 46.84 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = ~ liters + (50 feet X 0.005 liters/foot) + 0.1 liters ~ 0.35 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 43	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 43	PURGING INITIATED AT: 0840	PURGING ENDED AT: 0918	TOTAL VOLUME PURGED (liters): 3.62
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll LaMotte 2020we	SERIAL NO(S):	949474 2949-0413	

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)
4.07	0848	1.0	1.0	0.125	25.87	1.52	6.26	1483.0	81.10	1.29	18.26
4.07	0853	0.62	1.62	0.125	26.46	3.82	6.25	148.70	65.90	1.06	18.10
3.67	0858	0.50	2.12	0.10	26.73	1.28	6.24	149.10	59.20	0.95	18.27
3.67	0903	0.50	2.62	0.10	26.95	2.07	6.24	149.00	55.30	0.97	18.30
3.67	0908	0.50	3.12	0.10	27.08	1.31	6.24	149.50	52.70	0.99	18.33
3.67	0913	0.50	3.62	0.10	27.19	1.22	6.23	148.10	51.00	1.00	18.43
☐	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 ; ⅞" = 0.12 ; **1"** = 0.16

NOTES:
Reduced purge rate @ 0853 to 100 mL/min.
- check pH in preservative bottles - ~2.0.
- Collect EQB-1 @ 1000 (collected from the tubing weight).

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Bowan /AECOM		9/14/16	0919
PUMP OR TUBING DEPTH IN WELL (feet): 43	**SAMPLE PUMP FLOW RATE (L per minute):** 0.10	**TUBING MATERIAL CODE:** PE	**SAMPLING ENDED AT:** 0955
FIELD DECONTAMINATION: (Y) N	**FIELD-FILTERED:** Y (N) **FILTER SIZE:** ____ µm Filtration Equipment Type:	**QC Sample Collected:** (Y) N ☐ Duplicate ☒ Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
VGWA-4I	1	0.5 L	PE	HNO_3	Metals app. III & IV	APP
VGWA-4I	1	0.5 L	PE	N/A	Cl, F, SO_4, TDS	APP
VGWA-4I	1	1 GAL	PE	HNO_3	Ra 226/228	APP
EQB-1	1	0.25L	PE	HNO_3	Metals app III & IV	direct fill
EQB-1	1	1 qt	PE	N/A	Cl, F, SO_4, TDS	direct fill
EQB-1	1	½ gal	PE	HNO_3	Ra 226/228	direct fill

REMARKS:

FINAL DEPTH TO WATER: 27.19 **DEPTH TO BOTTOM:** 48.83

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:	VGWA-5I	SAMPLE ID:	VGWA-5I
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/14/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 47.76 feet to 57.76 feet	STATIC DEPTH TO WATER (feet): 21.06	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (57.76 feet – 21.06 feet) X 0.65 liters/foot ~ 23.85 liters 3x ~ 71.56 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = – liters + (63 feet X 0.005 liters/foot) + 0.1 liters ~ 0.41 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 52	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 52	PURGING INITIATED AT: 1107	PURGING ENDED AT: 1200	TOTAL VOLUME PURGED (liters): 7.68
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll LaMotte 2020we	SERIAL NO(S):	449474 2949-0413	

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)
4.58	1115	1.28	1.28	0.16	21.42	8.32	5.75	82.80	83.00	6.24	19.71
4.58	1120	0.8	2.08	0.16	21.43	8.92	5.75	83.10	81.00	6.25	19.51
4.58	1125	0.8	2.98	0.16	21.43	8.23	5.74	82.90	79.80	6.20	19.42
4.58	1130	0.9	3.68	0.16	21.43	5.89	5.74	82.90	79.40	6.33	19.42
4.58	1135	0.8	4.48	0.16	21.44	5.72	5.74	82.30	79.10	6.14	19.46
4.57	1140	0.8	5.28	0.16	21.44	4.27	5.74	82.80	78.20	6.23	19.28
4.57	1145	0.8	6.08	0.16	21.44	3.68	5.75	82.80	78.80	6.28	19.68
4.57	1150	0.8	6.88	0.16	21.44	3.43	5.74	82.30	78.40	6.24	19.68
4.57	1155	0.8	7.68	0.16	21.44	3.11	5.73	82.30	78.40	6.27	20.04
4.57	1200	0.8	7.68	0.16	21.44	4.10	5.74	82.30	77.70	6.32	19.68

☐ 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 ; **⅞"** = 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)

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Bowen /AECOM		9/14/16	1204
PUMP OR TUBING DEPTH IN WELL (feet): 52	SAMPLE PUMP FLOW RATE (L per minute): 0.160	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1227
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: Y (N) ☐ Duplicate ☐ Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YOWA-5I	1	~~0.5L~~ 1L	PE	HNO_3	Metals app. III & IV	APP
YOWA-5I	1	~~0.5L~~ 1L	PE	N/A	Cl, F, SO_4, TDS	APP
YOWA-5I	1	~~1L~~ 1GAL	PE	HNO_3	Ra 226/228	APP

REMARKS:

FINAL DEPTH TO WATER: 21.30 **DEPTH TO BOTTOM:** 57.76

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:	YGWA-SD	SAMPLE ID:	YGWA-SD
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/14/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 119.01 feet to 129.01 feet	STATIC DEPTH TO WATER (feet): 13.97	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (129.01 feet − 13.97 feet) X 0.65 liters/foot ~ 74.77 liters 3x ~ 224.32 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = − liters + (130 feet X 0.005 liters/foot) + 0.1 liters ~ 0.75 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 124	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 124	PURGING INITIATED AT: 1231	PURGING ENDED AT: 1300	TOTAL VOLUME PURGED (liters): 5.05
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449474 2949-0413		

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)
4.57	1240	1.57	1.57	0.175	14.64	0.25	7.45	282.70	-94.20	0.63	19.44
4.57	1245	0.87	2.44	0.175	14.68	0.45	7.54	282.00	-96.40	0.54	19.15
4.57	1250	0.87	3.31	0.175	14.68	0.42	7.57	282.50	-98.40	0.47	19.11
4.57	1255	0.87	4.18	0.175	14.68	0.86	7.59	281.40	-98.40	0.44	19.13
4.57	1300	0.87	5.05	0.175	14.68	0.22	7.60	281.60	-98.30	0.43	19.15

☐ 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 ; ⅞" = 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)

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Bowen /AECOM		9/14/16	1305
PUMP OR TUBING DEPTH IN WELL (feet): 124	SAMPLE PUMP FLOW RATE (L per minute): 0.175	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1328
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: Y (N) ☐ Duplicate ☐Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWA-SD	1	~~0.5~~ L 0.25	PE	HNO_3	Metals app. III & IV	APP
YGWA-SD	1	~~0.5~~ L 1 qt	PE	N/A	Cl, F, SO_4, TDS	APP
YGWA-SD	1	½ GAL	PE	HNO_3	Ra 226/228	APP

REMARKS:

FINAL DEPTH TO WATER:	14.41	DEPTH TO BOTTOM:	129.0

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:	YGWA-6S	SAMPLE ID:	YGWA-6S
FIELD TECHNICIAN:	W. Bowen	DATE:	9/15/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 29.55 feet to 39.55 feet	STATIC DEPTH TO WATER (feet): 21.28	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (39.55 feet − 21.28 feet) X 0.65 liters/foot ~ 11.87 liters 3x ~ 35.62 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = − liters + (40 feet X 0.005 liters/foot) + 0.1 liters ~ 0.30 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 34	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 34	PURGING INITIATED AT: 0852	PURGING ENDED AT: 0855	TOTAL VOLUME PURGED (liters): 3.45
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449474 2949-0413		

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)
4.42	0840	1.2	1.2	0.150	22.36	2.07	5.99	103.90	93.80	6.13	18.76
4.42	0845	0.75	1.95	0.150	22.76	1.85	5.93	105.10	84.80	6.14	18.65
4.42	0850	0.75	2.70	0.150	22.89	1.62	5.92	104.50	80.60	6.12	18.65
4.42	0855	0.75	3.45	0.150	22.96	1.35	5.92	104.90	78.60	6.26	18.71

☐ 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 ; **⅞"** = 0.12 ; **1"** = 0.16

NOTES:
check pH in preservative bottles ~2.0 pH

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Brown /AECOM		9/15/16	0920
PUMP OR TUBING DEPTH IN WELL (feet): 34	**SAMPLE PUMP FLOW RATE (L per minute):** 0.150	**TUBING MATERIAL CODE:** PE	**SAMPLING ENDED AT:** 1002
FIELD DECONTAMINATION: (Y) N	**FIELD-FILTERED:** Y (N) **FILTER SIZE:** ____ µm **Filtration Equipment Type:** ____	**QC Sample Collected:** (Y) N ☐ Duplicate ☐Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWA-65	1	~~0.5 L~~ 0.25L	PE	HNO_3	Metals app. III & IV	APP
YGWA-65	1	~~0.5L~~ 1/4	PE	N/A	Cl, F, SO_4, TDS	APP
YGWA-65	1	1 GAL 1/2	PE	HNO_3	Ra 226/228	APP
YGWA-65 (2nd Rad)	1	1/2 gal	PE	HNO_3	Ra 226/228	APP

REMARKS: Collect 2nd Rad sample for lab QC.

FINAL DEPTH TO WATER: 22.67 **DEPTH TO BOTTOM:** 39.54

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:	VGWA-6I	SAMPLE ID:	VGWA-6I
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/15/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 58.73 feet to 68.73 feet	STATIC DEPTH TO WATER (feet): 21.54	PURGE PUMP TYPE OR BAILER: Bladder Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (68.73 feet – 21.54 feet) X 0.65 liters/foot ~ 30.67 liters 3x ~ 92.02 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 + (75 feet X 0.005 liters/foot) + 0.1 liters ~ 0.57 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 63.70	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 63.70	PURGING INITIATED AT: 1120	PURGING ENDED AT: 1254	TOTAL VOLUME PURGED (liters): 28.02
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll	SERIAL NO(S):	439474	
	LaMotte 2020we		2949-0413	

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)
110/105	1134	4.34	4.34	0.310	24.93	3.63	6.41	234.90	50.90	1.45	19.08
110/105	1139	1.55	5.89	0.310	26.35	3.22	6.38	232.30	44.30	1.36	19.26
110/105	1144	1.55	7.44	0.310	28.45	3.75	6.36	230.20	41.50	1.33	18.77
110/105	1149	1.55	8.99	0.310	30.48	3.85	6.37	229.80	39.10	1.05	18.71
113/105	1154	1.87	10.86	0.375	32.88	3.66	6.36	229.60	36.90	1.13	18.57
113/105	1159	1.87	12.73	0.375	35.41	3.81	6.35	230.30	35.00	1.34	18.57
113/105	1204	1.87	14.60	0.375	37.60	4.18	6.36	232.00	34.10	0.97	18.46
113/105	1209	1.87	16.47	0.375	39.87	4.14	6.37	231.70	32.90	1.07	18.61
113/105	1214	1.87	18.34	0.375	42.07	4.22	6.38	229.60	32.00	1.47	18.55
113/105	1219	1.87	20.21	0.375	44.61	4.00	6.36	229.70	31.10	1.25	18.54
113/105	1224	1.87	22.08	0.375	46.23	4.34	6.37	231.70	29.80	1.43	18.54
113/105	1229	1.87	23.95	0.375	48.49	4.28	6.37	230.70	28.90	1.77	18.49
113/105	1234	1.87	25.82	0.375	50.30	4.57	6.39	231.20	27.90	1.62	18.73
103/90	1239	0.55	26.37	0.110	50.51	4.32	6.34	233.90	27.10	1.28	21.10
103/90	1244	0.55	26.92	0.110	50.61	4.52	6.42	235.40	25.00	1.44	20.71
103/90	1249	0.55	27.47	0.110	50.65	4.14	6.43	243.40	23.40	1.52	21.33
103/90	1254	0.55	28.02	0.110	50.69	4.22	6.43	236.00	23.80	1.61	21.51

☐ 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 ; ⅞" = 0.12 ; **1"** = 0.16

NOTES:
- @ 1149 increase purge rate from 310 mL/min to 375 mL/min.
- @ 1234 reduced purge rate from 375 mL/min to 110 mL/min.
- pH check on all preserved containers – 2.0 pH

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Bowen /AECOM		9/15/16	1300
PUMP OR TUBING DEPTH IN WELL (feet): 63.70	**SAMPLE PUMP FLOW RATE (L per minute):** 0.110	**TUBING MATERIAL CODE:** PE	**SAMPLING ENDED AT:** 1338
FIELD DECONTAMINATION: (Y) N	**FIELD-FILTERED:** Y (N) **FILTER SIZE:** ____ µm Filtration Equipment Type:	**QC Sample Collected:** (Y) N ☐ Duplicate ☐Equipment Blank ☒ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YOWA-6I	1	~~0.5L~~ 0.25	PE	HNO_3	Metals app. III & IV	BP
YOWA-6I	1	~~0.5L~~ 1gt	PE	N/A	Cl, F, SO_4, TDS	BP
YOWA-6I	1	~~1 GAL~~ 2L	PE	HNO_3	Ra 226/228	BP
FB-2	1	0.25L	PE	HNO_3	Metals app III + IV	Direct Fill
FB-2	1	1gt	PE	N/A	Cl, F, SO_4, TDS	Direct Fill
FB-2	1	1/2 gal	PE	HNO_3	Ra 226/228	Direct Fill

REMARKS:
FB-2 collected @ 1345

FINAL DEPTH TO WATER: 50.56 **DEPTH TO BOTTOM:** 68.71

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:	YGWA-175	SAMPLE ID:	YGWA-175
FIELD TECHNICIAN:	Charles Watson	DATE:	9/16/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 29.8 feet to 39.8 feet	STATIC DEPTH TO WATER (feet): 15.30	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 = (40.13 feet – 15.30 feet) X 0.65 liters/foot ~ 16.14 liters 3x ~ 49.42 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: 811	PURGING ENDED AT: 843	TOTAL VOLUME PURGED (liters): 4.80
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll	SERIAL NO(S):	463068	
	LaMotte 2020we		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)
4.30	813	0.3	0.3	0.15	15.49	3.00	5.67	65.4	132.9	1.98	20.03
	818	0.75	1.05	0.15	15.72	3.10	5.55	66.3	92.2	1.45	18.93
	823	0.75	1.80	0.15	15.74	2.13	5.55	66.1	68.5	1.35	18.70
	828	0.75	2.55	0.15	15.74	2.54	5.51	66.3	62.3	1.31	18.65
	833	0.75	3.30	0.15	15.75	1.98	5.57	67.2	58.6	1.24	18.60
	838	0.75	4.05	0.15	15.74	1.81	5.57	67.2	56.1	1.21	18.60
4.30	843	0.75	4.80	0.15	15.73	1.02	5.58	68.1	53.7	1.15	18.61

☐ 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 ; **⅞"** = 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)

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Charles Watson/AECOM		9/16/16	08:47
PUMP OR TUBING DEPTH IN WELL (feet): 35	SAMPLE PUMP FLOW RATE (L per minute): 0.15	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 09:13
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: Y (N) ☐ Duplicate ☐Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWA-175	1	~~1 GAL~~ 1050 mL	PE	HNO_3	Metals app. III & IV	APP
YGWA-175	1	1 ~~GAL~~ L	PE	N/A	Cl, F, SO_4, TDS	APP
YGWA-175	1	½ GAL	PE	HNO_3	Ra 226/228	APP

REMARKS:

FINAL DEPTH TO WATER: 15.72 **DEPTH TO BOTTOM:** 40.12

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:	YGWA-18S	SAMPLE ID:	YGWA-18S
FIELD TECHNICIAN:	Wesley Brown	DATE:	9/16/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 30.37 feet to 40.37 feet	STATIC DEPTH TO WATER (feet): 22.90	PURGE PUMP TYPE OR BAILER: peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (40.37 feet – 22.90 feet) X 0.65 liters/foot = 11.35 liters 3x = 34.06 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = ~ liters + (43 feet X 0.005 liters/foot) + 0.1 liters = 0.31 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 35	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 35	PURGING INITIATED AT: 0810	PURGING ENDED AT: 0931	TOTAL VOLUME PURGED (liters): 13.5
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449471 2949-0413		

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)
3.76	0821	2.31	2.31	0.12	23.83	19.7	5.37	6010	69.70	1.15	18.07
3.76	0826	0.6	2.91	0.12	23.95	14.7	5.38	60.00	61.80	1.10	18.03
3.76	0831	0.6	3.51	0.12	24.0	12.5	5.39	60.00	57.20	1.04	18.04
3.76	0836	0.6	4.11	0.12	24.01	11.7	5.39	60.00	54.00	1.03	18.12
3.76	0841	0.6	4.71	0.12	24.01	12.1	5.40	60.20	51.50	1.04	18.12
3.76	0846	0.6	5.31	0.12	24.01	11.26	5.41	60.30	50.60	0.95	18.13
5.91	0851	0.93	6.24	0.185	24.33	8.64	5.42	60.20	49.30	0.98	17.72
5.91	0856	0.93	7.17	0.185	24.54	7.48	5.45	60.70	46.30	1.12	17.60
5.91	0901	0.93	8.1	0.185	24.63	7.72	5.45	60.90	44.60	1.05	17.70
7.87	0906	1.20	9.3	0.240	25.02	4.55	5.43	60.80	43.80	1.88	17.43
7.87	0911	1.20	10.5	0.240	25.09	5.62	5.46	61.60	41.30	1.59	17.46
7.87	0916	1.20	11.7	0.240	25.28	6.32	5.49	61.60	40.90	1.84	17.47
3.72	0921	0.6	12.3	0.12	24.68	4.65	5.56	64.90	37.50	0.70	18.26
3.72	0926	0.6	12.9	0.12	24.35	3.75	5.59	65.60	36.10	0.58	18.48
3.72	0931	0.6	13.5	0.12	24.18	2.92	5.59	65.80	36.40	0.65	18.66

☐ 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 ; ⅞" = 0.12 ; 1" = 0.16

NOTES:
* bottom of well was disturbed during tubing install.
- @ 0846 increase purge rate from 120 mL/min to 185 mL/min
- @ 0901 increase purge rate from 185 mL/min to 240 mL/min.
- @ 0916 decrease purge rate from 240 mL/min to 120 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

pH check for preserved containers - 2.0 pH

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Brown /AECOM		9/16/16	0938
PUMP OR TUBING DEPTH IN WELL (feet): 35	SAMPLE PUMP FLOW RATE (L per minute): 0.120	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1012
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: (Y) N ☐ Duplicate ☐Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWA-185	1	0.5 L	PE	HNO_3	Metals app. III & IV	APP
YGWA-185	1	0.5 L	PE	N/A	Cl, F, SO_4, TDS	APP
YGWA-185	1	1 GAL	PE	HNO_3	Ra 226/228	APP

REMARKS:
* Put sample time on SmarTroll PDF. *

FINAL DEPTH TO WATER: 23.57	DEPTH TO BOTTOM: 40.37

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:	YGWA-18I	SAMPLE ID:	YGWA-18I
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/19/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 70.06 feet to 80.06 feet	STATIC DEPTH TO WATER (feet): 25.23	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (80.06 feet – 25.23 feet) X 0.65 liters/foot ~ 35.63 liters 3x ~ 106.91 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = – liters + (81 feet X 0.005 liters/foot) + 0.1 liters ~ 0.50 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 75	PURGING INITIATED AT: 0840	PURGING ENDED AT: 0925	TOTAL VOLUME PURGED (liters): 8.70
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449474 2949-0413		

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)
4.35	0850	1.35	1.35	0.135	25.42	5.11	6.04	109.10	55.70	2.86	18.08
6.51	0855	1.05	2.4	0.210	25.52	4.77	6.03	106.80	51.40	3.35	18.17
6.51	0900	1.05	3.45	0.210	25.54	1.81	6.03	108.70	49.90	3.17	18.05
6.50	0905	1.05	4.5	0.210	25.55	1.37	6.02	108.40	49.60	3.56	18.00
6.50	0910	1.05	5.55	0.210	25.56	1.19	6.04	110.90	48.50	3.52	18.16
6.50	0915	1.05	6.60	0.210	25.57	0.81	6.03	113.50	46.70	3.25	18.12
6.49	0920	1.05	7.65	0.210	25.57	0.92	6.04	114.70	43.60	3.31	18.07
6.49	0925	1.05	8.70	0.210	25.57	0.68	6.04	117.10	40.80	3.34	18.08

☐ 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 ; ⅞" = 0.12 ; **1"** = 0.16

NOTES:
@ 0850 increase purge rate from 135 mL/min to 210 mL/min.
check pH in preserved containers – 2.0 pH

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 Brown /AECOM	SAMPLER(S) SIGNATURES:	DATE SAMPLED: 9/19/16	SAMPLING INITIATED AT: 0930
PUMP OR TUBING DEPTH IN WELL (feet): 75	SAMPLE PUMP FLOW RATE (L per minute): 0.210	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 0948
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: (Y) N ☐ Duplicate ☒ Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION # CONTAINERS	VOLUME	MATERIAL CODE	SAMPLE PRESERVATION PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
YGWA-18I	1	~~0.5L~~ 0.25	PE	HNO_3	Metals app. III & IV	APP
YGWA-18I	1	~~0.5L~~ 1qt	PE	N/A	Cl, F, SO_4, TDS	APP
YGWA-18I	1	1 GAL	PE	HNO_3	Ra 226/228	APP
EQB-2	1	0.25L	PE	HNO_3	Metals app. III + IV	Direct fill
EQB-2	1	1qt	PE	N/A	Cl, F, SO_4, TDS	Direct fill
EQB-2	1	1 GAL	PE	HNO_3	Ra 226/228	Direct fill

REMARKS:
Collect EQB-2 @ 0955

FINAL DEPTH TO WATER: 25.57 **DEPTH TO BOTTOM:** 80.06

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:	YGWA-20S	SAMPLE ID:	YGWA-20S
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/19/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 19.54 feet to 29.54 feet	STATIC DEPTH TO WATER (feet): 9.63	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (29.54 feet − 9.63 feet) X 0.65 liters/foot ~ 12.94 liters 3x ~ 38.82 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = — liters + (30 feet X 0.005 liters/foot) + 0.1 liters ~ 0.25 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 24	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 24	PURGING INITIATED AT: 1041	PURGING ENDED AT: 1122	TOTAL VOLUME PURGED (liters): 7.20
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449 474 2044-0413		

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)
4.04	1052	1.65	1.65	0.150	10.26	7.39	5.74	50.90	57.50	5.69	19.88
4.03	1057	0.75	2.40	0.150	10.30	8.17	5.74	50.70	54.20	5.66	19.78
4.03	1102	0.75	3.15	0.150	10.32	8.89	5.74	50.70	53.80	5.66	19.68
4.03	1107	0.75	3.90	0.150	10.32	7.86	5.74	5060	54.60	5.63	19.69
5.75	1112	1.10	5.0	0.220	10.58	4.39	5.71	50.20	53.80	5.30	19.95
5.75	1117	1.10	6.10	0.220	10.61	2.84	5.75	50.10	52.70	5.30	19.00
5.75	1122	1.10	7.20	0.220	10.62	1.91	5.73	50.10	53.30	5.29	19.04

☐ 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 ; **⅞"** = 0.12 ; **1"** = 0.16

NOTES:
@ 1107 increase purge rate from 150 ml/min to 220 ml/min
check pH in [redacted]B preserved containers - 2.0 pH

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Ashley Brown /AECOM		9/19/16	1127
PUMP OR TUBING DEPTH IN WELL (feet): 24	SAMPLE PUMP FLOW RATE (L per minute): 0.220	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1141
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: Y (N) ☐ Duplicate ☐Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWA-201	1	~~0.5 L~~ 0.25	PE	HNO_3	Metals app. III & IV	APP
YGWA-202	1	~~0.5L~~ 1Gal	PE	N/A	Cl, F, SO_4, TDS	APP
YGWA-203	1	1 GAL (2)	PE	HNO_3	Ra 226/228	APP

REMARKS:

FINAL DEPTH TO WATER:	10.48	DEPTH TO BOTTOM:	29.54

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:	YOWA-21I	SAMPLE ID:	YOWA-21I
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/19/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 70.40 feet to 80.40 feet	STATIC DEPTH TO WATER (feet): 29.32	PURGE PUMP TYPE OR BAILER: Peristaltic / Bladder Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (80.40 feet − 29.32 feet) X 0.65 liters/foot ~ ~~33.20~~ liters 3x ~ 99.60 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 + (81 feet X 0.005 liters/foot) + 0.1 liters ~ 0.60 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 75	PURGING INITIATED AT: 1216	PURGING ENDED AT: 1337	TOTAL VOLUME PURGED (liters): 7.30
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll LaMotte 2020we	SERIAL NO(S):	419494 2949-0413	

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)
5.88	1227	1.10	1.10	0.10	30.70	1.25	6.15	89.60	2.20	1.74	20.49
5.88	1232	0.50	1.60	0.10	31.02	1.21	6.14	90.20	14.40	1.84	21.02
5.88	1237	0.50	2.10	0.10	31.21	0.91	6.14	91.10	19.00	1.85	21.66
5.88	1242	0.50	2.60	0.10	31.30	0.78	6.11	89.90	21.80	1.91	22.02
—	1247	—	—	—	—	—	—	—	—	—	—
—	1252	—	—	—	—	—	—	—	—	—	—
103/100	1257	—	—	—	29.94	4.86	6.37	0.0	18.60	8.08	24.09
103/100	1302	0.35	2.95	0.07	30.24	3.36	6.20	89.60	-49.40	2.30	22.61
108/100	1307	0.715	3.66	0.143	30.90	6.05	6.13	89.30	-72.40	1.36	20.25
108/100	1312	0.715	4.36	0.143	31.46	4.92	6.12	89.30	-2.00	1.33	19.76
108/100	1317	0.715	5.08	0.143	31.91	4.13	6.13	89.60	9.60	1.39	19.77
108/100	1322	0.715	5.80	0.143	32.43	3.06	6.13	89.50	13.40	1.54	19.70
108/95	1327	0.50	6.30	0.10	32.50	4.10	6.14	89.80	14.10	1.50	20.69
108/95	1332	0.50	6.80	0.10	32.61	2.55	6.13	89.50	12.00	1.24	20.71
108/95	1337	0.50	7.30	0.10	32.64	1.61	6.12	89.30	8.50	1.22	20.73

☐ 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 ; **⅞"** = 0.12 ; **1"** = 0.16

NOTES:
@ 1244 shut event down & switch to Bladder pump due to drawdown.
@ 1254 resume purge w/ bladder pump.

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: 9/19/16	SAMPLING INITIATED AT: 1343
PUMP OR TUBING DEPTH IN WELL (feet): 75	SAMPLE PUMP FLOW RATE (L per minute): 0.100	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1432
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: Y (N) ☐ Duplicate ☐ Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWA-21I	1	~~0.5~~ L 0.25	PE	HNO_3	Metals app. III & IV	BP
YGWA-21I	1	~~0.5 L~~ 1/4	PE	N/A	Cl, F, SO_4, TDS	BP
YGWA-21I	1	1/2 GAL	PE	HNO_3	Ra 226/228	BP

REMARKS:
check pH preservative in containers - pH - 2.0

FINAL DEPTH TO WATER: 32.28 **DEPTH TO BOTTOM:** 80.40

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-225	SAMPLE ID:	YGWC-225
FIELD TECHNICIAN:	Charles Watson	DATE:	9/19/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 29.8 feet to 39.8 feet	STATIC DEPTH TO WATER (feet): 10.26	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 = (40.13 feet – 10.26 feet) X 0.65 liters/foot = 19.42 liters 3x = 58.26 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: 1416	PURGING ENDED AT: 1436	TOTAL VOLUME PURGED (liters): 5.30
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll	SERIAL NO(S):	463068	
	LaMotte 2020we		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)
5.07	1411	0.3	0.3	0.20	10.52	1.69	5.09	592.6	142.5	0.83	30.05
|	1416	1.00	1.3	0.20	10.57	2.36	5.00	671.0	223.1	0.39	23.43
|	1421	1.00	2.3	0.20	10.89	1.40	4.96	675.3	272.5	0.35	22.80
|	1426	1.00	3.3	0.20	10.89	1.54	4.94	676.5	301.6	0.23	22.53
|	1431	1.00	4.3	0.20	10.89	1.32	4.93	680.1	305.1	0.22	22.40
5.07	1436	1.00	5.3	0.20	10.89	0.72	4.95	671.4	279.5	0.19	22.36

☐ 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 ; ⅞" = 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)

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Charles Water/AECOM		9/19/16	1438
PUMP OR TUBING DEPTH IN WELL (feet): 35	SAMPLE PUMP FLOW RATE (L per minute): 0.20	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1500
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: Y (N) ☐ Duplicate ☐Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION # CONTAINERS	SAMPLE CONTAINER SPECIFICATION VOLUME	SAMPLE PRESERVATION MATERIAL CODE	SAMPLE PRESERVATION PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
YGWC-225	1	~~0.5~~ 0.25 L	PE	HNO_3	Metals app. III & IV	APP
YGWC-225	1	~~0.5 L~~ 1QT	PE	N/A	Cl, F, SO_4, TDS	APP
YGWC-225	1	~~1~~ 1/2 GAL	PE	HNO_3	Ra 226/228	APP

REMARKS:

FINAL DEPTH TO WATER: 40.86	DEPTH TO BOTTOM: 40.13

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-23S	SAMPLE ID:	YGWC-23S
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/20/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 19.91 feet to 29.91 feet	STATIC DEPTH TO WATER (feet): 16.11	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (29.91 feet – 16.11 feet) X 0.65 liters/foot ~ 8.90 liters 3x ~ 26.71 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = liters + (30 feet X 0.005 liters/foot) + 0.1 liters ~ 0.25 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 25	PURGING INITIATED AT: 0851	PURGING ENDED AT: 0950	TOTAL VOLUME PURGED (liters): 11.76
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449474 2949-613		

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)
3.34	0900	1.08	1.08	0.120	16.58	9.06	5.53	221.90	85.00	7.01	19.49
3.34	0905	0.6	1.68	0.120	16.58	9.13	5.53	218.30	81.70	7.52	19.43
3.34	0910	0.6	2.28	0.120	16.58	9.18	5.53	216.10	79.50	7.60	19.46
3.34	0915	0.6	2.88	0.120	16.58	9.93	5.54	214.00	77.90	6.93	19.56
3.34	0920	0.6	3.48	0.120	16.57	12.20	5.53	211.40	76.90	6.89	19.68
6.76	0925	1.38	4.86	0.275	17.02	7.62	5.53	207.20	75.40	7.01	18.62
6.76	0930	1.38	6.24	0.275	17.13	3.68	5.54	204.00	74.00	7.03	18.66
6.76	0935	1.38	7.62	0.275	17.13	1.80	5.53	202.50	72.70	6.67	18.70
6.76	0940	1.38	9.0	0.275	17.13	0.92	5.54	199.70	69.30	6.88	18.86
6.76	0945	1.38	10.38	0.275	17.13	0.54	5.53	203.20	68.60	6.74	18.79
6.76	0950	1.38	11.76	0.275	17.13	0.69	5.53	199.30	68.30	6.84	18.99

☐ 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 ; ⅞" = 0.12 ; **1"** = 0.16

NOTES:
@ 0925 increase purge rate from 120 mL/min to 275 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)
☐	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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Bowen /AECOM		9/20/16	0956
PUMP OR TUBING DEPTH IN WELL (feet): 25	SAMPLE PUMP FLOW RATE (L per minute): 0.275	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1010
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:		QC Sample Collected: Y (N) ☐ Duplicate ☐ Equipment Blank ☐ Field Blank

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION # CONTAINERS	VOLUME	MATERIAL CODE	SAMPLE PRESERVATION PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
YGWC-23S	1	~~0.5 L~~ 0.25	PE	HNO_3	Metals app. III & IV	APP
YGWC-23S	1	~~0.5 L~~ 1g/L	PE	N/A	Cl, F, SO_4, TDS	APP
YGWC-23S	1	1 GAL	PE	HNO_3	Ra 226/228	APP

REMARKS:
check pH preservative in containers ~2.0 pH

FINAL DEPTH TO WATER:	17.03	DEPTH TO BOTTOM:	29.81

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-24S	SAMPLE ID:	YGWC-24S
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/20/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 47.63 feet to 57.63 feet	STATIC DEPTH TO WATER (feet): 28.65	PURGE PUMP TYPE OR BAILER: Bladder Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (57.63 feet – 28.65 feet) X 0.65 liters/foot ~ 18.83 liters 3x ~ 56.51 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 + (60 feet X 0.005 liters/foot) + 0.1 liters ~ 0.50 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 52.60	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1058	PURGING ENDED AT: 1122	TOTAL VOLUME PURGED (liters): 4.08
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll LaMotte 2020we	SERIAL NO(S):	449474 2949-0413	

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)
108/72	1107	1.53	1.53	0.170	29.26	8.15	5.62	65.40	58.40	6.19	20.32
108/72	1112	0.85	2.38	0.170	29.25	6.60	5.61	65.40	58.10	6.20	20.03
108/72	1117	0.85	3.23	0.170	29.25	4.20	5.62	65.60	57.20	6.19	20.09
108/72	1122	0.85	4.08	0.170	29.20	3.45	5.61	65.60	57.10	6.19	20.22
☐	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 ; **⅞"** = 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)

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Bowen /AECOM		9/20/16	1127
PUMP OR TUBING DEPTH IN WELL (feet): 57.6	**SAMPLE PUMP FLOW RATE (L per minute):** 0.170	**TUBING MATERIAL CODE:** PE	**SAMPLING ENDED AT:** 1200
FIELD DECONTAMINATION: (Y) N	**FIELD-FILTERED:** Y (N) **FILTER SIZE:** ____ µm **Filtration Equipment Type:**	**QC Sample Collected:** (Y) N ☒ Duplicate ☐ Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION		
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
VGWL-24S	1	~~0.5L~~ 0.25L	PE	HNO_3	Metals app. III & IV	BP
VGWL-24S	1	~~0.5L~~ 1qt	PE	N/A	Cl, F, SO_4, TDS	BP
VGWL-24S	1	½GAL	PE	HNO_3	Ra 226/228	BP
DUP-3	1	0.25L	PE	HNO_3	Metals app. III & IV	BP
DUP-3	1	1qt	PE	N/A	Cl, F, SO_4, TDS	BP
DUP-3	1	½ gal	PE	HNO_3	Ra 226/228	BP

REMARKS:
pH check of preserved containers - 2.0 pH

FINAL DEPTH TO WATER:	28.80	DEPTH TO BOTTOM:	57.63

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-32S	SAMPLE ID:	YGWC-32S
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/21/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 13.16 feet to 23.16 feet	STATIC DEPTH TO WATER (feet): 16.88	PURGE PUMP TYPE OR BAILER: Dol. Stultic pump.

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (23.16 feet − 16.88 feet) X 0.65 liters/foot ~ 4.08 liters 3x ~ 12.24 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = ~ liters + (25 feet X 0.005 liters/foot) + 0.1 liters ~ 0.23 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 19	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18	PURGING INITIATED AT: 0832	PURGING ENDED AT: 1112	TOTAL VOLUME PURGED (liters): 19.59
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449474 2949-0413		

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)
4.79	0842	1.70	1.70	0.170	17.40	52.1	4.57	741.30	250.90	1.60	21.02
4.79	0847	0.85	2.55	0.170	17.45	66.0	4.57	741.40	292.0	1.42	21.02
7.38	0852	1.40	3.95	0.280	17.73	842	4.59	739.20	375.50	0.93	20.97
7.38	0857	1.40	5.35	0.280	18.00	817	4.61	740.50	423.00	0.97	20.95
7.38	0902	1.40	6.75	0.280	18.51	1580	4.64	738.70	412.00	1.39	20.93
3.55	0907	0.58	7.32	0.115	17.95	79	4.62	737.90	335.40	1.44	21.14
3.55	0912	0.58	7.90	0.115	17.70	55	4.63	741.10	341.80	1.63	21.30
3.55	0917	0.58	8.48	0.115	17.59	49.7	4.61	743.70	340.10	1.51	21.54
3.55	0922	0.58	9.06	0.115	17.55	26.3	4.53	741.60	340.10	1.66	21.73
3.55	0927	0.58	9.64	0.115	17.50	43.5	4.59	741.20	371.10	1.93	21.91
3.55	0932	0.58	10.22	0.115	17.48	29.7	4.59	732.00	371.90	1.95	22.04
3.55	0937	0.58	10.80	0.115	17.47	24.2	4.61	740.70	392.80	2.12	22.14
3.55	0942	0.58	11.38	0.115	17.45	18.2	4.61	739.60	407.10	2.20	22.21
3.55	0947	0.58	11.96	0.115	17.45	11.3	4.59	733.0	421.00	2.22	22.28
3.55	0952	0.58	12.54	0.115	17.43	10.69	4.59	737.20	433.70	2.36	22.41
3.25	0957	0.50	13.04	0.10	17.41	11.03	4.50	738.20	436.20	2.49	22.58
3.25	1002	0.50	13.54	0.10	17.40	11.50	4.61	739.60	438.90	2.28	22.71
3.25	1007	0.50	14.04	0.10	17.39	14.40	4.58	740.30	439.10	2.46	22.90

☒ 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 ; ⅞" = 0.12 ; **1"** = 0.16

NOTES:
* Water level meter touched bottom of well when gauging. Water level meter was not indicating a power due to the battery.
@ 0847 - increase purge rate to 280 mL/min.
@ 0902 - decrease purge rate to 115 mL/min.
@ 0952 - decrease 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

@ 1007 increase purge rate to 170 mL/min
@ 1022 decrease purge rate to 100 mL/min & pull tubing up 1' (18.50C)

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)
4.80	1012	0.85	14.89	0.170	17.55	12.6	4.57	738.40	481.10	2.36	22.54
4.80	1017	0.85	15.74	0.170	17.61	19.6	4.59	736.60	493.50	2.19	22.58
4.80	1022	0.85	16.59	0.170	17.65	16.3	4.61	736.50	495.50	2.65	22.70
3.22	1027	0.50	17.09	0.10	17.50	11.90	4.57	740.40	496.10	1.95	23.20
3.22	1032	0.50	17.59	0.10	17.45	10.98	4.60	737.80	488.70	2.57	23.63
3.22	1037	0.50	18.09	0.10	17.40	7.66	4.60	737.70	466.90	2.74	23.88
3.22	1042	0.50	18.59	0.10	17.39	6.01	4.60	738.40	464.40	2.93	24.02
3.22	1047	0.50	19.09	0.10	17.38	8.81	4.60	738.30	461.50	2.70	24.30
3.22	1052	0.50	19.59	0.10	17.35	9.80	4.60	736.80	449.10	2.44	24.38
3.22	1057	0.50	20.09	0.10	17.36	6.31	4.60	734	448.0	2.60	24.47
3.22	1102	0.50	20.59	0.10	17.35	5.67	4.60	735.0	460.60	2.53	24.65
3.22	1107	0.50	21.09	0.10	17.36	4.98	4.61	739.60	456.10	2.39	24.79
3.22	1112	0.50	21.59	0.10	17.35	4.27	4.63	727.00	457.00	2.41	25.06
☐	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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Bowen/AECOM		9/21/16	1120
PUMP OR TUBING DEPTH IN WELL (feet): 18	**SAMPLE PUMP FLOW RATE (L per minute):** 0.100	**TUBING MATERIAL CODE:** PE	**SAMPLING ENDED AT:** 1153
FIELD DECONTAMINATION: (Y) N	**FIELD-FILTERED:** Y (N) **Filtration Equipment Type:** ____ **FILTER SIZE:** ____ µm	**QC Sample Collected:** Y (N) ☐ Duplicate ☐ Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION # CONTAINERS	SAMPLE CONTAINER SPECIFICATION VOLUME	SAMPLE CONTAINER SPECIFICATION MATERIAL CODE	SAMPLE PRESERVATION PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
YGWC-329	1	~~0.5L~~ 0.25L	PE	HNO_3	Metals app. III & IV	APP
YGWC-329	1	~~0.5L~~ 1/8 L	PE	N/A	Cl, F, SO_4, TDS	APP
YGWC-329	1	½ GAL	PE	HNO_3	Ra 226/228	APP

REMARKS:

FINAL DEPTH TO WATER: 17.30 **DEPTH TO BOTTOM:** 23.16

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-32I	SAMPLE ID:	YGWC-32I
FIELD TECHNICIAN:	Washen Bowen	DATE:	9/21/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 30.0 feet to 40.0 feet	STATIC DEPTH TO WATER (feet): 20.09	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (40.0 feet – 20.09 feet) X 0.65 liters/foot ~ 12.94 liters 3x ~ 38.82 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = – liters + (42 feet X 0.005 liters/foot) + 0.1 liters ~ 0.31 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 35	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 35	PURGING INITIATED AT: 1200	PURGING ENDED AT: 1217	TOTAL VOLUME PURGED (liters): 3.06
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449474 2949-0913		

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)
5.03	1207	1.26	1.26	0.180	20.40	1.99	5.41	928.20	249.60	0.36	22.63
5.03	1212	0.90	2.16	0.180	20.39	0.99	5.40	932.60	266.10	0.29	22.21
5.03	1217	0.90	3.06	0.180	20.40	1.02	5.40	931.90	244.90	0.29	22.29
☐	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 ; **⅞"** = 0.12 ; **1"** = 0.16

NOTES:

check pH in preserved containers - pH-2.0

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Bowen /AECOM		9/21/06	1223
PUMP OR TUBING DEPTH IN WELL (feet): 35	**SAMPLE PUMP FLOW RATE (L per minute):** 0.180	**TUBING MATERIAL CODE:** PE	**SAMPLING ENDED AT:** 1241
FIELD DECONTAMINATION: (Y) N	**FIELD-FILTERED:** Y (N) **FILTER SIZE:** ____ µm **Filtration Equipment Type:**	**QC Sample Collected:** (Y) N ☐ Duplicate ☐ Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWC-32I	1	~~0.5L~~ 0.25L	PE	HNO_3	Metals app. III & IV	APP
YGWC-32I	1	~~0.5L~~ 1 qt	PE	N/A	Cl, F, SO_4, TDS	APP
YGWC-32I	1	~~1~~ ¼ GAL	PE	HNO_3	Ra 226/228	APP
EQB-4	1	0.25L	PE	HNO_3	Metals app III & IV	Direct fill
EQB-4	1	1 qt	PE	N/A	Cl, F, SO_4, TDS	Direct fill
EQB-4	1	½ gal	PE	HNO_3	Ra 226/228	Direct fill

REMARKS:
Collect EQB-4 @ 1246 - (collect from tubing weight)

FINAL DEPTH TO WATER:	20.40	DEPTH TO BOTTOM:	40.0

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-33S	SAMPLE ID:	YGWC-33S
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/21/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 28.56 feet to 38.56 feet	STATIC DEPTH TO WATER (feet): 9.16	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (38.56 feet − 9.16 feet) X 0.65 liters/foot ~ 19.11 liters 3x ~ 57.33 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = — liters + (33 feet X 0.005 liters/foot) + 0.1 liters ~ 0.29 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 33	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 33	PURGING INITIATED AT: 1129	PURGING ENDED AT: 1435	TOTAL VOLUME PURGED (liters): 10.39
WATER QUALITY INSTRUMENT(S): In-Situ SmarTroll LaMotte 2020we		SERIAL NO(S): 449474 2949-0413		

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	1335	1.23	1.23	0.205	9.72	1.99	4.92	1322.20	-2.60	0.24	22.58
5.05	1340	1.03	2.26	0.205	9.78	1.95	4.93	1329.00	-4.90	0.18	22.00
* 5.05	1345	1.03	3.29	0.205	9.78	3.65	—	—	—	—	—
5.05	1350	1.03	4.32	0.205	9.80	5.86	4.74	1349.80	[illegible]	0.13	21.89
5.05	1355	1.03	5.35	0.205	9.80	11.29	4.68	1344.60	4.50	0.12	21.72
3.74	1400	0.70	6.05	0.140	9.69	8.42	4.59	1379.00	9.40	0.13	22.18
3.74	1405	0.70	6.75	0.140	9.65	6.56	4.62	1367.00	9.0	0.16	22.22
3.74	1410	0.70	7.45	0.140	9.63	5.31	4.64	1364.60	8.0	0.15	22.26
3.74	1415	0.70	8.15	0.140	9.62	5.06	4.62	1374.50	10.5	0.29	22.26
3.74	1420	0.70	8.85	0.140	9.63	4.75	4.64	1370.60	9.80	0.14	22.71
3.74	1425	0.70	9.99	0.140	9.58	4.31	4.64	1365.10	10.90	0.14	22.80
3.74	1430	0.70	9.69	0.140	9.57	3.85	4.64	1364.50	10.80	0.15	22.80
3.74	1435	0.70	10.39	0.140	9.56	3.00	4.63	1367.70	11.70	0.16	22.62

☐ 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 ; ⅞" = 0.12 ; **1"** = 0.16

NOTES:

* no readings on Ipad -
@ 1355 reduce pump rate to 140 ml/min
- pH check in preserved containers - 2.0 pH

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 Bonney /AECOM	SAMPLER(S) SIGNATURES:	DATE SAMPLED: 9/21/16	SAMPLING INITIATED AT: 1440
PUMP OR TUBING DEPTH IN WELL (feet): 33	SAMPLE PUMP FLOW RATE (L per minute): 0.140	TUBING MATERIAL CODE: PE	SAMPLING ENDED AT: 1532
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	QC Sample Collected: (Y) N (Duplicate ☐Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWC-33S	1	0.5 L	PE	HNO_3	Metals app. III & IV	APP
YGWC-33S	1	0.5 L	PE	N/A	Cl, F, SO_4, TDS	APP
YGWC-33S	1	1 GAL	PE	HNO_3	Ra 226/228	APP
DUP-4	1	0.25L	PE	HNO_3	Metals app. III & IV	APP
DUP-4	1	1qt	PE	N/A	Cl, F, SO_4, TDS	APP
DUP-4	1	1/2 gal	PE	HNO_3	Ra 226/228	APP

REMARKS:

FINAL DEPTH TO WATER:	9.43	**DEPTH TO BOTTOM:**	38.56

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-34I	SAMPLE ID:	YGWC-34I
FIELD TECHNICIAN:	Wesley Bowen	DATE:	9/21/16

PURGING DATA

WELL DIAMETER (inches): 2	WELL SCREEN INTERVAL DEPTH: 28.75 feet to 38.75 feet	STATIC DEPTH TO WATER (feet): 24.87	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (38.75 feet − 24.87 feet) X 0.65 liters/foot ~ 9.02 liters 3x ~ 27.06 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TOTAL LENGTH OF TUBING X TUBING CAPACITY) + FLOW THROUGH CELL VOLUME

1 EQUIPMENT VOLUME = — liters + (38 feet X 0.005 liters/foot) + 0.1 liters ~ 0.29 liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 37	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 37	PURGING INITIATED AT: 1558	PURGING ENDED AT: 1625	TOTAL VOLUME PURGED (liters): 3.40	
WATER QUALITY INSTRUMENT(S):	In-Situ SmarTroll LaMotte 2020we	SERIAL NO(S):	449474 2946-0413		

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)
3.75	1605	0.88	0.88	0.125	25.07	0.09	4.94	728.80	97.80	0.48	23.53
3.75	1610	0.63	1.51	0.125	25.11	0.01	4.92	751.40	95.90	0.31	22.91
3.75	1615	0.63	2.14	0.125	25.10	0.20	4.92	731.40	90.80	0.24	22.02
3.75	1620	0.63	2.77	0.125	25.11	0.07	4.89	735.90	88.40	0.22	22.09
3.75	1625	0.63	3.40	0.125	25.12	0.10	4.85	735.60	86.80	0.20	22.36

☐ 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 ; **⅞"** = 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)

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:	SAMPLER(S) SIGNATURES:	DATE SAMPLED:	SAMPLING INITIATED AT:
Wesley Brewer /AECOM		9/21/16	1630
PUMP OR TUBING DEPTH IN WELL (feet): 33	**SAMPLE PUMP FLOW RATE (L per minute):** 0.125	**TUBING MATERIAL CODE:** PE	**SAMPLING ENDED AT:** 1716
FIELD DECONTAMINATION: (Y) N	**FIELD-FILTERED:** Y (N) **FILTER SIZE:** ____ µm **Filtration Equipment Type:**	**QC Sample Collected:** (Y) N ☒ Duplicate ☐ Equipment Blank ☐ Field Blank	

SAMPLE ID	SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	# CONTAINERS	VOLUME	MATERIAL CODE	PRESERVATIVE USED		
YGWC-34I	1	~~0.5L~~ 0.25 L	PE	HNO_3	Metals app. III & IV	APP
YGWC-34I	1	~~0.5L~~ 1/4	PE	N/A	Cl, F, SO_4, TDS	APP
YGWC-34I	1	1 GAL	PE	HNO_3	Ra 226/228	APP
2nd Rad YGWC-34I	1	1/2 Gal	PE	HNO_3	Ra 226/228	APP

REMARKS: Collect 2nd Rad YGWC-34I for lab Duplicate

FINAL DEPTH TO WATER: 25.0 **DEPTH TO BOTTOM:** 38.74

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)

Product Name: Low-Flow System

Date: 2017-02-28 13:58:05

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Phase 2	Tubing Length	65 ft
Latitude	33º 27' 27.7"		
Longitude	-84º -53' -50.17"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	55 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.896712 L
Well Total Depth	60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7.56 in
Depth to Water	10.17 ft	Total Volume Pumped	10.4 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	13:29:27	14416.78	18.07	5.99	388.08	7.44	10.80	0.64	95.36
Last 5	13:34:27	14716.78	18.03	5.99	386.69	6.93	10.80	0.65	95.29
Last 5	13:39:27	15016.76	17.99	5.99	386.17	6.86	10.80	0.67	95.34
Last 5	13:44:27	15316.76	17.93	5.99	384.87	6.61	10.80	0.69	95.10
Last 5	13:49:27	15616.76	17.90	5.99	384.31	6.37	10.80	0.70	95.30
Variance 0			-0.04	0.00	-0.53			0.02	0.05
Variance 1			-0.06	-0.00	-1.30			0.02	-0.24
Variance 2			-0.03	0.00	-0.55			0.01	0.20

Notes

Cloudy 60's. Sampled at 1400.

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: 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:

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
Client ID: YGWA-4I
Date/Time Sampled: 11/2/2016 12:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0157-01
Date/Time Received: 11/4/2016 9:35:00AM

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
Client ID: YGWA-5D
Date/Time Sampled: 11/2/2016 11:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0157-02
Date/Time Received: 11/4/2016 9:35:00AM

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
Client ID: YGWA-6I
Date/Time Sampled: 11/2/2016 3:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0157-03
Date/Time Received: 11/4/2016 9:35:00AM

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
Client ID: YGWA-14S
Date/Time Sampled: 11/2/2016 10:50:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0157-04
Date/Time Received: 11/4/2016 9:35:00AM

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
Client ID: YGWA-20S
Date/Time Sampled: 11/2/2016 2:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0157-05
Date/Time Received: 11/4/2016 9:35:00AM

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
Client ID: FB-1-11-2-16
Date/Time Sampled: 11/2/2016 1:00:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AZK0157-06
Date/Time Received: 11/4/2016 9:35:00AM

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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m/d/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:							P	P	P	P					
PRESERVATION:							3	7	3						
11-2-16	1255	GW		✓	YGWA-4I	3	1	1	1						1
11-2-16	1120	GW		✓	YGWA-5D	4	1	1	2						2
11-2-16	1535	GW		✓	YGWA-6I	3	1	1	1						3
11-2-16	1050	GW		✓	YGWA-14S	3	1	1	1						4
11-2-16	1440	GW		✓	YGWA-20S	3	1	1	1						5
11-2-16	1300	W		✓	FB-1-11-2-16	3	1	1	1						6

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: Chris Parker, Brandon Reynolds
DATE/TIME: 11-3-16 0900

RELINQUISHED BY:
DATE/TIME: 11/4/2016 0935

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 11/04/16 0935

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min. 1°C Max.
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZK0157
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 1:53:06PM**

Attn: Mr. Jcju 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30201763

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
Total Radium	Total Radium Calculation	**0.791 ± 0.662 (1.35)**	pCi/L	12/07/16 15:53	7440-14-4	

Sample: FB-1-11-2-16 **Lab ID: 30201763006** Collected: 11/02/16 13:00 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	**-0.0798 ± 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30201763

Chain of Custody

Workorder: AZK0157 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 12/8/2016

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	YGWA-4I	G	11/2/2016 12:55	AZK0157-01	GW	1	X	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								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Karen Hall	11-7-16 0925	
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.

30201763

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m/d/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:							P	P	P	P					
PRESERVATION:							3	7	3						
11-2-16	1255	GW		✓	YBWA-4I	3	1	1	1						1
11-2-16	1120	GW		✓	YBWA-5D	4	1	1	2						2
11-2-16	1535	GW		✓	YGWA-6I	3	1	1	1						3
11-2-16	1050	GW		✓	YGWA-14S	3	1	1	1						4
11-2-16	1440	GW		✓	YGWA-20S	3	1	1	1						5
11-2-16	1300	W		✓	FB-1-11-2-16	3	1	1	1						6

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Parker, Brandon Reynolds
DATE/TIME: 11-3-16 0900

RELINQUISHED BY:
DATE/TIME: 11/4/2016 0935

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 11/04/16 0935

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1.0 °C Min: 1.0 °C Max.

Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: 42K0157
Entered into LIMS:
Tracking #:

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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 NA 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 11-7-16

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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH < 2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH; Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH Date: 11-7-16

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

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	11/21/2016
Worklist:	32367
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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
	LCS32367	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	

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:	

Duplicate Sample Assessment

Sample I.D.:	30201763002	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30201763002DUP	
Sample Result (pCi/L, g, F):	3.881	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.618	
Sample Duplicate Result (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	30201763002
Duplicate RPD:	1.75%	30201763002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

12/7/16

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	11/28/2016
Worklist:	32411
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS32411	LCSD32411
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/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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30201555003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30201555003
Duplicate RPD:	12.71%	30201555003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

12/7/16

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:

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
Client ID: YGWA-6S
Date/Time Sampled: 11/3/2016 9:15:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-01
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: YGWA-17S
Date/Time Sampled: 11/3/2016 12:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-02
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: YGWA-18S
Date/Time Sampled: 11/3/2016 3:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-03
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: YGWA-18I
Date/Time Sampled: 11/3/2016 1:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-04
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: YGWA-21I
Date/Time Sampled: 11/3/2016 11:25:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-05
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: EB-2-11-3-16
Date/Time Sampled: 11/3/2016 2:50:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AZK0200-06
Date/Time Received: 11/5/2016 10:40:00AM

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	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
Client ID: Dup 1
Date/Time Sampled: 11/3/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-07
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: YGWA-1I
Date/Time Sampled: 11/4/2016 11:25:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-08
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: YGWA-2I
Date/Time Sampled: 11/4/2016 2:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-09
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: YGWA-5I
Date/Time Sampled: 11/4/2016 9:55:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0200-10
Date/Time Received: 11/5/2016 10:40:00AM

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
Client ID: FB-2-11-4-16
Date/Time Sampled: 11/4/2016 3:15:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AZK0200-11
Date/Time Received: 11/5/2016 10:40:00AM

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	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	0.0250	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:								P	P	P	P					
PRESERVATION:								3	7	3						
11-3-16	0915	GW		✓	YGWA-6S	3		1	1	1						1
11-3-16	1235	GW		✓	YGWA-17S	3		1	1	1						2
11-3-16	1500	GW		✓	YGWA-18S	3		1	1	1						3
11-3-16	1320	GW		✓	YGWA-18I	3		1	1	1						4
11-3-16	1125	GW		✓	YGWA-21I	3		1	1	1						5
11-3-16	1450	W		✓	EB-2-11-3-16	3		1	1	1						6
11-3-16	—	GW		✓	DUP 1	3		1	1	1						7

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤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: R. Walker, B. Reynolds (QC)
DATE/TIME: 11-4-16 1000
RELINQUISHED BY:
DATE/TIME: 11-5-16 1040
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY LAB:
DATE/TIME: 11/05/16 1040
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1 °C Min: 1 °C Max
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AZK0200
Entered into LIMS: MB
Tracking #:

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
11-4-16	1125	GW		✓	YGWA-1I	3	1	1	1	8
11-4-16	1415	GW		✓	YGWA-2I	3	1	1	1	9
11-4-16	0955	GW		✓	YGWA-5I	3	1	1	1	10
11-4-16	1515	W		✓	FB-2-11-4-16	3	1	1	1	11

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: B. Reynolds, R. Walker (AC)
DATE/TIME: 11-4-16 1530
RELINQUISHED BY:
DATE/TIME: 11-5-16 1040

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME: 11/05/16 1040

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZK0200
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. Jcju 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:90% T:NA**	pCi/L	11/25/16 08:38	13982-63-3	
Radium-228	EPA 9320	**-0.0711 ± 0.364 (0.791) C:65% T:86%**	pCi/L	12/12/16 18:54	15262-20-1	
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) C:86% T:NA**	pCi/L	11/25/16 08:38	13982-63-3	
Radium-228	EPA 9320	**0.235 ± 0.418 (0.852) C:63% T:90%**	pCi/L	12/12/16 18:54	15262-20-1	
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) C:89% T:NA**	pCi/L	11/25/16 08:38	13982-63-3	
Radium-228	EPA 9320	**0.928 ± 0.538 (0.954) C:52% T:87%**	pCi/L	12/12/16 18:54	15262-20-1	
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) C:94% T:NA**	pCi/L	11/25/16 08:38	13982-63-3	
Radium-228	EPA 9320	**0.302 ± 0.376 (0.747) C:60% T:87%**	pCi/L	12/12/16 18:54	15262-20-1	
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) C:85% T:NA**	pCi/L	11/25/16 08:38	13982-63-3	
Radium-228	EPA 9320	**0.631 ± 0.512 (0.973) C:58% T:82%**	pCi/L	12/12/16 18:54	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202029

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
Total Radium	Total Radium Calculation	**0.797 ± 0.645 (1.20)**	pCi/L	12/15/16 06:59	7440-14-4	

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	

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	

Sample: YGWA-1I **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	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Chain of Custody

WO#:30202029

30202029

Pace Analytical
www.pacelabs.com

Workorder: AZK0200 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 12/9/2016

Report To:	Subcontract To:
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 HNO3					Requested Analysis Radium 226, 228, Total												LAB USE ONLY
1	YGWA-6S	G	11/3/2016 9:15	AZK0200-01	GW	1					X												001
2	YGWA-17S	G	11/3/2016 12:35	AZK0200-02	GW	1					X												002
3	YGWA-18S	G	11/3/2016 15:00	AZK0200-03	GW	1					X												003
4	YGWA-18I	G	11/3/2016 13:20	AZK0200-04	GW	1					X												004
5	YGWA-21I	G	11/3/2016 11:25	AZK0200-05	GW	1					X												005
6	EB-2-11-3-16	G	11/3/2016 14:50	AZK0200-06	W	1					X												006
7	Dup 1	G	11/3/2016 0:00	AZK0200-07	GW	1					X												007
8	YGWA-1I	G	11/4/2016 11:25	AZK0200-08	GW	1					X												008
9	YGWA-2I	G	11/4/2016 14:15	AZK0200-09	GW	1					X												009
10	YGWA-5I	G	11/4/2016 9:55	AZK0200-10	~~W~~ GW	1	3 mcl 11/7/2016				X												010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	MDahlman	11/07/16	[signature]	11-9-16 1035	
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.

30202029

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: AZK0200 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 12/9/2016

Report To:	Subcontract To:
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 HNO3					Requested Analysis Radium 226, 228, Total												LAB USE ONLY
11	FB-2-11-4-16	G	11/4/2016 15:15	AZK0200-11	W	1					X												011
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	MAdkinson	11/07/16		11-9-16 1035	
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®

30202029

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
CONTAINER TYPE:							P	P	P	
PRESERVATION:							3	7	3	
11-3-16	0915	GW		✓	YGWA-6S	3	1	1	1	1
11-3-16	1235	GW		✓	YGWA-17S	3	1	1	1	2
11-3-16	1500	GW		✓	YGWA-18S	3	1	1	1	3
11-3-16	1320	GW		✓	YGWA-18I	3	1	1	1	4
11-3-16	1125	GW		✓	YGWA-21I	3	1	1	1	5
11-3-16	1450	W		✓	EB-2-11-3-16	3	1	1	1	6
11-3-16	—	GW		✓	DUP 1	3	1	1	1	7

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: R. Walker, B. Reynolds (QC)

DATE/TIME: 11-4-16 1000

RELINQUISHED BY:

DATE/TIME: 11-5-16 1040

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB: Malman

DATE/TIME: 11/03/16 1040

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Ice: Yes No NA

Temperature: 1°C Min: 1°C Max:

Custody Seal: Intact Broken Not Present

# of Coolers

Cooler ID:

FOR LAB USE ONLY

LAB #: AZK0200

Entered into LIMS: MR

Tracking #:

CHAIN OF CUSTODY RECORD

Pace Analytical®

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

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

Collection DATE m-d-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER
CONTAINER TYPE:							P	P	P	P						
PRESERVATION:							3	7	3							
11-4-16	1125	GW		✓	YGWA-1I	3	1	1	1							8
11-4-16	1415	GW		✓	YGWA-2I	3	1	1	1							9
11-4-16	0955	GW		✓	YGWA-5I	3	1	1	1							10
11-4-16	1515	W		✓	FB-2-11-4-16	3	1	1	1							11

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: B. Reynolds, R. Walker (AQ)
DATE/TIME: 11-4-16 1530

RELINQUISHED BY:
DATE/TIME: 11-5-16 1040

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME: 11/05/16 1040

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max: 1°C
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: A2K0200
Entered into LIMS:
Tracking #:

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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 ML 11-9-16		4.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WA	X			5.
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: -Pace Containers Used:	X X			10.
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X X			13. PH < 2
				Initial when completed: ML 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: ML Date: 11-9-16

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

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	11/21/2016
Worklist:	32548
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

	LCSD (Y or N)?	N
	LCS32548	LCSD32548
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):	0.502	
Target Conc. (pCi/L, g, F):	8.904	
Uncertainty (Calculated):	0.419	
Result (pCi/L, g, F):	8.463	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.787	
Numerical Performance Indicator:	-0.97	
Percent Recovery:	95.05%	
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):	
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:	

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

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30202040001
30202040001DUP

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:

12/15/16

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JAL
Date:	12/9/2016
Worklist:	32862
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS32862	LCSD32862
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	

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:	

Duplicate Sample Assessment	
Sample I.D.:	30202155001
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

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30202155001
30202155001DUP

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:

12/15/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	LCSD (Y or N)?	Y
	LCS32861	LCSD32861
Count Date:	12/12/2016	12/12/2016
Spike I.D.:	16-027	16-027
Spike Concentration (pCi/mL):	25.841	25.841
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.820	0.811
Target Conc. (pCi/L, g, F):	6.300	6.371
Uncertainty (Calculated):	0.454	0.459
Result (pCi/L, g, F):	5.218	6.099
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.668	0.714
Numerical Performance Indicator:	-2.63	-0.63
Percent Recovery:	82.83%	95.73%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

Duplicate Sample Assessment		
Sample I.D.:	LCS32861	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD32861	
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 Result 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):	
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:	

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

Comments:

12/15/16

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: **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:

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: YGWC-23S
Date/Time Sampled: 11/8/2016 2:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-01
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: YGWC-24S
Date/Time Sampled: 11/8/2016 12:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-02
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: YGWC-28I
Date/Time Sampled: 11/8/2016 11:25:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-03
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: FB-3-11-8-16
Date/Time Sampled: 11/8/2016 3:30:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AZK0417-04
Date/Time Received: 11/11/2016 9:40:00AM

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	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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: YGWC-19S
Date/Time Sampled: 11/9/2016 10:10:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-05
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: YGWC-22S
Date/Time Sampled: 11/9/2016 12:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-06
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: YGWC-32S
Date/Time Sampled: 11/9/2016 3:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-07
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: YGWC-34I
Date/Time Sampled: 11/9/2016 2:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-08
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: Dup-3
Date/Time Sampled: 11/9/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-09
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: YGWC-32I
Date/Time Sampled: 11/10/2016 10:25:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0417-10
Date/Time Received: 11/11/2016 9:40:00AM

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

Attention: Mr. Joju Abraham

November 22, 2016

Report No.: AZK0417
Client ID: FB-4-11-10-16
Date/Time Sampled: 11/10/2016 10:50:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AZK0417-11
Date/Time Received: 11/11/2016 9:40:00AM

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	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
Client ID: EB-4-11-10-16
Date/Time Sampled: 11/10/2016 9:45:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AZK0417-12
Date/Time Received: 11/11/2016 9:40:00AM

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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:							P	P	P	P					
PRESERVATION:							3	7	3						
~~11-8-16~~	~~1145~~	~~W~~		✓	~~EB-3-11-8-16~~	~~3~~	~~1~~	~~1~~	~~1~~	CP 11/11/16					
11-8-16	1455	GW		✓	YGWC-23S	3	1	1	1						1
11-8-16	1250	GW		✓	YGWC-24S	3	1	1	1						2
11-8-16	1125	GW		✓	YGWC-28I	3	1	1	1						3
11-8-16	1530	W		✓	FB-3-11-8-16	3	1	1	1						4

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker (ACC)

DATE/TIME: 11-9-16 1000

RELINQUISHED BY:

DATE/TIME: 11-11-16 0940

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

FOR LAB USE ONLY

LAB #: AZK0417

Entered into LIMS: MK

RECEIVED BY LAB: Laburman

DATE/TIME: 11/11/16 0940

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #:

Packed: No NA

Ice: Yes No NA

Temperature: 1°C Min: 1°C Max:

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470) P 3	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C) P 7	Radium 226 & 228 (SW-846 9315/9320) P 3						LAB ID NUMBER
11-9-16	1010	GW		✓	YGWC-19S	3		1	1	1						5
11-9-16	1210	GW		✓	YGWC-22S	3		1	1	1						6
11-9-16	1505	GW		✓	YGWC-32S	3		1	1	1						7
11-9-16	1445	GW		✓	YGWC-34I	4		1	1	2						8
11-9-16	—	GW		✓	DUP-3	3		1	1	1						9

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: C. Parker, R. Walker (ACC)
DATE/TIME: 11-10-16 0900
RELINQUISHED BY:
DATE/TIME: 11-11-16 0940

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: Laitman
DATE/TIME: 11/11/16 0940
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Packed: No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AZK0417
Entered into LIMS: MR
Tracking #:

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-d-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470) P 3	Cl, F, SO4, & TDS (EPA 300.0 & SM 2540C) P 7	Radium 226 & 228 (SW-846 9315/9320) P 3							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
11-10-16	1025	GW		✓	YGWC-32I	3		1	1	1							10	
11-10-16	1050	W		✓	FB-4-11-10-16	3		1	1	1							11	
11-10-16	0945	W		✓	EB-4-11-10-16	3		1	1	1							12	

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C Packer, R. Walker (ACC)
DATE/TIME: 11-10-16 1410
RELINQUISHED BY:
DATE/TIME: 11-11-16 0940

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: Latimer
DATE/TIME: 11/11/16 0940
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Packed: No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZK0417
Entered into LIMS: MR
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: 11/22/2016 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:95% T:NA**	pCi/L	12/06/16 08:16	13982-63-3	
Radium-228	EPA 9320	**0.194 ± 0.354 (0.723) C:63% T:88%**	pCi/L	12/15/16 19:06	15262-20-1	
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) C:93% T:NA**	pCi/L	12/06/16 08:16	13982-63-3	
Radium-228	EPA 9320	**0.385 ± 0.387 (0.755) C:64% T:86%**	pCi/L	12/15/16 19:06	15262-20-1	
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) C:88% T:NA**	pCi/L	12/06/16 08:16	13982-63-3	
Radium-228	EPA 9320	**0.186 ± 0.374 (0.769) C:58% T:88%**	pCi/L	12/15/16 19:07	15262-20-1	
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) C:92% T:NA**	pCi/L	12/06/16 08:16	13982-63-3	
Radium-228	EPA 9320	**0.294 ± 0.292 (0.565) C:65% T:88%**	pCi/L	12/15/16 19:07	15262-20-1	
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) C:93% T:NA**	pCi/L	12/06/16 09:58	13982-63-3	
Radium-228	EPA 9320	**-0.0553 ± 0.324 (0.706) C:57% T:94%**	pCi/L	12/15/16 19:07	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202498

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
Total Radium	Total Radium Calculation	**0.0543 ± 0.460 (1.04)**	pCi/L	12/16/16 09:44	7440-14-4	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202498

Sample: YGWC-32I **Lab ID: 30202498010** Collected: 11/10/16 10:25 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	**0.103 ± 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	

Sample: FB-4-11-10-16 **Lab ID: 30202498011** Collected: 11/10/16 10:50 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	**-0.00848 ± 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	

Sample: EB-4-11-10-16 **Lab ID: 30202498012** Collected: 11/10/16 09:45 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	**-0.0866 ± 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30202498

30202498

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AZK0417 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 12/14/2016

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
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	006
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
1			Karen Hill	11/11/16 0845	
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

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: AZK0417 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 12/14/2016

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
11	FB-4-11-10-16	G	11/10/2016 10:50	AZK0417-11	W	1	X	011
12	EB-4-11-10-16	G	11/10/2016 9:45	AZK0417-12	W	1	X	012
13								
14								
15								
16								
17								
18								
19								
20								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Kevin Hill	11-14-16 0945	
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

CHAIN OF CUSTODY RECORD

Pace Analytical®

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

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
~~11-8-16~~	~~1145~~	~~W~~		✓	~~EB-3-11-8-16~~	~~3~~	~~1~~	~~1~~	~~1~~	CP 11/11/16	
11-8-16	1455	GW		✓	YGWC-23S	3	1	1	1	1	
11-8-16	1250	GW		✓	YGWC-24S	3	1	1	1	2	
11-8-16	1125	GW		✓	YGWC-28I	3	1	1	1	3	
11-8-16	1530	W		✓	FB-3-11-8-16	3	1	1	1	4	

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker (ACC) DATE/TIME: 11-9-16 1000

RELINQUISHED BY: [signature] DATE/TIME: 11-11-16 0940

RECEIVED BY: DATE/TIME:

RELINQUISHED BY: DATE/TIME:

RECEIVED BY LAB: M Lahman DATE/TIME: 11/11/16 0940

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA | Ice: Yes No NA | Temperature: 1°C Min 1°C Max | Custody Seal: Intact Broken Not Present | # of Coolers: | Cooler ID:

FOR LAB USE ONLY
LAB #: AZK0417
Entered into LIMS: MP
Tracking #:

Plant Yates COC Ash Ponds.xlsx

30202498

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:							P	P	P	P					
PRESERVATION:							3	7	3						
11-9-16	1010	GW		✓	YGWC-19S	3	1	1	1						5
11-9-16	1210	GW		✓	YGWC-22S	3	1	1	1						6
11-9-16	1505	GW		✓	YGWC-32S	3	1	1	1						7
11-9-16	1445	GW		✓	YGWC-34I	4	1	1	2						8
11-9-16	—	GW		✓	DUP-3	3	1	1	1						9

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker (ACC)
DATE/TIME: 11-10-16 0900
RELINQUISHED BY: [signature]
DATE/TIME: 11-11-16 0940
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

FOR LAB USE ONLY
LAB #: AZK0917
Entered into LIMS: MR

RECEIVED BY LAB: [signature]
DATE/TIME: 11/11/16 0940
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Tracking #:
pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

Plant Yates COC Ash Ponds.xlsx

30202498

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-d-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
11-10-16	1025	GW		✓	YGWC-32I	3	1	1	1	10
11-10-16	1050	W		✓	FB-4-11-10-16	3	1	1	1	11
11-10-16	0945	W		✓	EB-4-11-10-16	3	1	1	1	12

CONTAINER TYPE / PRESERVATION
P - PLASTIC — 1 - HCl, ≤6°C
A - AMBER GLASS — 2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: C. Packer, R. Walker (ACC)
DATE/TIME: 11-10-16 1410
RELINQUISHED BY:
DATE/TIME: 11-11-16 0940
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY LAB: M Latimore
DATE/TIME: 11/11/16 0940
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER (CLIENT) OTHER FS
pH checked: (Yes) No NA
Ice: (Yes) No NA
Temperature: 1° Min 1° Max
Custody Seal: (Intact) Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: 42K0417
Entered Into LIMS: MD
Tracking #:

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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: KH 11-14-16

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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH < 2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH / Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH / Date: 11-14-16

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

Pace Analytical™ www.pacelabs.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	LCSD (Y or N)?	N
	LCS32686	LCSD32686
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):	8.900	
Uncertainty (Calculated):	0.419	
Result (pCi/L, g, F):	8.003	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.944	
Numerical Performance Indicator:	-1.70	
Percent Recovery:	89.92%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30202498008	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30202498008DUP	
Sample 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	30202498008
Duplicate RPD:	216.23%	30202498008DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

2nd prep

Comments:

***Batch must be re-prepped due to unacceptable precision.

12/16/16

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS32685	LCSD32685
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30202155001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30202155001
Duplicate RPD:	17.91%	30202155001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

12/16/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JAL
Date:	12/12/2016
Worklist:	32863
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1192646
MB concentration:	-0.046
M/B Counting Uncertainty:	0.369
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	LCSD (Y or N)?	N
	LCS32863	LCSD32863
Count Date:	12/16/2016	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30202498008	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30202498008
Duplicate RPD:	41.51%	30202498008DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

12/16/16

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: **AZK0463**
November 23, 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 23, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EB-3-11-14-16	AZK0463-01	Water	11/14/16 10:00	11/14/16 16:15
YGWC-33S	AZK0463-02	Ground Water	11/14/16 13:55	11/14/16 16:15
Dup-4	AZK0463-03	Ground Water	11/14/16 00:00	11/14/16 16:15

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 23, 2016

Report No.: AZK0463
Client ID: EB-3-11-14-16
Date/Time Sampled: 11/14/2016 10:00:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AZK0463-01
Date/Time Received: 11/14/2016 4:15:00PM

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	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	11/15/16 10:03	11/15/16 16:13	6110383	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	11/15/16 10:03	11/15/16 16:13	6110383	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	11/15/16 10:03	11/15/16 16:13	6110383	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/16/16 08:40	11/21/16 13:05	6110399	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Calcium	ND	0.500	0.0311	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Chromium	0.0057	0.0100	0.0009	mg/L	EPA 6020B	B-01, J	1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:06	6110399	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 14:56	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 23, 2016

Report No.: AZK0463
Client ID: YGWC-33S
Date/Time Sampled: 11/14/2016 1:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0463-02
Date/Time Received: 11/14/2016 4:15:00PM

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	11/15/16 13:55	11/15/16 13:55	6110386	JPT
Inorganic Anions											
Chloride	6.4	0.25	0.01	mg/L	EPA 300.0		1	11/15/16 10:03	11/15/16 16:34	6110383	RNB
Fluoride	0.35	0.30	0.02	mg/L	EPA 300.0		1	11/15/16 10:03	11/15/16 16:34	6110383	RNB
Sulfate	750	100	5.1	mg/L	EPA 300.0		100	11/15/16 10:03	11/20/16 12:23	6110383	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/16/16 08:40	11/21/16 13:11	6110399	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Barium	0.0149	0.0100	0.0004	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Beryllium	0.0152	0.0030	0.00008	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Boron	11.0	0.200	0.0321	mg/L	EPA 6020B		5	11/16/16 08:40	11/20/16 15:49	6110399	CSW
Cadmium	0.0027	0.0010	0.00007	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Calcium	116	25.0	1.55	mg/L	EPA 6020B		50	11/16/16 08:40	11/20/16 15:43	6110399	CSW
Chromium	0.0010	0.0100	0.0009	mg/L	EPA 6020B	B-01, J	1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Cobalt	0.0144	0.0100	0.0005	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Lead	0.0012	0.0050	0.0001	mg/L	EPA 6020B	J	1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Lithium	0.0253	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/16/16 08:40	11/19/16 16:12	6110399	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 14:58	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 23, 2016

Report No.: AZK0463
Client ID: Dup-4
Date/Time Sampled: 11/14/2016 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AZK0463-03
Date/Time Received: 11/14/2016 4:15:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1230	25	10	mg/L	SM 2540 C		1	11/15/16 13:55	11/15/16 13:55	6110386	JPT
Inorganic Anions											
Chloride	6.4	0.25	0.01	mg/L	EPA 300.0		1	11/15/16 10:03	11/15/16 16:54	6110383	RNB
Fluoride	0.35	0.30	0.02	mg/L	EPA 300.0		1	11/15/16 10:03	11/15/16 16:54	6110383	RNB
Sulfate	860	20	1.0	mg/L	EPA 300.0		20	11/15/16 10:03	11/20/16 03:21	6110383	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	11/16/16 08:40	11/21/16 13:18	6110399	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Barium	0.0154	0.0100	0.0004	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Beryllium	0.0155	0.0030	0.00008	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Boron	11.6	0.200	0.0321	mg/L	EPA 6020B		5	11/16/16 08:40	11/20/16 16:00	6110399	CSW
Cadmium	0.0027	0.0010	0.00007	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Calcium	120	25.0	1.55	mg/L	EPA 6020B		50	11/16/16 08:40	11/20/16 15:54	6110399	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Cobalt	0.0149	0.0100	0.0005	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Lead	0.0012	0.0050	0.0001	mg/L	EPA 6020B	J	1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Lithium	0.0258	0.0500	0.0021	mg/L	EPA 6020B	J	1	11/16/16 08:40	11/19/16 16:29	6110399	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	11/17/16 09:55	11/17/16 15:01	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 23, 2016

Report No.: AZK0463

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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 23, 2016

Report No.: AZK0463

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110383 - EPA 300.0											
Blank (6110383-BLK1)						Prepared & Analyzed: 11/15/16					
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 (6110383-BS1)						Prepared & Analyzed: 11/15/16					
Chloride	10.7	0.25	0.01	mg/L	10.010		107	90-110			
Fluoride	10.8	0.30	0.02	mg/L	10.020		108	90-110			
Sulfate	10.5	1.0	0.05	mg/L	10.020		105	90-110			
Matrix Spike (6110383-MS1)		**Source: AZK0448-01**				Prepared & Analyzed: 11/15/16					
Chloride	10.6	0.25	0.01	mg/L	10.010	0.99	96	90-110			
Fluoride	9.84	0.30	0.02	mg/L	10.020	ND	98	90-110			
Sulfate	10.8	1.0	0.05	mg/L	10.020	1.18	96	90-110			
Matrix Spike Dup (6110383-MSD1)		**Source: AZK0448-01**				Prepared & Analyzed: 11/15/16					
Chloride	11.3	0.25	0.01	mg/L	10.010	0.99	103	90-110	6	15	
Fluoride	10.6	0.30	0.02	mg/L	10.020	ND	106	90-110	8	15	
Sulfate	11.5	1.0	0.05	mg/L	10.020	1.18	103	90-110	6	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 23, 2016

Report No.: AZK0463

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110399 - EPA 3005A											
Blank (6110399-BLK1)						Prepared: 11/16/16 Analyzed: 11/21/16					
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	0.0041	0.0100	0.0009	mg/L							J
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 (6110399-BS1)						Prepared: 11/16/16 Analyzed: 11/19/16					
Antimony	0.0997	0.0030	0.0008	mg/L	0.10000		100	80-120			
Arsenic	0.103	0.0050	0.0016	mg/L	0.10000		103	80-120			
Barium	0.0972	0.0100	0.0004	mg/L	0.10000		97	80-120			
Beryllium	0.106	0.0030	0.00008	mg/L	0.10000		106	80-120			
Boron	1.10	0.0400	0.0064	mg/L	1.0000		110	80-120			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000		102	80-120			
Calcium	1.01	0.500	0.0311	mg/L	1.0000		101	80-120			
Chromium	0.107	0.0100	0.0009	mg/L	0.10000		107	80-120			
Cobalt	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Copper	0.104	0.0250	0.0005	mg/L	0.10000		104	80-120			
Lead	0.101	0.0050	0.0001	mg/L	0.10000		101	80-120			
Molybdenum	0.103	0.0100	0.0017	mg/L	0.10000		103	80-120			
Nickel	0.106	0.0100	0.0006	mg/L	0.10000		106	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	0.0998	0.0010	0.0002	mg/L	0.10000		100	80-120			
Vanadium	0.106	0.0100	0.0071	mg/L	0.10000		106	80-120			
Zinc	0.106	0.0100	0.0021	mg/L	0.10000		106	80-120			
Lithium	0.115	0.0500	0.0021	mg/L	0.10000		115	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 23, 2016

Report No.: AZK0463

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110399 - EPA 3005A											
Matrix Spike (6110399-MS1)		**Source: AZK0464-03**				Prepared: 11/16/16 Analyzed: 11/19/16					
Antimony	0.100	0.0030	0.0008	mg/L	0.10000	ND	100	75-125			
Arsenic	0.101	0.0050	0.0016	mg/L	0.10000	ND	101	75-125			
Barium	0.0973	0.0100	0.0004	mg/L	0.10000	ND	97	75-125			
Beryllium	0.104	0.0030	0.00008	mg/L	0.10000	ND	104	75-125			
Boron	1.11	0.0400	0.0064	mg/L	1.0000	0.0179	109	75-125			
Cadmium	0.101	0.0010	0.00007	mg/L	0.10000	ND	101	75-125			
Calcium	0.993	0.500	0.0311	mg/L	1.0000	ND	99	75-125			
Chromium	0.105	0.0100	0.0009	mg/L	0.10000	0.0092	96	75-125			
Cobalt	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125			
Copper	0.103	0.0250	0.0005	mg/L	0.10000	ND	103	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	0.103	0.0100	0.0010	mg/L	0.10000	ND	103	75-125			
Silver	0.101	0.0100	0.0005	mg/L	0.10000	ND	101	75-125			
Thallium	0.101	0.0010	0.0002	mg/L	0.10000	ND	101	75-125			
Vanadium	0.103	0.0100	0.0071	mg/L	0.10000	ND	103	75-125			
Zinc	0.103	0.0100	0.0021	mg/L	0.10000	ND	103	75-125			
Lithium	0.113	0.0500	0.0021	mg/L	0.10000	ND	113	75-125			
Matrix Spike Dup (6110399-MSD1)		**Source: AZK0464-03**				Prepared: 11/16/16 Analyzed: 11/19/16					
Antimony	0.0976	0.0030	0.0008	mg/L	0.10000	ND	98	75-125	3	20	
Arsenic	0.0993	0.0050	0.0016	mg/L	0.10000	ND	99	75-125	2	20	
Barium	0.0944	0.0100	0.0004	mg/L	0.10000	ND	94	75-125	3	20	
Beryllium	0.103	0.0030	0.00008	mg/L	0.10000	ND	103	75-125	2	20	
Boron	1.07	0.0400	0.0064	mg/L	1.0000	0.0179	105	75-125	4	20	
Cadmium	0.0987	0.0010	0.00007	mg/L	0.10000	ND	99	75-125	2	20	
Calcium	0.983	0.500	0.0311	mg/L	1.0000	ND	98	75-125	1	20	
Chromium	0.103	0.0100	0.0009	mg/L	0.10000	0.0092	94	75-125	2	20	
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125	1	20	
Copper	0.101	0.0250	0.0005	mg/L	0.10000	ND	101	75-125	1	20	
Lead	0.100	0.0050	0.0001	mg/L	0.10000	ND	100	75-125	1	20	
Molybdenum	0.101	0.0100	0.0017	mg/L	0.10000	ND	101	75-125	3	20	
Nickel	0.104	0.0100	0.0006	mg/L	0.10000	ND	104	75-125	0.7	20	
Selenium	0.102	0.0100	0.0010	mg/L	0.10000	ND	102	75-125	0.9	20	
Silver	0.0986	0.0100	0.0005	mg/L	0.10000	ND	99	75-125	3	20	
Thallium	0.101	0.0010	0.0002	mg/L	0.10000	ND	101	75-125	0.4	20	
Vanadium	0.104	0.0100	0.0071	mg/L	0.10000	ND	104	75-125	1	20	
Zinc	0.101	0.0100	0.0021	mg/L	0.10000	ND	101	75-125	2	20	
Lithium	0.111	0.0500	0.0021	mg/L	0.10000	ND	111	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 23, 2016

Report No.: AZK0463

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110399 - EPA 3005A											
Post Spike (6110399-PS1)			**Source: AZK0464-03**			Prepared: 11/16/16 Analyzed: 11/19/16					
Antimony	94.8			ug/L	100.00	0.0200	95	80-120			
Arsenic	97.7			ug/L	100.00	-1.58	98	80-120			
Barium	94.5			ug/L	100.00	0.0400	94	80-120			
Beryllium	102			ug/L	100.00	0.00	102	80-120			
Boron	1070			ug/L	1000.0	17.9	106	80-120			
Cadmium	96.7			ug/L	100.00	-0.0200	97	80-120			
Calcium	971			ug/L	1000.0	1.69	97	80-120			
Chromium	102			ug/L	100.00	9.15	92	80-120			
Cobalt	102			ug/L	100.00	0.00	102	80-120			
Copper	100			ug/L	100.00	-0.0600	100	80-120			
Lead	99.0			ug/L	100.00	-0.0100	99	80-120			
Molybdenum	101			ug/L	100.00	0.0100	101	80-120			
Nickel	100			ug/L	100.00	0.120	100	80-120			
Selenium	99.9			ug/L	100.00	-1.80	100	80-120			
Silver	97.3			ug/L	100.00	0.00	97	80-120			
Thallium	98.1			ug/L	100.00	-0.0200	98	80-120			
Vanadium	101			ug/L	100.00	-8.51	101	80-120			
Zinc	99.2			ug/L	100.00	0.610	99	80-120			
Lithium	113			ug/L	100.00	0.0100	113	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			

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 23, 2016

Report No.: AZK0463

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6110442 - EPA 7470A											
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 23, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
						CONTAINER TYPE:		P	P	P	P						
						PRESERVATION:		3	7	3							
11-14-16	1000	W		✓	EB-3-11-14-16	3		1	1	1						1	
11-14-16	1355	GW		✓	YGWC-33S	3		1	1	1						2	
11-14-16	—	GW		✓	DUP-4	3		1	1	1						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_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Parker ACC — DATE/TIME: 11-14-16 1450

RELINQUISHED BY: [signature] — DATE/TIME: 11-14-16 1615

RECEIVED BY: — DATE/TIME: 1615

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: Lahman — DATE/TIME: 11/14/16 1615

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Checked: No NA — Ice: Yes No NA — Temperature: 1°C Min: 1°C Max: 11/14/16

Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID:

FOR LAB USE ONLY
LAB #: AZK0463
Entered into LIMS: MR
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: 11/23/2016 4:40:15PM

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 11/14/16 16:15

Work Order: AZK0463
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

December 20, 2016

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30202825

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on November 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30202825

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30202825

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30202825001	**EB-3-11-14-16**	Water	11/14/16 10:00	11/16/16 11:55
30202825002	**YGWC-33S**	Water	11/14/16 13:55	11/16/16 11:55
30202825003	**Dup-4**	Water	11/14/16 00:00	11/16/16 11:55

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30202825

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30202825001	**EB-3-11-14-16**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202825002	**YGWC-33S**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1
30202825003	**Dup-4**	EPA 9315	LAL	1
		EPA 9320	JAL	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202825

Sample: EB-3-11-14-16 **Lab ID: 30202825001** Collected: 11/14/16 10:00 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**-0.0392 ± 0.127 (0.389) C:90% T:NA**	pCi/L	12/06/16 10:03	13982-63-3	
Radium-228	EPA 9320	**0.744 ± 0.388 (0.650) C:60% T:89%**	pCi/L	12/16/16 19:19	15262-20-1	
Total Radium	Total Radium Calculation	**0.744 ± 0.515 (1.04)**	pCi/L	12/19/16 16:46	7440-14-4	

Sample: YGWC-33S **Lab ID: 30202825002** Collected: 11/14/16 13:55 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.297 ± 0.229 (0.415) C:95% T:NA**	pCi/L	12/06/16 10:03	13982-63-3	
Radium-228	EPA 9320	**0.554 ± 0.401 (0.744) C:66% T:82%**	pCi/L	12/16/16 19:19	15262-20-1	
Total Radium	Total Radium Calculation	**0.851 ± 0.630 (1.16)**	pCi/L	12/19/16 16:46	7440-14-4	

Sample: Dup-4 **Lab ID: 30202825003** Collected: 11/14/16 00:00 Received: 11/16/16 11:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.317 ± 0.204 (0.300) C:95% T:NA**	pCi/L	12/06/16 10:03	13982-63-3	
Radium-228	EPA 9320	**1.44 ± 0.543 (0.819) C:63% T:84%**	pCi/L	12/16/16 19:19	15262-20-1	
Total Radium	Total Radium Calculation	**1.76 ± 0.747 (1.12)**	pCi/L	12/19/16 16:46	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202825

QC Batch: 241711 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30202825001, 30202825002, 30202825003

METHOD BLANK: 1188125 Matrix: Water
Associated Lab Samples: 30202825001, 30202825002, 30202825003

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30202825

QC Batch: 242657 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30202825001, 30202825002, 30202825003

METHOD BLANK: 1192648 Matrix: Water
Associated Lab Samples: 30202825001, 30202825002, 30202825003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0888 ± 0.377 (0.792) C:63% T:86%	pCi/L	12/16/16 19:19	

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, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30202825

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.

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

WO#:30202825

30202825

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AZK0463 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 12/16/2016

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	EB-3-11-14-16	G	11/14/2016 10:00	AZK0463-01	W	1	X	001
2	YGWC-33S	G	11/14/2016 13:55	AZK0463-02	GW	1	X	002
3	Dup-4	G	11/14/2016 0:00	AZK0463-03	GW	1	X	003
4								
5								
6								
7								
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Karen Hill	11-16-16 1155	
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.

30202825

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER
CONTAINER TYPE:								P	P	P	P						
PRESERVATION:								3	7	3							
11-14-16	1000	W		✓	EB-3-11-14-16	3		1	1	1							1
11-14-16	1355	GW		✓	YGWC-33S	3		1	1	1							2
11-14-16	—	GW		✓	DUP-4	3		1	1	1							3

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Packer ACC
DATE/TIME: 11-14-16 1450

RELINQUISHED BY: [signature]
DATE/TIME: 11-14-16 1615

RECEIVED BY:
DATE/TIME: 1615

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: MZatman
DATE/TIME: 11/14/16 1615

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH Checked: Yes No NA
Ice: Yes No NA
Temperature: 0°C Min. 1°C Max.
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY:
LAB #: A2K0463
Entered into LIMS:
Tracking #:

30202825

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	CONTAINER TYPE	PRESERVATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
						P	3		P	P	P		
11-14-16	1000	W		✓	EB-3-11-14-16			3	1	1	1	1	
11-14-16	1355	GW		✓	YGWC-33S			3	1	1	1	2	
11-14-16	—	GW		✓	DUP-4			3	1	1	1	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_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Parker ACC
DATE/TIME: 11-14-16 1450

RELINQUISHED BY: [signature]
DATE/TIME: 11-14-16 1615

RECEIVED BY:
DATE/TIME: 1615

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: [signature]
DATE/TIME: 11/14/16 1615

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH Checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AZK0463
Entered into LIMS:
Tracking #:

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace Georgia Project # 30202825

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

Tracking #: 6812 5100 4285

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

Thermometer Used NA 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 11-17-16

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/Analysis Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked.	✓			13. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH; Date/time of preservation; Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	14.
Trip Blank Present:			✓	15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH Date: 11-17-16

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

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	12/5/2016
Worklist:	32686
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

	LCS32686	LCSD32686
LCSD (Y or N)?		N
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):	8.900	
Uncertainty (Calculated):	0.419	
Result (pCi/L, g, F):	8.003	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.944	
Numerical Performance Indicator:	-1.70	
Percent Recovery:	89.92%	
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):	
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:	

Duplicate Sample Assessment

Sample I.D.:	30202498008
Duplicate Sample I.D.	30202498008DUP
Sample 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***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30202498008
30202498008DUP

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:

LMDC

***Batch must be re-prepped due to unacceptable precision.

12/20/16

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JAL
Date:	12/12/2016
Worklist:	32864
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1192648
MB concentration:	0.089
M/B Counting Uncertainty:	0.377
MB MDC:	0.792
MB Numerical Performance Indicator:	0.46
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS32864	LCSD32864
Count Date:	12/16/2016	
Spike I.D.:	16-027	
Spike Concentration (pCi/mL):	25.807	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.801	
Target Conc. (pCi/L, g, F):	6.441	
Uncertainty (Calculated):	0.464	
Result (pCi/L, g, F):	8.521	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.711	
Numerical Performance Indicator:	4.80	
Percent Recovery:	132.29%	
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):	
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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30202831001	
Duplicate Sample I.D.	30202831001DUP	
Sample Result (pCi/L, g, F):	0.133	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.364	
Sample Duplicate Result (pCi/L, g, F):	0.543	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.380	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.527	30202831001
Duplicate RPD:	121.16%	30202831001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

12/12/16

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: AAE0387
May 22, 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

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 22, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-47	AAE0387-01	Ground Water	05/08/17 12:00	05/11/17 09:50
YGWC-44	AAE0387-02	Ground Water	05/08/17 13:35	05/11/17 09:50
YGWC-46	AAE0387-03	Ground Water	05/08/17 15:05	05/11/17 09:50
YGWC-36	AAE0387-04	Ground Water	05/09/17 11:55	05/11/17 09:50
YGWC-49	AAE0387-05	Ground Water	05/09/17 13:20	05/11/17 09:50
YGWC-45	AAE0387-06	Ground Water	05/09/17 15:25	05/11/17 09:50
Dup-1	AAE0387-07	Ground Water	05/09/17 00:00	05/11/17 09:50
YGWC-42	AAE0387-08	Ground Water	05/10/17 12:05	05/11/17 09:50
YGWC-43	AAE0387-09	Ground Water	05/10/17 10:15	05/11/17 09:50
EB-1-5-10-17	AAE0387-10	Water	05/10/17 11:50	05/11/17 09:50
FB-1-5-9-17	AAE0387-11	Water	05/09/17 10:25	05/11/17 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

May 22, 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 22, 2017

Report No.: AAE0387
Client ID: YGWA-47
Date/Time Sampled: 5/8/2017 12:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-01
Date/Time Received: 5/11/2017 9:50:00AM

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	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	5.8	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 11:53	7050437	SLH
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 11:53	7050437	SLH
Sulfate	120	10	0.92	mg/L	EPA 300.0		10	05/12/17 09:41	05/18/17 16:46	7050437	SLH
Metals, Total											
Antimony	0.0004	0.0030	0.0003	mg/L	EPA 6020B	B-01, J	1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Barium	0.0251	0.0100	0.0003	mg/L	EPA 6020B		1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Beryllium	0.00007	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Boron	0.0141	0.0400	0.0060	mg/L	EPA 6020B	J	1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Cadmium	0.0001	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Calcium	14.6	5.00	0.522	mg/L	EPA 6020B		50	05/15/17 09:00	05/17/17 17:30	7050474	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Cobalt	0.0099	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Lithium	0.0053	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/15/17 09:00	05/17/17 17:24	7050474	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:20	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 22, 2017

Report No.: AAE0387
Client ID: YGWC-44
Date/Time Sampled: 5/8/2017 1:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-02
Date/Time Received: 5/11/2017 9:50:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	296	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	13	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 12:55	7050437	SLH
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 12:55	7050437	SLH
Sulfate	150	10	0.92	mg/L	EPA 300.0		10	05/12/17 09:41	05/18/17 17:07	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Arsenic	0.0006	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Barium	0.125	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Boron	0.690	0.0400	0.0060	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Calcium	29.9	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/12/17 12:00	05/15/17 22:04	7050449	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Cobalt	0.0018	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Lithium	0.0132	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 21:58	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:22	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 22, 2017

Report No.: AAE0387
Client ID: YGWC-46
Date/Time Sampled: 5/8/2017 3:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-03
Date/Time Received: 5/11/2017 9:50:00AM

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	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	33	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 13:15	7050437	SLH
Fluoride	0.004	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 13:15	7050437	SLH
Sulfate	770	50	4.6	mg/L	EPA 300.0		50	05/12/17 09:41	05/18/17 17:28	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Arsenic	0.0007	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Barium	0.0332	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Boron	1.71	1.00	0.302	mg/L	EPA 6020B		50	05/12/17 12:00	05/15/17 22:27	7050449	CSW
Cadmium	0.0001	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Calcium	103	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/12/17 12:00	05/15/17 22:27	7050449	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Cobalt	0.0367	0.0100	0.0005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Molybdenum	0.0008	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Lithium	0.0087	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:21	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:24	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 22, 2017

Report No.: AAE0387
Client ID: YGWC-36
Date/Time Sampled: 5/9/2017 11:55:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-04
Date/Time Received: 5/11/2017 9:50:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	303	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	5.7	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 13:36	7050437	SLH
Fluoride	0.009	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 13:36	7050437	SLH
Sulfate	130	10	0.92	mg/L	EPA 300.0		10	05/12/17 09:41	05/18/17 17:48	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Arsenic	0.0006	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Barium	0.0349	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Beryllium	0.0002	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Boron	0.233	0.0400	0.0060	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Cadmium	0.0002	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Calcium	13.9	5.00	0.522	mg/L	EPA 6020B	B-01	50	05/12/17 12:00	05/15/17 22:39	7050449	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Lead	0.0004	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Molybdenum	0.0025	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Selenium	0.0018	0.0100	0.0014	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Lithium	0.0057	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:33	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:27	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 22, 2017

Report No.: AAE0387
Client ID: YGWC-49
Date/Time Sampled: 5/9/2017 1:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-05
Date/Time Received: 5/11/2017 9:50:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	154	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	5.3	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 13:57	7050437	SLH
Fluoride	0.05	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 13:57	7050437	SLH
Sulfate	91	5.0	0.46	mg/L	EPA 300.0		5	05/12/17 09:41	05/18/17 18:09	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Barium	0.0792	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Calcium	14.4	5.00	0.522	mg/L	EPA 6020B	B-01	50	05/12/17 12:00	05/15/17 22:50	7050449	CSW
Chromium	0.0017	0.0100	0.0003	mg/L	EPA 6020B	B-01, J	1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Selenium	0.0076	0.0100	0.0014	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Lithium	0.0038	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:44	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:29	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 22, 2017

Report No.: AAE0387
Client ID: YGWC-45
Date/Time Sampled: 5/9/2017 3:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-06
Date/Time Received: 5/11/2017 9:50:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	388	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	4.6	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 14:17	7050437	SLH
Fluoride	0.20	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 14:17	7050437	SLH
Sulfate	190	10	0.92	mg/L	EPA 300.0		10	05/12/17 09:41	05/18/17 18:30	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Barium	0.0779	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Boron	0.338	0.0400	0.0060	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Calcium	56.0	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/12/17 12:00	05/15/17 23:01	7050449	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Cobalt	0.0008	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Molybdenum	0.0015	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Lithium	0.0136	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 22:56	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:31	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 22, 2017

Report No.: AAE0387
Client ID: Dup-1
Date/Time Sampled: 5/9/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-07
Date/Time Received: 5/11/2017 9:50:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	249	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	5.7	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 14:59	7050437	SLH
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 14:59	7050437	SLH
Sulfate	130	10	0.92	mg/L	EPA 300.0		10	05/12/17 09:41	05/18/17 18:50	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Arsenic	0.0007	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Barium	0.0352	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Beryllium	0.0002	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Boron	0.239	0.0400	0.0060	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Cadmium	0.0002	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Calcium	14.1	5.00	0.522	mg/L	EPA 6020B	B-01	50	05/12/17 12:00	05/15/17 23:13	7050449	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Lead	0.0003	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Molybdenum	0.0026	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Selenium	0.0016	0.0100	0.0014	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Lithium	0.0053	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:07	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:39	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 22, 2017

Report No.: AAE0387
Client ID: YGWC-42
Date/Time Sampled: 5/10/2017 12:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-08
Date/Time Received: 5/11/2017 9:50:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1630	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	4.4	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 16:42	7050437	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 16:42	7050437	SLH
Sulfate	1200	50	4.6	mg/L	EPA 300.0		50	05/12/17 09:41	05/18/17 19:11	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Arsenic	0.0022	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Barium	0.0517	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Beryllium	0.00009	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Boron	20.4	2.00	0.302	mg/L	EPA 6020B		50	05/12/17 12:00	05/15/17 23:36	7050449	CSW
Cadmium	0.0002	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Calcium	130	25.0	0.522	mg/L	EPA 6020B	B-01	50	05/12/17 12:00	05/15/17 23:36	7050449	CSW
Chromium	0.0006	0.0100	0.0003	mg/L	EPA 6020B	B-01, J	1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Cobalt	0.0021	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Lead	0.00009	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Molybdenum	0.0017	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Selenium	0.0530	0.0100	0.0014	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Lithium	0.0316	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:30	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:41	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 22, 2017

Report No.: AAE0387
Client ID: YGWC-43
Date/Time Sampled: 5/10/2017 10:15:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0387-09
Date/Time Received: 5/11/2017 9:50:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	203	25	10	mg/L	SM 2540 C		1	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	1.2	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 17:03	7050437	SLH
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 17:03	7050437	SLH
Sulfate	100	5.0	0.46	mg/L	EPA 300.0		5	05/12/17 09:41	05/18/17 19:32	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Barium	0.0173	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Boron	0.955	0.0400	0.0060	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Calcium	7.90	0.500	0.0104	mg/L	EPA 6020B	B-01	1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Chromium	0.0005	0.0100	0.0003	mg/L	EPA 6020B	B-01, J	1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Lead	0.00008	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Lithium	0.0123	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:41	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:43	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 22, 2017

Report No.: AAE0387
Client ID: EB-1-5-10-17
Date/Time Sampled: 5/10/2017 11:50:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAE0387-10
Date/Time Received: 5/11/2017 9:50:00AM

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	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 17:23	7050437	SLH
Fluoride	0.009	0.30	0.004	mg/L	EPA 300.0	J	1	05/12/17 09:41	05/12/17 17:23	7050437	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 17:23	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Boron	0.0071	0.0400	0.0060	mg/L	EPA 6020B	J	1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Calcium	0.0638	0.500	0.0104	mg/L	EPA 6020B	B-01, J	1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	B-01, J	1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:53	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:46	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 22, 2017

Report No.: AAE0387
Client ID: FB-1-5-9-17
Date/Time Sampled: 5/9/2017 10:25:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAE0387-11
Date/Time Received: 5/11/2017 9:50:00AM

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	05/12/17 11:45	05/12/17 11:45	7050407	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 17:44	7050437	SLH
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 17:44	7050437	SLH
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	05/12/17 09:41	05/12/17 17:44	7050437	SLH
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Calcium	0.0497	0.500	0.0104	mg/L	EPA 6020B	B-01, J	1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/12/17 12:00	05/15/17 23:59	7050449	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/15/17 10:15	05/15/17 15:48	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 22, 2017

Report No.: AAE0387

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 22, 2017

Report No.: AAE0387

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050437 - EPA 300.0											
Blank (7050437-BLK1)						Prepared & Analyzed: 05/12/17					
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 (7050437-BS1)						Prepared & Analyzed: 05/12/17					
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		101	90-110			
Matrix Spike (7050437-MS1)		**Source: AAE0387-01**				Prepared & Analyzed: 05/12/17					
Chloride	15.8	0.25	0.01	mg/L	10.020	5.79	100	90-110			
Fluoride	10.4	0.30	0.004	mg/L	10.020	0.03	104	90-110			
Sulfate	109	1.0	0.09	mg/L	10.050	110	NR	90-110			QM-02
Matrix Spike (7050437-MS2)		**Source: AAE0387-06**				Prepared & Analyzed: 05/12/17					
Chloride	14.9	0.25	0.01	mg/L	10.020	4.60	103	90-110			
Fluoride	10.7	0.30	0.004	mg/L	10.020	0.20	105	90-110			
Sulfate	152	1.0	0.09	mg/L	10.050	157	NR	90-110			QM-02
Matrix Spike Dup (7050437-MSD1)		**Source: AAE0387-01**				Prepared & Analyzed: 05/12/17					
Chloride	16.0	0.25	0.01	mg/L	10.020	5.79	101	90-110	1	15	
Fluoride	10.6	0.30	0.004	mg/L	10.020	0.03	106	90-110	2	15	
Sulfate	108	1.0	0.09	mg/L	10.050	110	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

May 22, 2017

Report No.: AAE0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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			
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			
Batch 7050449 - EPA 3005A											
Blank (7050449-BLK1)						Prepared: 05/12/17 Analyzed: 05/15/17					
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	0.0319	0.500	0.0104	mg/L							J
Chromium	0.0006	0.0100	0.0003	mg/L							J
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 22, 2017

Report No.: AAE0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050449 - EPA 3005A											
LCS (7050449-BS1)						Prepared: 05/12/17 Analyzed: 05/15/17					
Antimony	0.116	0.0030	0.0003	mg/L	0.10000		116	80-120			
Arsenic	0.102	0.0050	0.0004	mg/L	0.10000		102	80-120			
Barium	0.105	0.0100	0.0003	mg/L	0.10000		105	80-120			
Beryllium	0.108	0.0030	0.00007	mg/L	0.10000		108	80-120			
Boron	1.17	0.0400	0.0060	mg/L	1.0000		117	80-120			
Cadmium	0.104	0.0010	0.00006	mg/L	0.10000		104	80-120			
Calcium	1.05	0.500	0.0104	mg/L	1.0000		105	80-120			
Chromium	0.102	0.0100	0.0003	mg/L	0.10000		102	80-120			
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000		103	80-120			
Copper	0.103	0.0250	0.0003	mg/L	0.10000		103	80-120			
Lead	0.106	0.0050	0.00007	mg/L	0.10000		106	80-120			
Molybdenum	0.106	0.0100	0.0006	mg/L	0.10000		106	80-120			
Nickel	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Selenium	0.108	0.0100	0.0014	mg/L	0.10000		108	80-120			
Silver	0.110	0.0100	0.0003	mg/L	0.10000		110	80-120			
Thallium	0.107	0.0010	0.00005	mg/L	0.10000		107	80-120			
Vanadium	0.0978	0.0100	0.0014	mg/L	0.10000		98	80-120			
Zinc	0.102	0.0100	0.0013	mg/L	0.10000		102	80-120			
Lithium	0.113	0.0500	0.0011	mg/L	0.10000		113	80-120			
Matrix Spike (7050449-MS1)			**Source: AAE0387-02**			Prepared: 05/12/17 Analyzed: 05/15/17					
Antimony	0.111	0.0030	0.0003	mg/L	0.10000	ND	111	75-125			
Arsenic	0.107	0.0050	0.0004	mg/L	0.10000	0.0006	106	75-125			
Barium	0.240	0.0100	0.0003	mg/L	0.10000	0.125	115	75-125			
Beryllium	0.0991	0.0030	0.00007	mg/L	0.10000	ND	99	75-125			
Boron	2.08	0.0400	0.0060	mg/L	1.0000	0.690	139	75-125			QM-02
Cadmium	0.104	0.0010	0.00006	mg/L	0.10000	ND	104	75-125			
Calcium	30.2	25.0	0.522	mg/L	1.0000	29.9	33	75-125			QM-02
Chromium	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125			
Cobalt	0.0999	0.0100	0.0005	mg/L	0.10000	0.0018	98	75-125			
Copper	0.0966	0.0250	0.0003	mg/L	0.10000	ND	97	75-125			
Lead	0.0976	0.0050	0.00007	mg/L	0.10000	ND	98	75-125			
Molybdenum	0.102	0.0100	0.0006	mg/L	0.10000	ND	102	75-125			
Nickel	0.102	0.0100	0.0003	mg/L	0.10000	0.0016	101	75-125			
Selenium	0.104	0.0100	0.0014	mg/L	0.10000	ND	104	75-125			
Silver	0.101	0.0100	0.0003	mg/L	0.10000	ND	101	75-125			
Thallium	0.100	0.0010	0.00005	mg/L	0.10000	ND	100	75-125			
Vanadium	0.100	0.0100	0.0014	mg/L	0.10000	ND	100	75-125			
Zinc	0.0970	0.0100	0.0013	mg/L	0.10000	0.0013	96	75-125			
Lithium	0.113	0.0500	0.0011	mg/L	0.10000	0.0132	100	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 22, 2017

Report No.: AAE0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050449 - EPA 3005A											
Matrix Spike Dup (7050449-MSD1)		**Source: AAE0387-02**			Prepared: 05/12/17 Analyzed: 05/15/17						
Antimony	0.115	0.0030	0.0003	mg/L	0.10000	ND	115	75-125	3	20	
Arsenic	0.107	0.0050	0.0004	mg/L	0.10000	0.0006	106	75-125	0.2	20	
Barium	0.249	0.0100	0.0003	mg/L	0.10000	0.125	124	75-125	3	20	
Beryllium	0.106	0.0030	0.00007	mg/L	0.10000	ND	106	75-125	7	20	
Boron	2.11	0.0400	0.0060	mg/L	1.0000	0.690	142	75-125	1	20	QM-02
Cadmium	0.102	0.0010	0.00006	mg/L	0.10000	ND	102	75-125	1	20	
Calcium	30.2	25.0	0.522	mg/L	1.0000	29.9	32	75-125	0.03	20	QM-02
Chromium	0.104	0.0100	0.0003	mg/L	0.10000	ND	104	75-125	2	20	
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000	0.0018	101	75-125	3	20	
Copper	0.0993	0.0250	0.0003	mg/L	0.10000	ND	99	75-125	3	20	
Lead	0.102	0.0050	0.00007	mg/L	0.10000	ND	102	75-125	5	20	
Molybdenum	0.105	0.0100	0.0006	mg/L	0.10000	ND	105	75-125	3	20	
Nickel	0.102	0.0100	0.0003	mg/L	0.10000	0.0016	100	75-125	0.5	20	
Selenium	0.109	0.0100	0.0014	mg/L	0.10000	ND	109	75-125	4	20	
Silver	0.102	0.0100	0.0003	mg/L	0.10000	ND	102	75-125	0.2	20	
Thallium	0.106	0.0010	0.00005	mg/L	0.10000	ND	106	75-125	5	20	
Vanadium	0.107	0.0100	0.0014	mg/L	0.10000	ND	107	75-125	6	20	
Zinc	0.104	0.0100	0.0013	mg/L	0.10000	0.0013	102	75-125	7	20	
Lithium	0.121	0.0500	0.0011	mg/L	0.10000	0.0132	108	75-125	7	20	
Post Spike (7050449-PS1)		**Source: AAE0387-02**			Prepared: 05/12/17 Analyzed: 05/15/17						
Antimony	113			ug/L	100.00	0.177	113	80-120			
Arsenic	105			ug/L	100.00	0.577	105	80-120			
Barium	245			ug/L	100.00	125	120	80-120			
Beryllium	99.0			ug/L	100.00	0.0141	99	80-120			
Boron	2110			ug/L	1000.0	690	142	80-120			QM-02
Cadmium	104			ug/L	100.00	-0.0077	104	80-120			
Calcium	28800			ug/L	1000.0	29900	NR	80-120			QM-02
Chromium	104			ug/L	100.00	0.154	104	80-120			
Cobalt	104			ug/L	100.00	1.80	102	80-120			
Copper	97.2			ug/L	100.00	0.173	97	80-120			
Lead	100			ug/L	100.00	0.0257	100	80-120			
Molybdenum	105			ug/L	100.00	0.375	105	80-120			
Nickel	101			ug/L	100.00	1.58	99	80-120			
Selenium	105			ug/L	100.00	0.504	105	80-120			
Silver	104			ug/L	100.00	0.0031	104	80-120			
Thallium	104			ug/L	100.00	0.0152	104	80-120			
Vanadium	105			ug/L	100.00	0.464	105	80-120			
Zinc	101			ug/L	100.00	1.26	99	80-120			
Lithium	115			ug/L	100.00	13.2	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

May 22, 2017

Report No.: AAE0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050474 - EPA 3005A											
Blank (7050474-BLK1)						Prepared: 05/15/17 Analyzed: 05/17/17					
Antimony	0.0003	0.0030	0.0003	mg/L							J
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 (7050474-BS1)						Prepared: 05/15/17 Analyzed: 05/17/17					
Antimony	0.106	0.0030	0.0003	mg/L	0.10000		106	80-120			
Arsenic	0.102	0.0050	0.0004	mg/L	0.10000		102	80-120			
Barium	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Beryllium	0.0986	0.0030	0.00007	mg/L	0.10000		99	80-120			
Boron	0.990	0.0400	0.0060	mg/L	1.0000		99	80-120			
Cadmium	0.0997	0.0010	0.00006	mg/L	0.10000		100	80-120			
Calcium	0.982	0.500	0.0104	mg/L	1.0000		98	80-120			
Chromium	0.100	0.0100	0.0003	mg/L	0.10000		100	80-120			
Cobalt	0.0954	0.0100	0.0005	mg/L	0.10000		95	80-120			
Copper	0.103	0.0250	0.0003	mg/L	0.10000		103	80-120			
Lead	0.0978	0.0050	0.00007	mg/L	0.10000		98	80-120			
Molybdenum	0.103	0.0100	0.0006	mg/L	0.10000		103	80-120			
Nickel	0.101	0.0100	0.0003	mg/L	0.10000		101	80-120			
Selenium	0.105	0.0100	0.0014	mg/L	0.10000		105	80-120			
Silver	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Thallium	0.0971	0.0010	0.00005	mg/L	0.10000		97	80-120			
Vanadium	0.104	0.0100	0.0014	mg/L	0.10000		104	80-120			
Zinc	0.0929	0.0100	0.0013	mg/L	0.10000		93	80-120			
Lithium	0.0983	0.0500	0.0011	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

May 22, 2017

Report No.: AAE0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050474 - EPA 3005A											
Matrix Spike (7050474-MS1)		**Source: AAE0387-01**				Prepared: 05/15/17 Analyzed: 05/17/17					
Antimony	0.108	0.0030	0.0003	mg/L	0.10000	0.0004	107	75-125			
Arsenic	0.0986	0.0050	0.0004	mg/L	0.10000	ND	99	75-125			
Barium	0.128	0.0100	0.0003	mg/L	0.10000	0.0251	103	75-125			
Beryllium	0.105	0.0030	0.00007	mg/L	0.10000	0.00007	105	75-125			
Boron	1.08	0.0400	0.0060	mg/L	1.0000	0.0141	107	75-125			
Cadmium	0.103	0.0010	0.00006	mg/L	0.10000	0.0001	103	75-125			
Calcium	15.6	25.0	0.522	mg/L	1.0000	14.6	110	75-125			J
Chromium	0.0991	0.0100	0.0003	mg/L	0.10000	ND	99	75-125			
Cobalt	0.106	0.0100	0.0005	mg/L	0.10000	0.0099	96	75-125			
Copper	0.106	0.0250	0.0003	mg/L	0.10000	0.0004	105	75-125			
Lead	0.0966	0.0050	0.00007	mg/L	0.10000	ND	97	75-125			
Molybdenum	0.102	0.0100	0.0006	mg/L	0.10000	ND	102	75-125			
Nickel	0.100	0.0100	0.0003	mg/L	0.10000	0.0026	98	75-125			
Selenium	0.106	0.0100	0.0014	mg/L	0.10000	ND	106	75-125			
Silver	0.0986	0.0100	0.0003	mg/L	0.10000	ND	99	75-125			
Thallium	0.0943	0.0010	0.00005	mg/L	0.10000	ND	94	75-125			
Vanadium	0.104	0.0100	0.0014	mg/L	0.10000	ND	104	75-125			
Zinc	0.0955	0.0100	0.0013	mg/L	0.10000	0.0019	94	75-125			
Lithium	0.108	0.0500	0.0011	mg/L	0.10000	0.0053	103	75-125			
Matrix Spike Dup (7050474-MSD1)		**Source: AAE0387-01**				Prepared: 05/15/17 Analyzed: 05/17/17					
Antimony	0.111	0.0030	0.0003	mg/L	0.10000	0.0004	110	75-125	3	20	
Arsenic	0.103	0.0050	0.0004	mg/L	0.10000	ND	103	75-125	4	20	
Barium	0.132	0.0100	0.0003	mg/L	0.10000	0.0251	107	75-125	3	20	
Beryllium	0.108	0.0030	0.00007	mg/L	0.10000	0.00007	107	75-125	2	20	
Boron	1.05	0.0400	0.0060	mg/L	1.0000	0.0141	104	75-125	3	20	
Cadmium	0.101	0.0010	0.00006	mg/L	0.10000	0.0001	101	75-125	2	20	
Calcium	17.0	25.0	0.522	mg/L	1.0000	14.6	245	75-125	8	20	QM-02, J
Chromium	0.0930	0.0100	0.0003	mg/L	0.10000	ND	93	75-125	6	20	
Cobalt	0.103	0.0100	0.0005	mg/L	0.10000	0.0099	93	75-125	3	20	
Copper	0.0980	0.0250	0.0003	mg/L	0.10000	0.0004	98	75-125	7	20	
Lead	0.0977	0.0050	0.00007	mg/L	0.10000	ND	98	75-125	1	20	
Molybdenum	0.105	0.0100	0.0006	mg/L	0.10000	ND	105	75-125	3	20	
Nickel	0.0954	0.0100	0.0003	mg/L	0.10000	0.0026	93	75-125	5	20	
Selenium	0.104	0.0100	0.0014	mg/L	0.10000	ND	104	75-125	1	20	
Silver	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125	4	20	
Thallium	0.0979	0.0010	0.00005	mg/L	0.10000	ND	98	75-125	4	20	
Vanadium	0.103	0.0100	0.0014	mg/L	0.10000	ND	103	75-125	0.9	20	
Zinc	0.0929	0.0100	0.0013	mg/L	0.10000	0.0019	91	75-125	3	20	
Lithium	0.107	0.0500	0.0011	mg/L	0.10000	0.0053	102	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

May 22, 2017

Report No.: AAE0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050474 - EPA 3005A											
Post Spike (7050474-PS1)		**Source: AAE0387-01**			Prepared: 05/15/17 Analyzed: 05/17/17						
Antimony	104			ug/L	100.00	0.356	103	80-120			
Arsenic	101			ug/L	100.00	0.394	100	80-120			
Barium	132			ug/L	100.00	25.1	107	80-120			
Beryllium	106			ug/L	100.00	0.0713	106	80-120			
Boron	1090			ug/L	1000.0	14.1	107	80-120			
Cadmium	100			ug/L	100.00	0.141	100	80-120			
Calcium	16400			ug/L	1000.0	14600	188	80-120			QM-02
Chromium	106			ug/L	100.00	0.255	106	80-120			
Cobalt	112			ug/L	100.00	9.88	102	80-120			
Copper	102			ug/L	100.00	0.417	102	80-120			
Lead	100			ug/L	100.00	0.0274	100	80-120			
Molybdenum	106			ug/L	100.00	0.329	106	80-120			
Nickel	99.6			ug/L	100.00	2.58	97	80-120			
Selenium	106			ug/L	100.00	1.38	104	80-120			
Silver	103			ug/L	100.00	0.0036	103	80-120			
Thallium	101			ug/L	100.00	0.0391	101	80-120			
Vanadium	112			ug/L	100.00	1.32	110	80-120			
Zinc	110			ug/L	100.00	1.91	108	80-120			
Lithium	115			ug/L	100.00	5.34	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 22, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates Phase II Facilities

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m/d/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)						LAB ID NUMBER
CONTAINER TYPE:								P	P	P	P					
PRESERVATION:								3	7	3						
5/8/17	1200	GW		✓	YGWA-47	4		1	1	2						1
5/8/17	1335	GW		✓	YGWC-44	4		1	1	2						2
5/8/17	1505	GW		✓	YGWC-46	4		1	1	2						3
5/9/17	1155	GW		✓	YGWC-36	4		1	1	2						4
5/9/17	1320	GW		✓	YGWC-49	4		1	1	2						5
5/9/17	1525	GW		✓	YGWC-45	4		1	1	2						6
5/9/17	—	GW		✓	DUP-1	4		1	1	2						7
5/10/17	1205	GW		✓	YGWC-42	4		1	1	2						8
5/10/17	1015	GW		✓	YGWC-43	4		1	1	2						9
5/10/17	1150	W		✓	EB-1-5-10-17	4		1	1	2						10
5/9/17	1025	W		✓	FB-1-5-9-17	4		1	1	2						11

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: J. Berisford ACC
DATE/TIME: 5/10/17 1830
RELINQUISHED BY:
DATE/TIME: 5/11/17 0850

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: Rahman
DATE/TIME: 05/11/17 0950
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
pH Checked: Yes No NA
Ice: Yes No NA
Temperature: 1.0 Min 1.0 Max
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAE0387
Entered into LIMS: MR
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: 5/12/2017 10:59:18AM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 05/11/17 09:50

Work Order: AAE0387
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 11 **#Containers:** 44

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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 07, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAE0387 Plant Yates
Pace Project No.: 30218704

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on May 12, 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30218704001	**YGWA-47**	Water	05/08/17 12:00	05/12/17 10:20
30218704002	**YGWC-44**	Water	05/08/17 13:35	05/12/17 10:20
30218704003	**YGWC-46**	Water	05/08/17 15:05	05/12/17 10:20
30218704004	**YGWC-36**	Water	05/09/17 11:55	05/12/17 10:20
30218704005	**YGWC-49**	Water	05/09/17 13:20	05/12/17 10:20
30218704006	**YGWC-45**	Water	05/09/17 15:25	05/12/17 10:20
30218704007	**Dup-1**	Water	05/09/17 00:00	05/12/17 10:20
30218704008	**YGWC-42**	Water	05/10/17 12:05	05/12/17 10:20
30218704009	**YGWC-43**	Water	05/10/17 10:15	05/12/17 10:20
30218704010	**EB-1-5-10-17**	Water	05/10/17 11:50	05/12/17 10:20
30218704011	**FB-1-5-9-17**	Water	05/09/17 10:25	05/12/17 10:20

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30218704001	**YGWA-47**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704002	**YGWC-44**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704003	**YGWC-46**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704004	**YGWC-36**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704005	**YGWC-49**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704006	**YGWC-45**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704007	**Dup-1**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704008	**YGWC-42**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704009	**YGWC-43**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704010	**EB-1-5-10-17**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30218704011	**FB-1-5-9-17**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

Sample: YGWA-47 **Lab ID: 30218704001** Collected: 05/08/17 12:00 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.120 ± 0.108 (0.206) C:86% T:NA**	pCi/L	05/26/17 08:24	13982-63-3	
Radium-228	EPA 9320	**0.335 ± 0.334 (0.688) C:81% T:85%**	pCi/L	05/31/17 15:31	15262-20-1	
Total Radium	Total Radium Calculation	**0.455 ± 0.442 (0.894)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: YGWC-44 **Lab ID: 30218704002** Collected: 05/08/17 13:35 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.118 ± 0.108 (0.208) C:86% T:NA**	pCi/L	05/26/17 08:24	13982-63-3	
Radium-228	EPA 9320	**0.390 ± 0.399 (0.826) C:79% T:79%**	pCi/L	05/31/17 15:31	15262-20-1	
Total Radium	Total Radium Calculation	**0.508 ± 0.507 (1.03)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: YGWC-46 **Lab ID: 30218704003** Collected: 05/08/17 15:05 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.422 ± 0.168 (0.171) C:88% T:NA**	pCi/L	05/26/17 08:22	13982-63-3	
Radium-228	EPA 9320	**0.529 ± 0.366 (0.709) C:78% T:88%**	pCi/L	05/31/17 15:31	15262-20-1	
Total Radium	Total Radium Calculation	**0.949 ± 0.534 (0.880)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: YGWC-36 **Lab ID: 30218704004** Collected: 05/09/17 11:55 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.148 ± 0.101 (0.156) C:98% T:NA**	pCi/L	05/26/17 08:22	13982-63-3	
Radium-228	EPA 9320	**0.161 ± 0.433 (0.962) C:79% T:82%**	pCi/L	05/31/17 15:31	15262-20-1	
Total Radium	Total Radium Calculation	**0.309 ± 0.534 (1.12)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: YGWC-49 **Lab ID: 30218704005** Collected: 05/09/17 13:20 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.217 ± 0.131 (0.198) C:90% T:NA**	pCi/L	05/26/17 08:22	13982-63-3	
Radium-228	EPA 9320	**0.302 ± 0.371 (0.786) C:79% T:77%**	pCi/L	05/31/17 15:31	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

Sample: YGWC-49 **Lab ID: 30218704005** Collected: 05/09/17 13:20 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**0.519 ± 0.502 (0.984)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: YGWC-45 **Lab ID: 30218704006** Collected: 05/09/17 15:25 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.00 ± 0.308 (0.228) C:90% T:NA**	pCi/L	05/22/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.403 ± 0.350 (0.707) C:79% T:87%**	pCi/L	05/31/17 15:31	15262-20-1	
Total Radium	Total Radium Calculation	**1.40 ± 0.658 (0.935)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: Dup-1 **Lab ID: 30218704007** Collected: 05/09/17 00:00 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0851 ± 0.134 (0.297) C:87% T:NA**	pCi/L	05/22/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.479 ± 0.376 (0.745) C:75% T:85%**	pCi/L	05/31/17 15:31	15262-20-1	
Total Radium	Total Radium Calculation	**0.564 ± 0.510 (1.04)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: YGWC-42 **Lab ID: 30218704008** Collected: 05/10/17 12:05 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.87 ± 0.459 (0.296) C:88% T:NA**	pCi/L	05/22/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.676 ± 0.370 (0.668) C:80% T:89%**	pCi/L	05/31/17 15:32	15262-20-1	
Total Radium	Total Radium Calculation	**2.55 ± 0.829 (0.964)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: YGWC-43 **Lab ID: 30218704009** Collected: 05/10/17 10:15 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.537 ± 0.248 (0.313) C:76% T:NA**	pCi/L	05/22/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.735 ± 0.372 (0.641) C:82% T:82%**	pCi/L	05/31/17 15:32	15262-20-1	
Total Radium	Total Radium Calculation	**1.27 ± 0.620 (0.954)**	pCi/L	06/05/17 14:39	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

Sample: EB-1-5-10-17 **Lab ID: 30218704010** Collected: 05/10/17 11:50 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**-0.0108 ± 0.0858 (0.256) C:83% T:NA**	pCi/L	05/22/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.314 ± 0.372 (0.786) C:82% T:83%**	pCi/L	05/31/17 15:32	15262-20-1	
Total Radium	Total Radium Calculation	**0.314 ± 0.458 (1.04)**	pCi/L	06/05/17 14:39	7440-14-4	

Sample: FB-1-5-9-17 **Lab ID: 30218704011** Collected: 05/09/17 10:25 Received: 05/12/17 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.140 ± 0.140 (0.272) C:86% T:NA**	pCi/L	05/22/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.255 ± 0.381 (0.823) C:93% T:76%**	pCi/L	06/02/17 16:28	15262-20-1	
Total Radium	Total Radium Calculation	**0.395 ± 0.521 (1.10)**	pCi/L	06/06/17 14:13	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

QC Batch: 258875 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30218704001, 30218704002, 30218704003, 30218704004, 30218704005, 30218704006, 30218704007, 30218704008, 30218704009, 30218704010

METHOD BLANK: 1275038 Matrix: Water
Associated Lab Samples: 30218704001, 30218704002, 30218704003, 30218704004, 30218704005, 30218704006, 30218704007, 30218704008, 30218704009, 30218704010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.621 ± 0.402 (0.762) C:76% T:80%	pCi/L	05/31/17 11:47	

Results presented on 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

QC Batch: 258733 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30218704006, 30218704007, 30218704008, 30218704009, 30218704010, 30218704011

METHOD BLANK: 1274461 Matrix: Water
Associated Lab Samples: 30218704006, 30218704007, 30218704008, 30218704009, 30218704010, 30218704011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00989 ± 0.108 (0.288) C:89% T:NA	pCi/L	05/22/17 09:24	

Results presented on 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

QC Batch: 259469 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30218704011

METHOD BLANK: 1278134 Matrix: Water
Associated Lab Samples: 30218704011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.550 ± 0.338 (0.616) C:94% T:73%	pCi/L	06/02/17 16:30	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

QC Batch: 258653 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30218704001, 30218704002, 30218704003, 30218704004, 30218704005

METHOD BLANK: 1274144 Matrix: Water
Associated Lab Samples: 30218704001, 30218704002, 30218704003, 30218704004, 30218704005

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAE0387 Plant Yates
Pace Project No.: 30218704

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.

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

30218704

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAE0387 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 6/5/2017

Report To:	Subcontract To:
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 HNO3					Requested Analysis Radium 226, 228, Total		LAB USE ONLY
1	YGWA-47	G	5/8/2017 12:00	AAE0387-01	GW	~~3~~ 2		GMP 5/11/17			X	WO#:30218704	001
2	YGWC-44	G	5/8/2017 13:35	AAE0387-02	GW	2					X		002
3	YGWC-46	G	5/8/2017 15:05	AAE0387-03	GW	2					X		003
4	YGWC-36	G	5/9/2017 11:55	AAE0387-04	GW	2					X		004
5	YGWC-49	G	5/9/2017 13:20	AAE0387-05	GW	2					X		005
6	YGWC-45	G	5/9/2017 15:25	AAE0387-06	GW	2					X		006
7	Dup-1	G	5/9/2017 0:00	AAE0387-07	GW	2					X		007
8	YGWC-42	G	5/10/2017 12:05	AAE0387-08	GW	2					X		008
9	YGWC-43	G	5/10/2017 10:15	AAE0387-09	GW	2					X		009
10	EB-1-5-10-17	G	5/10/2017 11:50	AAE0387-10	W	2					X		010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	5/11/17	Ashleigh Pace	5-12-17 1020	
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.

30218704

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAE0387 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 6/5/2017

Report To:	Subcontract To:
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 HNO3					Requested Analysis Radium 226, 228, Total												LAB USE ONLY
11	FB-1-5-9-17	G	5/9/2017 10:25	AAE0387-01	W	2					X												011
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	5/11/17	[illegible] Pace	5/12/17 1020	
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.

30218704

CHAIN OF CUSTODY RECORD

Pace Analytical

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 Phase II Facilities

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M/D/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
						CONTAINER TYPE:		P	P	P	P							
						PRESERVATION:		3	7	3								
5/8/17	1200	GW		✓	YGWA-47	4		1	1	2							1	
5/8/17	1335	GW		✓	YGWC-44	4		1	1	2							2	
5/8/17	1505	GW		✓	YGWC-46	4		1	1	2							3	
5/9/17	1155	GW		✓	YGWC-36	4		1	1	2							4	
5/9/17	1320	GW		✓	YGWC-49	4		1	1	2							5	
5/9/17	1525	GW		✓	YGWC-45	4		1	1	2							6	
5/9/17	—	GW		✓	DUP-1	4		1	1	2							7	
5/10/17	1205	GW		✓	YGWC-42	4		1	1	2							8	
5/10/17	1015	GW		✓	YGWC-43	4		1	1	2							9	
5/10/17	1150	W		✓	EB-1-5-10-17	4		1	1	2							10	
5/9/17	1025	W		✓	FB-1-5-9-17	4		1	1	2							11	

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: J. Berisford ACC — DATE/TIME: 5/10/17 1830

RELINQUISHED BY: [signature] — DATE/TIME: 5/11/17 0950

RECEIVED BY: — DATE/TIME:

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: Mahman — DATE/TIME: 05/11/17 0950

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA — Ice: Yes No NA — Temperature: 4.0 Min 4.0 Max — Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID

FOR LAB USE ONLY
LAB #: AAE0387
Entered into LIMS: MR
Tracking #:

Plant Yates COC Phase II Facilities

RTB

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace, GA Project # 30218704

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

Tracking #: 6812 5104 3087

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: DCMH 5-12-17

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: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
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. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			15. pH<2 Initial when completed: DCMH 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: DCMH Date: 5-12-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	LAL
Date:	5/22/2017
Worklist:	35680
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1274461
MB concentration:	0.010
M/B Counting Uncertainty:	0.108
MB MDC:	0.288
MB Numerical Performance Indicator:	0.18
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS35680	LCSD35680
Count Date:	5/24/2017	
Spike I.D.:	13-033	
Spike Concentration (pCi/mL):	19.848	
Volume Used (mL):	0.40	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	15.827	
Uncertainty (Calculated):	0.745	
Result (pCi/L, g, F):	14.483	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.895	
Numerical Performance Indicator:	-2.26	
Percent Recovery:	91.51%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30218862001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30218862001DUP	
Sample Result (pCi/L, g, F):	0.223	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.195	
Sample Duplicate Result (pCi/L, g, F):	0.160	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.143	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	0.510	30218862001
Duplicate RPD:	32.90%	30218862001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.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	LCSD (Y or N)?	N
	LCS35671	LCSD35671
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30218700009	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30218700009DUP	
Sample Result (pCi/L, g, F):	0.165	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.117	
Sample Duplicate Result (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	30218700009
Duplicate RPD:	22.23%	30218700009DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	JLW
Date:	5/24/2017
Worklist:	35720
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1275038
MB concentration:	0.621
M/B Counting Uncertainty:	0.386
MB MDC:	0.762
MB Numerical Performance Indicator:	3.15
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS35720	LCSD35720
Count Date:	5/31/2017	
Spike I.D.:	17-005	
Spike Concentration (pCi/mL):	24.405	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.801	
Target Conc. (pCi/L, g, F):	6.097	
Uncertainty (Calculated):	0.439	
Result (pCi/L, g, F):	4.587	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.641	
Numerical Performance Indicator:	-3.81	
Percent Recovery:	75.23%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30218700009	Enter Duplicate
Duplicate Sample I.D.	30218700009DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.493	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.348	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.199	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.337	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.191	30218700009
Duplicate RPD:	85.07%	30218700009DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	5/27/2017
Worklist:	35805
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1278134
MB concentration:	0.550
M/B Counting Uncertainty:	0.323
MB MDC:	0.616
MB Numerical Performance Indicator:	3.34
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS35805	LCSD35805
Count Date:	6/2/2017	
Spike I.D.:	17-005	
Spike Concentration (pCi/mL):	24.388	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.829	
Target Conc. (pCi/L, g, F):	5.885	
Uncertainty (Calculated):	0.424	
Result (pCi/L, g, F):	6.176	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.678	
Numerical Performance Indicator:	0.71	
Percent Recovery:	104.93%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30218862001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30218862001DUP	
Sample Result (pCi/L, g, F):	0.669	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.335	
Sample Duplicate Result (pCi/L, g, F):	0.732	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.329	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.265	30218862001
Duplicate RPD:	9.05%	30218862001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

Product Name: Low-Flow System

Date: 2016-11-02 12:57:09

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	45 ft
Latitude	33º 26' 47.41"		
Longitude	-84º -53' -29.89"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	45 ft

Well Information:		Pumping Information:	
Well ID	YGWA 4I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.462339 L
Well Total Depth	49.7 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	19 in
Depth to Water	26.06 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:33:50	1200.01	17.43	6.14	151.43	0.60	27.80	0.97	56.56
Last 5	12:38:50	1500.01	17.54	6.11	149.68	0.40	27.80	0.84	56.98
Last 5	12:43:50	1800.00	17.66	6.09	148.32	0.60	27.90	0.76	56.67
Last 5	12:48:50	2099.99	17.63	6.08	148.26	0.60	27.90	0.74	56.85
Last 5	12:53:50	2399.99	17.60	6.08	148.34	0.60	27.90	0.74	56.38
Variance 0			0.12	-0.02	-1.36			-0.07	-0.31
Variance 1			-0.03	-0.01	-0.06			-0.02	0.18
Variance 2			-0.03	-0.00	0.07			0.00	-0.48

Notes

Sampled at 12:55. Cloudy 70's. FB-1-11-2-16 here.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-02 11:17:32

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	110 ft
Latitude	33º 26' 47.42"		
Longitude	-84º -53' -21.12"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	110 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	2.874051 L
Well Total Depth	131.60 ft	Calculated Sample Rate	300 sec
Screen Length	50 ft	Stabilization Drawdown	6 in
Depth to Water	15.30 ft	Total Volume Pumped	8.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:47:32	1200.01	17.31	7.16	285.69	0.55	15.90	0.44	-76.27
Last 5	10:52:32	1500.00	17.28	7.23	285.78	0.70	15.90	0.36	-81.45
Last 5	10:57:32	1800.00	17.28	7.28	285.37	0.77	15.90	0.33	-83.46
Last 5	11:07:32	2399.99	17.32	7.34	284.53	0.71	15.90	0.30	-85.82
Last 5	11:12:32	2699.99	17.36	7.35	283.88	0.79	15.90	0.29	-86.60
Variance 0			0.00	0.05	-0.41			-0.03	-2.01
Variance 1			0.04	0.06	-0.84			-0.03	-2.37
Variance 2			0.04	0.01	-0.65			-0.01	-0.77

Notes

Collected at 11:20. Cloudy, 60s

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-04 09:56:58

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Peristaltic
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	57 ft
Latitude	33º 26' 47.13"		
Longitude	-84º -53' -20.93"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWA 5I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.4444151 L
Well Total Depth	57.59 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.6 in
Depth to Water	22.33 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:33:53	300.02	17.32	5.59	81.41	4.69	22.80	5.96	103.97
Last 5	09:38:53	600.01	17.31	5.60	81.65	3.65	22.80	5.96	100.57
Last 5	09:43:53	900.00	17.30	5.61	80.67	3.54	22.80	5.97	98.80
Last 5	09:48:53	1199.99	17.32	5.61	81.29	3.39	22.80	5.94	97.72
Last 5	09:53:53	1500.00	17.32	5.61	80.48	2.40	22.80	5.96	96.84
Variance 0			-0.01	0.00	-0.99			0.01	-1.77
Variance 1			0.02	0.00	0.62			-0.03	-1.08
Variance 2			0.01	0.00	-0.81			0.02	-0.88

Notes

Sample collected at 09:55. Sunny, 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-02 15:46:37

Project Information:		Pump Information:	
Operator Name	Brandon Reynolds	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	62 ft
Latitude	33º 27' 39.41"		
Longitude	-84º -53' -46.28"		
Sonde SN	408206		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	64 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6I	Final Pumping Rate	125 mL/min
Well diameter	2 in	Total System Volume	1.831556 L
Well Total Depth	69.1 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	22.8 ft	Total Volume Pumped	15 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000
Last 5	15:23:18	11121.95	21.50	6.39	233.98	7.58	32.80	1.41	187.03
Last 5	15:28:19	11422.94	21.44	6.39	234.42	6.70	32.90	1.55	186.93
Last 5	15:33:19	11722.94	21.30	6.40	233.95	7.11	32.90	1.59	184.40
Last 5	15:38:19	12022.94	21.24	6.40	234.56	7.74	33.00	1.66	178.44
Last 5	15:43:24	12327.94	21.55	6.40	234.37	7.56	33.00	1.72	178.53
Variance 0			-0.13	0.00	-0.48			0.04	-2.53
Variance 1			-0.07	0.00	0.61			0.08	-5.96
Variance 2			0.31	0.00	-0.19			0.06	0.09

Notes

68 degrees and cloudy. Sampled at 1545

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-03 09:14:01

Project Information:		Pump Information:	
Operator Name	Brandon Reynolds	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	32 ft
Latitude	33º 27' 42.94"		
Longitude	-84º -53' -50.4"		
Sonde SN	408206		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.179997 L
Well Total Depth	39.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	22.75 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000
Last 5	08:52:02	1200.02	17.35	5.85	143.14	4.68	23.40	6.18	164.86
Last 5	08:57:02	1499.95	17.31	5.85	140.99	5.41	23.40	6.06	163.66
Last 5	09:02:02	1799.95	17.30	5.86	139.21	3.28	23.40	6.11	162.60
Last 5	09:07:04	2101.95	17.36	5.86	138.09	2.46	23.40	6.27	164.74
Last 5	09:12:04	2401.95	17.45	5.85	136.09	2.26	23.40	6.30	162.62
Variance 0			-0.01	0.01	-1.78			0.05	-1.06
Variance 1			0.07	-0.00	-1.12			0.16	2.14
Variance 2			0.08	-0.00	-2.01			0.03	-2.12

Notes

62 degrees and clear. Sampled at 0915

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-03 12:34:13

Project Information:		Pump Information:	
Operator Name	Brandon Reynolds	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	33 ft
Latitude	33º 27' 46.04"		
Longitude	-84º -53' -55.84"		
Sonde SN	408206		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWA-17S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.201715 L
Well Total Depth	39.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	16.07 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 1000
Last 5	12:11:09	1500.01	19.19	5.60	71.36	2.07	16.30	1.87	189.98
Last 5	12:16:09	1800.01	19.23	5.59	71.88	2.69	16.30	1.56	188.54
Last 5	12:21:09	2100.01	19.17	5.59	72.25	2.24	16.30	1.35	187.78
Last 5	12:26:10	2401.01	19.13	5.58	72.68	3.15	16.30	1.31	186.96
Last 5	12:31:10	2701.01	19.26	5.59	73.02	3.01	16.30	1.25	185.64
Variance 0			-0.06	-0.01	0.37			-0.20	-0.76
Variance 1			-0.04	-0.00	0.43			-0.04	-0.83
Variance 2			0.13	0.00	0.33			-0.06	-1.32

Notes

75 degrees and clear. Sampled at 1235

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-03 13:18:47

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	75 ft
Latitude	33º 27' 13.86"		
Longitude	-84º -53' -11.73"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA 18I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	2.113899 L
Well Total Depth	79.67 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	26.15 ft	Total Volume Pumped	3.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:55:57	300.02	19.28	6.06	106.88	0.83	26.30	2.75	95.63
Last 5	13:00:57	600.02	18.47	6.02	111.55	1.98	26.30	2.98	97.48
Last 5	13:05:57	900.00	18.35	5.99	113.46	3.15	26.30	2.72	97.18
Last 5	13:10:57	1200.00	18.43	5.97	114.50	4.37	26.30	2.67	96.95
Last 5	13:15:57	1500.00	18.43	5.97	114.86	4.56	26.30	2.67	95.48
Variance 0			-0.12	-0.02	1.91			-0.26	-0.30
Variance 1			0.08	-0.02	1.04			-0.05	-0.23
Variance 2			-0.00	0.00	0.37			-0.01	-1.47

Notes

Sample collected at 13:20. Sunny 70's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-03 14:59:59

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	35 ft
Latitude	33º 27' 13.98"		
Longitude	-84º -53' -11.74"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWA 18S	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	1.245153 L
Well Total Depth	39.86 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	13 in
Depth to Water	23.93 ft	Total Volume Pumped	6.05 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	14:37:35	1800.00	19.28	5.37	61.13	2.10	24.90	1.13	101.14
Last 5	14:42:35	2100.00	19.27	5.37	61.19	2.06	25.00	1.04	99.86
Last 5	14:47:35	2399.98	19.15	5.39	61.11	1.79	25.00	0.97	97.84
Last 5	14:52:35	2699.98	19.01	5.38	61.32	2.16	25.00	0.94	97.27
Last 5	14:57:35	2999.97	19.06	5.39	61.36	2.46	25.00	0.89	96.01
Variance 0			-0.12	0.02	-0.08			-0.08	-2.02
Variance 1			-0.14	-0.00	0.21			-0.03	-0.57
Variance 2			0.05	0.01	0.04			-0.05	-1.26

Notes

Sample collected at 15:00. Sunny 70's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-02 14:40:05

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	25 ft
Latitude	33º 26' 58.53"		
Longitude	-84º -53' -6.91"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	25 ft

Well Information:		Pumping Information:	
Well ID	YGWA-20S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.5965856 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	9.9 ft	Total Volume Pumped	4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:17:28	1200.01	19.41	5.67	53.90	13.00	10.50	5.50	84.51
Last 5	14:22:28	1500.00	19.28	5.67	53.86	9.24	10.50	5.46	87.33
Last 5	14:27:28	1800.00	19.19	5.67	53.73	6.01	10.50	5.42	81.63
Last 5	14:32:28	2100.00	19.18	5.67	53.71	5.34	10.50	5.35	80.38
Last 5	14:37:28	2399.99	19.14	5.67	53.50	4.66	10.50	5.29	82.16
Variance 0			-0.09	-0.00	-0.13			-0.04	-5.70
Variance 1			-0.01	-0.00	-0.02			-0.07	-1.25
Variance 2			-0.04	-0.00	-0.20			-0.05	1.78

Notes

Collected at 14:40. Cloudy 70s

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-03 11:27:39

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	75 ft
Latitude	33º 26' 58.49"		
Longitude	-84º -53' -14.44"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA-21I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	2.113899 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	37 in
Depth to Water	31.35 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:04:20	1200.00	18.34	6.07	94.56	1.32	33.70	0.98	46.29
Last 5	11:09:20	1499.99	18.29	6.07	94.57	1.17	33.90	0.86	42.88
Last 5	11:14:20	1799.99	18.35	6.07	94.55	1.04	34.00	0.78	43.12
Last 5	11:19:20	2099.99	18.55	6.07	94.77	0.91	34.10	0.76	43.89
Last 5	11:24:20	2399.98	18.73	6.07	94.78	0.92	32.20	0.77	45.31
Variance 0			0.07	-0.00	-0.02			-0.07	0.24
Variance 1			0.20	0.00	0.22			-0.03	0.76
Variance 2			0.17	-0.00	0.00			0.01	1.42

Notes

Sample collected at 11:25. Sunny 70's

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-09 10:10:27

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	24 ft
Latitude	33º 26' 58.88"		
Longitude	-84º -53' -29.39"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	24 ft

Well Information:		Pumping Information:	
Well ID	YGWC 19S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.5921222 L
Well Total Depth	29.82 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4.5 in
Depth to Water	18.22 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:46:19	300.12	17.28	5.56	43.84	5.24	18.60	4.67	129.17
Last 5	09:51:19	600.02	17.33	5.51	43.82	2.99	18.60	4.48	124.19
Last 5	09:56:19	900.02	17.45	5.56	43.74	2.41	18.60	4.11	118.80
Last 5	10:01:19	1200.02	17.54	5.56	43.66	1.92	18.60	3.96	116.98
Last 5	10:06:19	1500.02	17.59	5.56	43.65	1.46	18.60	3.90	115.65
Variance 0			0.13	0.05	-0.08			-0.37	-5.40
Variance 1			0.09	-0.00	-0.08			-0.15	-1.82
Variance 2			0.04	-0.00	-0.01			-0.06	-1.32

Notes

Sample collected at 10:10. Sunny 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-09 12:11:56

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	35 ft
Latitude	33º 27' 14.38"		
Longitude	-84º -53' -34.22"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC 22S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.6412198 L
Well Total Depth	40.13 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.3 in
Depth to Water	10.36 ft	Total Volume Pumped	8.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:49:56	1800.01	20.90	4.87	699.64	0.94	10.80	0.17	226.71
Last 5	11:54:56	2100.01	21.02	4.87	698.77	0.72	10.80	0.15	215.91
Last 5	11:59:56	2400.01	20.97	4.87	698.32	0.85	10.80	0.14	225.66
Last 5	12:04:58	2702.01	20.92	4.87	697.70	1.03	10.80	0.14	214.73
Last 5	12:09:58	3001.97	20.88	4.87	699.40	0.93	10.80	0.14	222.02
Variance 0			-0.05	0.00	-0.45			-0.01	9.74
Variance 1			-0.05	-0.00	-0.61			-0.01	-10.93
Variance 2			-0.04	0.00	1.70			-0.00	7.29

Notes

Collected sample at 12:10. Sunny 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-08 14:57:26

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	34 ft
Latitude	33º 27' 6.62"		
Longitude	-84º -53' -38.72"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWC 23S	Final Pumping Rate	155 mL/min
Well diameter	2 in	Total System Volume	1.223434 L
Well Total Depth	39.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	16.49 ft	Total Volume Pumped	8.6 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	14:33:59	1800.00	18.97	5.52	223.56	16.10	16.90	7.12	122.14
Last 5	14:38:59	2099.99	19.04	5.53	222.19	10.70	16.90	7.09	119.72
Last 5	14:43:59	2399.98	18.88	5.52	220.00	8.45	16.90	7.03	118.07
Last 5	14:48:59	2699.99	18.79	5.53	219.54	5.35	16.90	7.02	115.61
Last 5	14:53:59	2999.97	18.67	5.53	219.20	4.16	16.90	7.02	113.29
Variance 0			-0.16	-0.00	-2.19			-0.06	-1.65
Variance 1			-0.09	0.01	-0.46			-0.01	-2.46
Variance 2			-0.12	-0.00	-0.34			-0.00	-2.32

Notes

Sample collected at 14:55. Cloudy 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-08 12:51:44

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	52 ft
Latitude	33º 27' 31.27"		
Longitude	-84º -53' -48.78"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWC 24S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	1.61437 L
Well Total Depth	57.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.5 in
Depth to Water	29.24 ft	Total Volume Pumped	5.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:29:33	300.01	18.57	5.57	65.72	0.30	29.60	5.31	124.71
Last 5	12:34:33	600.00	17.99	5.56	65.65	0.43	29.70	5.32	119.24
Last 5	12:39:33	900.00	17.92	5.57	65.90	0.42	29.70	5.34	115.75
Last 5	12:44:33	1200.00	17.83	5.56	65.79	0.31	29.70	5.40	112.98
Last 5	12:49:33	1499.99	17.84	5.55	65.85	0.30	29.70	5.44	111.50
Variance 0			-0.07	0.01	0.26			0.02	-3.49
Variance 1			-0.09	-0.01	-0.12			0.06	-2.76
Variance 2			0.01	-0.01	0.07			0.05	-1.49

Notes

Sample collected at 12:50. Cloudy 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-10 10:25:47

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	33 ft
Latitude	33º 27' 19.37"		
Longitude	-84º -53' -35.15"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC 32I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.201715 L
Well Total Depth	38.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	15 in
Depth to Water	20.15 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:02:33	900.00	19.46	5.33	990.63	7.42	21.40	0.24	305.62
Last 5	10:07:33	1200.00	19.41	5.33	993.22	4.01	21.40	0.19	362.38
Last 5	10:12:33	1499.99	19.50	5.32	994.90	3.39	21.40	0.19	335.53
Last 5	10:17:35	1801.99	19.46	5.32	995.56	2.96	21.40	0.18	380.36
Last 5	10:22:35	2101.99	19.22	5.32	997.49	2.03	21.40	0.17	424.43
Variance 0			0.09	-0.00	1.68			-0.01	-26.85
Variance 1			-0.04	-0.00	0.67			-0.01	44.83
Variance 2			-0.24	-0.00	1.93			-0.00	44.08

Notes

Sample collected at 10:25. Sunny 50's. FB-4 taken here.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-09 15:06:44

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	peri Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	27 ft
Latitude	33º 27' 19.15"		
Longitude	-84º -53' -35.45"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	21 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2105124 L
Well Total Depth	23.47 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	15 in
Depth to Water	17.1 ft	Total Volume Pumped	25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:42:05	6905.93	21.74	4.73	758.02	12.00	18.30	1.90	452.78
Last 5	14:47:05	7205.93	21.81	4.73	755.92	8.73	18.30	1.72	456.94
Last 5	14:52:05	7505.92	21.90	4.72	758.55	5.46	18.30	1.77	456.48
Last 5	14:57:05	7805.92	21.95	4.73	755.41	3.13	18.30	1.86	469.84
Last 5	15:02:05	8106.13	21.79	4.73	755.03	2.37	18.30	1.78	467.19
Variance 0			0.09	-0.00	2.64			0.05	-0.45
Variance 1			0.05	0.00	-3.14			0.09	13.36
Variance 2			-0.17	-0.00	-0.38			-0.08	-2.65

Notes

Collected at 15:05. Cloudy 60s

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-14 13:56:28

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	28.8 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	480 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	38.73 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	9.57 ft	Total Volume Pumped	108 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	13:30:37	6299.94	19.89	4.35	1417.31	9.12	9.80	0.09	145.52
Last 5	13:35:37	6599.94	20.08	4.35	1415.26	8.74	9.80	0.09	147.63
Last 5	13:40:38	6900.94	20.04	4.35	1416.70	8.19	9.80	0.09	147.35
Last 5	13:45:38	7200.94	20.09	4.35	1417.83	8.26	9.80	0.09	148.04
Last 5	13:50:38	7500.94	19.97	4.35	1420.48	8.43	9.80	0.09	152.44
Variance 0			-0.04	-0.00	1.44			0.00	-0.27
Variance 1			0.05	-0.00	1.13			-0.00	0.68
Variance 2			-0.12	0.00	2.65			-0.00	4.40

Notes

Collected at 13:55. Sunny 60s. DUP 4 here. EB-3 here. Well purged for 4 hrs, first part of well log did not save.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-09 14:44:27

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	33 ft
Latitude	33º 27' 17.76"		
Longitude	-84º -53' -32.7"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC 34I	Final Pumping Rate	130 mL/min
Well diameter	2 in	Total System Volume	1.201715 L
Well Total Depth	38.75 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	25.43 ft	Total Volume Pumped	9.75 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:21:56	2999.97	19.98	4.77	716.58	0.10	25.60	0.46	131.13
Last 5	14:26:56	3299.97	19.81	4.77	719.79	0.12	25.60	0.44	131.62
Last 5	14:31:56	3599.96	19.70	4.77	717.70	0.14	25.60	0.37	128.93
Last 5	14:36:56	3899.96	19.61	4.77	718.31	0.12	25.60	0.36	129.41
Last 5	14:41:56	4199.95	19.62	4.77	718.05	0.11	25.60	0.34	129.37
Variance 0			-0.11	0.00	-2.09			-0.07	-2.69
Variance 1			-0.09	0.00	0.61			-0.01	0.47
Variance 2			0.01	0.00	-0.26			-0.02	-0.04

Notes

Sample collected at 14:45. Cloudy 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-09 11:58:47

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Phase 2	Tubing Length	60 ft
Latitude	33º 27' 27.67"		
Longitude	-84º -53' -50.26"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	55 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	160 mL/min
Well diameter	2 in	Total System Volume	1.788119 L
Well Total Depth	60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	18 in
Depth to Water	10.38 ft	Total Volume Pumped	24 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	11:35:20	7799.89	20.59	6.29	406.73	5.66	11.80	0.34	132.28
Last 5	11:40:21	8100.89	20.54	6.30	407.48	5.72	11.80	0.35	133.54
Last 5	11:45:21	8400.88	20.52	6.30	405.76	5.36	11.80	0.35	134.41
Last 5	11:50:21	8700.87	20.48	6.31	406.79	5.00	11.80	0.36	135.73
Last 5	11:55:21	9000.87	20.53	6.30	406.82	4.82	11.80	0.38	136.80
Variance 0			-0.03	0.01	-1.72			0.00	0.86
Variance 1			-0.03	0.00	1.03			0.01	1.33
Variance 2			0.05	-0.00	0.03			0.02	1.07

Notes

Sunny, sample time-1155, dup-1 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: 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:

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

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342
Client ID: YGWA-14S
Date/Time Sampled: 1/10/2017 3:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0342-01
Date/Time Received: 1/11/2017 5:25:00PM

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

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342
Client ID: YGWA-17S
Date/Time Sampled: 1/11/2017 11:10:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0342-02
Date/Time Received: 1/11/2017 5:25:00PM

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

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342
Client ID: YGWA-18I
Date/Time Sampled: 1/11/2017 12:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0342-03
Date/Time Received: 1/11/2017 5:25:00PM

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

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342
Client ID: YGWA-18S
Date/Time Sampled: 1/11/2017 2:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0342-04
Date/Time Received: 1/11/2017 5:25:00PM

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

Attention: Mr. Joju Abraham

January 18, 2017

Report No.: AAA0342
Client ID: Dup-1
Date/Time Sampled: 1/11/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0342-05
Date/Time Received: 1/11/2017 5:25:00PM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P							
PRESERVATION:								3	7	3								
1-10-17	1540	GW		✓	YGWA-14S	4		1	1	2							1	
1-11-17	1110	GW		✓	YGWA-17S	4		1	1	2							2	
1-11-17	1250	GW		✓	YGWA-18I	4		1	1	2							3	
1-11-17	1425	GW		✓	YGWA-18S	4		1	1	2							4	
1-11-17	—	GW		✓	DUP-1	4		1	1	2							5	

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: Chris Packer ACC
DATE/TIME: 1-11-2017 / 1600
RELINQUISHED BY:
DATE/TIME: 1-11-17 1725

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: Rahman
DATE/TIME: 01/11/17 1725

Packed: No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AAA03442
Entered Into LIMS: MR
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: 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

30207924

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAA0342 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 2/3/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	YGWA-14S	G	1/10/2017 15:40	AAA0342-01	GW	2	X	001
2	YGWA-17S	G	1/11/2017 11:10	AAA0342-02	GW	2	X	002
3	YGWA-18I	G	1/11/2017 12:50	AAA0342-03	GW	2	X	003
4	YGWA-18S	G	1/11/2017 14:25	AAA0342-04	GW	2	X	004
5	Dup-1	G	1/11/2017 0:00	AAA0342-05	GW	2	X	005
6								
7								
8								
9								
10								

WO#:30207924

30207924

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Ashley Rose / Pace	1-13-17/0940	
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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
	CONTAINER TYPE:						P	P	P	
	PRESERVATION:						3	7	3	
1-10-17	1540	GW		✓	YGWA-14S	4	1	1	2	1
1-11-17	1110	GW		✓	YGWA-17S	4	1	1	2	2
1-11-17	1250	GW		✓	YGWA-18I	4	1	1	2	3
1-11-17	1425	GW		✓	YGWA-18S	4	1	1	2	4
1-11-17	—	GW		✓	DUP-1	4	1	1	2	5

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Parker ACC
DATE/TIME: 1-11-2017 / 1600
RELINQUISHED BY:
DATE/TIME: 1-11-17 1725
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY: LAB: M Rahman
DATE/TIME: 01/11/17 1725
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:

FOR LAB USE ONLY
LAB #: PAA0342
Entered Into LIMS: MR
Tracking #:

Sample Condition Upon Receipt Pittsburgh

30207924

Pace Analytical

Client Name: Pace, GA Project #

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

Tracking #: 6812 5101 6035

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: MAH 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: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
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. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			15. pH<2 Initial when completed MAH 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: MAH Date: 1-13-17

Client Notification/ Resolution:

Person Contacted: ___ Date/Time: ___ Contacted By: ___

Comments/ Resolution: ___

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	1/21/2017
Worklist:	33612
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1214154
MB concentration:	0.245
M/B 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	LCSD (Y or N)?	N
	LCS33612	LCSD33612
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):	
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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30208060001
Duplicate RPD:	67.46%	30208060001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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: LMR

***Batch must be re-prepped due to unacceptable precision.

1/24/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	1/20/2017
Worklist:	33614
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1214156
MB concentration:	0.011
M/B 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	LCSD (Y or N)?	N
	LCS33614	LCSD33614
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30208060001	
Duplicate Sample I.D.	30208060001DUP	
Sample Result (pCi/L, g, F):	0.125	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.094	
Sample Duplicate Result (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	30208060001
Duplicate RPD:	12.30%	30208060001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

2/9/17

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: 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:

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
Client ID: YGWA-1D
Date/Time Sampled: 1/11/2017 3:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0396-01
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	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

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396
Client ID: YGWA-3I
Date/Time Sampled: 1/11/2017 1:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0396-02
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	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

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396
Client ID: YGWA-3D
Date/Time Sampled: 1/11/2017 11:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0396-03
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	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

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396
Client ID: FB-1-1-11-17
Date/Time Sampled: 1/11/2017 12:50:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAA0396-04
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 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

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396
Client ID: YGWA-5I
Date/Time Sampled: 1/12/2017 2:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0396-05
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	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

Attention: Mr. Joju Abraham

January 19, 2017

Report No.: AAA0396
Client ID: YGWA-5D
Date/Time Sampled: 1/12/2017 2:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0396-06
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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
1-11-17	1535	GW		✓	YGWA-1D	4	1	1	2	1
1-11-17	1330	GW		✓	YGWA-3I	4	1	1	2	2
1-11-17	1120	GW		✓	YGWA-3D	4	1	1	2	3
1-11-17	1250	W		✓	FB-1-1-11-17	4	1	1	2	4
1-12-17	1400	GW		✓	YGWA-5I	4	1	1	2	5
1-12-17	1455	GW		✓	YGWA-5D	4	1	1	2	6
1-12-17	1315	W		✓	EB-1-1-12-17	4	1	1	2	7

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: J. Berksford, C. Parker (ACC) — DATE/TIME: 1-12-17 / 1530 — RELINQUISHED BY: — DATE/TIME: 1-12-17 / 1725

RECEIVED BY: — DATE/TIME: — RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: — DATE/TIME: 01/12/17 1725

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID:

Packed: No NA — Ice: Yes No NA — Temperature: 1° Min: 1° Max: 1°C

FOR LAB USE ONLY
LAB #: AA0396
Entered into LIMS: MR
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: 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208062

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
Total Radium	Total Radium Calculation	**0.202 ± 0.410 (0.901)**	pCi/L	02/13/17 13:42	7440-14-4	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30208062

30208062

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAA0396 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 2/6/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWA-1D	G	1/11/2017 15:35	AAA0396-01	GW	1	X	001
2	YGWA-3I	G	1/11/2017 13:30	AAA0396-02	GW	1	X	002
3	YGWA-3D	G	1/11/2017 11:20	AAA0396-03	GW	1	X	003
4	FB-1-1-11-17	G	1/11/2017 12:50	AAA0396-04	W	1	X	004
5	YGWA-5I	G	1/12/2017 14:00	AAA0396-05	GW	1	X	005
6	YGWA-5D	G	1/12/2017 14:55	AAA0396-06	GW	1	X	006
7	EB-1-1-12-17	G	1/12/2017 13:15	AAA0396-07	W	1	X	007
8						BRS 1/13/2017		
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Ashley Rose/Pace	1-16-17/0920	
2					
3					

Cooler Temperature on Receipt	Custody Seal Y or N	Received on Ice Y or N	Sample Intact Y or N
N/A °C	Y or N	Y or N	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

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
1-11-17	1535	GW		✓	YGWA-1D	4	1	1	2	1
1-11-17	1330	GW		✓	YGWA-3I	4	1	1	2	2
1-11-17	1120	GW		✓	YGWA-3D	4	1	1	2	3
1-11-17	1250	W		✓	FB-1-1-11-17	4	1	1	2	4
1-12-17	1400	GW		✓	YGWA-5I	4	1	1	2	5
1-12-17	1455	GW		✓	YGWA-5D	4	1	1	2	6
1-12-17	1315	W		✓	EB-1-1-12-17	4	1	1	2	7

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: J. Burkford, C. Parker (ACC)
DATE/TIME: 1-12-17 / 1530
RELINQUISHED BY:
DATE/TIME: 1-12-17 / 1725

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

FOR LAB USE ONLY
LAB #: AAA0396
Entered Into LIMS: MR

RECEIVED BY LAB:
DATE/TIME: 01/12/17 1725
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Tracking #:

Rad checked: Yes No NA
Ice: Yes No NA
Temperature: 10 Min: 1°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh

30208062

Pace Analytical

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: AMH 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: -Includes date/time/ID Matrix: WT	X			5.
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. All containers needing preservation are found to be in compliance with EPA recommendation.	X			15. pH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed AMH 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: AMH Date: 1-16-17

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS33613	LCSD33613
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30208166001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30208166001
Duplicate RPD:	136.37%	30208166001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

2/13/17

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	1/20/2017
Worklist:	33615
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS33615	LCSD33615
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30208166001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30208166001
Duplicate RPD:	5.59%	30208166001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

2/13/17

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: AAA0466

January 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:

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 20, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-4I	AAA0466-01	Ground Water	01/13/17 11:20	01/14/17 11:15
YGWA-20S	AAA0466-02	Ground Water	01/13/17 13:25	01/14/17 11:15
YGWA-21I	AAA0466-03	Ground Water	01/13/17 14:55	01/14/17 11:15
YGWA-6S	AAA0466-04	Ground Water	01/13/17 14:25	01/14/17 11:15
YGWA-6I	AAA0466-05	Ground Water	01/13/17 13:05	01/14/17 11:15
FB-2-1-13-17	AAA0466-06	Water	01/13/17 14:00	01/14/17 11:15

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 20, 2017

Report No.: AAA0466
Client ID: YGWA-4I
Date/Time Sampled: 1/13/2017 11:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0466-01
Date/Time Received: 1/14/2017 11:15:00AM

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	01/16/17 17:50	01/16/17 17:50	7010343	JPT
Inorganic Anions											
Chloride	4.2	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 19:47	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 19:47	7010348	RNB
Sulfate	8.1	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 19:47	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Barium	0.0146	0.0100	0.0004	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Calcium	8.08	2.50	0.155	mg/L	EPA 6020B	B-01	5	01/18/17 11:45	01/20/17 13:32	7010413	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Cobalt	0.0029	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Lithium	0.0121	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/18/17 11:45	01/19/17 18:52	7010413	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/18/17 09:55	01/18/17 14:59	7010407	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 20, 2017

Report No.: AAA0466
Client ID: YGWA-20S
Date/Time Sampled: 1/13/2017 1:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0466-02
Date/Time Received: 1/14/2017 11:15:00AM

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	01/16/17 17:50	01/16/17 17:50	7010343	JPT
Inorganic Anions											
Chloride	2.3	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 20:08	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 20:08	7010348	RNB
Sulfate	0.10	1.0	0.05	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 20:08	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Barium	0.0158	0.0100	0.0004	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Calcium	2.45	0.500	0.0311	mg/L	EPA 6020B	B-01	1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:04	7010413	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/18/17 09:55	01/18/17 15:01	7010407	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 20, 2017

Report No.: AAA0466
Client ID: YGWA-21I
Date/Time Sampled: 1/13/2017 2:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0466-03
Date/Time Received: 1/14/2017 11:15:00AM

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	01/16/17 17:50	01/16/17 17:50	7010343	JPT
Inorganic Anions											
Chloride	2.5	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 20:49	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 20:49	7010348	RNB
Sulfate	4.3	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 20:49	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Barium	0.0105	0.0100	0.0004	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Calcium	4.98	2.50	0.155	mg/L	EPA 6020B	B-01	5	01/18/17 11:45	01/20/17 13:38	7010413	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Cobalt	0.0110	0.0100	0.0005	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Lithium	0.0062	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/18/17 11:45	01/19/17 19:15	7010413	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/18/17 09:55	01/18/17 15:04	7010407	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 20, 2017

Report No.: AAA0466
Client ID: YGWA-6S
Date/Time Sampled: 1/13/2017 2:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0466-04
Date/Time Received: 1/14/2017 11:15:00AM

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	01/16/17 17:50	01/16/17 17:50	7010343	JPT
Inorganic Anions											
Chloride	2.9	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 22:32	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 22:32	7010348	RNB
Sulfate	32	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 22:32	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Barium	0.0211	0.0100	0.0004	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Boron	0.0554	0.0400	0.0064	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Calcium	6.45	2.50	0.155	mg/L	EPA 6020B	B-01	5	01/18/17 11:45	01/20/17 13:44	7010413	CSW
Chromium	0.0056	0.0100	0.0009	mg/L	EPA 6020B	J	1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:27	7010413	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/18/17 09:55	01/18/17 15:06	7010407	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 20, 2017

Report No.: AAA0466
Client ID: YGWA-6I
Date/Time Sampled: 1/13/2017 1:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0466-05
Date/Time Received: 1/14/2017 11:15:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	163	25	10	mg/L	SM 2540 C		1	01/16/17 17:50	01/16/17 17:50	7010343	JPT
Inorganic Anions											
Chloride	7.5	0.25	0.01	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 22:53	7010348	RNB
Fluoride	0.05	0.30	0.02	mg/L	EPA 300.0	J	1	01/16/17 10:22	01/16/17 22:53	7010348	RNB
Sulfate	54	5.0	0.26	mg/L	EPA 300.0		5	01/16/17 10:22	01/17/17 16:04	7010348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Barium	0.0259	0.0100	0.0004	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Boron	0.0624	0.0400	0.0064	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Calcium	9.20	2.50	0.155	mg/L	EPA 6020B	B-01	5	01/18/17 11:45	01/19/17 20:07	7010413	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Lead	0.0001	0.0050	0.0001	mg/L	EPA 6020B	J	1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Selenium	0.0016	0.0100	0.0010	mg/L	EPA 6020B	J	1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Lithium	0.0081	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/18/17 11:45	01/19/17 19:38	7010413	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/18/17 09:55	01/18/17 15:08	7010407	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 20, 2017

Report No.: AAA0466
Client ID: FB-2-1-13-17
Date/Time Sampled: 1/13/2017 2:00:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAA0466-06
Date/Time Received: 1/14/2017 11:15:00AM

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	01/16/17 17:50	01/16/17 17:50	7010343	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 23:14	7010348	RNB
Fluoride	ND	0.30	0.02	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 23:14	7010348	RNB
Sulfate	ND	1.0	0.05	mg/L	EPA 300.0		1	01/16/17 10:22	01/16/17 23:14	7010348	RNB
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Boron	ND	0.0400	0.0064	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Calcium	0.0820	0.500	0.0311	mg/L	EPA 6020B	B-01, J	1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/18/17 11:45	01/19/17 20:01	7010413	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/18/17 09:55	01/18/17 15:15	7010407	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 20, 2017

Report No.: AAA0466

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010343 - SM 2540 C											
Blank (7010343-BLK1)						Prepared & Analyzed: 01/16/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7010343-BS1)						Prepared & Analyzed: 01/16/17					
Total Dissolved Solids	380	25	10	mg/L	400.00		95	84-108			
Duplicate (7010343-DUP1)		**Source: AAA0446-05**				Prepared & Analyzed: 01/16/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7010343-DUP2)		**Source: AAA0455-01**				Prepared & Analyzed: 01/16/17					
Total Dissolved Solids	818	25	10	mg/L		827			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 20, 2017

Report No.: AAA0466

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	0.004	mg/L							
Sulfate	ND	1.0	0.09	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	0.004	mg/L	10.020		102	90-110			
Sulfate	10.1	1.0	0.09	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	0.004	mg/L	10.020	ND	93	90-110			
Sulfate	14.5	1.0	0.09	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	0.004	mg/L	10.020	ND	95	90-110			
Sulfate	9.06	1.0	0.09	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	0.004	mg/L	10.020	ND	98	90-110	5	15	
Sulfate	14.9	1.0	0.09	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 20, 2017

Report No.: AAA0466

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010407 - EPA 7470A											
Blank (7010407-BLK1)						Prepared & Analyzed: 01/18/17					
Mercury	0.00007	0.00050	0.000041	mg/L							J
LCS (7010407-BS1)						Prepared & Analyzed: 01/18/17					
Mercury	0.00257	0.00050	0.000041	mg/L	2.5000E-3		103	80-120			
Duplicate (7010407-DUP1)			Source: AAA0412-16RE1			Prepared & Analyzed: 01/18/17					
Mercury	0.00143	0.00050	0.000041	mg/L		0.00141			2	20	
Matrix Spike (7010407-MS1)			Source: AAA0466-01			Prepared & Analyzed: 01/18/17					
Mercury	0.00241	0.00050	0.000041	mg/L	2.5000E-3	ND	97	75-125			
Matrix Spike Dup (7010407-MSD1)			Source: AAA0466-01			Prepared & Analyzed: 01/18/17					
Mercury	0.00238	0.00050	0.000041	mg/L	2.5000E-3	ND	95	75-125	1	20	
Post Spike (7010407-PS1)			Source: AAA0466-01			Prepared & Analyzed: 01/18/17					
Mercury	1.64			ug/L	1.6667	0.0260	97	80-120			
Batch 7010413 - EPA 3005A											
Blank (7010413-BLK1)						Prepared: 01/18/17 Analyzed: 01/19/17					
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	0.0766	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 20, 2017

Report No.: AAA0466

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010413 - EPA 3005A											
LCS (7010413-BS1)						Prepared: 01/18/17 Analyzed: 01/19/17					
Antimony	0.103	0.0030	0.0008	mg/L	0.10000		103	80-120			
Arsenic	0.0998	0.0050	0.0016	mg/L	0.10000		100	80-120			
Barium	0.0973	0.0100	0.0004	mg/L	0.10000		97	80-120			
Beryllium	0.104	0.0030	0.00008	mg/L	0.10000		104	80-120			
Boron	1.05	0.0400	0.0064	mg/L	1.0000		105	80-120			
Cadmium	0.104	0.0010	0.00007	mg/L	0.10000		104	80-120			
Calcium	1.09	0.500	0.0311	mg/L	1.0000		109	80-120			
Chromium	0.101	0.0100	0.0009	mg/L	0.10000		101	80-120			
Cobalt	0.0999	0.0100	0.0005	mg/L	0.10000		100	80-120			
Copper	0.103	0.0250	0.0005	mg/L	0.10000		103	80-120			
Lead	0.0999	0.0050	0.0001	mg/L	0.10000		100	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	0.100	0.0100	0.0010	mg/L	0.10000		100	80-120			
Silver	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Thallium	0.0995	0.0010	0.0002	mg/L	0.10000		99	80-120			
Vanadium	0.101	0.0100	0.0071	mg/L	0.10000		101	80-120			
Zinc	0.0956	0.0100	0.0021	mg/L	0.10000		96	80-120			
Lithium	0.105	0.0500	0.0021	mg/L	0.10000		105	80-120			
Matrix Spike (7010413-MS1)			**Source: AAA0466-05**			Prepared: 01/18/17 Analyzed: 01/19/17					
Antimony	0.100	0.0030	0.0008	mg/L	0.10000	ND	100	75-125			
Arsenic	0.0972	0.0050	0.0016	mg/L	0.10000	ND	97	75-125			
Barium	0.123	0.0100	0.0004	mg/L	0.10000	0.0259	97	75-125			
Beryllium	0.104	0.0030	0.00008	mg/L	0.10000	ND	104	75-125			
Boron	1.11	0.0400	0.0064	mg/L	1.0000	0.0624	105	75-125			
Cadmium	0.102	0.0010	0.00007	mg/L	0.10000	ND	102	75-125			
Calcium	9.93	2.50	0.155	mg/L	1.0000	9.20	74	75-125			QM-02
Chromium	0.100	0.0100	0.0009	mg/L	0.10000	ND	100	75-125			
Cobalt	0.0967	0.0100	0.0005	mg/L	0.10000	ND	97	75-125			
Copper	0.0988	0.0250	0.0005	mg/L	0.10000	ND	99	75-125			
Lead	0.0986	0.0050	0.0001	mg/L	0.10000	0.0001	98	75-125			
Molybdenum	0.103	0.0100	0.0017	mg/L	0.10000	ND	103	75-125			
Nickel	0.101	0.0100	0.0006	mg/L	0.10000	ND	101	75-125			
Selenium	0.102	0.0100	0.0010	mg/L	0.10000	0.0016	101	75-125			
Silver	0.0969	0.0100	0.0005	mg/L	0.10000	ND	97	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	0.100	0.0100	0.0021	mg/L	0.10000	0.0044	96	75-125			
Lithium	0.108	0.0500	0.0021	mg/L	0.10000	0.0081	100	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 20, 2017

Report No.: AAA0466

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010413 - EPA 3005A											
Matrix Spike Dup (7010413-MSD1)		**Source: AAA0466-05**			Prepared: 01/18/17 Analyzed: 01/19/17						
Antimony	0.0969	0.0030	0.0008	mg/L	0.10000	ND	97	75-125	3	20	
Arsenic	0.0992	0.0050	0.0016	mg/L	0.10000	ND	99	75-125	2	20	
Barium	0.118	0.0100	0.0004	mg/L	0.10000	0.0259	92	75-125	4	20	
Beryllium	0.100	0.0030	0.00008	mg/L	0.10000	ND	100	75-125	4	20	
Boron	1.04	0.0400	0.0064	mg/L	1.0000	0.0624	98	75-125	6	20	
Cadmium	0.108	0.0010	0.00007	mg/L	0.10000	ND	108	75-125	5	20	
Calcium	10.3	2.50	0.155	mg/L	1.0000	9.20	109	75-125	3	20	
Chromium	0.100	0.0100	0.0009	mg/L	0.10000	ND	100	75-125	0.4	20	
Cobalt	0.0974	0.0100	0.0005	mg/L	0.10000	ND	97	75-125	0.7	20	
Copper	0.0969	0.0250	0.0005	mg/L	0.10000	ND	97	75-125	2	20	
Lead	0.0965	0.0050	0.0001	mg/L	0.10000	0.0001	96	75-125	2	20	
Molybdenum	0.105	0.0100	0.0017	mg/L	0.10000	ND	105	75-125	2	20	
Nickel	0.101	0.0100	0.0006	mg/L	0.10000	ND	101	75-125	0.2	20	
Selenium	0.101	0.0100	0.0010	mg/L	0.10000	0.0016	99	75-125	1	20	
Silver	0.0962	0.0100	0.0005	mg/L	0.10000	ND	96	75-125	0.7	20	
Thallium	0.0980	0.0010	0.0002	mg/L	0.10000	ND	98	75-125	0.07	20	
Vanadium	0.102	0.0100	0.0071	mg/L	0.10000	ND	102	75-125	0.3	20	
Zinc	0.100	0.0100	0.0021	mg/L	0.10000	0.0044	96	75-125	0.3	20	
Lithium	0.106	0.0500	0.0021	mg/L	0.10000	0.0081	98	75-125	1	20	
Post Spike (7010413-PS1)		**Source: AAA0466-05**			Prepared: 01/18/17 Analyzed: 01/19/17						
Antimony	73.3			ug/L	100.00	0.232	73	80-120			QM-05
Arsenic	99.6			ug/L	100.00	0.578	99	80-120			
Barium	120			ug/L	100.00	25.9	94	80-120			
Beryllium	101			ug/L	100.00	0.0618	101	80-120			
Boron	1100			ug/L	1000.0	62.4	104	80-120			
Cadmium	102			ug/L	100.00	0.0304	102	80-120			
Calcium	10100			ug/L	1000.0	9200	89	80-120			
Chromium	100			ug/L	100.00	0.335	100	80-120			
Cobalt	98.5			ug/L	100.00	0.0437	98	80-120			
Copper	98.6			ug/L	100.00	0.0258	99	80-120			
Lead	93.7			ug/L	100.00	0.135	94	80-120			
Molybdenum	104			ug/L	100.00	0.801	103	80-120			
Nickel	97.8			ug/L	100.00	0.437	97	80-120			
Selenium	101			ug/L	100.00	1.60	100	80-120			
Silver	97.1			ug/L	100.00	0.0042	97	80-120			
Thallium	96.6			ug/L	100.00	0.0120	97	80-120			
Vanadium	102			ug/L	100.00	0.298	102	80-120			
Zinc	103			ug/L	100.00	4.38	99	80-120			
Lithium	111			ug/L	100.00	8.08	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 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:								P	P	P	P					
PRESERVATION:								3	7	3						
1-13-17	1120	GW		✓	YGWA-4I	6		1	1	4						1
1-13-17	1325	GW		✓	YGWA-20S	4		1	1	2						2
1-13-17	1455	GW		✓	YGWA-21I	4		1	1	2						3
1-13-17	1425	GW		✓	YGWA-6S	4		1	1	2						4
1-13-17	1305	GW		✓	YGWA-6I	4		1	1	2						5
1-13-17	1400	W		✓	FB-2-1-13-17	4		1	1	2						6

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, J. Barnsford (ACC)
DATE/TIME: 1-13-17 1550
RELINQUISHED BY:
DATE/TIME: 1-14-17 11:15

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 1/14/17 1115

Packed: No NA
Ice: Yes No NA
Temperature: 7° Min: 1°C Max:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AA04466
Entered into LIMS: CH
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: 1/16/2017 1:12:57PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 01/14/17 11:15

Work Order: AAA0466
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 6 **#Containers:** 26

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

February 14, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30208166

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on January 17, 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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30208166

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30208166

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30208166001	**YGWA-4I**	Water	01/13/17 11:20	01/17/17 10:00
30208166002	**YGWA-20S**	Water	01/13/17 13:25	01/17/17 10:00
30208166003	**YGWA-21I**	Water	01/13/17 14:55	01/17/17 10:00
30208166004	**YGWA-6S**	Water	01/13/17 14:25	01/17/17 10:00
30208166005	**YGWA-6I**	Water	01/13/17 13:05	01/17/17 10:00
30208166006	**FB-2-1-13-17**	Water	01/13/17 14:00	01/17/17 10:00

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30208166

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30208166001	**YGWA-4I**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208166002	**YGWA-20S**	EPA 9315	LAL	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208166003	**YGWA-21I**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208166004	**YGWA-6S**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208166005	**YGWA-6I**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208166006	**FB-2-1-13-17**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208166

Sample: YGWA-4I **Lab ID: 30208166001** Collected: 01/13/17 11:20 Received: 01/17/17 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	**0.762 ± 0.215 (0.175) C:84% T:NA**	pCi/L	01/22/17 16:16	13982-63-3	
Radium-228	EPA 9320	**0.430 ± 0.318 (0.607) C:75% T:80%**	pCi/L	02/10/17 11:45	15262-20-1	
Total Radium	Total Radium Calculation	**1.19 ± 0.533 (0.782)**	pCi/L	02/13/17 14:03	7440-14-4	

Sample: YGWA-20S **Lab ID: 30208166002** Collected: 01/13/17 13:25 Received: 01/17/17 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	**0.0709 ± 0.108 (0.232) C:94% T:NA**	pCi/L	01/22/17 16:16	13982-63-3	
Radium-228	EPA 9320	**0.225 ± 0.291 (0.619) C:79% T:92%**	pCi/L	02/10/17 15:51	15262-20-1	
Total Radium	Total Radium Calculation	**0.296 ± 0.399 (0.851)**	pCi/L	02/13/17 14:03	7440-14-4	

Sample: YGWA-21I **Lab ID: 30208166003** Collected: 01/13/17 14:55 Received: 01/17/17 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	**0.200 ± 0.178 (0.294) C:85% T:NA**	pCi/L	02/01/17 09:14	13982-63-3	
Radium-228	EPA 9320	**0.520 ± 0.467 (0.949) C:65% T:81%**	pCi/L	02/12/17 14:03	15262-20-1	
Total Radium	Total Radium Calculation	**0.720 ± 0.645 (1.24)**	pCi/L	02/13/17 14:03	7440-14-4	

Sample: YGWA-6S **Lab ID: 30208166004** Collected: 01/13/17 14:25 Received: 01/17/17 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	**0.122 ± 0.165 (0.342) C:88% T:NA**	pCi/L	02/01/17 09:14	13982-63-3	
Radium-228	EPA 9320	**0.627 ± 0.517 (1.03) C:60% T:83%**	pCi/L	02/12/17 14:03	15262-20-1	
Total Radium	Total Radium Calculation	**0.749 ± 0.682 (1.37)**	pCi/L	02/13/17 14:25	7440-14-4	

Sample: YGWA-6I **Lab ID: 30208166005** Collected: 01/13/17 13:05 Received: 01/17/17 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	**1.24 ± 0.437 (0.381) C:81% T:NA**	pCi/L	02/01/17 09:14	13982-63-3	
Radium-228	EPA 9320	**0.650 ± 0.596 (1.21) C:47% T:84%**	pCi/L	02/12/17 14:03	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208166

Sample: YGWA-6I **Lab ID: 30208166005** Collected: 01/13/17 13:05 Received: 01/17/17 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	**1.89 ± 1.03 (1.59)**	pCi/L	02/13/17 14:25	7440-14-4	

Sample: FB-2-1-13-17 **Lab ID: 30208166006** Collected: 01/13/17 14:00 Received: 01/17/17 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	**0.00981 ± 0.125 (0.348) C:90% T:NA**	pCi/L	02/01/17 09:14	13982-63-3	
Radium-228	EPA 9320	**-0.0680 ± 0.344 (0.800) C:118% T:68%**	pCi/L	02/12/17 14:03	15262-20-1	
Total Radium	Total Radium Calculation	**0.00981 ± 0.469 (1.15)**	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208166

QC Batch: 246910 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30208166001, 30208166002

METHOD BLANK: 1214155 Matrix: Water
Associated Lab Samples: 30208166001, 30208166002

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208166

QC Batch: 246912 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30208166001, 30208166002

METHOD BLANK: 1214157 Matrix: Water
Associated Lab Samples: 30208166001, 30208166002

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208166

QC Batch: 247684 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30208166003, 30208166004, 30208166005, 30208166006

METHOD BLANK: 1218073 Matrix: Water
Associated Lab Samples: 30208166003, 30208166004, 30208166005, 30208166006

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208166

QC Batch: 247678 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30208166003, 30208166004, 30208166005, 30208166006

METHOD BLANK: 1218053 Matrix: Water
Associated Lab Samples: 30208166003, 30208166004, 30208166005, 30208166006

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30208166

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.

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

WO#:30208166

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAA0466 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 2/7/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	YGWA-4I	G	1/13/2017 11:20	AAA0466-01	GW	4	X	001
2	YGWA-20S	G	1/13/2017 13:25	AAA0466-02	GW	2	X	002
3	YGWA-21I	G	1/13/2017 14:55	AAA0466-03	GW	2	X	003
4	YGWA-6S	G	1/13/2017 14:25	AAA0466-04	GW	2	X	004
5	YGWA-6I	G	1/13/2017 13:05	AAA0466-05	GW	2	X	005
6	FB-2-1-13-17	G	1/13/2017 14:00	AAA0466-06	W	2	X	006
7								
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Michael Sanders	1-17-17 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.

30208166

CHAIN OF CUSTODY RECORD

Pace Analytical

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX-CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE								P	P	P	P					
PRESERVATION								3	7	3						
1-13-17	1120	GW		✓	YGWA-4I	6		1	1	4						1
1-13-17	1325	GW		✓	YGWA-20S	4		1	1	2						2
1-13-17	1455	GW		✓	YGWA-21I	4		1	1	2						3
1-13-17	1425	GW		✓	YGWA-6S	4		1	1	2						4
1-13-17	1305	GW		✓	YGWA-6I	4		1	1	2						5
1-13-17	1400	W		✓	FB-2-1-13-17	4		1	1	2						6

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: L. Barker, J. Bousfield (Acc)
DATE/TIME: 1-13-17 1550

RELINQUISHED BY: [signature]
DATE/TIME: 1-14-17 11:15

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: [signature]
DATE/TIME: 1/14/17 1115

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1.0 °C (Min / Max)
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AA04466
Entered into LIMS: CH
Tracking #:

Plant Yates COC Ash Ponds.xlsx

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace GA Project # 30208166

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

Tracking #: 6812 5101 7230

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 1-17-17

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	X		4. 1/18/17
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
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. All containers needing preservation are found to be in compliance with EPA recommendation.	X			15. PH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed ML Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present: Trip Blank Custody Seals Present		X	X	17.
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: ML Date: 1-19-17

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

Test: Ra-226
Analyst: LAL
Date: 1/20/2017
Worklist: 33615
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

	LCSD (Y or N)?	N
	LCS33615	LCSD33615
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	

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:	

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

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30208166001
30208166001DUP

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:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	1/31/2017
Worklist:	33727
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1218053
MB concentration:	0.108
M/B 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

	LCSD (Y or N)?	N
	LCS33727	LCSD33727
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	

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:	

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***

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

30208384001
30208384001DUP

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:

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	1/21/2017
Worklist:	33613
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

	LCSD (Y or N)?	N
	LCS33613	LCSD33613
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	

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:	

Duplicate Sample Assessment

		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30208166001
Duplicate RPD:	136.37%	30208166001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	2/3/2017
Worklist:	33729
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

	LCSD (Y or N)?	N
	LCS33729	LCSD33729
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	

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:	

Duplicate Sample Assessment

		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30208384001	
Duplicate Sample I.D.	30208384001DUP	
Sample Result (pCi/L, g, F):	0.706	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.527	
Sample Duplicate Result (pCi/L, g, F):	0.035	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.414	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.962	30208384001
Duplicate RPD:	181.07%	30208384001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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:

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
Client ID: YGWA-1I
Date/Time Sampled: 1/16/2017 11:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0521-01
Date/Time Received: 1/17/2017 5:12:00PM

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
Client ID: EB-2-1-16-17
Date/Time Sampled: 1/16/2017 12:25:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAA0521-02
Date/Time Received: 1/17/2017 5:12:00PM

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	01/19/17 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
Client ID: YGWA-2I
Date/Time Sampled: 1/16/2017 2:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0521-03
Date/Time Received: 1/17/2017 5:12:00PM

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
Client ID: YGWA-30I
Date/Time Sampled: 1/16/2017 10:50:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0521-04
Date/Time Received: 1/17/2017 5:12:00PM

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

Attention: Mr. Joju Abraham

January 27, 2017

Report No.: AAA0521
Client ID: YGWC-19S
Date/Time Sampled: 1/16/2017 12:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0521-05
Date/Time Received: 1/17/2017 5:12:00PM

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
Client ID: YGWC-22S
Date/Time Sampled: 1/16/2017 3:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0521-06
Date/Time Received: 1/17/2017 5:12:00PM

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
Client ID: YGWC-23S
Date/Time Sampled: 1/16/2017 1:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0521-07
Date/Time Received: 1/17/2017 5:12:00PM

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
Client ID: Dup-2
Date/Time Sampled: 1/16/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0521-08
Date/Time Received: 1/17/2017 5:12:00PM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:								P	P	P	P					
PRESERVATION:								3	7	3						
1-16-17	1120	GW		✓	YGWA-1I	4		1	1	2						1
1-16-17	1225	W		✓	EB-2-1-16-17	4		1	1	2						2
1-16-17	1405	GW		✓	YGWA-2I	4		1	1	2						3
1-16-17	1050	GW		✓	YGWA-30I	4		1	1	2						4
1-16-17	1230	GW		✓	YGWC-19S	4		1	1	2						5
1-16-17	1515	GW		✓	YGWC-22S	4		1	1	2						6
1-16-17	1350	GW		✓	YGWC-23S	4		1	1	2						7
1-16-17	—	GW		✓	Dup-2	4		1	1	2						8

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker ACC

DATE/TIME: 1-17-17 / 0850

RELINQUISHED BY: C. Parker

DATE/TIME: 1-17-17 / 1712

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB:

DATE/TIME: 1/17/17 1712

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Sealed: X No NA

Ice: Yes No NA

Temperature: 1 °C Min / °C Max:

Custody Seal: Intact* Broken Not Present

# of Coolers

Cooler ID:

FOR LAB USE ONLY

LAB #: AAA0521

Entered into LIMS: [illegible]

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: 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208385

Sample: YGWA-1I **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) C:79% T:NA**	pCi/L	02/01/17 09:24	13982-63-3	
Radium-228	EPA 9320	**-0.349 ± 0.388 (0.992) C:58% T:80%**	pCi/L	02/12/17 14:04	15262-20-1	
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) C:89% T:NA**	pCi/L	02/01/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.188 ± 0.554 (1.24) C:55% T:75%**	pCi/L	02/12/17 14:04	15262-20-1	
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) C:80% T:NA**	pCi/L	02/01/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.262 ± 0.488 (1.07) C:55% T:78%**	pCi/L	02/12/17 14:04	15262-20-1	
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) C:85% T:NA**	pCi/L	02/01/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.284 ± 0.483 (1.05) C:56% T:80%**	pCi/L	02/12/17 14:04	15262-20-1	
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) C:88% T:NA**	pCi/L	02/01/17 09:24	13982-63-3	
Radium-228	EPA 9320	**0.511 ± 0.576 (1.20) C:52% T:71%**	pCi/L	02/12/17 14:04	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208385

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
Total Radium	Total Radium Calculation	**0.511 ± 0.704 (1.59)**	pCi/L	02/13/17 14:25	7440-14-4	

Sample: YGWC-22S **Lab ID: 30208385006** Collected: 01/16/17 15:15 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	**0.467 ± 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	

Sample: YGWC-23S **Lab ID: 30208385007** Collected: 01/16/17 13:50 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	**0.0277 ± 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	

Sample: Dup-2 **Lab ID: 30208385008** Collected: 01/16/17 00:01 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	**0.119 ± 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Chain of Custody

WO# : 30208385

30208385

Pace Analytical
www.pacelabs.com

Workorder: AAA0521 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 2/2/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	YGWA-1I	G	1/16/2017 11:20	AAA0521-01	GW	2	X	001
2	EB-2-1-16-17	G	1/16/2017 12:25	AAA0521-02	W	2	X	002
3	YGWA-2I	G	1/16/2017 14:05	AAA0521-03	GW	2	X	003
4	YGWA-30I	G	1/16/2017 10:50	AAA0521-04	GW	2	X	004
5	YGWC-19S	G	1/16/2017 12:30	AAA0521-05	GW	2	X	005
6	YGWC-22S	G	1/16/2017 15:15	AAA0521-06	GW	2	X	006
7	YGWC-23S	G	1/16/2017 13:50	AAA0521-07	GW	2	X	007
8	Dup-2	G	1/16/2017 0:00	AAA0521-08	GW	2	X	008
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	Charles Hawks	1/18/17 1730	Ashley Shore/Pace	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

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

30208385

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

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		P Metals App. III & IV (EPA 6020/7470) 3	P Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C) 7	P Radium 226 & 228 (SW-846 9315/9320) 3	P					LAB ID NUMBER
1-16-17	1120	GW		✓	YGWA-1I	4		1	1	2						1
1-16-17	1225	W		✓	EB-2-1-16-17	4		1	1	2						2
1-16-17	1405	GW		✓	YGWA-2I	4		1	1	2						3
1-16-17	1050	GW		✓	YGWA-30I	4		1	1	2						4
1-16-17	1230	GW		✓	YGWC-19S	4		1	1	2						5
1-16-17	1515	GW		✓	YGWC-22S	4		1	1	2						6
1-16-17	1350	GW		✓	YGWC-23S	4		1	1	2						7
1-16-17	—	GW		✓	Dup-2	4		1	1	2						8

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: C. Parker, R. Walker ACC
DATE/TIME: 1-17-17 / 0850
RELINQUISHED BY: C. Parker
DATE/TIME: 1-17-17 / 1712
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY/LAB:
DATE/TIME: 1/17/17 1712
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1.0 °C Min / °C Max
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAA0521
Entered into LIMS:
Tracking #:

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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: QNR 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: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
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. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			15. PH<2 Initial when completed QNR 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: QNR Date: 1-19-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	1/31/2017
Worklist:	33727
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1218053
MB concentration:	0.108
M/B 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	LCSD (Y or N)?	N
	LCS33727	LCSD33727
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30208384001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30208384001
Duplicate RPD:	132.51%	30208384001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

2/15/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	2/3/2017
Worklist:	33729
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS33729	LCSD33729
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30208384001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30208384001DUP	
Sample Result (pCi/L, g, F):	0.706	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.527	
Sample Duplicate Result (pCi/L, g, F):	0.035	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.414	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.962	30208384001
Duplicate RPD:	181.07%	30208384001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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: AAA0584
January 30, 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

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 30, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-32I	AAA0584-01	Ground Water	01/17/17 10:50	01/18/17 17:15
YGWC-32S	AAA0584-02	Ground Water	01/17/17 14:40	01/18/17 17:15
YGWC-24S	AAA0584-03	Ground Water	01/17/17 14:45	01/18/17 17:15
YGWC-33S	AAA0584-04	Ground Water	01/17/17 10:20	01/18/17 17:15
YGWC-34I	AAA0584-05	Ground Water	01/17/17 12:00	01/18/17 17:15
FB-3-1-17-17	AAA0584-06	Water	01/17/17 15:30	01/18/17 17:15
Dup-3	AAA0584-07	Ground Water	01/17/17 00:00	01/18/17 17:15

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 30, 2017

Report No.: AAA0584
Client ID: YGWC-32I
Date/Time Sampled: 1/17/2017 10:50:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0584-01
Date/Time Received: 1/18/2017 5:15:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	717	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	13	0.25	0.01	mg/L	EPA 300.0	B-01	1	01/18/17 18:04	01/19/17 07:59	7010464	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	01/18/17 18:04	01/19/17 07:59	7010464	RLC
Sulfate	490	10	0.92	mg/L	EPA 300.0	B-01	10	01/18/17 18:04	01/25/17 15:53	7010464	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Barium	0.0247	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Boron	4.06	2.00	0.321	mg/L	EPA 6020B		50	01/23/17 14:20	01/24/17 18:20	7010563	CSW
Cadmium	0.0008	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Calcium	97.9	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 18:20	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Cobalt	0.0015	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Selenium	0.0027	0.0100	0.0010	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Lithium	0.0032	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 18:14	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 15:38	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 30, 2017

Report No.: AAA0584
Client ID: YGWC-32S
Date/Time Sampled: 1/17/2017 2:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0584-02
Date/Time Received: 1/18/2017 5:15:00PM

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	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	15	0.25	0.01	mg/L	EPA 300.0	B-01	1	01/18/17 18:04	01/19/17 09:03	7010464	RLC
Fluoride	0.24	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 18:04	01/19/17 09:03	7010464	RLC
Sulfate	350	20	1.8	mg/L	EPA 300.0	B-01	20	01/18/17 18:04	01/25/17 16:14	7010464	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:37	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:37	7010563	CSW
Barium	0.0216	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 18:37	7010563	CSW
Beryllium	0.0026	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:18	7010563	CSW
Boron	4.58	2.00	0.321	mg/L	EPA 6020B		50	01/23/17 14:20	01/24/17 18:43	7010563	CSW
Cadmium	0.0007	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 18:37	7010563	CSW
Calcium	110	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 18:43	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:18	7010563	CSW
Cobalt	0.0038	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:18	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:37	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:37	7010563	CSW
Selenium	0.0635	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:37	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:37	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:18	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 15:40	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 30, 2017

Report No.: AAA0584
Client ID: YGWC-24S
Date/Time Sampled: 1/17/2017 2:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0584-03
Date/Time Received: 1/18/2017 5:15:00PM

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	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	5.5	0.25	0.01	mg/L	EPA 300.0	B-01	1	01/18/17 18:04	01/19/17 09:24	7010464	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	01/18/17 18:04	01/19/17 09:24	7010464	RLC
Sulfate	0.48	1.0	0.09	mg/L	EPA 300.0	B-01, J	1	01/18/17 18:04	01/19/17 09:24	7010464	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Barium	0.0192	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Beryllium	0.0001	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:24	7010563	CSW
Boron	0.0079	0.0400	0.0064	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Calcium	1.70	0.500	0.0311	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:24	7010563	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:24	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 18:48	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:24	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 15:43	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 30, 2017

Report No.: AAA0584
Client ID: YGWC-33S
Date/Time Sampled: 1/17/2017 10:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0584-04
Date/Time Received: 1/18/2017 5:15:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1150	25	10	mg/L	SM 2540 C		1	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	5.3	0.25	0.01	mg/L	EPA 300.0	B-01	1	01/18/17 18:04	01/19/17 09:45	7010464	RLC
Fluoride	0.22	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 18:04	01/19/17 09:45	7010464	RLC
Sulfate	790	20	1.8	mg/L	EPA 300.0	B-01	20	01/18/17 18:04	01/26/17 19:17	7010464	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:00	7010563	CSW
Arsenic	0.0027	0.0050	0.0016	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:00	7010563	CSW
Barium	0.0139	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 19:00	7010563	CSW
Beryllium	0.0142	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:29	7010563	CSW
Boron	11.8	2.00	0.321	mg/L	EPA 6020B		50	01/23/17 14:20	01/24/17 19:06	7010563	CSW
Cadmium	0.0033	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:00	7010563	CSW
Calcium	126	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 19:06	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 13:29	7010563	CSW
Cobalt	0.0095	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:29	7010563	CSW
Lead	0.0020	0.0050	0.0001	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:00	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:00	7010563	CSW
Selenium	0.0122	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:00	7010563	CSW
Thallium	0.0004	0.0010	0.0002	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:00	7010563	CSW
Lithium	0.0256	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 13:29	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 15:45	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 30, 2017

Report No.: AAA0584
Client ID: YGWC-34I
Date/Time Sampled: 1/17/2017 12:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0584-05
Date/Time Received: 1/18/2017 5:15:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	487	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	B-01	1	01/18/17 18:04	01/19/17 10:06	7010464	RLC
Fluoride	0.19	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 18:04	01/19/17 10:06	7010464	RLC
Sulfate	330	10	0.92	mg/L	EPA 300.0	B-01	10	01/18/17 18:04	01/19/17 22:53	7010464	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:11	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:34	7010563	CSW
Barium	0.0208	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 19:11	7010563	CSW
Beryllium	0.0006	0.0030	0.00008	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 15:34	7010563	CSW
Boron	4.79	2.00	0.321	mg/L	EPA 6020B		50	01/23/17 14:20	01/24/17 19:17	7010563	CSW
Cadmium	0.0001	0.0010	0.00007	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:11	7010563	CSW
Calcium	93.3	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 19:17	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:34	7010563	CSW
Cobalt	0.0049	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 15:34	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:11	7010563	CSW
Molybdenum	0.0279	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:11	7010563	CSW
Selenium	0.0758	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:34	7010563	CSW
Thallium	0.0002	0.0010	0.0002	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:11	7010563	CSW
Lithium	0.0027	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 15:34	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 15:47	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 30, 2017

Report No.: AAA0584
Client ID: FB-3-1-17-17
Date/Time Sampled: 1/17/2017 3:30:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAA0584-06
Date/Time Received: 1/18/2017 5:15:00PM

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	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	0.07	0.25	0.01	mg/L	EPA 300.0	B-01, J	1	01/18/17 18:04	01/19/17 10:27	7010464	RLC
Fluoride	0.006	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 18:04	01/19/17 10:27	7010464	RLC
Sulfate	0.24	1.0	0.09	mg/L	EPA 300.0	B-01, J	1	01/18/17 18:04	01/19/17 10:27	7010464	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:23	7010563	CSW
Arsenic	ND	0.0050	0.0016	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:40	7010563	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:23	7010563	CSW
Beryllium	ND	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:40	7010563	CSW
Boron	0.0072	0.0400	0.0064	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:23	7010563	CSW
Cadmium	ND	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:23	7010563	CSW
Calcium	0.0512	0.500	0.0311	mg/L	EPA 6020B	B-01, J	1	01/23/17 14:20	01/24/17 19:23	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:40	7010563	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:40	7010563	CSW
Lead	ND	0.0050	0.0001	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:23	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:23	7010563	CSW
Selenium	ND	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:40	7010563	CSW
Thallium	ND	0.0010	0.0002	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:23	7010563	CSW
Lithium	ND	0.0500	0.0021	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:40	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 15:55	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 30, 2017

Report No.: AAA0584
Client ID: Dup-3
Date/Time Sampled: 1/17/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAA0584-07
Date/Time Received: 1/18/2017 5:15:00PM

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	01/23/17 16:46	01/23/17 16:46	7010550	JPT
Inorganic Anions											
Chloride	5.3	0.25	0.01	mg/L	EPA 300.0	B-01	1	01/18/17 18:04	01/19/17 10:49	7010464	RLC
Fluoride	0.26	0.30	0.004	mg/L	EPA 300.0	J	1	01/18/17 18:04	01/19/17 10:49	7010464	RLC
Sulfate	770	20	1.8	mg/L	EPA 300.0	B-01	20	01/18/17 18:04	01/19/17 23:15	7010464	RLC
Metals, Total											
Antimony	ND	0.0030	0.0008	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:28	7010563	CSW
Arsenic	0.0030	0.0050	0.0016	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 15:45	7010563	CSW
Barium	0.0140	0.0100	0.0004	mg/L	EPA 6020B	B-01	1	01/23/17 14:20	01/24/17 19:28	7010563	CSW
Beryllium	0.0124	0.0030	0.00008	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:45	7010563	CSW
Boron	10.2	2.00	0.321	mg/L	EPA 6020B		50	01/23/17 14:20	01/24/17 19:46	7010563	CSW
Cadmium	0.0033	0.0010	0.00007	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:45	7010563	CSW
Calcium	125	25.0	1.55	mg/L	EPA 6020B	B-01	50	01/23/17 14:20	01/24/17 19:46	7010563	CSW
Chromium	ND	0.0100	0.0009	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:45	7010563	CSW
Cobalt	0.0092	0.0100	0.0005	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 15:45	7010563	CSW
Lead	0.0021	0.0050	0.0001	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:28	7010563	CSW
Molybdenum	ND	0.0100	0.0017	mg/L	EPA 6020B		1	01/23/17 14:20	01/24/17 19:28	7010563	CSW
Selenium	0.0104	0.0100	0.0010	mg/L	EPA 6020B		1	01/23/17 14:20	01/25/17 15:45	7010563	CSW
Thallium	0.0004	0.0010	0.0002	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/24/17 19:28	7010563	CSW
Lithium	0.0221	0.0500	0.0021	mg/L	EPA 6020B	J	1	01/23/17 14:20	01/25/17 15:45	7010563	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	01/23/17 10:50	01/23/17 15:57	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 30, 2017

Report No.: AAA0584

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 30, 2017

Report No.: AAA0584

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7010464 - EPA 300.0											
Blank (7010464-BLK1)						Prepared: 01/18/17 Analyzed: 01/19/17					
Chloride	0.02	0.25	0.01	mg/L							J
Fluoride	ND	0.30	0.004	mg/L							
Sulfate	0.79	1.0	0.09	mg/L							J
LCS (7010464-BS1)						Prepared: 01/18/17 Analyzed: 01/19/17					
Chloride	10.1	0.25	0.01	mg/L	10.010		101	90-110			
Fluoride	10.7	0.30	0.004	mg/L	10.020		107	90-110			
Sulfate	10.7	1.0	0.09	mg/L	10.020		107	90-110			
Matrix Spike (7010464-MS1)			**Source: AAA0584-01**			Prepared: 01/18/17 Analyzed: 01/19/17					
Chloride	22.8	0.25	0.01	mg/L	10.010	13.4	94	90-110			
Fluoride	10.8	0.30	0.004	mg/L	10.020	ND	107	90-110			
Sulfate	287	1.0	0.09	mg/L	10.020	303	NR	90-110			QM-02
Matrix Spike Dup (7010464-MSD1)			**Source: AAA0584-01**			Prepared: 01/18/17 Analyzed: 01/19/17					
Chloride	22.5	0.25	0.01	mg/L	10.010	13.4	92	90-110	1	15	
Fluoride	10.6	0.30	0.004	mg/L	10.020	ND	106	90-110	1	15	
Sulfate	286	1.0	0.09	mg/L	10.020	303	NR	90-110	0.08	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 30, 2017

Report No.: AAA0584

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 30, 2017

Report No.: AAA0584

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 30, 2017

Report No.: AAA0584

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 30, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
	CONTAINER TYPE:						P	P	P	
	PRESERVATION:						3	7	3	
1-17-17	1050	GW		✓	YGWC-32I	6	1	1	4	1
1-17-17	1440	GW		✓	YGWC-32S	4	1	1	2	2
1-17-17	1445	GW		✓	YGWC-24S	4	1	1	2	3
1-17-17	1020	GW		✓	YGWC-33S	4	1	1	2	4
1-17-17	1200	GW		✓	YGWC-34I	4	1	1	2	5
1-17-17	1530	W		✓	FB-3-1-17-17	4	1	1	2	6
1-17-17	—	GW		✓	DUP-3	4	1	1	2	7

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: C. Packer, R. Walker ALL
DATE/TIME: 1-18-17 0845
RELINQUISHED BY:
DATE/TIME: 1-18-17 1715

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: Rathman
DATE/TIME: 01/18/17 1715
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Packed: No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AAA0584
Entered Into LIMS: MR
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: 1/19/2017 9:58:25AM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 01/18/17 17:15

Work Order: AAA0584
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 7 **#Containers:** 30

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

February 20, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: Plant Yates
Pace Project No.: 30208508

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on January 20, 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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Plant Yates
Pace Project No.: 30208508

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Plant Yates
Pace Project No.: 30208508

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30208508001	**YGWC-32I**	Water	01/17/17 10:50	01/20/17 10:15
30208508002	**YGWC-32S**	Water	01/17/17 14:40	01/20/17 10:15
30208508003	**YGWC-24S**	Water	01/17/17 14:45	01/20/17 10:15
30208508004	**YGWC-33S**	Water	01/17/17 10:20	01/20/17 10:15
30208508005	**YGWC-34I**	Water	01/17/17 12:00	01/20/17 10:15
30208508006	**FB-3-1-17-17**	Water	01/17/17 15:30	01/20/17 10:15
30208508007	**Dup-3**	Water	01/17/17 00:00	01/20/17 10:15

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Plant Yates
Pace Project No.: 30208508

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30208508001	**YGWC-32I**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208508002	**YGWC-32S**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208508003	**YGWC-24S**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208508004	**YGWC-33S**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208508005	**YGWC-34I**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208508006	**FB-3-1-17-17**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1
30208508007	**Dup-3**	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	CMC	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208508

Sample: YGWC-32I **Lab ID: 30208508001** Collected: 01/17/17 10:50 Received: 01/20/17 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 ± 0.183 (0.330) C:93% T:NA**	pCi/L	02/01/17 09:25	13982-63-3	
Radium-228	EPA 9320	**0.648 ± 0.610 (1.25) C:53% T:73%**	pCi/L	02/12/17 14:04	15262-20-1	
Total Radium	Total Radium Calculation	**0.838 ± 0.793 (1.58)**	pCi/L	02/13/17 14:25	7440-14-4	

Sample: YGWC-32S **Lab ID: 30208508002** Collected: 01/17/17 14:40 Received: 01/20/17 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	**0.230 ± 0.228 (0.443) C:94% T:NA**	pCi/L	02/01/17 09:25	13982-63-3	
Radium-228	EPA 9320	**0.739 ± 0.423 (0.771) C:73% T:83%**	pCi/L	02/12/17 14:05	15262-20-1	
Total Radium	Total Radium Calculation	**0.969 ± 0.651 (1.21)**	pCi/L	02/13/17 14:25	7440-14-4	

Sample: YGWC-24S **Lab ID: 30208508003** Collected: 01/17/17 14:45 Received: 01/20/17 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	**0.0759 ± 0.203 (0.487) C:95% T:NA**	pCi/L	02/01/17 09:26	13982-63-3	
Radium-228	EPA 9320	**-0.208 ± 0.543 (1.31) C:53% T:76%**	pCi/L	02/16/17 11:59	15262-20-1	
Total Radium	Total Radium Calculation	**0.0759 ± 0.746 (1.80)**	pCi/L	02/17/17 15:08	7440-14-4	

Sample: YGWC-33S **Lab ID: 30208508004** Collected: 01/17/17 10:20 Received: 01/20/17 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	**0.604 ± 0.296 (0.388) C:96% T:NA**	pCi/L	02/01/17 09:26	13982-63-3	
Radium-228	EPA 9320	**0.806 ± 0.642 (1.27) C:48% T:83%**	pCi/L	02/16/17 11:59	15262-20-1	
Total Radium	Total Radium Calculation	**1.41 ± 0.938 (1.66)**	pCi/L	02/17/17 15:08	7440-14-4	

Sample: YGWC-34I **Lab ID: 30208508005** Collected: 01/17/17 12:00 Received: 01/20/17 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	**0.163 ± 0.182 (0.363) C:99% T:NA**	pCi/L	02/01/17 09:26	13982-63-3	
Radium-228	EPA 9320	**-0.282 ± 0.338 (0.862) C:68% T:80%**	pCi/L	02/16/17 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208508

Sample: YGWC-34I **Lab ID: 30208508005** Collected: 01/17/17 12:00 Received: 01/20/17 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	**0.163 ± 0.520 (1.23)**	pCi/L	02/17/17 15:08	7440-14-4	

Sample: FB-3-1-17-17 **Lab ID: 30208508006** Collected: 01/17/17 15:30 Received: 01/20/17 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	**0.196 ± 0.200 (0.386) C:98% T:NA**	pCi/L	02/01/17 09:26	13982-63-3	
Radium-228	EPA 9320	**0.824 ± 0.630 (1.25) C:62% T:74%**	pCi/L	02/16/17 11:59	15262-20-1	
Total Radium	Total Radium Calculation	**1.02 ± 0.830 (1.64)**	pCi/L	02/17/17 15:08	7440-14-4	

Sample: Dup-3 **Lab ID: 30208508007** Collected: 01/17/17 00:00 Received: 01/20/17 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	**0.332 ± 0.204 (0.264) C:98% T:NA**	pCi/L	02/01/17 11:41	13982-63-3	
Radium-228	EPA 9320	**0.352 ± 0.507 (1.09) C:61% T:70%**	pCi/L	02/16/17 11:59	15262-20-1	
Total Radium	Total Radium Calculation	**0.684 ± 0.711 (1.35)**	pCi/L	02/17/17 15:08	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208508

QC Batch: 247684 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30208508001, 30208508002

METHOD BLANK: 1218073 Matrix: Water
Associated Lab Samples: 30208508001, 30208508002

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208508

QC Batch: 247678 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30208508001, 30208508002

METHOD BLANK: 1218053 Matrix: Water
Associated Lab Samples: 30208508001, 30208508002

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208508

QC Batch: 247685 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30208508003, 30208508004, 30208508005, 30208508006, 30208508007

METHOD BLANK: 1218074 Matrix: Water
Associated Lab Samples: 30208508003, 30208508004, 30208508005, 30208508006, 30208508007

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates
Pace Project No.: 30208508

QC Batch: 247679 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30208508003, 30208508004, 30208508005, 30208508006, 30208508007

METHOD BLANK: 1218054 Matrix: Water
Associated Lab Samples: 30208508003, 30208508004, 30208508005, 30208508006, 30208508007

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Plant Yates
Pace Project No.: 30208508

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.

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

WO# : 30208508

30208508

Chain of Custody

Workorder: AAA0584 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 2/9/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	YGWC-32I	G	1/17/2017 10:50	AAA0584-01	GW	4	X	001
2	YGWC-32S	G	1/17/2017 14:40	AAA0584-02	GW	2	X	002
3	YGWC-24S	G	1/17/2017 14:45	AAA0584-03	GW	2	X	003
4	YGWC-33S	G	1/17/2017 10:20	AAA0584-04	GW	2	X	004
5	YGWC-34I	G	1/17/2017 12:00	AAA0584-05	GW	2	X	005
6	FB-3-1-17-17	G	1/17/2017 15:30	AAA0584-06	W	2	X	006
7	Dup-3	G	1/17/2017 0:00	AAA0584-07	GW	2	X	007
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			[signature]	1-20-17 1015	
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.

30208508

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	CONTAINER TYPE:	PRESERVATION:	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
						P	3		7	3	P						
1-17-17	1050	GW		✓	YGWC-32I		6	1	1	4							1
1-17-17	1440	GW		✓	YGWC-32S		4	1	1	2							2
1-17-17	1445	GW		✓	YGWC-24S		4	1	1	2							3
1-17-17	1020	GW		✓	YGWC-33S		4	1	1	2							4
1-17-17	1200	GW		✓	YGWC-34I		4	1	1	2							5
1-17-17	1530	W		✓	FB-3-1-17-17		4	1	1	2							6
1-17-17	—	GW		✓	DUP-3		4	1	1	2							7

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C.Parker, R.Walker All
DATE/TIME: 1-18-17 0845
RELINQUISHED BY:
DATE/TIME: 1-18-17 1715

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: M Laburan
DATE/TIME: 01/18/17 1715
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
pH Checked: Yes No NA
Ice: Yes No NA
Temperature: 1° Min: 1°C Max
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: PAA0584
Entered Into LIMS: MR
Tracking #:

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace GA Project # 30208508

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

Tracking #: 6812 5101 8086

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

Thermometer Used _____ 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 1-20-17

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. JAW 1/20/17
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
Containers Intact:	X			11.
Orthophosphate field filtered		X		12.
Organic Samples checked for dechlorination:		X	X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			15. PHC2
				Initial when completed: ML 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: ML Date: 1-20-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	2/3/2017
Worklist:	33729
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS33729	LCSD33729
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30208384001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30208384001DUP	
Sample Result (pCi/L, g, F):	0.706	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.527	
Sample Duplicate Result (pCi/L, g, F):	0.035	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.414	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.962	30208384001
Duplicate RPD:	181.07%	30208384001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

2/21/17

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	2/2/2017
Worklist:	33730
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1218074
MB concentration:	0.468
M/B 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
	LCS33730	LCSD33730
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30208662001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30208662001
Duplicate RPD:	29.90%	30208662001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

2/20/17

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	1/31/2017
Worklist:	33728
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1218054
MB concentration:	0.102
M/B 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

	LCSD (Y or N)?	N
	LCS33728	LCSD33728
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):	0.500	
Target Conc. (pCi/L, g, F):	8.934	
Uncertainty (Calculated):	0.420	
Result (pCi/L, g, F):	7.689	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.871	
Numerical Performance Indicator:	-2.52	
Percent Recovery:	86.07%	
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):	
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:	

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 Result 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

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:

2/2/2017

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	1/31/2017
Worklist:	33727
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1218053
MB concentration:	0.108
M/B 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

	LCSD (Y or N)?	N
	LCS33727	LCSD33727
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	

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:	

Duplicate Sample Assessment

Sample I.D.:	30208384001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30208384001
Duplicate RPD:	132.51%	30208384001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

2/10/17

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: AAG0387
July 25, 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

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 25, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-47	AAG0387-01	Ground Water	07/11/17 10:40	07/14/17 09:20
YGWC-42	AAG0387-02	Ground Water	07/11/17 13:10	07/14/17 09:20
YGWC-43	AAG0387-03	Ground Water	07/11/17 14:50	07/14/17 09:20
Dup-1	AAG0387-04	Ground Water	07/11/17 00:00	07/14/17 09:20
YGWC-36	AAG0387-05	Ground Water	07/13/17 10:40	07/14/17 09:20
YGWC-49	AAG0387-06	Ground Water	07/13/17 12:55	07/14/17 09:20
EB-1-7-13-17	AAG0387-07	Water	07/13/17 13:30	07/14/17 09:20
YGWC-44	AAG0387-08	Ground Water	07/13/17 12:25	07/14/17 09:20
YGWC-45	AAG0387-09	Ground Water	07/13/17 10:35	07/14/17 09:20
YGWC-46	AAG0387-10	Ground Water	07/13/17 14:20	07/14/17 09:20
FB-1-7-13-17	AAG0387-11	Water	07/13/17 14:35	07/14/17 09:20

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 25, 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 25, 2017

Report No.: AAG0387
Client ID: YGWA-47
Date/Time Sampled: 7/11/2017 10:40:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-01
Date/Time Received: 7/14/2017 9:20:00AM

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	07/17/17 19:50	07/17/17 19:50	7070376	JPT
Inorganic Anions											
Chloride	5.8	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 02:06	7070516	RLC
Fluoride	0.07	0.30	0.03	mg/L	EPA 300.0	J	1	07/20/17 16:43	07/21/17 02:06	7070516	RLC
Sulfate	110	10	0.17	mg/L	EPA 300.0		10	07/20/17 16:43	07/23/17 00:01	7070516	RLC
Metals, Total											
Antimony	0.0006	0.0030	0.0006	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Barium	0.0233	0.0100	0.0004	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Boron	0.0131	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Calcium	14.3	5.00	2.02	mg/L	EPA 6020B		50	07/20/17 15:35	07/21/17 22:46	7070491	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Cobalt	0.0096	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/24/17 14:21	7070491	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Lithium	0.0051	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 22:40	7070491	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:13	7070380	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 25, 2017

Report No.: AAG0387
Client ID: YGWC-42
Date/Time Sampled: 7/11/2017 1:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-02
Date/Time Received: 7/14/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1800	25	10	mg/L	SM 2540 C		1	07/17/17 19:50	07/17/17 19:50	7070376	JPT
Inorganic Anions											
Chloride	4.7	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 02:27	7070516	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 02:27	7070516	RLC
Sulfate	1300	50	0.85	mg/L	EPA 300.0		50	07/20/17 16:43	07/23/17 00:22	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Arsenic	0.0030	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Barium	0.0451	0.0100	0.0004	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Beryllium	0.0001	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Boron	25.2	2.00	0.298	mg/L	EPA 6020B		50	07/20/17 15:35	07/21/17 23:09	7070491	CSW
Cadmium	0.0005	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Calcium	172	25.0	2.02	mg/L	EPA 6020B		50	07/20/17 15:35	07/21/17 23:09	7070491	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Cobalt	0.0014	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Molybdenum	0.0014	0.0100	0.0010	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Selenium	0.0697	0.0100	0.0018	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Lithium	0.0281	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:03	7070491	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:15	7070380	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 25, 2017

Report No.: AAG0387
Client ID: YGWC-43
Date/Time Sampled: 7/11/2017 2:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-03
Date/Time Received: 7/14/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	238	25	10	mg/L	SM 2540 C		1	07/17/17 19:50	07/17/17 19:50	7070376	JPT
Inorganic Anions											
Chloride	1.5	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 02:48	7070516	RLC
Fluoride	0.20	0.30	0.03	mg/L	EPA 300.0	J	1	07/20/17 16:43	07/21/17 02:48	7070516	RLC
Sulfate	110	10	0.17	mg/L	EPA 300.0		10	07/20/17 16:43	07/23/17 00:43	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Barium	0.0183	0.0100	0.0004	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Boron	0.994	0.0400	0.0060	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Calcium	6.71	0.500	0.0404	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Lithium	0.0131	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:14	7070491	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:18	7070380	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 25, 2017

Report No.: AAG0387
Client ID: Dup-1
Date/Time Sampled: 7/11/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-04
Date/Time Received: 7/14/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	1810	25	10	mg/L	SM 2540 C		1	07/17/17 19:50	07/17/17 19:50	7070376	JPT
Inorganic Anions											
Chloride	4.8	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 03:09	7070516	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 03:09	7070516	RLC
Sulfate	1200	50	0.85	mg/L	EPA 300.0		50	07/20/17 16:43	07/23/17 14:42	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Arsenic	0.0031	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Barium	0.0454	0.0100	0.0004	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Beryllium	0.0001	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Boron	24.6	2.00	0.298	mg/L	EPA 6020B		50	07/20/17 15:35	07/21/17 23:31	7070491	CSW
Cadmium	0.0005	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Calcium	167	25.0	2.02	mg/L	EPA 6020B		50	07/20/17 15:35	07/21/17 23:31	7070491	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Cobalt	0.0014	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Molybdenum	0.0014	0.0100	0.0010	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Selenium	0.0700	0.0100	0.0018	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Lithium	0.0287	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:26	7070491	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:20	7070380	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 25, 2017

Report No.: AAG0387
Client ID: YGWC-36
Date/Time Sampled: 7/13/2017 10:40:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-05
Date/Time Received: 7/14/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	282	25	10	mg/L	SM 2540 C		1	07/20/17 18:53	07/20/17 18:53	7070489	JPT
Inorganic Anions											
Chloride	5.4	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 03:29	7070516	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 03:29	7070516	RLC
Sulfate	140	10	0.17	mg/L	EPA 300.0		10	07/20/17 16:43	07/23/17 01:24	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Barium	0.0484	0.0100	0.0004	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Beryllium	0.0003	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Boron	0.262	0.0400	0.0060	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Cadmium	0.0002	0.0010	0.0001	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Calcium	16.6	5.00	2.02	mg/L	EPA 6020B		50	07/20/17 15:35	07/21/17 23:43	7070491	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Lead	0.0004	0.0050	0.00007	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Molybdenum	0.0014	0.0100	0.0010	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Selenium	0.0031	0.0100	0.0018	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Lithium	0.0070	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:37	7070491	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:22	7070380	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 25, 2017

Report No.: AAG0387
Client ID: YGWC-49
Date/Time Sampled: 7/13/2017 12:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-06
Date/Time Received: 7/14/2017 9:20:00AM

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	07/20/17 18:53	07/20/17 18:53	7070489	JPT
Inorganic Anions											
Chloride	4.7	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 04:33	7070516	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 04:33	7070516	RLC
Sulfate	88	5.0	0.08	mg/L	EPA 300.0		5	07/20/17 16:43	07/23/17 01:45	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Barium	0.0839	0.0100	0.0004	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Beryllium	0.0001	0.0030	0.00009	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Boron	0.0093	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Calcium	14.1	5.00	2.02	mg/L	EPA 6020B		50	07/20/17 15:35	07/21/17 23:54	7070491	CSW
Chromium	0.0019	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Cobalt	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Selenium	0.0093	0.0100	0.0018	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Lithium	0.0036	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/20/17 15:35	07/21/17 23:49	7070491	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:30	7070380	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 25, 2017

Report No.: AAG0387
Client ID: EB-1-7-13-17
Date/Time Sampled: 7/13/2017 1:30:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAG0387-07
Date/Time Received: 7/14/2017 9:20:00AM

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	07/20/17 18:53	07/20/17 18:53	7070489	JPT
Inorganic Anions											
Chloride	0.08	0.25	0.02	mg/L	EPA 300.0	J	1	07/20/17 16:43	07/21/17 04:54	7070516	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 04:54	7070516	RLC
Sulfate	0.09	1.0	0.02	mg/L	EPA 300.0	J	1	07/20/17 16:43	07/21/17 04:54	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Boron	0.0101	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 18:38	7070414	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:32	7070380	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 25, 2017

Report No.: AAG0387
Client ID: YGWC-44
Date/Time Sampled: 7/13/2017 12:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-08
Date/Time Received: 7/14/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	345	25	10	mg/L	SM 2540 C		1	07/20/17 18:53	07/20/17 18:53	7070489	JPT
Inorganic Anions											
Chloride	13	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 05:15	7070516	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 05:15	7070516	RLC
Sulfate	150	5.0	0.08	mg/L	EPA 300.0		5	07/20/17 16:43	07/23/17 02:05	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Barium	0.106	0.0100	0.0004	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Boron	0.649	0.0400	0.0060	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Calcium	30.2	25.0	2.02	mg/L	EPA 6020B		50	07/18/17 10:03	07/20/17 19:16	7070414	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Cobalt	0.0022	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Lithium	0.0124	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:11	7070414	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:34	7070380	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 25, 2017

Report No.: AAG0387
Client ID: YGWC-45
Date/Time Sampled: 7/13/2017 10:35:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-09
Date/Time Received: 7/14/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	433	25	10	mg/L	SM 2540 C		1	07/20/17 18:53	07/20/17 18:53	7070489	JPT
Inorganic Anions											
Chloride	4.7	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 06:40	7070516	RLC
Fluoride	0.11	0.30	0.03	mg/L	EPA 300.0	J	1	07/20/17 16:43	07/21/17 06:40	7070516	RLC
Sulfate	180	5.0	0.08	mg/L	EPA 300.0		5	07/20/17 16:43	07/23/17 02:26	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Barium	0.0719	0.0100	0.0004	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Boron	0.340	0.0400	0.0060	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Calcium	54.8	25.0	2.02	mg/L	EPA 6020B		50	07/18/17 10:03	07/20/17 19:28	7070414	CSW
Chromium	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Cobalt	0.0009	0.0100	0.0003	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Molybdenum	0.0015	0.0100	0.0010	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Lithium	0.0129	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:22	7070414	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:37	7070380	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 25, 2017

Report No.: AAG0387
Client ID: YGWC-46
Date/Time Sampled: 7/13/2017 2:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0387-10
Date/Time Received: 7/14/2017 9:20:00AM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	996	25	10	mg/L	SM 2540 C		1	07/20/17 18:53	07/20/17 18:53	7070489	JPT
Inorganic Anions											
Chloride	32	0.25	0.02	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 07:02	7070516	RLC
Fluoride	0.35	0.30	0.03	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 07:02	7070516	RLC
Sulfate	630	20	0.34	mg/L	EPA 300.0		20	07/20/17 16:43	07/23/17 14:22	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Arsenic	0.0011	0.0050	0.0005	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Barium	0.0365	0.0100	0.0004	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Boron	1.62	0.0400	0.0060	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Calcium	83.7	25.0	2.02	mg/L	EPA 6020B		50	07/18/17 10:03	07/20/17 19:39	7070414	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Cobalt	0.0265	0.0100	0.0003	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Molybdenum	0.0015	0.0100	0.0010	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Lithium	0.0104	0.0500	0.0015	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:33	7070414	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:39	7070380	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 25, 2017

Report No.: AAG0387
Client ID: FB-1-7-13-17
Date/Time Sampled: 7/13/2017 2:35:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAG0387-11
Date/Time Received: 7/14/2017 9:20:00AM

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	07/20/17 18:53	07/20/17 18:53	7070489	JPT
Inorganic Anions											
Chloride	0.08	0.25	0.02	mg/L	EPA 300.0	J	1	07/20/17 16:43	07/21/17 07:23	7070516	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	07/20/17 16:43	07/21/17 07:23	7070516	RLC
Sulfate	0.28	1.0	0.02	mg/L	EPA 300.0	J	1	07/20/17 16:43	07/21/17 07:23	7070516	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Barium	ND	0.0100	0.0004	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Beryllium	ND	0.0030	0.00009	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Boron	0.0061	0.0400	0.0060	mg/L	EPA 6020B	J	1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Cadmium	ND	0.0010	0.0001	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Calcium	ND	0.500	0.0404	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Lithium	ND	0.0500	0.0015	mg/L	EPA 6020B		1	07/18/17 10:03	07/20/17 19:45	7070414	CSW
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	07/20/17 10:30	07/20/17 16:41	7070380	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 25, 2017

Report No.: AAG0387

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070376 - SM 2540 C											
Blank (7070376-BLK1)						Prepared & Analyzed: 07/17/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7070376-BS1)						Prepared & Analyzed: 07/17/17					
Total Dissolved Solids	340	25	10	mg/L	400.00		85	84-108			
Duplicate (7070376-DUP1)		**Source: AAG0277-09**				Prepared & Analyzed: 07/17/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7070376-DUP2)		**Source: AAG0387-03**				Prepared & Analyzed: 07/17/17					
Total Dissolved Solids	236	25	10	mg/L		238			0.8	10	
Batch 7070489 - SM 2540 C											
Blank (7070489-BLK1)						Prepared & Analyzed: 07/20/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7070489-BS1)						Prepared & Analyzed: 07/20/17					
Total Dissolved Solids	406	25	10	mg/L	400.00		102	84-108			
Duplicate (7070489-DUP1)		**Source: AAG0383-14**				Prepared & Analyzed: 07/20/17					
Total Dissolved Solids	2280	25	10	mg/L		2280			0.2	10	
Duplicate (7070489-DUP2)		**Source: AAG0387-07**				Prepared & Analyzed: 07/20/17					
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 25, 2017

Report No.: AAG0387

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070516 - EPA 300.0											
Blank (7070516-BLK1)						Prepared: 07/20/17 Analyzed: 07/21/17					
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 (7070516-BS1)						Prepared: 07/20/17 Analyzed: 07/21/17					
Chloride	10.4	0.25	0.02	mg/L	10.020		103	90-110			
Fluoride	10.3	0.30	0.03	mg/L	10.020		103	90-110			
Sulfate	10.5	1.0	0.02	mg/L	10.050		104	90-110			
Matrix Spike (7070516-MS1)		**Source: AAG0387-05**				Prepared: 07/20/17 Analyzed: 07/21/17					
Chloride	15.4	0.25	0.02	mg/L	10.020	5.39	100	90-110			
Fluoride	10.3	0.30	0.03	mg/L	10.020	ND	102	90-110			
Sulfate	125	1.0	0.02	mg/L	10.050	129	NR	90-110			QM-02
Matrix Spike (7070516-MS2)		**Source: AAG0388-05**				Prepared: 07/20/17 Analyzed: 07/21/17					
Chloride	30.0	0.25	0.02	mg/L	10.020	21.2	87	90-110			QM-02
Fluoride	12.0	0.30	0.03	mg/L	10.020	0.20	117	90-110			QM-05
Sulfate	170	1.0	0.02	mg/L	10.050	178	NR	90-110			QM-02
Matrix Spike Dup (7070516-MSD1)		**Source: AAG0387-05**				Prepared: 07/20/17 Analyzed: 07/21/17					
Chloride	15.4	0.25	0.02	mg/L	10.020	5.39	100	90-110	0.2	15	
Fluoride	10.1	0.30	0.03	mg/L	10.020	ND	101	90-110	1	15	
Sulfate	125	1.0	0.02	mg/L	10.050	129	NR	90-110	0.3	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

July 25, 2017

Report No.: AAG0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070380 - EPA 7470A											
Blank (7070380-BLK1)						Prepared & Analyzed: 07/20/17					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7070380-BS1)						Prepared & Analyzed: 07/20/17					
Mercury	0.00239	0.00050	0.000041	mg/L	2.5000E-3		95	80-120			
Matrix Spike (7070380-MS1)		**Source: AAG0387-08**				Prepared & Analyzed: 07/20/17					
Mercury	0.00234	0.00050	0.000041	mg/L	2.5000E-3	ND	94	75-125			
Matrix Spike Dup (7070380-MSD1)		**Source: AAG0387-08**				Prepared & Analyzed: 07/20/17					
Mercury	0.00228	0.00050	0.000041	mg/L	2.5000E-3	ND	91	75-125	3	20	
Post Spike (7070380-PS1)		**Source: AAG0387-08**				Prepared & Analyzed: 07/20/17					
Mercury	1.67			ug/L	1.6667	0.00549	100	80-120			
Batch 7070414 - EPA 3005A											
Blank (7070414-BLK1)						Prepared: 07/18/17 Analyzed: 07/20/17					
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	0.0004	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							

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology 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 25, 2017

Report No.: AAG0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070414 - EPA 3005A											
LCS (7070414-BS1)						Prepared: 07/18/17 Analyzed: 07/20/17					
Antimony	0.102	0.0030	0.0006	mg/L	0.10000		102	80-120			
Arsenic	0.101	0.0050	0.0005	mg/L	0.10000		101	80-120			
Barium	0.102	0.0100	0.0004	mg/L	0.10000		102	80-120			
Beryllium	0.105	0.0030	0.00009	mg/L	0.10000		105	80-120			
Boron	1.11	0.0400	0.0060	mg/L	1.0000		111	80-120			
Cadmium	0.101	0.0010	0.0001	mg/L	0.10000		101	80-120			
Calcium	1.05	0.500	0.0404	mg/L	1.0000		105	80-120			
Chromium	0.108	0.0100	0.0005	mg/L	0.10000		108	80-120			
Cobalt	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Copper	0.100	0.0250	0.0003	mg/L	0.10000		100	80-120			
Lead	0.103	0.0050	0.00007	mg/L	0.10000		103	80-120			
Molybdenum	0.104	0.0100	0.0010	mg/L	0.10000		104	80-120			
Nickel	0.104	0.0100	0.0005	mg/L	0.10000		104	80-120			
Selenium	0.102	0.0100	0.0018	mg/L	0.10000		102	80-120			
Silver	0.104	0.0100	0.0002	mg/L	0.10000		104	80-120			
Thallium	0.102	0.0010	0.00005	mg/L	0.10000		102	80-120			
Vanadium	0.107	0.0100	0.0012	mg/L	0.10000		107	80-120			
Zinc	0.103	0.0100	0.0012	mg/L	0.10000		103	80-120			
Lithium	0.107	0.0500	0.0015	mg/L	0.10000		107	80-120			
Matrix Spike (7070414-MS1)			**Source: AAG0387-10**			Prepared: 07/18/17 Analyzed: 07/20/17					
Antimony	0.101	0.0030	0.0006	mg/L	0.10000	ND	101	75-125			
Arsenic	0.106	0.0050	0.0005	mg/L	0.10000	0.0011	105	75-125			
Barium	0.119	0.0100	0.0004	mg/L	0.10000	0.0365	83	75-125			
Beryllium	0.0931	0.0030	0.00009	mg/L	0.10000	ND	93	75-125			
Boron	2.53	0.0400	0.0060	mg/L	1.0000	1.62	91	75-125			
Cadmium	0.103	0.0010	0.0001	mg/L	0.10000	ND	103	75-125			
Calcium	84.8	25.0	2.02	mg/L	1.0000	83.7	108	75-125			
Chromium	0.104	0.0100	0.0005	mg/L	0.10000	ND	104	75-125			
Cobalt	0.130	0.0100	0.0003	mg/L	0.10000	0.0265	104	75-125			
Copper	0.0959	0.0250	0.0003	mg/L	0.10000	ND	96	75-125			
Lead	0.0983	0.0050	0.00007	mg/L	0.10000	ND	98	75-125			
Molybdenum	0.107	0.0100	0.0010	mg/L	0.10000	0.0015	105	75-125			
Nickel	0.107	0.0100	0.0005	mg/L	0.10000	0.0054	101	75-125			
Selenium	0.108	0.0100	0.0018	mg/L	0.10000	ND	108	75-125			
Silver	0.0956	0.0100	0.0002	mg/L	0.10000	ND	96	75-125			
Thallium	0.101	0.0010	0.00005	mg/L	0.10000	ND	101	75-125			
Vanadium	0.110	0.0100	0.0012	mg/L	0.10000	ND	110	75-125			
Zinc	0.106	0.0100	0.0012	mg/L	0.10000	0.0040	102	75-125			
Lithium	0.107	0.0500	0.0015	mg/L	0.10000	0.0104	96	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

July 25, 2017

Report No.: AAG0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070414 - EPA 3005A											
Matrix Spike Dup (7070414-MSD1)		**Source: AAG0387-10**			Prepared: 07/18/17 Analyzed: 07/20/17						
Antimony	0.104	0.0030	0.0006	mg/L	0.10000	ND	104	75-125	3	20	
Arsenic	0.104	0.0050	0.0005	mg/L	0.10000	0.0011	103	75-125	2	20	
Barium	0.122	0.0100	0.0004	mg/L	0.10000	0.0365	86	75-125	2	20	
Beryllium	0.0866	0.0030	0.00009	mg/L	0.10000	ND	87	75-125	7	20	
Boron	2.45	0.0400	0.0060	mg/L	1.0000	1.62	83	75-125	3	20	
Cadmium	0.0971	0.0010	0.0001	mg/L	0.10000	ND	97	75-125	6	20	
Calcium	89.3	25.0	2.02	mg/L	1.0000	83.7	557	75-125	5	20	QM-02
Chromium	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125	0.9	20	
Cobalt	0.127	0.0100	0.0003	mg/L	0.10000	0.0265	100	75-125	3	20	
Copper	0.0921	0.0250	0.0003	mg/L	0.10000	ND	92	75-125	4	20	
Lead	0.0944	0.0050	0.00007	mg/L	0.10000	ND	94	75-125	4	20	
Molybdenum	0.107	0.0100	0.0010	mg/L	0.10000	0.0015	106	75-125	0.8	20	
Nickel	0.103	0.0100	0.0005	mg/L	0.10000	0.0054	98	75-125	3	20	
Selenium	0.107	0.0100	0.0018	mg/L	0.10000	ND	107	75-125	0.3	20	
Silver	0.0963	0.0100	0.0002	mg/L	0.10000	ND	96	75-125	0.7	20	
Thallium	0.0964	0.0010	0.00005	mg/L	0.10000	ND	96	75-125	5	20	
Vanadium	0.107	0.0100	0.0012	mg/L	0.10000	ND	107	75-125	3	20	
Zinc	0.101	0.0100	0.0012	mg/L	0.10000	0.0040	97	75-125	5	20	
Lithium	0.101	0.0500	0.0015	mg/L	0.10000	0.0104	90	75-125	6	20	
Post Spike (7070414-PS1)		**Source: AAG0387-10**			Prepared: 07/18/17 Analyzed: 07/20/17						
Antimony	102			ug/L	100.00	0.433	101	80-120			
Arsenic	104			ug/L	100.00	1.05	102	80-120			
Barium	122			ug/L	100.00	36.5	86	80-120			
Beryllium	88.6			ug/L	100.00	0.0154	89	80-120			
Boron	2520			ug/L	1000.0	1620	90	80-120			
Cadmium	99.5			ug/L	100.00	0.0284	99	80-120			
Calcium	83200			ug/L	1000.0	83700	NR	80-120			QM-02
Chromium	101			ug/L	100.00	0.357	101	80-120			
Cobalt	123			ug/L	100.00	26.5	97	80-120			
Copper	92.0			ug/L	100.00	0.184	92	80-120			
Lead	94.2			ug/L	100.00	0.0118	94	80-120			
Molybdenum	109			ug/L	100.00	1.54	107	80-120			
Nickel	102			ug/L	100.00	5.37	96	80-120			
Selenium	105			ug/L	100.00	0.612	104	80-120			
Silver	95.9			ug/L	100.00	0.0028	96	80-120			
Thallium	95.6			ug/L	100.00	0.0057	96	80-120			
Vanadium	107			ug/L	100.00	0.726	107	80-120			
Zinc	103			ug/L	100.00	3.98	99	80-120			
Lithium	104			ug/L	100.00	10.4	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

July 25, 2017

Report No.: AAG0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070491 - EPA 3005A											
Blank (7070491-BLK1)						Prepared: 07/20/17 Analyzed: 07/21/17					
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 (7070491-BS1)						Prepared: 07/20/17 Analyzed: 07/24/17					
Antimony	0.120	0.0030	0.0006	mg/L	0.10000		120	80-120			
Arsenic	0.114	0.0050	0.0005	mg/L	0.10000		114	80-120			
Barium	0.106	0.0100	0.0004	mg/L	0.10000		106	80-120			
Beryllium	0.111	0.0030	0.00009	mg/L	0.10000		111	80-120			
Boron	1.13	0.0400	0.0060	mg/L	1.0000		113	80-120			
Cadmium	0.120	0.0010	0.0001	mg/L	0.10000		120	80-120			
Calcium	1.18	0.500	0.0404	mg/L	1.0000		118	80-120			
Chromium	0.114	0.0100	0.0005	mg/L	0.10000		114	80-120			
Cobalt	0.115	0.0100	0.0003	mg/L	0.10000		115	80-120			
Copper	0.114	0.0250	0.0003	mg/L	0.10000		114	80-120			
Lead	0.113	0.0050	0.00007	mg/L	0.10000		113	80-120			
Molybdenum	0.119	0.0100	0.0010	mg/L	0.10000		119	80-120			
Nickel	0.116	0.0100	0.0005	mg/L	0.10000		116	80-120			
Selenium	0.111	0.0100	0.0018	mg/L	0.10000		111	80-120			
Silver	0.117	0.0100	0.0002	mg/L	0.10000		117	80-120			
Thallium	0.116	0.0010	0.00005	mg/L	0.10000		116	80-120			
Vanadium	0.115	0.0100	0.0012	mg/L	0.10000		115	80-120			
Zinc	0.116	0.0100	0.0012	mg/L	0.10000		116	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 25, 2017

Report No.: AAG0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070491 - EPA 3005A											
Matrix Spike (7070491-MS1)		**Source: AAG0387-01**				Prepared: 07/20/17 Analyzed: 07/21/17					
Antimony	0.115	0.0030	0.0006	mg/L	0.10000	0.0006	114	75-125			
Arsenic	0.0995	0.0050	0.0005	mg/L	0.10000	ND	99	75-125			
Barium	0.117	0.0100	0.0004	mg/L	0.10000	0.0233	94	75-125			
Beryllium	0.0981	0.0030	0.00009	mg/L	0.10000	ND	98	75-125			
Boron	1.02	0.0400	0.0060	mg/L	1.0000	0.0131	101	75-125			
Cadmium	0.106	0.0010	0.0001	mg/L	0.10000	ND	106	75-125			
Calcium	15.3	25.0	2.02	mg/L	1.0000	14.3	101	75-125			J
Chromium	0.103	0.0100	0.0005	mg/L	0.10000	ND	103	75-125			
Cobalt	0.118	0.0100	0.0003	mg/L	0.10000	0.0096	109	75-125			
Copper	0.0984	0.0250	0.0003	mg/L	0.10000	0.0004	98	75-125			
Lead	0.0978	0.0050	0.00007	mg/L	0.10000	ND	98	75-125			
Molybdenum	0.106	0.0100	0.0010	mg/L	0.10000	ND	106	75-125			
Nickel	0.104	0.0100	0.0005	mg/L	0.10000	0.0025	102	75-125			
Selenium	0.100	0.0100	0.0018	mg/L	0.10000	ND	100	75-125			
Silver	0.0994	0.0100	0.0002	mg/L	0.10000	ND	99	75-125			
Thallium	0.100	0.0010	0.00005	mg/L	0.10000	ND	100	75-125			
Vanadium	0.104	0.0100	0.0012	mg/L	0.10000	ND	104	75-125			
Zinc	0.108	0.0100	0.0012	mg/L	0.10000	0.0043	104	75-125			
Lithium	0.103	0.0500	0.0015	mg/L	0.10000	0.0051	98	75-125			
Matrix Spike Dup (7070491-MSD1)		**Source: AAG0387-01**				Prepared: 07/20/17 Analyzed: 07/21/17					
Antimony	0.117	0.0030	0.0006	mg/L	0.10000	0.0006	117	75-125	2	20	
Arsenic	0.103	0.0050	0.0005	mg/L	0.10000	ND	103	75-125	3	20	
Barium	0.120	0.0100	0.0004	mg/L	0.10000	0.0233	97	75-125	3	20	
Beryllium	0.104	0.0030	0.00009	mg/L	0.10000	ND	104	75-125	6	20	
Boron	1.06	0.0400	0.0060	mg/L	1.0000	0.0131	105	75-125	4	20	
Cadmium	0.101	0.0010	0.0001	mg/L	0.10000	ND	101	75-125	5	20	
Calcium	15.5	25.0	2.02	mg/L	1.0000	14.3	123	75-125	1	20	J
Chromium	0.106	0.0100	0.0005	mg/L	0.10000	ND	106	75-125	3	20	
Cobalt	0.117	0.0100	0.0003	mg/L	0.10000	0.0096	108	75-125	1	20	
Copper	0.0987	0.0250	0.0003	mg/L	0.10000	0.0004	98	75-125	0.3	20	
Lead	0.0981	0.0050	0.00007	mg/L	0.10000	ND	98	75-125	0.3	20	
Molybdenum	0.106	0.0100	0.0010	mg/L	0.10000	ND	106	75-125	0.05	20	
Nickel	0.107	0.0100	0.0005	mg/L	0.10000	0.0025	104	75-125	3	20	
Selenium	0.102	0.0100	0.0018	mg/L	0.10000	ND	102	75-125	2	20	
Silver	0.101	0.0100	0.0002	mg/L	0.10000	ND	101	75-125	2	20	
Thallium	0.101	0.0010	0.00005	mg/L	0.10000	ND	101	75-125	0.6	20	
Vanadium	0.107	0.0100	0.0012	mg/L	0.10000	ND	107	75-125	3	20	
Zinc	0.107	0.0100	0.0012	mg/L	0.10000	0.0043	103	75-125	0.8	20	
Lithium	0.110	0.0500	0.0015	mg/L	0.10000	0.0051	104	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 25, 2017

Report No.: AAG0387

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070491 - EPA 3005A											
Post Spike (7070491-PS1)		**Source: AAG0387-01**				Prepared: 07/20/17 Analyzed: 07/21/17					
Antimony	106			ug/L	100.00	0.648	105	80-120			
Arsenic	102			ug/L	100.00	0.0447	102	80-120			
Barium	115			ug/L	100.00	23.3	92	80-120			
Beryllium	100			ug/L	100.00	0.0625	100	80-120			
Boron	1030			ug/L	1000.0	13.1	102	80-120			
Cadmium	103			ug/L	100.00	0.142	103	80-120			
Calcium	15300			ug/L	1000.0	14300	95	80-120			
Chromium	101			ug/L	100.00	0.196	101	80-120			
Cobalt	113			ug/L	100.00	9.61	103	80-120			
Copper	100			ug/L	100.00	0.386	100	80-120			
Lead	97.0			ug/L	100.00	0.0209	97	80-120			
Molybdenum	103			ug/L	100.00	0.316	103	80-120			
Nickel	99.9			ug/L	100.00	2.47	97	80-120			
Selenium	104			ug/L	100.00	1.29	103	80-120			
Silver	99.1			ug/L	100.00	-0.0002	99	80-120			
Thallium	98.5			ug/L	100.00	0.0377	98	80-120			
Vanadium	105			ug/L	100.00	0.324	105	80-120			
Zinc	105			ug/L	100.00	4.33	101	80-120			
Lithium	103			ug/L	100.00	5.08	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 25, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates Phase II Facilities

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-dd-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:							P	P	P	P							
PRESERVATION:							3	7	3								
7-11-17	1040	GW		✓	YGWA-47	4	1	1	2							1	
7-11-17	1310	GW		✓	YGWC-42	4	1	1	2							2	
7-11-17	1450	GW		✓	YGWC-43	4	1	1	2							3	
7-11-17	—	GW		✓	DUP-1	4	1	1	2							4	
7-13-17	1040	GW		✓	YGWC-36	6	1	1	4							5	extra Rdd here
7-13-17	1255	GW		✓	YGWC-49	4	1	1	2							6	
7-13-17	1330	W		✓	EB-1-7-13-17	4	1	1	2							7	
7-13-17	1225	GW		✓	YGWC-44	4	1	1	2							8	
7-13-17	1035	GW		✓	YGWC-45	4	1	1	2							9	
7-13-17	1420	GW		✓	YGWC-46	4	1	1	2							10	
7-13-17	1435	W		✓	FB-1-7-13-17 +	4	1	1	2							11	+ FB-1-7-13-17 (EP).

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, B. Walker

DATE/TIME: 7-13-2017 1715

RELINQUISHED BY:

DATE/TIME: 7-14-17 0920

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB: Laurman

DATE/TIME: 07/14/17 0920

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

Packed: No NA

Ice: Yes No NA

Temperature: Min: 3.1 Max:

FOR LAB USE ONLY

LAB #: AAG0387

Entered into LIMS: MR

Tracking #:

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project # AAG0387

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

Optional
Proj. Due Date:
Proj. Name:

Tracking #: _____

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

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used IR-2 Type of Ice: (Wet) Blue None ☐ Samples on Ice, cooling process has begun

Cooler Temperature 3.1 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 7/19/17 MR

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 7/17/2017 12:13:35PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 07/14/17 09:20

Work Order: AAG0387
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 11 **#Containers:** 46

Minimum Temp(C): 3.1 **Maximum Temp(C):** 3.1 **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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

August 07, 2017

Ms. Lauren Petty
GA Power
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: AAG0387 Plant Yates
Pace Project No.: 30224382

Dear Ms. Petty:
Enclosed are the analytical results for sample(s) received by the laboratory on July 17, 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30224382001	**YGWA-47**	Water	07/11/17 10:40	07/17/17 09:30
30224382002	**YGWC-42**	Water	07/11/17 13:10	07/17/17 09:30
30224382003	**YGWC-43**	Water	07/11/17 14:50	07/17/17 09:30
30224382004	**Dup-1**	Water	07/11/17 00:00	07/17/17 09:30
30224382005	**YGWC-36**	Water	07/13/17 10:40	07/17/17 09:30
30224382006	**YGWC-49**	Water	07/13/17 12:55	07/17/17 09:30
30224382007	**EB-1-7-13-17**	Water	07/13/17 13:30	07/17/17 09:30
30224382008	**YGWC-44**	Water	07/13/17 12:25	07/17/17 09:30
30224382009	**YGWC-45**	Water	07/13/17 10:35	07/17/17 09:30
30224382010	**YGWC-46**	Water	07/13/17 14:20	07/17/17 09:30
30224382011	**FB-1-7-13-17**	Water	07/13/17 14:35	07/17/17 09:30

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30224382001	**YGWA-47**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382002	**YGWC-42**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382003	**YGWC-43**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382004	**Dup-1**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382005	**YGWC-36**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382006	**YGWC-49**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382007	**EB-1-7-13-17**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382008	**YGWC-44**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382009	**YGWC-45**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382010	**YGWC-46**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1
30224382011	**FB-1-7-13-17**	EPA 9315	JC2	1
		EPA 9320	VAL	1
		Total Radium Calculation	RMK	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

Sample: YGWA-47 **Lab ID: 30224382001** Collected: 07/11/17 10:40 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.280 ± 0.133 (0.146) C:90% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**0.191 ± 0.350 (0.766) C:80% T:85%**	pCi/L	08/02/17 15:59	15262-20-1	
Total Radium	Total Radium Calculation	**0.471 ± 0.483 (0.912)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: YGWC-42 **Lab ID: 30224382002** Collected: 07/11/17 13:10 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.77 ± 0.391 (0.161) C:94% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**2.17 ± 0.717 (0.986) C:81% T:61%**	pCi/L	08/02/17 15:59	15262-20-1	
Total Radium	Total Radium Calculation	**3.94 ± 1.11 (1.15)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: YGWC-43 **Lab ID: 30224382003** Collected: 07/11/17 14:50 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.724 ± 0.228 (0.188) C:88% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**0.300 ± 0.349 (0.737) C:78% T:91%**	pCi/L	08/02/17 15:59	15262-20-1	
Total Radium	Total Radium Calculation	**1.02 ± 0.577 (0.925)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: Dup-1 **Lab ID: 30224382004** Collected: 07/11/17 00:00 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**1.73 ± 0.394 (0.141) C:85% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**0.679 ± 0.422 (0.801) C:79% T:82%**	pCi/L	08/02/17 15:59	15262-20-1	
Total Radium	Total Radium Calculation	**2.41 ± 0.816 (0.942)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: YGWC-36 **Lab ID: 30224382005** Collected: 07/13/17 10:40 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.322 ± 0.142 (0.150) C:92% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**0.296 ± 0.350 (0.739) C:80% T:81%**	pCi/L	08/02/17 15:59	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

Sample: YGWC-36 **Lab ID: 30224382005** Collected: 07/13/17 10:40 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**0.618 ± 0.492 (0.889)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: YGWC-49 **Lab ID: 30224382006** Collected: 07/13/17 12:55 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.288 ± 0.152 (0.226) C:88% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**0.212 ± 0.373 (0.815) C:84% T:76%**	pCi/L	08/02/17 15:59	15262-20-1	
Total Radium	Total Radium Calculation	**0.500 ± 0.525 (1.04)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: EB-1-7-13-17 **Lab ID: 30224382007** Collected: 07/13/17 13:30 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.293 ± 0.143 (0.182) C:90% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**0.585 ± 0.365 (0.691) C:83% T:86%**	pCi/L	08/02/17 15:59	15262-20-1	
Total Radium	Total Radium Calculation	**0.878 ± 0.508 (0.873)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: YGWC-44 **Lab ID: 30224382008** Collected: 07/13/17 12:25 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.315 ± 0.137 (0.145) C:101% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**0.455 ± 0.381 (0.770) C:82% T:85%**	pCi/L	08/02/17 16:00	15262-20-1	
Total Radium	Total Radium Calculation	**0.770 ± 0.518 (0.915)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: YGWC-45 **Lab ID: 30224382009** Collected: 07/13/17 10:35 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.611 ± 0.201 (0.163) C:94% T:NA**	pCi/L	08/02/17 09:12	13982-63-3	
Radium-228	EPA 9320	**-0.339 ± 0.334 (0.858) C:77% T:85%**	pCi/L	08/02/17 18:09	15262-20-1	
Total Radium	Total Radium Calculation	**0.611 ± 0.535 (1.02)**	pCi/L	08/04/17 11:56	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

Sample: YGWC-46 **Lab ID: 30224382010** Collected: 07/13/17 14:20 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.657 ± 0.204 (0.152) C:97% T:NA**	pCi/L	08/02/17 09:41	13982-63-3	
Radium-228	EPA 9320	**0.752 ± 0.408 (0.693) C:77% T:81%**	pCi/L	08/02/17 18:09	15262-20-1	
Total Radium	Total Radium Calculation	**1.41 ± 0.612 (0.845)**	pCi/L	08/04/17 11:56	7440-14-4	

Sample: FB-1-7-13-17 **Lab ID: 30224382011** Collected: 07/13/17 14:35 Received: 07/17/17 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.109 ± 0.0982 (0.178) C:89% T:NA**	pCi/L	08/02/17 09:42	13982-63-3	
Radium-228	EPA 9320	**0.478 ± 0.376 (0.738) C:82% T:87%**	pCi/L	08/02/17 18:09	15262-20-1	
Total Radium	Total Radium Calculation	**0.587 ± 0.474 (0.916)**	pCi/L	08/04/17 11:56	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

QC Batch: 265653 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30224382001, 30224382002, 30224382003, 30224382004, 30224382005, 30224382006, 30224382007, 30224382008, 30224382009, 30224382010, 30224382011

METHOD BLANK: 1308228 Matrix: Water
Associated Lab Samples: 30224382001, 30224382002, 30224382003, 30224382004, 30224382005, 30224382006, 30224382007, 30224382008, 30224382009, 30224382010, 30224382011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.302 ± 0.274 (0.549) C:82% T:85%	pCi/L	08/02/17 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

QC Batch: 265657 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30224382001, 30224382002, 30224382003, 30224382004, 30224382005, 30224382006, 30224382007, 30224382008, 30224382009, 30224382010, 30224382011

METHOD BLANK: 1308239 Matrix: Water
Associated Lab Samples: 30224382001, 30224382002, 30224382003, 30224382004, 30224382005, 30224382006, 30224382007, 30224382008, 30224382009, 30224382010, 30224382011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.254 ± 0.116 (0.177) C:89% T:NA	pCi/L	08/01/17 19:52	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAG0387 Plant Yates
Pace Project No.: 30224382

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.

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

WO# : 30224382

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAG0387 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 8/8/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWA-47	G	7/11/2017 10:40	AAG0387-01	GW	2	X	001
2	YGWC-42	G	7/11/2017 13:10	AAG0387-02	GW	2	X	002
3	YGWC-43	G	7/11/2017 14:50	AAG0387-03	GW	2	X	003
4	Dup-1	G	7/11/2017 0:00	AAG0387-04	GW	2	X	004
5	YGWC-36	G	7/13/2017 10:40	AAG0387-05	GW	4	X	005
6	YGWC-49	G	7/13/2017 12:55	AAG0387-06	GW	2	X	006
7	EB-1-7-13-17	G	7/13/2017 13:30	AAG0387-07	W	2	X	007
8	YGWC-44	G	7/13/2017 12:25	AAG0387-08	GW	2	X	008
9	YGWC-45	G	7/13/2017 10:35	AAG0387-09	GW	2	X	009
10	YGWC-46	G	7/13/2017 14:20	AAG0387-10	GW	2	X	010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	7/14/17	Johnathan Pace	7-17-17/0930	
2					
3					

Cooler Temperature on Receipt N/A °C	Custody Seal Y or N (O)	Received on Ice Y or N (O)	Sample Intact Y or N (O)

***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.

30224382

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAG0387 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 8/8/2017

Report To:	Subcontract To:
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 HNO3					Requested Analysis Radium 226, 228, Total												LAB USE ONLY
11	FB-1-7-13-17	G	7/13/2017 14:35	AAG0387-11	GW	2					X												011
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	7/14/17	Ashleystown/Pace	7-17-17/0930	
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.

30224382

CHAIN OF CUSTODY RECORD

Pace Analytical®

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 Phase II Facilities

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-pp-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
						CONTAINER TYPE:		P	P	P	P							
						PRESERVATION:		3	7	3								
7-11-17	1040	GW		✓	YGWA-47	4		1	1	2							1	
7-11-17	1310	GW		✓	YGWC-42	4		1	1	2							2	
7-11-17	1450	GW		✓	YGWC-43	4		1	1	2							3	
7-11-17	—	GW		✓	DUP-1	4		1	1	2							4	
7-13-17	1040	GW		✓	YGWC-36	6		1	1	4							5	extra Rad here
7-13-17	1255	GW		✓	YGWC-49	4		1	1	2							6	
7-13-17	1330	W		✓	EB-1-7-13-17	4		1	1	2							7	
7-13-17	1225	GW		✓	YGWC-44	4		1	1	2							8	
7-13-17	1035	GW		✓	YGWC-45	4		1	1	2							9	
7-13-17	1420	GW		✓	YGWC-46	4		1	1	2							10	
7-13-17	1435	W		✓	FB-1-7-13-17 *	4		1	1	2							11	* FB-1-7-13-17 (ID).

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker — DATE/TIME: 7-13-2017 1715

RELINQUISHED BY: [signature] — DATE/TIME: 7-14-17 0920

RECEIVED BY: — DATE/TIME:

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: M Lahman — DATE/TIME: 07/14/17 0920

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA — Ice: Yes No NA — Temperature: Min: 3.1 Max

Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID:

FOR LAB USE ONLY
LAB #: AAG0387
Entered into LIMS: MR
Tracking #:

Plant Yates COC Phase II Facilities.xlsx

Sample Condition Upon Receipt

30224382

Pace Analytical

Client Name: GA Power

Project # AAG0387

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

Optional: Proj. Due Date: Proj. Name:

Tracking #: _____

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

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: IR-2 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 3.1 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 7/14/17 MR

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

F-ALLC003rev.3, 11September2006

Sample Condition Upon Receipt Pittsburgh

Face Analytical

Client Name: Pace, GA Project # 30224382

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

Label AML

LIMS Login BLM

Tracking #: 7413 6657 2151

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: AML 7-17-17

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: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
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. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			15. pH<2
				Initial when completed: AM 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: AM Date: 7-17-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	7/26/2017
Worklist:	36803
Matrix:	DW

Method Blank Assessment

MB Sample ID	1308228
MB concentration:	0.302
M/B Counting Uncertainty:	0.268
MB MDC:	0.549
MB Numerical Performance Indicator:	2.21
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS36803	LCSD36803
Count Date:	8/2/2017	
Spike I.D.:	17-005	
Spike Concentration (pCi/mL):	23.902	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.820	
Target Conc. (pCi/L, g, F):	5.833	
Uncertainty (Calculated):	0.420	
Result (pCi/L, g, F):	6.019	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.700	
Numerical Performance Indicator:	0.45	
Percent Recovery:	103.19%	
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):	
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:	

Duplicate Sample Assessment

		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30224382005	
Duplicate Sample I.D.	30224382005DUP	
Sample Result (pCi/L, g, F):	0.296	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.346	
Sample Duplicate Result (pCi/L, g, F):	0.756	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.446	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.599	30224382005
Duplicate RPD:	87.57%	30224382005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

*Numerical Indicator is acceptable.

8/7/17

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JC2
Date:	7/27/2017
Worklist:	36807
Matrix:	DW

Method Blank Assessment

MB Sample ID	1308239
MB concentration:	0.254
M/B Counting Uncertainty:	0.110
MB MDC:	0.177
MB Numerical Performance Indicator:	4.54
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC	See Comment*

Laboratory Control Sample Assessment

	LCS36807	LCSD36807
	LCSD (Y or N)?	N
Count Date:	8/2/2017	
Spike I.D.:	17-030	
Spike Concentration (pCi/mL):	80.197	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.515	
Target Conc. (pCi/L, g, F):	15.579	
Uncertainty (Calculated):	1.435	
Result (pCi/L, g, F):	13.665	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.836	
Numerical Performance Indicator:	-2.26	
Percent Recovery:	87.72%	
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):	
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:	

Duplicate Sample Assessment

Sample I.D.:	30224382005
Duplicate Sample I.D.	30224382005DUP
Sample Result (pCi/L, g, F):	0.322
Sample Result Counting Uncertainty (pCi/L, g, F):	0.134
Sample Duplicate Result (pCi/L, g, F):	0.152
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.122
Are sample and/or duplicate results below MDC?	See Below ##
Duplicate Numerical Performance Indicator:	1.842
Duplicate RPD:	71.88%
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.

30224382005
30224382005DUP

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.

* Numerical Indicator is acceptable.

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.

8/7/17

Product Name: Low-Flow System

Date: 2017-01-13 11:21:03

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	50 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	44 ft

Well Information:		Pumping Information:	
Well ID	YGWA-4I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.570932 L
Well Total Depth	49.7 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	19 in
Depth to Water	25.95 ft	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	10:53:39	1500.00	16.16	6.21	165.63	0.62	27.60	1.27	70.29
Last 5	10:58:39	1800.00	16.20	6.21	165.26	0.55	27.70	1.09	69.33
Last 5	11:03:39	2099.99	16.20	6.20	164.84	0.47	27.70	0.99	69.04
Last 5	11:08:39	2399.99	16.20	6.20	164.24	0.59	27.70	0.92	68.21
Last 5	11:13:39	2699.99	16.51	6.19	163.62	0.62	27.70	0.91	68.42
Variance 0			0.00	-0.01	-0.42			-0.11	-0.28
Variance 1			0.00	0.00	-0.60			-0.06	-0.83
Variance 2			0.30	-0.01	-0.62			-0.01	0.21

Notes

Collected at 11:20. Sunny 60s. Extra Rad here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-12 14:55:45

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	110 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	105 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	135 mL/min
Well diameter	2 in	Total System Volume	2.874051 L
Well Total Depth	131.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	15.60 ft	Total Volume Pumped	4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:32:37	600.01	17.20	7.38	301.99	1.69	16.00	0.25	-164.71
Last 5	14:37:37	900.01	17.19	7.40	303.50	1.05	16.00	0.20	-140.48
Last 5	14:42:37	1200.00	17.13	7.44	304.18	0.85	16.00	0.13	-134.08
Last 5	14:47:37	1500.00	17.20	7.47	304.38	0.80	16.00	0.09	-133.15
Last 5	14:52:37	1799.99	17.27	7.49	304.50	0.75	16.00	0.08	-131.72
Variance 0			-0.06	0.03	0.69			-0.07	6.40
Variance 1			0.08	0.03	0.20			-0.03	0.93
Variance 2			0.07	0.02	0.12			-0.01	1.43

Notes

Collected at 14:55. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-12 14:01:51

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	60 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	53 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5I	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	1.788119 L
Well Total Depth	58.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	22.03 ft	Total Volume Pumped	22 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	13:33:42	9304.90	17.14	5.75	91.12	6.98	22.20	6.58	110.19
Last 5	13:38:42	9604.87	17.07	5.74	90.96	7.45	22.20	6.55	110.66
Last 5	13:43:42	9904.87	17.14	5.74	91.10	7.62	22.20	6.52	110.62
Last 5	13:48:42	10204.87	17.14	5.73	91.22	7.30	22.20	6.65	110.18
Last 5	13:58:43	10805.86	17.54	5.71	91.06	--	--	6.46	111.24
Variance 0			0.07	0.00	0.14			-0.03	-0.04
Variance 1			0.00	-0.01	0.12			0.13	-0.44
Variance 2			0.40	-0.01	-0.17			-0.19	1.07

Notes

Collected at 1400. Sunny 70s. EB-1-1-12-17 here at 13:15.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-13 13:17:36

Project Information:		Pump Information:	
Operator Name	JB	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.25 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	70 ft
Latitude	33º 27' 47.4"		
Longitude	-84º -53' -38.45"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	65 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6I	Final Pumping Rate	50 mL/min
Well diameter	2 in	Total System Volume	1.160691 L
Well Total Depth	69.1 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	72.84 in
Depth to Water	23.23 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:45:39	7202.91	19.63	6.34	242.68	4.59	28.70	1.17	93.48
Last 5	12:50:39	7502.91	19.56	6.34	242.78	4.70	29.00	1.10	93.25
Last 5	12:55:39	7802.92	19.62	6.34	241.88	4.78	29.20	1.07	93.37
Last 5	13:00:39	8102.92	19.68	6.33	242.84	4.80	29.25	1.03	94.92
Last 5	13:05:39	8402.89	20.34	6.34	241.27	4.76	29.30	1.00	95.98
Variance 0			0.06	0.01	-0.90			-0.02	0.12
Variance 1			0.06	-0.01	0.96			-0.04	1.55
Variance 2			0.66	0.01	-1.57			-0.03	1.06

Notes

74 degrees F, sampled at 1305

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-13 14:27:13

Project Information:		Pump Information:	
Operator Name	JB	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.25 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 47.26"		
Longitude	-84º -53' -38.22"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6S	Final Pumping Rate	75 mL/min
Well diameter	2 in	Total System Volume	0.8711092 L
Well Total Depth	39.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8 in
Depth to Water	23.02 ft	Total Volume Pumped	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	14:05:10	1202.02	20.01	5.96	152.30	2.74	23.70	6.98	115.12
Last 5	14:10:10	1502.00	19.64	5.95	153.14	2.24	23.70	7.17	113.35
Last 5	14:15:10	1802.00	19.50	5.95	153.31	1.66	23.70	7.17	109.98
Last 5	14:20:10	2102.00	19.32	5.95	153.32	1.37	23.70	7.17	107.36
Last 5	14:25:12	2404.00	19.18	5.93	152.71	0.96	23.70	7.01	105.91
Variance 0			-0.13	0.00	0.17			0.01	-3.36
Variance 1			-0.18	0.00	0.01			-0.00	-2.62
Variance 2			-0.14	-0.03	-0.61			-0.16	-1.45

Notes

74 degrees F, sampled at 1425

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-11 11:10:56

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWA-17S	Final Pumping Rate	170 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	39.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	13.93 ft	Total Volume Pumped	5.7 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	10:47:02	900.02	17.13	5.62	77.65	2.73	14.30	1.37	126.52
Last 5	10:52:02	1200.01	17.16	5.60	77.99	3.04	14.30	1.16	126.42
Last 5	10:57:02	1500.01	17.23	5.59	78.36	2.91	14.30	1.07	127.84
Last 5	11:02:02	1800.00	17.23	5.59	78.63	2.74	14.30	1.01	128.28
Last 5	11:07:02	2099.99	17.27	5.59	78.66	2.90	14.30	0.99	128.40
Variance 0			0.07	-0.01	0.37			-0.10	1.42
Variance 1			0.00	-0.00	0.27			-0.06	0.44
Variance 2			0.04	-0.00	0.04			-0.02	0.12

Notes

Collected at 11:10. Cloudy 60s. DUP 1 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-11 12:48:45

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	82 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	76 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18I	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	2.265929 L
Well Total Depth	79.67 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	25.86 ft	Total Volume Pumped	3.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:23:57	300.02	16.18	6.34	124.36	1.82	26.00	2.05	77.19
Last 5	12:28:58	601.02	16.28	6.11	122.93	1.96	26.00	3.09	85.99
Last 5	12:33:58	901.02	16.29	6.07	123.11	1.77	26.00	2.99	87.75
Last 5	12:38:58	1201.02	16.29	6.06	123.00	1.85	26.00	2.96	88.08
Last 5	12:43:58	1501.02	16.28	6.05	122.89	1.92	26.00	2.96	88.24
Variance 0			0.01	-0.04	0.18			-0.11	1.76
Variance 1			-0.00	-0.01	-0.11			-0.03	0.33
Variance 2			-0.01	-0.01	-0.11			0.00	0.16

Notes

Collected at 12:50. Cloudy 60s

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-11 14:29:10

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18S	Final Pumping Rate	90 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	39.86 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9 in
Depth to Water	23.44 ft	Total Volume Pumped	4.3 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	14:02:13	1500.00	16.29	5.46	63.97	1.45	24.20	1.17	131.41
Last 5	14:07:13	1800.00	16.28	5.47	63.80	1.52	24.20	1.07	130.73
Last 5	14:12:13	2099.99	16.29	5.48	63.90	1.45	24.20	0.99	130.25
Last 5	14:17:13	2399.99	16.29	5.47	63.95	1.59	24.20	0.91	129.92
Last 5	14:22:13	2699.98	16.29	5.48	63.99	1.51	24.20	0.89	129.71
Variance 0			0.01	0.01	0.10			-0.08	-0.48
Variance 1			0.00	-0.00	0.05			-0.07	-0.33
Variance 2			0.00	0.01	0.04			-0.02	-0.21

Notes

Collected at 14:25. Cloudy 60s

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-13 13:23:44

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	30 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	24 ft

Well Information:		Pumping Information:	
Well ID	YGWA-20S	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	0.6189027 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	9.87 ft	Total Volume Pumped	4.3 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	13:00:17	600.01	19.64	5.78	59.60	9.97	10.40	5.89	99.08
Last 5	13:05:17	900.01	19.64	5.79	59.42	7.05	10.40	5.85	102.27
Last 5	13:10:17	1199.99	19.77	5.79	59.27	5.21	10.40	5.86	105.62
Last 5	13:15:17	1500.00	19.59	5.78	59.20	4.74	10.40	5.84	108.40
Last 5	13:20:17	1800.00	19.59	5.79	59.32	4.04	10.40	5.83	109.09
Variance 0			0.13	-0.01	-0.15			0.00	3.35
Variance 1			-0.18	-0.01	-0.07			-0.02	2.79
Variance 2			0.00	0.01	0.12			-0.00	0.68

Notes

Collected at 13:25. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-13 14:55:23

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	80 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA-21I	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	2.222492 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	41 in
Depth to Water	31.3 ft	Total Volume Pumped	4.4 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	14:31:31	1202.01	18.72	6.41	140.22	1.29	34.00	0.44	-20.25
Last 5	14:36:31	1502.01	18.47	6.43	136.11	1.57	34.40	0.28	-18.50
Last 5	14:41:31	1802.04	18.71	6.41	133.49	1.71	34.60	0.22	-15.35
Last 5	14:46:31	2102.00	19.01	6.41	131.66	1.52	34.70	0.20	-14.28
Last 5	14:51:31	2401.99	18.88	6.41	132.14	1.45	34.70	0.19	-12.83
Variance 0			0.24	-0.01	-2.62			-0.06	3.15
Variance 1			0.29	0.00	-1.84			-0.02	1.07
Variance 2			-0.13	-0.01	0.49			-0.01	1.45

Notes

Collected at 14:55. Cloudy 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-16 12:27:42

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	25 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	5 ft

Well Information:		Pumping Information:	
Well ID	YGWC-19S	Final Pumping Rate	210 mL/min
Well diameter	2 in	Total System Volume	0.5965856 L
Well Total Depth	29.82 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.6 in
Depth to Water	15.00 ft	Total Volume Pumped	7.35 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	12:06:18	600.02	17.99	5.56	42.76	4.82	15.30	2.71	109.47
Last 5	12:11:18	900.02	17.90	5.55	42.80	3.05	15.30	2.57	111.00
Last 5	12:16:18	1200.01	18.39	5.54	42.72	1.87	15.30	2.88	112.97
Last 5	12:21:18	1500.02	17.90	5.56	42.69	1.39	15.30	2.90	112.06
Last 5	12:26:18	1800.02	18.21	5.56	42.55	0.96	15.30	3.10	112.75
Variance 0			0.49	-0.01	-0.09			0.31	1.97
Variance 1			-0.49	0.02	-0.02			0.02	-0.91
Variance 2			0.30	-0.01	-0.14			0.19	0.70

Notes

Sampled at 1230. Sunny 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-16 15:11:04

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 14.54"		
Longitude	-84º -53' -34.01"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-22S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.6635369 L
Well Total Depth	40.13 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.4 in
Depth to Water	9.65 ft	Total Volume Pumped	7.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:49:21	1500.01	19.88	4.92	683.59	0.55	10.10	0.16	193.62
Last 5	14:54:21	1800.01	19.94	4.93	683.98	0.45	10.10	0.14	178.21
Last 5	14:59:21	2100.02	19.64	4.93	683.05	0.31	10.10	0.18	184.74
Last 5	15:04:21	2399.97	19.72	4.93	684.22	0.40	10.10	0.16	190.16
Last 5	15:09:21	2699.98	19.87	4.93	683.69	0.32	10.10	0.16	180.37
Variance 0			-0.30	0.00	-0.92			0.04	6.52
Variance 1			0.08	-0.00	1.17			-0.02	5.42
Variance 2			0.15	0.00	-0.53			0.00	-9.79

Notes

Sampled at 1515. Sunny 70's

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-16 13:46:51

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	44 ft
Latitude	33º 27' 6.52"		
Longitude	-84º -53' -38.39"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-23S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.44062 L
Well Total Depth	39.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6.36 in
Depth to Water	15.57 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:24:33	300.03	19.08	5.62	219.44	2.33	16.10	7.55	127.07
Last 5	13:29:33	600.01	18.93	5.58	216.81	2.74	16.10	7.54	125.03
Last 5	13:34:33	900.05	19.23	5.59	214.98	3.10	16.10	7.54	124.23
Last 5	13:39:33	1200.02	19.24	5.59	211.76	3.09	16.10	7.47	124.35
Last 5	13:44:33	1500.00	19.28	5.59	208.56	2.34	16.10	7.52	124.77
Variance 0			0.29	0.01	-1.83			0.00	-0.80
Variance 1			0.01	0.00	-3.22			-0.07	0.11
Variance 2			0.05	-0.00	-3.20			0.04	0.43

Notes

Sampled at 1350. Sunny 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-17 14:40:04

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	62 ft
Latitude	33º 27' 31.2"		
Longitude	-84º -53' -48.8"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWC-24S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.831556 L
Well Total Depth	57.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6.72 in
Depth to Water	28.94 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:17:20	300.02	18.83	5.59	65.68	0.18	29.40	5.85	117.26
Last 5	14:22:20	600.02	18.49	5.55	65.81	0.17	29.50	5.81	114.47
Last 5	14:27:20	900.01	18.25	5.51	65.68	0.21	29.50	5.69	113.15
Last 5	14:32:20	1200.01	18.12	5.55	65.85	0.15	29.50	5.71	110.03
Last 5	14:37:20	1500.01	18.21	5.53	66.23	0.15	29.50	5.79	109.98
Variance 0			-0.23	-0.03	-0.13			-0.11	-1.32
Variance 1			-0.13	0.03	0.17			0.02	-3.11
Variance 2			0.09	-0.02	0.38			0.08	-0.06

Notes

Sampled at 1445. Sunny 70's. FB-3 poured here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-17 10:51:13

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32I	Final Pumping Rate	90 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	38.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	19.7 ft	Total Volume Pumped	3.6 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	10:26:03	900.01	20.13	5.43	1039.00	2.05	19.90	0.98	137.59
Last 5	10:31:04	1201.00	20.16	5.41	1042.25	1.43	19.90	0.93	163.73
Last 5	10:36:04	1501.00	20.31	5.39	1042.58	1.11	19.90	0.78	164.60
Last 5	10:41:04	1800.99	20.30	5.38	1045.66	1.19	19.90	0.73	173.76
Last 5	10:46:04	2100.99	20.39	5.37	1044.26	1.06	19.90	0.65	204.14
Variance 0			0.14	-0.02	0.34			-0.15	0.86
Variance 1			-0.01	-0.01	3.08			-0.04	9.16
Variance 2			0.09	-0.01	-1.40			-0.08	30.37

Notes

Collected at 10:50. Sunny 60s. Extra Rad collected here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-17 14:41:58

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Peristaltic
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	25 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	20 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32S	Final Pumping Rate	190 mL/min
Well diameter	2 in	Total System Volume	0.2015856 L
Well Total Depth	23.47 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9 in
Depth to Water	16.62 ft	Total Volume Pumped	24 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	14:19:24	6604.93	21.62	4.68	827.96	5.35	17.40	0.49	351.22
Last 5	14:24:24	6904.92	21.55	4.68	828.47	5.12	17.40	0.49	360.92
Last 5	14:29:24	7204.92	21.42	4.68	829.55	5.02	17.40	0.49	363.60
Last 5	14:34:24	7504.92	21.46	4.67	830.34	4.73	17.40	0.53	362.97
Last 5	14:39:24	7804.91	21.60	4.68	828.99	4.49	17.40	0.52	369.07
Variance 0			-0.13	0.00	1.08			-0.00	2.68
Variance 1			0.04	-0.01	0.79			0.04	-0.63
Variance 2			0.15	0.01	-1.35			-0.01	6.10

Notes

Collected at 14:40. Cloudy 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-17 10:18:56

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	38 ft
Latitude	33º 27' 26"		
Longitude	-84º -53' -44.33"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	410 mL/min
Well diameter	2 in	Total System Volume	1.310309 L
Well Total Depth	38.73 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.88 in
Depth to Water	8.76 ft	Total Volume Pumped	26.65 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	09:56:43	2699.98	18.89	4.15	1341.79	4.74	9.00	0.11	122.66
Last 5	10:01:43	2999.98	18.78	4.15	1343.94	4.31	9.00	0.10	123.07
Last 5	10:06:44	3300.97	18.84	4.15	1342.80	4.37	9.00	0.10	122.85
Last 5	10:11:46	3602.97	18.92	4.15	1341.82	4.26	9.00	0.09	122.17
Last 5	10:16:46	3902.95	19.15	4.16	1339.71	4.51	9.00	0.09	121.86
Variance 0			0.06	0.01	-1.14			-0.01	-0.22
Variance 1			0.08	0.00	-0.99			-0.01	-0.68
Variance 2			0.23	0.00	-2.10			0.00	-0.31

Notes

Sampled at 1020. Sunny 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-17 11:58:59

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	43 ft
Latitude	33º 27' 17.78"		
Longitude	-84º -53' -32.87"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC-34I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.418902 L
Well Total Depth	38.75 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.24 in
Depth to Water	25.43 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:37:20	900.01	19.28	4.78	722.52	0.22	25.70	0.26	128.76
Last 5	11:42:20	1200.01	19.50	4.78	720.58	0.16	25.70	0.22	125.98
Last 5	11:47:20	1500.00	19.72	4.78	719.90	0.08	25.70	0.19	125.09
Last 5	11:52:20	1800.00	19.81	4.78	719.80	0.11	25.70	0.17	124.67
Last 5	11:57:20	2099.99	19.86	4.78	719.41	0.10	25.70	0.18	124.64
Variance 0			0.22	-0.00	-0.68			-0.02	-0.89
Variance 1			0.09	0.00	-0.10			-0.02	-0.43
Variance 2			0.05	-0.00	-0.39			0.01	-0.03

Notes

Sampled at 1200. Sunny 60's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-13 10:37:09

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	QED
Company Name	ACC	Tubing Type	Bladder
Project Name	Plant Yates - Phase 2	Tubing Diameter	.375 in
Site Name	Plant Yates - Phase 2 CCR	Tubing Length	60.0 ft
Latitude	33º 27' 27.71"		
Longitude	-84º -53' -49.99"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	55.0 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	1.788119 L
Well Total Depth	60.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	16 in
Depth to Water	10.12 ft	Total Volume Pumped	6.3 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	10:14:18	904.01	21.64	5.72	412.11	3.64	11.30	0.94	80.90
Last 5	10:19:21	1207.03	21.82	5.59	410.94	3.90	11.40	0.71	86.69
Last 5	10:24:23	1509.03	21.55	5.59	411.25	3.47	11.40	0.72	86.27
Last 5	10:29:26	1812.03	21.50	5.57	411.61	3.91	11.40	0.72	87.10
Last 5	10:34:28	2114.03	21.64	5.57	412.10	3.66	11.40	0.72	88.23
Variance 0			-0.27	-0.01	0.31			0.01	-0.41
Variance 1			-0.05	-0.01	0.36			-0.00	0.83
Variance 2			0.13	-0.01	0.50			0.00	1.13

Notes

Collected at 10:40. Sunny 80s.

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: 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:

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
Client ID: YGWC-34I
Date/Time Sampled: 2/28/2017 4:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-01
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWA-3I
Date/Time Sampled: 3/1/2017 2:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-02
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWA-18S
Date/Time Sampled: 3/1/2017 4:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-03
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWA-18I
Date/Time Sampled: 3/1/2017 2:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-04
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWC-32S
Date/Time Sampled: 3/1/2017 11:05:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-05
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWC-32I
Date/Time Sampled: 3/1/2017 12:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-06
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWC-33S
Date/Time Sampled: 3/1/2017 12:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-07
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: EB-1-3-1-17
Date/Time Sampled: 3/1/2017 11:45:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAC0139-08
Date/Time Received: 3/3/2017 2:00:00PM

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	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
Client ID: FB-2-3-2-17
Date/Time Sampled: 3/2/2017 10:00:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAC0139-09
Date/Time Received: 3/3/2017 2:00:00PM

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	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
Client ID: YGWA-3D
Date/Time Sampled: 3/2/2017 10:15:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-10
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWA-1D
Date/Time Sampled: 3/2/2017 12:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-11
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWA-1I
Date/Time Sampled: 3/2/2017 2:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-12
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: EB-2-3-2-17
Date/Time Sampled: 3/2/2017 3:40:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAC0139-13
Date/Time Received: 3/3/2017 2:00:00PM

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	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
Client ID: YGWA-6I
Date/Time Sampled: 3/2/2017 1:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-14
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWA-17S
Date/Time Sampled: 3/2/2017 3:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-15
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: Dup-2
Date/Time Sampled: 3/2/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-16
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWA-2I
Date/Time Sampled: 3/3/2017 11:30:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-17
Date/Time Received: 3/3/2017 2:00:00PM

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
Client ID: YGWA-6S
Date/Time Sampled: 3/3/2017 10:30:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0139-18
Date/Time Received: 3/3/2017 2:00:00PM

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				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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-dd-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P						
PRESERVATION:								3	7	3							
2-28-17	1615	GW		✓	YGWC-34I	4		1	1	2						1	
3-1-17	1430	GW		✓	YGWA-3I	4		1	1	2						2	
3-1-17	1610	GW		✓	YGWA-18S	4		1	1	2						3	
3-1-17	1440	GW		✓	YGWA-18I	4		1	1	2						4	
3-1-17	1105	GW		✓	YGWC-32S	6		1	1	4						5	extra Rdel
3-1-17	1245	GW		✓	YGWC-32I	4		1	1	2						6	
3-1-17	1255	GW		✓	YGWC-33S	4		1	1	2						7	
3-1-17	1145	W		✓	EB-1-3-1-17	4		1	1	2						8	

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, B. Walker (ACC)
DATE/TIME: 3-2-17 0830
RELINQUISHED BY:
DATE/TIME: 3-3-17 1400
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY LAB:
DATE/TIME: 03/03/17 1400
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Packed: No NA
Ice: Yes No NA
Temperature: 2°C Min: 2°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAC0139
Entered into LIMS:
Tracking #:

Plant Yates COC Ash Ponds

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		P Metals App. III & IV (EPA 6020/7470) 3	P Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C) 7	P Radium 226 & 228 (SW-846 9315/9320) 3	P					LAB ID NUMBER
3-2-17	1000	W		✓	FB-Z-3-2-17	4		1	1	2						9
3-2-17	1015	GW		✓	YGWA-3D	4		1	1	2						10
3-2-17	1250	GW		✓	YGWA-1D	3		1	1	1						11
3-2-17	1435	GW		✓	YGWA-1I	3		1	1	1						12
3-2-17	1540	W		✓	EB-Z-3-2-17	3		1	1	1						13
3-2-17	1325	GW		✓	YGWA-6I	4		1	1	2						14
3-2-17	1520	GW		✓	YGWA-17S	4		1	1	2						15
3-2-17	—	GW		✓	DUP-2	3		1	1	1						16
3-3-17	1130	GW		✓	YGWA-2I	3		1	1	1						17
3-3-17	1030	GW		✓	YGWA-6S	4		1	1	2						18

extra rad

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: C. Parker, R. Walker
DATE/TIME: 3-3-17 1220
RELINQUISHED BY:
DATE/TIME: 3-3-17 1400
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY/LAB:
DATE/TIME: 03/03/17 1400
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

FOR LAB USE ONLY
LAB #: APC0139
Entered into LIMS: MR
Tracking #:

Packed: No NA
Ice: Yes No NA
Temperature: 2°C Min: 2°C Max
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

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: 3/6/2017 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0139 Plant Yates
Pace Project No.: 30212543

Sample: YGWC-34I **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) C:97% T:NA**	pCi/L	03/20/17 10:26	13982-63-3	
Radium-228	EPA 9320	**0.310 ± 0.418 (0.891) C:61% T:85%**	pCi/L	03/18/17 15:47	15262-20-1	
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) C:94% T:NA**	pCi/L	03/20/17 10:26	13982-63-3	
Radium-228	EPA 9320	**0.471 ± 0.408 (0.822) C:72% T:88%**	pCi/L	03/18/17 15:47	15262-20-1	
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) C:95% T:NA**	pCi/L	03/20/17 10:26	13982-63-3	
Radium-228	EPA 9320	**0.173 ± 0.362 (0.800) C:72% T:83%**	pCi/L	03/18/17 15:47	15262-20-1	
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) C:93% T:NA**	pCi/L	03/20/17 10:12	13982-63-3	
Radium-228	EPA 9320	**0.340 ± 0.384 (0.805) C:77% T:81%**	pCi/L	03/18/17 15:47	15262-20-1	
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) C:97% T:NA**	pCi/L	03/20/17 10:12	13982-63-3	
Radium-228	EPA 9320	**0.0529 ± 0.337 (0.773) C:81% T:82%**	pCi/L	03/18/17 15:48	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0139 Plant Yates
Pace Project No.: 30212543

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	

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	

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	

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	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:98% T:NA**	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	**2.07 ± 0.672 (0.906) C:63% T:86%**	pCi/L	03/22/17 11:39	15262-20-1	
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) C:97% T:NA**	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	**0.174 ± 0.394 (0.874) C:63% T:82%**	pCi/L	03/22/17 11:39	15262-20-1	
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) C:97% T:NA**	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	**0.504 ± 0.478 (0.966) C:52% T:76%**	pCi/L	03/22/17 11:40	15262-20-1	
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) C:87% T:NA**	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	**0.518 ± 0.434 (0.862) C:55% T:88%**	pCi/L	03/22/17 11:40	15262-20-1	
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) C:89% T:NA**	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	**0.0193 ± 0.376 (0.883) C:58% T:76%**	pCi/L	03/22/17 11:40	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Chain of Custody

WO#:30212543

30212543

Pace Analytical
www.pacelabs.com

Workorder: AAC0139 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 3/28/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	YGWC-34I	G	2/28/2017 16:15	AAC0139-01	GW	2	X	001
2	YGWA-3I	G	3/1/2017 14:30	AAC0139-02	GW	2	X	002
3	YGWA-18S	G	3/1/2017 16:10	AAC0139-03	GW	2	X	003
4	YGWA-18I	G	3/1/2017 14:40	AAC0139-04	GW	2	X	004
5	YGWC-32S	G	3/1/2017 11:05	AAC0139-05	GW	4	X	005
6	YGWC-32I	G	3/1/2017 12:45	AAC0139-06	GW	2	X	006
7	YGWC-33S	G	3/1/2017 12:55	AAC0139-07	GW	2	X	007
8	EB-1-3-1-17	G	3/1/2017 11:45	AAC0139-08	W	2	X	008
9	FB-2-3-2-17	G	3/2/2017 10:00	AAC0139-09	W	2	X	009
10	YGWA-3D	G	3/2/2017 10:15	AAC0139-10	GW	2	X	010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Ashleigh Rice	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

UCM A 3-6-17

***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

Pace Analytical
www.pacelabs.com

Workorder: AAC0139 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 3/28/2017

Report To:	Subcontract To:
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

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Radium 226, 228, Total	LAB USE ONLY
11	YGWA-1D	G	3/2/2017 12:50	AAC0139-11	GW	1	X	011
12	YGWA-1I	G	3/2/2017 14:35	AAC0139-12	GW	1	X	012
13	EB-2-3-2-17	G	3/2/2017 15:40	AAC0139-13	W	1	X	013
14	YGWA-6I	G	3/2/2017 13:25	AAC0139-14	GW	2	X	014
15	YGWA-17S	G	3/2/2017 15:20	AAC0139-15	GW	2	X	015
16	Dup-2	G	3/2/2017 0:00	AAC0139-16	GW	1	X	016
17	YGWA-2I	G	3/3/2017 11:30	AAC0139-17	GW	1	X	017
18	YGWA-6S	G	3/3/2017 10:30	AAC0139-18	GW	2	X	018
19								
20								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Ashlyhore Pace	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

agth 3-6-r

***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.

KEH

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

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: CMR 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: -Includes date/time/ID Matrix: WT	X			5.
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. Low Volume Dup-2
Correct Containers Used: -Pace Containers Used:	X	X		10.
Containers Intact:		X		11. Received Dup-2 open/leaking only about 600mL remaining
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. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			15. pH<2 Initial when completed: CMR 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: CMR Date: 3-6-17

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.

302125 43

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-dd-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P							
PRESERVATION:								3	7	3								
2-28-17	1615	GW		✓	YGWC-34I	4		1	1	2							1	
3-1-17	1430	GW		✓	YGWA-3I	4		1	1	2							2	
3-1-17	1610	GW		✓	YGWA-18S	4		1	1	2							3	
3-1-17	1440	GW		✓	YGWA-18I	4		1	1	2							4	
3-1-17	1105	GW		✓	YGWC-32S	6		1	1	4							5	extra Rad
3-1-17	1245	GW		✓	YGWC-32I	4		1	1	2							6	
3-1-17	1255	GW		✓	YGWC-33S	4		1	1	2							7	
3-1-17	1145	W		✓	EB-1-3-1-17	4		1	1	2							8	

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: C. Parker, B. Walker (ACC)
DATE/TIME: 3-2-17 0830
RELINQUISHED BY:
DATE/TIME: 3-3-17 1400
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY/LAB:
DATE/TIME: 03/03/17 1400
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
pH checked: Yes No NA
Ice: Yes No NA
Temperature: 2°C Min: 2°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AAC0139
Entered into LIMS: MR
Tracking #:

30212543

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE mm-dd-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
					CONTAINER TYPE:		P	P	P		
					PRESERVATION:		3	7	3		
3-2-17	1000	W		✓	FB-Z-3-2-17	4	1	1	2	9	
3-2-17	1015	GW		✓	YGWA-3D	4	1	1	2	10	
3-2-17	1250	GW		✓	YGWA-1D	3	1	1	1	11	
3-2-17	1435	GW		✓	YGWA-1I	3	1	1	1	12	
3-2-17	1540	W		✓	EB-Z-3-2-17	3	1	1	1	13	
3-2-17	1325	GW		✓	YGWA-6I	4	1	1	2	14	
3-2-17	1520	GW		✓	YGWA-17S	4	1	1	2	15	
3-2-17	—	GW		✓	Dup-Z	3	1	1	1	16	
3-3-17	1130	GW		✓	YGWA-2I	3	1	1	1	17	
3-3-17	1030	GW		✓	YGWA-6S	4	1	1	2	18	extra rad

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker
DATE/TIME: 3-3-17 1220
RELINQUISHED BY: [signature]
DATE/TIME: 3-3-17 1400
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY LAB: [signature]
DATE/TIME: 03/03/17 1400
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

FOR LAB USE ONLY
LAB #: ARC0639
Entered into LIMS: MR
Tracking #:

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 2°C Min: 2°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

Plant Yates COC Ash Ponds

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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
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	LCSD (Y or N)?	N
	LCS34495	LCSD34495
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30211899003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30211899003
Duplicate RPD:	22.69%	30211899003DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

3/24/17

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.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
M/B 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	LCSD (Y or N)?	N
	LCS34496	LCSD34496
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30212543008	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30212543008
Duplicate RPD:	44.14%	30212543008DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Lmpc 3/24/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJY
Date:	3/13/2017
Worklist:	34513
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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
	LCS34513	LCSD34513
Count Date:	3/18/2017	3/18/2017
Spike I.D.:	17-005	17-005
Spike Concentration (pCi/mL):	25.008	25.008
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.807	0.806
Target Conc. (pCi/L, g, F):	6.198	6.204
Uncertainty (Calculated):	0.446	0.447
Result (pCi/L, g, F):	4.807	3.854
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.605	0.565
Numerical Performance Indicator:	-3.63	-6.39
Percent Recovery:	77.55%	62.13%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS34513	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD34513	
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	

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:

3/24/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJY
Date:	3/16/2017
Worklist:	34514
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD34514
Count Date:	3/22/2017	3/22/2017
Spike I.D.:	17-005	17-005
Spike Concentration (pCi/mL):	24.976	24.976
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.816	0.801
Target Conc. (pCi/L, g, F):	6.125	6.233
Uncertainty (Calculated):	0.441	0.449
Result (pCi/L, g, F):	5.155	6.807
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.600	0.805
Numerical Performance Indicator:	-2.56	1.22
Percent Recovery:	84.16%	109.20%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

Duplicate Sample Assessment		
Sample I.D.:	LCS34514	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD34514	
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	

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:	

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

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: AAC0316
March 16, 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

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 16, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-20S	AAC0316-01	Ground Water	03/06/17 11:15	03/08/17 15:35
YGWA-21I	AAC0316-02	Ground Water	03/06/17 12:45	03/08/17 15:35
YGWA-4I	AAC0316-03	Ground Water	03/06/17 14:50	03/08/17 15:35
Dup-3	AAC0316-04	Ground Water	03/06/17 00:00	03/08/17 15:35
EB-3-3-6-17	AAC0316-05	Water	03/06/17 15:30	03/08/17 15:35
YGWA-5D	AAC0316-06	Ground Water	03/07/17 10:10	03/08/17 15:35
YGWA-5I	AAC0316-07	Ground Water	03/07/17 13:20	03/08/17 15:35
FB-3-3-7-17	AAC0316-08	Water	03/07/17 14:00	03/08/17 15:35

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

March 16, 2017

Report No.: AAC0316
Client ID: YGWA-20S
Date/Time Sampled: 3/6/2017 11:15:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0316-01
Date/Time Received: 3/8/2017 3:35:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	164	25	10	mg/L	SM 2540 C		1	03/09/17 10:00	03/09/17 10:00	7030275	JPT
Inorganic Anions											
Chloride	1.9	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/10/17 23:33	7030348	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/10/17 23:33	7030348	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/10/17 23:33	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Barium	0.0163	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Calcium	2.48	0.500	0.0104	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Chromium	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:33	7030273	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 12:43	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 16, 2017

Report No.: AAC0316
Client ID: YGWA-21I
Date/Time Sampled: 3/6/2017 12:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0316-02
Date/Time Received: 3/8/2017 3:35:00PM

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	03/09/17 10:00	03/09/17 10:00	7030275	JPT
Inorganic Anions											
Chloride	2.1	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/10/17 23:54	7030348	RLC
Fluoride	0.09	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/10/17 23:54	7030348	RLC
Sulfate	4.5	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/10/17 23:54	7030348	RLC
Metals, Total											
Antimony	0.0005	0.0030	0.0003	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Arsenic	0.0017	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Barium	0.0105	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Calcium	6.28	2.50	0.0522	mg/L	EPA 6020B		5	03/09/17 09:20	03/16/17 14:16	7030273	CSW
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Cobalt	0.0110	0.0100	0.0005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Molybdenum	0.0007	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Lithium	0.0059	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 22:56	7030273	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 12:45	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 16, 2017

Report No.: AAC0316
Client ID: YGWA-4I
Date/Time Sampled: 3/6/2017 2:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0316-03
Date/Time Received: 3/8/2017 3:35:00PM

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	03/09/17 10:00	03/09/17 10:00	7030275	JPT
Inorganic Anions											
Chloride	3.6	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 00:56	7030348	RLC
Fluoride	0.05	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 00:56	7030348	RLC
Sulfate	8.0	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 00:56	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Barium	0.0141	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Calcium	8.64	2.50	0.0522	mg/L	EPA 6020B		5	03/09/17 09:20	03/16/17 14:22	7030273	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Cobalt	0.0006	0.0100	0.0005	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Lithium	0.0143	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:07	7030273	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 12:48	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 16, 2017

Report No.: AAC0316
Client ID: Dup-3
Date/Time Sampled: 3/6/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0316-04
Date/Time Received: 3/8/2017 3:35:00PM

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	03/09/17 10:00	03/09/17 10:00	7030275	JPT
Inorganic Anions											
Chloride	2.0	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 01:17	7030348	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 01:17	7030348	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 01:17	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Barium	0.0165	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Calcium	2.48	0.500	0.0104	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Chromium	0.0006	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:19	7030273	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 12:50	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 16, 2017

Report No.: AAC0316
Client ID: EB-3-3-6-17
Date/Time Sampled: 3/6/2017 3:30:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAC0316-05
Date/Time Received: 3/8/2017 3:35:00PM

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	03/09/17 10:00	03/09/17 10:00	7030275	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 01:37	7030348	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 01:37	7030348	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 01:37	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Calcium	0.0165	0.500	0.0104	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Chromium	0.0005	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:30	7030273	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 12:52	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 16, 2017

Report No.: AAC0316
Client ID: YGWA-5D
Date/Time Sampled: 3/7/2017 10:10:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0316-06
Date/Time Received: 3/8/2017 3:35:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	257	25	10	mg/L	SM 2540 C		1	03/09/17 10:00	03/09/17 10:00	7030275	JPT
Inorganic Anions											
Chloride	6.8	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 01:58	7030348	RLC
Fluoride	0.09	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 01:58	7030348	RLC
Sulfate	20	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 01:58	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Arsenic	0.0012	0.0050	0.0004	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Barium	0.0090	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Boron	0.0089	0.0400	0.0060	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Calcium	32.7	25.0	0.522	mg/L	EPA 6020B		50	03/09/17 09:20	03/13/17 23:41	7030273	CSW
Chromium	0.0012	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Lead	0.0001	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Molybdenum	0.0047	0.0100	0.0002	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Lithium	0.0056	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:36	7030273	CSW
Mercury	0.00010	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 12:57	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 16, 2017

Report No.: AAC0316
Client ID: YGWA-5I
Date/Time Sampled: 3/7/2017 1:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0316-07
Date/Time Received: 3/8/2017 3:35:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	108	25	10	mg/L	SM 2540 C		1	03/09/17 10:00	03/09/17 10:00	7030275	JPT
Inorganic Anions											
Chloride	4.5	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 02:19	7030348	RLC
Fluoride	0.03	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 02:19	7030348	RLC
Sulfate	2.1	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 02:19	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Barium	0.0196	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Calcium	2.34	0.500	0.0104	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Chromium	0.0006	0.0100	0.0003	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Lead	0.00007	0.0050	0.00005	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Lithium	0.0035	0.0500	0.0011	mg/L	EPA 6020B	J	1	03/09/17 09:20	03/13/17 23:59	7030273	CSW
Mercury	0.00013	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:00	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 16, 2017

Report No.: AAC0316
Client ID: FB-3-3-7-17
Date/Time Sampled: 3/7/2017 2:00:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAC0316-08
Date/Time Received: 3/8/2017 3:35:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	11	25	10	mg/L	SM 2540 C	J	1	03/09/17 10:00	03/09/17 10:00	7030275	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 02:39	7030348	RLC
Fluoride	0.05	0.30	0.004	mg/L	EPA 300.0	J	1	03/10/17 17:37	03/11/17 02:39	7030348	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	03/10/17 17:37	03/11/17 02:39	7030348	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Cadmium	ND	0.0010	0.000060	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Calcium	ND	0.500	0.0104	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Lead	ND	0.0050	0.00005	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Molybdenum	ND	0.0100	0.0002	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Thallium	ND	0.0010	0.00003	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	03/09/17 09:20	03/14/17 00:10	7030273	CSW
Mercury	0.00014	0.00050	0.000041	mg/L	EPA 7470A	B-01, J	1	03/13/17 16:35	03/14/17 13:02	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 16, 2017

Report No.: AAC0316

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030275 - SM 2540 C											
Blank (7030275-BLK1)						Prepared & Analyzed: 03/09/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7030275-BS1)						Prepared & Analyzed: 03/09/17					
Total Dissolved Solids	401	25	10	mg/L	400.00		100	84-108			
Duplicate (7030275-DUP1)		**Source: AAC0316-01**				Prepared & Analyzed: 03/09/17					
Total Dissolved Solids	179	25	10	mg/L		164			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

March 16, 2017

Report No.: AAC0316

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 16, 2017

Report No.: AAC0316

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030273 - EPA 3005A											
Blank (7030273-BLK1)						Prepared: 03/09/17 Analyzed: 03/13/17					
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	0.0005	0.0250	0.0002	mg/L							J
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 (7030273-BS1)						Prepared: 03/09/17 Analyzed: 03/13/17					
Antimony	0.111	0.0030	0.0003	mg/L	0.10000		111	80-120			
Arsenic	0.101	0.0050	0.0004	mg/L	0.10000		101	80-120			
Barium	0.0980	0.0100	0.0003	mg/L	0.10000		98	80-120			
Beryllium	0.108	0.0030	0.00007	mg/L	0.10000		108	80-120			
Boron	1.04	0.0400	0.0060	mg/L	1.0000		104	80-120			
Cadmium	0.104	0.0010	0.000060	mg/L	0.10000		104	80-120			
Calcium	1.06	0.500	0.0104	mg/L	1.0000		106	80-120			
Chromium	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Cobalt	0.101	0.0100	0.0005	mg/L	0.10000		101	80-120			
Copper	0.105	0.0250	0.0002	mg/L	0.10000		105	80-120			
Lead	0.103	0.0050	0.00005	mg/L	0.10000		103	80-120			
Molybdenum	0.102	0.0100	0.0002	mg/L	0.10000		102	80-120			
Nickel	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Selenium	0.101	0.0100	0.0014	mg/L	0.10000		101	80-120			
Silver	0.102	0.0100	0.0003	mg/L	0.10000		102	80-120			
Thallium	0.104	0.0010	0.00003	mg/L	0.10000		104	80-120			
Vanadium	0.109	0.0100	0.0014	mg/L	0.10000		109	80-120			
Zinc	0.105	0.0100	0.0013	mg/L	0.10000		105	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

March 16, 2017

Report No.: AAC0316

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030273 - EPA 3005A											
Matrix Spike (7030273-MS1)		**Source: AAC0316-01**				Prepared: 03/09/17 Analyzed: 03/13/17					
Antimony	0.113	0.0030	0.0003	mg/L	0.10000	ND	113	75-125			
Arsenic	0.0987	0.0050	0.0004	mg/L	0.10000	ND	99	75-125			
Barium	0.114	0.0100	0.0003	mg/L	0.10000	0.0163	97	75-125			
Beryllium	0.108	0.0030	0.00007	mg/L	0.10000	ND	108	75-125			
Boron	0.971	0.0400	0.0060	mg/L	1.0000	ND	97	75-125			
Cadmium	0.106	0.0010	0.000060	mg/L	0.10000	ND	106	75-125			
Calcium	3.33	0.500	0.0104	mg/L	1.0000	2.48	85	75-125			
Chromium	0.109	0.0100	0.0003	mg/L	0.10000	0.0005	108	75-125			
Cobalt	0.102	0.0100	0.0005	mg/L	0.10000	ND	102	75-125			
Copper	0.102	0.0250	0.0002	mg/L	0.10000	0.0002	102	75-125			
Lead	0.103	0.0050	0.00005	mg/L	0.10000	ND	103	75-125			
Molybdenum	0.106	0.0100	0.0002	mg/L	0.10000	ND	106	75-125			
Nickel	0.104	0.0100	0.0003	mg/L	0.10000	ND	104	75-125			
Selenium	0.0945	0.0100	0.0014	mg/L	0.10000	ND	95	75-125			
Silver	0.101	0.0100	0.0003	mg/L	0.10000	ND	101	75-125			
Thallium	0.103	0.0010	0.00003	mg/L	0.10000	ND	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	0.106	0.0500	0.0011	mg/L	0.10000	ND	106	75-125			
Matrix Spike Dup (7030273-MSD1)		**Source: AAC0316-01**				Prepared: 03/09/17 Analyzed: 03/13/17					
Antimony	0.114	0.0030	0.0003	mg/L	0.10000	ND	114	75-125	0.9	20	
Arsenic	0.103	0.0050	0.0004	mg/L	0.10000	ND	103	75-125	5	20	
Barium	0.114	0.0100	0.0003	mg/L	0.10000	0.0163	98	75-125	0.2	20	
Beryllium	0.108	0.0030	0.00007	mg/L	0.10000	ND	108	75-125	0.09	20	
Boron	1.03	0.0400	0.0060	mg/L	1.0000	ND	103	75-125	6	20	
Cadmium	0.110	0.0010	0.000060	mg/L	0.10000	ND	110	75-125	4	20	
Calcium	3.23	0.500	0.0104	mg/L	1.0000	2.48	75	75-125	3	20	
Chromium	0.112	0.0100	0.0003	mg/L	0.10000	0.0005	111	75-125	3	20	
Cobalt	0.112	0.0100	0.0005	mg/L	0.10000	ND	112	75-125	10	20	
Copper	0.112	0.0250	0.0002	mg/L	0.10000	0.0002	111	75-125	9	20	
Lead	0.103	0.0050	0.00005	mg/L	0.10000	ND	103	75-125	0.2	20	
Molybdenum	0.106	0.0100	0.0002	mg/L	0.10000	ND	106	75-125	0.5	20	
Nickel	0.113	0.0100	0.0003	mg/L	0.10000	ND	113	75-125	8	20	
Selenium	0.0977	0.0100	0.0014	mg/L	0.10000	ND	98	75-125	3	20	
Silver	0.103	0.0100	0.0003	mg/L	0.10000	ND	103	75-125	2	20	
Thallium	0.105	0.0010	0.00003	mg/L	0.10000	ND	105	75-125	1	20	
Vanadium	0.119	0.0100	0.0014	mg/L	0.10000	ND	119	75-125	9	20	
Zinc	0.113	0.0100	0.0013	mg/L	0.10000	ND	113	75-125	6	20	
Lithium	0.104	0.0500	0.0011	mg/L	0.10000	ND	104	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 16, 2017

Report No.: AAC0316

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030273 - EPA 3005A											
Post Spike (7030273-PS1)			**Source: AAC0316-01**			Prepared: 03/09/17 Analyzed: 03/13/17					
Antimony	106			ug/L	100.00	0.287	106	80-120			
Arsenic	100			ug/L	100.00	0.281	100	80-120			
Barium	111			ug/L	100.00	16.3	95	80-120			
Beryllium	106			ug/L	100.00	0.0623	106	80-120			
Boron	1030			ug/L	1000.0	5.52	103	80-120			
Cadmium	104			ug/L	100.00	0.0118	104	80-120			
Calcium	3260			ug/L	1000.0	2480	78	80-120			QM-02
Chromium	105			ug/L	100.00	0.519	104	80-120			
Cobalt	101			ug/L	100.00	0.0336	101	80-120			
Copper	102			ug/L	100.00	0.247	102	80-120			
Lead	101			ug/L	100.00	0.0455	101	80-120			
Molybdenum	104			ug/L	100.00	0.110	104	80-120			
Nickel	104			ug/L	100.00	0.138	104	80-120			
Selenium	96.1			ug/L	100.00	0.610	95	80-120			
Silver	101			ug/L	100.00	0.0100	101	80-120			
Thallium	102			ug/L	100.00	0.0261	102	80-120			
Vanadium	106			ug/L	100.00	0.891	105	80-120			
Zinc	103			ug/L	100.00	1.26	102	80-120			
Lithium	103			ug/L	100.00	0.363	102	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 16, 2017

Report No.: AAC0316

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 16, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470) P 3	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C) P 7	Radium 226 & 228 (SW-846 9315/9320) P 3						LAB ID NUMBER
3-6-17	1115	GW		✓	YGWA-20S	3		1	1	1						1
3-6-17	1245	GW		✓	YGWA-21I	3		1	1	1						2
3-6-17	1450	GW		✓	YGWA-4I	3		1	1	1						3
3-6-17	—	GW		✓	DUP-3	3		1	1	1						4
3-6-17	1530	GW		✓	EB-3-3-6-17	3		1	1	1						5
3-7-17	1010	GW		✓	YGWA-5D	3		1	1	1						6
3-7-17	1320	GW		✓	YGWA-5I	3		1	1	1						7
3-7-17	1400	W		✓	FB-3-3-7-17	3		1	1	1						8

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: Chris Parker (ACC) DATE/TIME: 3-8-17 / 1100

RELINQUISHED BY: [signature] DATE/TIME: 3-8-17 / 1535

RECEIVED BY: DATE/TIME:

RELINQUISHED BY: DATE/TIME:

RECEIVED BY LAB: Lakman DATE/TIME: 03/08/17 1535

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Packed: No NA Ice: Yes No NA Temperature: 1°C Min: 1°C Max:

Custody Seal: Intact Broken Not Present # of Coolers Cooler ID:

FOR LAB USE ONLY
LAB #: AAC0316
Entered into LIMS: MR
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: 3/9/2017 9:28:31AM**

Attn: Ms. Lauren Petty

Client: Georgia Power
Project: CCR Event
Date Received: 03/08/17 15:35

Work Order: AAC0316
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, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

March 24, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on March 09, 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30212882001	**YGWA-20S**	Water	03/06/17 11:15	03/09/17 10:15
30212882002	**YGWA-21I**	Water	03/06/17 12:45	03/09/17 10:15
30212882003	**YGWA-4I**	Water	03/06/17 14:50	03/09/17 10:15
30212882004	**DUP-3**	Water	03/06/17 00:00	03/09/17 10:15
30212882005	**EB-3-3-6-17**	Water	03/06/17 15:30	03/09/17 10:15
30212882006	**YGWA-5D**	Water	03/07/17 10:10	03/09/17 10:15
30212882007	**YGWA-5I**	Water	03/07/17 13:20	03/09/17 10:15
30212882008	**FB-3-3-7-17**	Water	03/07/17 14:00	03/09/17 10:15

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30212882001	**YGWA-20S**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212882002	**YGWA-21I**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212882003	**YGWA-4I**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212882004	**DUP-3**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212882005	**EB-3-3-6-17**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212882006	**YGWA-5D**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212882007	**YGWA-5I**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1
30212882008	**FB-3-3-7-17**	EPA 9315	LAL	1
		EPA 9320	JJY	1
		Total Radium Calculation	JAL	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

Sample: YGWA-20S **Lab ID: 30212882001** Collected: 03/06/17 11:15 Received: 03/09/17 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	**0.110 ± 0.104 (0.192) C:95% T:NA**	pCi/L	03/20/17 10:14	13982-63-3	
Radium-228	EPA 9320	**0.408 ± 0.418 (0.864) C:69% T:76%**	pCi/L	03/22/17 11:41	15262-20-1	
Total Radium	Total Radium Calculation	**0.518 ± 0.522 (1.06)**	pCi/L	03/24/17 09:48	7440-14-4	

Sample: YGWA-21I **Lab ID: 30212882002** Collected: 03/06/17 12:45 Received: 03/09/17 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	**0.134 ± 0.126 (0.242) C:89% T:NA**	pCi/L	03/20/17 10:14	13982-63-3	
Radium-228	EPA 9320	**0.384 ± 0.378 (0.772) C:65% T:83%**	pCi/L	03/22/17 11:42	15262-20-1	
Total Radium	Total Radium Calculation	**0.518 ± 0.504 (1.01)**	pCi/L	03/24/17 09:48	7440-14-4	

Sample: YGWA-4I **Lab ID: 30212882003** Collected: 03/06/17 14:50 Received: 03/09/17 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	**0.432 ± 0.183 (0.198) C:85% T:NA**	pCi/L	03/20/17 10:14	13982-63-3	
Radium-228	EPA 9320	**0.237 ± 0.387 (0.840) C:56% T:78%**	pCi/L	03/22/17 11:41	15262-20-1	
Total Radium	Total Radium Calculation	**0.669 ± 0.570 (1.04)**	pCi/L	03/24/17 09:48	7440-14-4	

Sample: DUP-3 **Lab ID: 30212882004** Collected: 03/06/17 00:00 Received: 03/09/17 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	**0.137 ± 0.120 (0.219) C:95% T:NA**	pCi/L	03/20/17 10:13	13982-63-3	
Radium-228	EPA 9320	**-0.103 ± 0.311 (0.763) C:63% T:85%**	pCi/L	03/22/17 11:42	15262-20-1	
Total Radium	Total Radium Calculation	**0.137 ± 0.431 (0.982)**	pCi/L	03/24/17 09:48	7440-14-4	

Sample: EB-3-3-6-17 **Lab ID: 30212882005** Collected: 03/06/17 15:30 Received: 03/09/17 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	**-0.00548 ± 0.0936 (0.258) C:90% T:NA**	pCi/L	03/20/17 10:14	13982-63-3	
Radium-228	EPA 9320	**-0.187 ± 0.345 (0.858) C:65% T:77%**	pCi/L	03/22/17 11:42	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

Sample: EB-3-3-6-17 **Lab ID: 30212882005** Collected: 03/06/17 15:30 Received: 03/09/17 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	**0.000 ± 0.439 (1.12)**	pCi/L	03/24/17 09:48	7440-14-4	

Sample: YGWA-5D **Lab ID: 30212882006** Collected: 03/07/17 10:10 Received: 03/09/17 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	**3.80 ± 0.716 (0.178) C:96% T:NA**	pCi/L	03/20/17 10:14	13982-63-3	
Radium-228	EPA 9320	**1.00 ± 0.432 (0.674) C:71% T:82%**	pCi/L	03/22/17 11:42	15262-20-1	
Total Radium	Total Radium Calculation	**4.80 ± 1.15 (0.852)**	pCi/L	03/24/17 09:48	7440-14-4	

Sample: YGWA-5I **Lab ID: 30212882007** Collected: 03/07/17 13:20 Received: 03/09/17 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	**0.0165 ± 0.0721 (0.188) C:94% T:NA**	pCi/L	03/20/17 10:15	13982-63-3	
Radium-228	EPA 9320	**0.0509 ± 0.346 (0.799) C:66% T:80%**	pCi/L	03/22/17 11:42	15262-20-1	
Total Radium	Total Radium Calculation	**0.0674 ± 0.418 (0.987)**	pCi/L	03/24/17 09:48	7440-14-4	

Sample: FB-3-3-7-17 **Lab ID: 30212882008** Collected: 03/07/17 14:00 Received: 03/09/17 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	**0.0983 ± 0.104 (0.204) C:97% T:NA**	pCi/L	03/20/17 10:15	13982-63-3	
Radium-228	EPA 9320	**0.00733 ± 0.360 (0.851) C:62% T:74%**	pCi/L	03/22/17 11:42	15262-20-1	
Total Radium	Total Radium Calculation	**0.106 ± 0.464 (1.06)**	pCi/L	03/24/17 09:48	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

QC Batch: 251732 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30212882001, 30212882002, 30212882003, 30212882004, 30212882005, 30212882006, 30212882007, 30212882008

METHOD BLANK: 1238370 Matrix: Water
Associated Lab Samples: 30212882001, 30212882002, 30212882003, 30212882004, 30212882005, 30212882006, 30212882007, 30212882008

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

QC Batch: 251829 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30212882001, 30212882002, 30212882003, 30212882004, 30212882005, 30212882006, 30212882007, 30212882008

METHOD BLANK: 1238975 Matrix: Water
Associated Lab Samples: 30212882001, 30212882002, 30212882003, 30212882004, 30212882005, 30212882006, 30212882007, 30212882008

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAC0316 Plant Yates AP
Pace Project No.: 30212882

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.

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

Chain of Custody

30212882

Pace Analytical
www.pacelabs.com

Workorder: AAC0316 Workorder Name: Plant Yates AP Owner Received Date: 3/8/2017 Results Requested By: 3/15/2017

Report To:	Subcontract To:
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: HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWA-20S	G	3/6/17 1115	AAC0316-01	GW	1	X	001
2	YGWA-21I	G	3/6/17 1245	AAC0316-02	GW	1	X	002
3	YGWA-4I	G	3/6/17 1450	AAC0316-03	GW	1	X	003
4	DUP-3	G	3/6/2017	AAC0316-04	GW	1	X	004
5	EB-3-3-6-17	G	3/6/17 1530	AAC0316-05	GW	1	X	005
6	YGWA-5D	G	3/7/17 1010	AAC0316-06	GW	1	X	006
7	YGWA-5I	G	3/7/17 1320	AAC0316-07	GW	1	x	007
8	FB-3-3-7-17	G	3/7/17 1400	AAC0316-08	GW	1	x	008
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Karen Hill	3/9/17 1015	EQuIS deliverable required.
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.

WO#:30212882

30212882

30212882

CHAIN OF CUSTODY RECORD

Pace Analytical

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
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:							P	P	P		
PRESERVATION:							3	7	3		
3-6-17	1115	GW		✓	YGWA-20S	3	1	1	1	1	
3-6-17	1245	GW		✓	YGWA-21I	3	1	1	1	2	
3-6-17	1450	GW		✓	YGWA-4I	3	1	1	1	3	
3-6-17	—	GW		✓	DUP-3	3	1	1	1	4	
3-6-17	1530	W		✓	EB-3-3-6-17	3	1	1	1	5	
3-7-17	1010	GW		✓	YGWA-5D	3	1	1	1	6	
3-7-17	1320	GW		✓	YGWA-5I	3	1	1	1	7	
3-7-17	1400	W		✓	FB-3-3-7-17	3	1	1	1	8	

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Locker (ACC)
DATE/TIME: 3-8-17 / 1100
RELINQUISHED BY:
DATE/TIME: 3-8-17 / 1535
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY LAB: MLaxman
DATE/TIME: 03/08/17 1535
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min: 1°C Max
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAC0316
Entered Into LIMS: MR
Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace Atlanta Project # 30212882

KEH

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

Tracking #: 6812 5102 8308

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

Thermometer Used NA **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 3/9/17

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: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed KH / 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: KH / Date: 3/9/17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	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
M/B 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	LCSD (Y or N)?	N
	LCS34496	LCSD34496
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30212543008	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30212543008
Duplicate RPD:	44.14%	30212543008DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

Limit

3/24/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJY
Date:	3/16/2017
Worklist:	34514
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD34514
Count Date:	3/22/2017	3/22/2017
Spike I.D.:	17-005	17-005
Spike Concentration (pCi/mL):	24.976	24.976
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.816	0.801
Target Conc. (pCi/L, g, F):	6.125	6.233
Uncertainty (Calculated):	0.441	0.449
Result (pCi/L, g, F):	5.155	6.807
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.600	0.805
Numerical Performance Indicator:	-2.56	1.22
Percent Recovery:	84.16%	109.20%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS34514	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD34514	
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	

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:

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:

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
Client ID: YGWA-14S
Date/Time Sampled: 3/8/2017 10:05:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0372-01
Date/Time Received: 3/9/2017 2:55:00PM

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
Client ID: YGWC-24S
Date/Time Sampled: 3/8/2017 11:50:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0372-02
Date/Time Received: 3/9/2017 2:55:00PM

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
Client ID: YGWC-22S
Date/Time Sampled: 3/8/2017 1:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0372-03
Date/Time Received: 3/9/2017 2:55:00PM

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
Client ID: FB-4-3-9-17
Date/Time Sampled: 3/9/2017 10:20:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAC0372-04
Date/Time Received: 3/9/2017 2:55:00PM

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	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
Client ID: YGWC-23S
Date/Time Sampled: 3/9/2017 10:40:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0372-05
Date/Time Received: 3/9/2017 2:55:00PM

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
Client ID: YGWC-19S
Date/Time Sampled: 3/9/2017 12:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0372-06
Date/Time Received: 3/9/2017 2:55:00PM

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
Client ID: EB-4-3-9-17
Date/Time Sampled: 3/9/2017 1:05:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAC0372-07
Date/Time Received: 3/9/2017 2:55:00PM

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	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
Client ID: Dup-4
Date/Time Sampled: 3/9/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAC0372-08
Date/Time Received: 3/9/2017 2:55:00PM

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)		**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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®
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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P							
PRESERVATION:								3	7	3								
3-8-17	1005	GW		✓	YGWA-14S	3		1	1	1							1	
3-8-17	1150	GW		✓	YGWC-24S	3		1	1	1							2	
3-8-17	1325	GW		✓	YGWC-22S	4		1	1	2							3	extra Rad here
3-9-17	1020	W		✓	FB-4-3-9-17	3		1	1	1							4	
3-9-17	1040	GW		✓	YGWC-23S	3		1	1	1							5	
3-9-17	1240	GW		✓	YGWC-19S	3		1	1	1							6	
3-9-17	1305	W		✓	EB-4-3-9-17	3		1	1	1							7	
3-9-17	—	GW		✓	Dup-4	3		1	1	1							8	

CONTAINER TYPE / PRESERVATION
- P - PLASTIC — 1 - HCl, ≤6°C
- A - AMBER GLASS — 2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Parker ACC
DATE/TIME: 3-9-17 1300
RELINQUISHED BY:
DATE/TIME: 3-9-17 1455
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY/LAB:
DATE/TIME: 3/9/17 1455
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Packed: No NA
Ice: Yes No NA
Temperature: 10°C Min: 1°C Max:
Custody Seal: Intact Broken Not Present NA
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AA60372
Entered into LIMS: CHT
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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAC0372 Plant Yates
Pace Project No.: 30213029

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
Total Radium	Total Radium Calculation	**0.0892 ± 0.448 (1.02)**	pCi/L	04/03/17 15:12	7440-14-4	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30213029

30213029

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAC0372 Workorder Name: Plant Yates Owner Received Date: 3/9/2017 Results Requested By: 3/17/2017

Report To:	Subcontract To:
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 HNO3					Requested Analysis Radium 226, 228, Total												LAB USE ONLY
1	YGWA-14 S	G	3/8/17 1005	AAC0372-01	GW	1					X												001
2	~~YGWAC-24~~ S YGWC-24S	G	3/8/17 1150	AAC0372-02	GW	1					X												002
3	YGWC-22 S BMD 3/10/17	G	3/8/17 1325	AAC0372-03	GW	~~1~~ 2				BMD 3/10/17	X												003
4	FB-4-3-9-17	G	3/9/17 1020	AAC0372-04	W	1					X												004
5	~~YGWC-19 S~~ YGWC-23S	G	3/9/17 1040	AAC0372-05	GW	1					X												005
6	YGWC-19 S	G	3/9/17 1240	AAC0372-06	GW	1					X												006
7	EB-4-3-9-17	G	3/9/17 1305	AAC0372-07	W	1					X												007
8	Dup-4	G	3/9/17	AAC0372-08	GW	1					X												008
9																							
10																							

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			Ashley Rose/Pace	3-10-17/1125	~~EQuIS deliverable required:~~ N/A BMD 3/10/17
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.

30213029

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAC0372 Workorder Name: Plant Yates Owner Received Date: 3/9/2017 Results Requested By: 3/17/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
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	Date/Time	Received By	Date/Time	Comments
1			Ashley Rose/Pace	3-10-17/1125	EQuIS deliverable required.
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.

30213029

CHAIN OF CUSTODY RECORD

Pace Analytical®

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

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-D-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
						CONTAINER TYPE		P	P	P	P							
						PRESERVATION		3	7	3								
3-8-17	1005	GW		✓	YGWA-14S	3		1	1	1							1	
3-8-17	1150	GW		✓	YGWC-24S	3		1	1	1							2	
3-8-17	1325	GW		✓	YGWC-22S	4		1	1	2							3	extra Rnd here
3-9-17	1020	W		✓	FB-4-3-9-17	3		1	1	1							4	
3-9-17	1040	GW		✓	YGWC-23S	3		1	1	1							5	
3-9-17	1240	GW		✓	YGWC-19S	3		1	1	1							6	
3-9-17	1305	W		✓	EB-4-3-9-17	3		1	1	1							7	
3-9-17	—	GW		✓	DUP-4	3		1	1	1							8	

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Chris Parker ACC
DATE/TIME: 3-9-17 1300
RELINQUISHED BY: [signature]
DATE/TIME: 3-9-17 1455

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: [signature]
DATE/TIME: 3/9/17 1455
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1°C Min 1°C Max
Custody Seal: Intact Broken Not Present NA
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AA C0372
Entered into LIMS: [initials]
Tracking #:

Plant Yates COC Ash Ponds

ANL

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace, GA Project # 30213029

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

Tracking #: 6812 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: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X	X		10.
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. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X X			15. pH<2 Initial when completed QNR 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: QNR Date: 3-10-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/29/2017
Worklist:	34790
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

	LCSD (Y or N)?	N
	LCS34790	**LCSD34790**
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	

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:	

Duplicate Sample Assessment

Sample I.D.:	30213029001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30213029001DUP	
Sample Result (pCi/L, g, F):	0.034	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.079	
Sample Duplicate Result (pCi/L, g, F):	-0.040	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.092	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	1.184	30213029001
Duplicate RPD:	-2373.73%	30213029001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

4/3/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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
M/B 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	LCSD (Y or N)?	N
	LCS34833	LCSD34833
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30213029003	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30213029003DUP	
Sample Result (pCi/L, g, F):	0.049	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.344	
Sample Duplicate Result (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	30213029003
Duplicate RPD:	130.43%	30213029003DUP
Duplicate Status vs Numerical Indicator:	~~N/A~~	
Duplicate Status vs RPD:	Fail***	

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:

results < MDC numerical indicator acceptable < 3

~~***Batch must be re-prepped due to unacceptable precision~~ 4/3/17

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: AAI0738
September 29, 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:

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

September 29, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-36	AAI0738-01	Ground Water	09/22/17 10:55	09/22/17 13:05

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

September 29, 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

September 29, 2017

Report No.: AAI0738
Client ID: YGWC-36
Date/Time Sampled: 09/22/2017 10:55:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAI0738-01
Date/Time Received: 09/22/2017 1:05:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	309	25	10	mg/L	SM 2540 C		1	09/27/17 15:50	09/27/17 15:50	7090698	JPT
Inorganic Anions											
Chloride	6.9	0.25	0.02	mg/L	EPA 300.0		1	09/24/17 10:16	09/25/17 12:35	7090610	RLC
Fluoride	0.09	0.30	0.03	mg/L	EPA 300.0	J	1	09/24/17 10:16	09/25/17 12:35	7090610	RLC
Sulfate	160	20	0.34	mg/L	EPA 300.0		20	09/24/17 10:16	09/25/17 19:49	7090610	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Barium	0.0491	0.0100	0.0004	mg/L	EPA 6020B		1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Beryllium	0.0003	0.0030	0.00009	mg/L	EPA 6020B	J	1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Boron	0.238	0.0400	0.0060	mg/L	EPA 6020B		1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Cadmium	0.0002	0.0010	0.0001	mg/L	EPA 6020B	J	1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Calcium	18.4	5.00	2.02	mg/L	EPA 6020B		50	09/26/17 09:35	09/26/17 15:23	7090637	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Lead	0.0003	0.0050	0.00007	mg/L	EPA 6020B	J	1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Selenium	0.0024	0.0100	0.0018	mg/L	EPA 6020B	J	1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Lithium	0.0067	0.0500	0.0015	mg/L	EPA 6020B	J	1	09/26/17 09:35	09/26/17 15:17	7090637	CSW
Mercury	ND	0.00050	0.000036	mg/L	EPA 7470A		1	09/26/17 14:10	09/27/17 16:30	7090654	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

September 29, 2017

Report No.: AAI0738

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7090698 - SM 2540 C											
Blank (7090698-BLK1)						Prepared & Analyzed: 09/27/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7090698-BS1)						Prepared & Analyzed: 09/27/17					
Total Dissolved Solids	400	25	10	mg/L	400.00		100	84-108			
Duplicate (7090698-DUP1)		**Source: AAI0738-01**				Prepared & Analyzed: 09/27/17					
Total Dissolved Solids	287	25	10	mg/L		309			7	10	
Duplicate (7090698-DUP2)		**Source: AAI0756-03**				Prepared & Analyzed: 09/27/17					
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

September 29, 2017

Report No.: AAI0738

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7090610 - EPA 300.0											
Blank (7090610-BLK1)						Prepared: 09/24/17 Analyzed: 09/25/17					
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 (7090610-BS1)						Prepared: 09/24/17 Analyzed: 09/25/17					
Chloride	10.6	0.25	0.02	mg/L	10.020		106	90-110			
Fluoride	10.1	0.30	0.03	mg/L	10.020		100	90-110			
Sulfate	10.5	1.0	0.02	mg/L	10.050		104	90-110			
Matrix Spike (7090610-MS1)			**Source: AAI0754-06**			Prepared: 09/24/17 Analyzed: 09/25/17					
Chloride	12.9	0.25	0.02	mg/L	10.020	2.30	106	90-110			
Fluoride	10.2	0.30	0.03	mg/L	10.020	ND	102	90-110			
Sulfate	12.7	1.0	0.02	mg/L	10.050	2.44	102	90-110			
Matrix Spike (7090610-MS2)			**Source: AAI0756-01**			Prepared: 09/24/17 Analyzed: 09/25/17					
Chloride	14.8	0.25	0.02	mg/L	10.020	6.23	85	90-110			QM-02
Fluoride	10.6	0.30	0.03	mg/L	10.020	0.04	105	90-110			
Sulfate	18.4	1.0	0.02	mg/L	10.050	6.93	114	90-110			QM-05
Matrix Spike Dup (7090610-MSD1)			**Source: AAI0754-06**			Prepared: 09/24/17 Analyzed: 09/25/17					
Chloride	13.0	0.25	0.02	mg/L	10.020	2.30	106	90-110	0.3	15	
Fluoride	10.3	0.30	0.03	mg/L	10.020	ND	102	90-110	0.7	15	
Sulfate	12.8	1.0	0.02	mg/L	10.050	2.44	103	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

September 29, 2017

Report No.: AAI0738

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7090637 - EPA 3005A											
Blank (7090637-BLK1)						Prepared & Analyzed: 09/26/17					
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 (7090637-BS1)						Prepared & Analyzed: 09/26/17					
Antimony	0.104	0.0030	0.0006	mg/L	0.10000		104	80-120			
Arsenic	0.100	0.0050	0.0005	mg/L	0.10000		100	80-120			
Barium	0.100	0.0100	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.101	0.0030	0.00009	mg/L	0.10000		101	80-120			
Boron	1.09	0.0400	0.0060	mg/L	1.0000		109	80-120			
Cadmium	0.104	0.0010	0.0001	mg/L	0.10000		104	80-120			
Calcium	1.02	0.500	0.0404	mg/L	1.0000		102	80-120			
Chromium	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Cobalt	0.103	0.0100	0.0003	mg/L	0.10000		103	80-120			
Copper	0.102	0.0250	0.0003	mg/L	0.10000		102	80-120			
Lead	0.100	0.0050	0.00007	mg/L	0.10000		100	80-120			
Molybdenum	0.103	0.0100	0.0010	mg/L	0.10000		103	80-120			
Nickel	0.104	0.0100	0.0005	mg/L	0.10000		104	80-120			
Selenium	0.102	0.0100	0.0018	mg/L	0.10000		102	80-120			
Silver	0.0989	0.0100	0.0002	mg/L	0.10000		99	80-120			
Thallium	0.103	0.0010	0.00005	mg/L	0.10000		103	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	0.104	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

September 29, 2017

Report No.: AAI0738

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7090637 - EPA 3005A											
Matrix Spike (7090637-MS1)		**Source: AAI0754-06**			Prepared & Analyzed: 09/26/17						
Antimony	0.103	0.0030	0.0006	mg/L	0.10000	0.0008	102	75-125			
Arsenic	0.102	0.0050	0.0005	mg/L	0.10000	ND	102	75-125			
Barium	0.112	0.0100	0.0004	mg/L	0.10000	0.0152	97	75-125			
Beryllium	0.0986	0.0030	0.00009	mg/L	0.10000	ND	99	75-125			
Boron	1.03	0.0400	0.0060	mg/L	1.0000	ND	103	75-125			
Cadmium	0.103	0.0010	0.0001	mg/L	0.10000	ND	103	75-125			
Calcium	30.1	25.0	2.02	mg/L	1.0000	30.8	NR	75-125			QM-02
Chromium	0.110	0.0100	0.0005	mg/L	0.10000	0.0008	109	75-125			
Cobalt	0.107	0.0100	0.0003	mg/L	0.10000	ND	107	75-125			
Copper	0.104	0.0250	0.0003	mg/L	0.10000	0.0003	104	75-125			
Lead	0.101	0.0050	0.00007	mg/L	0.10000	0.0003	100	75-125			
Molybdenum	0.103	0.0100	0.0010	mg/L	0.10000	ND	103	75-125			
Nickel	0.106	0.0100	0.0005	mg/L	0.10000	ND	106	75-125			
Selenium	0.101	0.0100	0.0018	mg/L	0.10000	ND	101	75-125			
Silver	0.100	0.0100	0.0002	mg/L	0.10000	ND	100	75-125			
Thallium	0.104	0.0010	0.00005	mg/L	0.10000	ND	104	75-125			
Vanadium	0.107	0.0100	0.0012	mg/L	0.10000	ND	107	75-125			
Zinc	0.104	0.0100	0.0012	mg/L	0.10000	0.0018	103	75-125			
Lithium	0.0979	0.0500	0.0015	mg/L	0.10000	ND	98	75-125			
Matrix Spike Dup (7090637-MSD1)		**Source: AAI0754-06**			Prepared & Analyzed: 09/26/17						
Antimony	0.108	0.0030	0.0006	mg/L	0.10000	0.0008	107	75-125	5	20	
Arsenic	0.105	0.0050	0.0005	mg/L	0.10000	ND	105	75-125	3	20	
Barium	0.120	0.0100	0.0004	mg/L	0.10000	0.0152	105	75-125	7	20	
Beryllium	0.103	0.0030	0.00009	mg/L	0.10000	ND	103	75-125	4	20	
Boron	1.08	0.0400	0.0060	mg/L	1.0000	ND	108	75-125	5	20	
Cadmium	0.106	0.0010	0.0001	mg/L	0.10000	ND	106	75-125	3	20	
Calcium	32.0	25.0	2.02	mg/L	1.0000	30.8	117	75-125	6	20	
Chromium	0.111	0.0100	0.0005	mg/L	0.10000	0.0008	110	75-125	0.7	20	
Cobalt	0.111	0.0100	0.0003	mg/L	0.10000	ND	111	75-125	4	20	
Copper	0.106	0.0250	0.0003	mg/L	0.10000	0.0003	106	75-125	2	20	
Lead	0.101	0.0050	0.00007	mg/L	0.10000	0.0003	100	75-125	0.1	20	
Molybdenum	0.108	0.0100	0.0010	mg/L	0.10000	ND	108	75-125	5	20	
Nickel	0.109	0.0100	0.0005	mg/L	0.10000	ND	109	75-125	4	20	
Selenium	0.106	0.0100	0.0018	mg/L	0.10000	ND	106	75-125	5	20	
Silver	0.103	0.0100	0.0002	mg/L	0.10000	ND	103	75-125	3	20	
Thallium	0.102	0.0010	0.00005	mg/L	0.10000	ND	102	75-125	2	20	
Vanadium	0.111	0.0100	0.0012	mg/L	0.10000	ND	111	75-125	3	20	
Zinc	0.107	0.0100	0.0012	mg/L	0.10000	0.0018	106	75-125	3	20	
Lithium	0.106	0.0500	0.0015	mg/L	0.10000	ND	106	75-125	8	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

September 29, 2017

Report No.: AAI0738

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7090637 - EPA 3005A											
Post Spike (7090637-PS1)			**Source: AAI0754-06**			Prepared & Analyzed: 09/26/17					
Antimony	98.4			ug/L	100.00	0.782	98	80-120			
Arsenic	104			ug/L	100.00	0.359	104	80-120			
Barium	118			ug/L	100.00	15.2	103	80-120			
Beryllium	97.0			ug/L	100.00	0.0514	97	80-120			
Boron	1020			ug/L	1000.0	3.15	101	80-120			
Cadmium	104			ug/L	100.00	0.0233	104	80-120			
Calcium	31800			ug/L	1000.0	30800	105	80-120			
Chromium	109			ug/L	100.00	0.767	108	80-120			
Cobalt	107			ug/L	100.00	0.0469	106	80-120			
Copper	103			ug/L	100.00	0.320	103	80-120			
Lead	99.5			ug/L	100.00	0.279	99	80-120			
Molybdenum	107			ug/L	100.00	0.338	107	80-120			
Nickel	104			ug/L	100.00	0.147	104	80-120			
Selenium	105			ug/L	100.00	0.0907	105	80-120			
Silver	101			ug/L	100.00	0.0040	101	80-120			
Thallium	99.8			ug/L	100.00	0.0068	100	80-120			
Vanadium	109			ug/L	100.00	0.0992	109	80-120			
Zinc	105			ug/L	100.00	1.78	103	80-120			
Lithium	105			ug/L	100.00	0.732	104	80-120			
Batch 7090654 - EPA 7470A											
Blank (7090654-BLK1)						Prepared: 09/26/17 Analyzed: 09/27/17					
Mercury	ND	0.00050	0.000036	mg/L							
LCS (7090654-BS1)						Prepared: 09/26/17 Analyzed: 09/27/17					
Mercury	0.00246	0.00050	0.000036	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

September 29, 2017

Report No.: AAI0738

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7090654 - EPA 7470A											
Matrix Spike (7090654-MS1)			**Source: AAI0738-01**			Prepared: 09/26/17 Analyzed: 09/27/17					
Mercury	0.00253	0.00050	0.000036	mg/L	2.5000E-3	ND	101	75-125			
Matrix Spike Dup (7090654-MSD1)			**Source: AAI0738-01**			Prepared: 09/26/17 Analyzed: 09/27/17					
Mercury	0.00256	0.00050	0.000036	mg/L	2.5000E-3	ND	103	75-125	2	20	
Post Spike (7090654-PS1)			**Source: AAI0738-01**			Prepared: 09/26/17 Analyzed: 09/27/17					
Mercury	1.74			ug/L	1.6667	-0.00892	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

September 29, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
9-22-17	1055	GW		X	YGWC-36	4	1	1	2	1

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤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: Ryan Walker ACC
DATE/TIME: 9-22-17 1055
RELINQUISHED BY: Ryan Walker
DATE/TIME: 9-22-17 1205

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

FOR LAB USE ONLY
LAB #: AK10738
Entered Into LIMS:

RECEIVED BY LAB: Rahman
DATE/TIME: 09/22/17 1305
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Tracking #:
Packed: No NA
Ice: Yes No NA
Temperature: Min: 0.1 Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project # AAI0738

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

Optional
Proj. Due Date:
Proj. Name:

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 6°C

Date and Initials of person examining contents: 9/22/17 DK

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 9/22/2017 3:02:40PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 09/22/17 13:05

Work Order: AAI0738
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 1 **#Containers:** 4

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 13, 2017

Mr. Joju Abraham
Georgia Power
2480 Maner Road
Atlanta, GA 30339

RE: Project: AAI0738 Plant Yates
Pace Project No.: 30231326

Dear Mr. Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on September 28, 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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAI0738 Plant Yates
Pace Project No.: 30231326

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAI0738 Plant Yates
Pace Project No.: 30231326

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30231326001	**YGWC-36**	Water	09/22/17 10:55	09/28/17 10:15

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAI0738 Plant Yates
Pace Project No.: 30231326

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30231326001	**YGWC-36**	EPA 9315	LAL	1
		EPA 9320	VAL	1
		Total Radium Calculation	JAL	1

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAI0738 Plant Yates
Pace Project No.: 30231326

Sample: YGWC-36 **Lab ID: 30231326001** Collected: 09/22/17 10:55 Received: 09/28/17 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	**0.306 ± 0.228 (0.378) C:83% T:NA**	pCi/L	10/04/17 08:27	13982-63-3	
Radium-228	EPA 9320	**0.361 ± 0.450 (0.953) C:78% T:79%**	pCi/L	10/11/17 18:11	15262-20-1	
Total Radium	Total Radium Calculation	**0.667 ± 0.678 (1.33)**	pCi/L	10/13/17 08:51	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAI0738 Plant Yates
Pace Project No.: 30231326

QC Batch: 273680 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30231326001

METHOD BLANK: 1346118 Matrix: Water
Associated Lab Samples: 30231326001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.235 ± 0.194 (0.342) C:100% T:NA	pCi/L	10/04/17 08:25	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAI0738 Plant Yates
Pace Project No.: 30231326

QC Batch: 273681 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30231326001

METHOD BLANK: 1346129 Matrix: Water
Associated Lab Samples: 30231326001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.514 ± 0.344 (0.659) C:81% T:90%	pCi/L	10/11/17 15:48	

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

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAI0738 Plant Yates
Pace Project No.: 30231326

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.

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

30231326

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAI0738 Workorder Name: Plant Yates Owner Received Date: 9/22/2017 Results Requested By: 10/19/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWC-36	G	9/22/2017 10:55	AAI0738-01	GW	2	X	001
2								
3								
4								
5								
6								
7								
8								
9								
10								

WO# : 30231326
30231326

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	9/27/17		9/28/17 1015	
2					
3					

Cooler Temperature on Receipt 1.2 °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.

30231326

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
9-22-17	1055	GW		X	YGWC-36	4	1	1	2	1

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Evan Walker ACC
DATE/TIME: 9-22-17 1055
RELINQUISHED BY:
DATE/TIME: 9-22-17 1205
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY/LAB: Malman
DATE/TIME: 09/22/17 1305

FOR LAB USE ONLY
LAB #: AR70738
Entered into LIMS:
Tracking #:

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: 0.1 Max:
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

Plant Yates COC Ash Ponds

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Pace GA Project # 30231326

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

Label ZH
LIMS Login [illegible]

Tracking #: 741366588530

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 9/28/17

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. [illegible] 9/18/17
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix: WT				
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation.	✓			16. PH L2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed ZH / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:			✓	18.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: ZH Date: 9/28/17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	10/4/2017
Worklist:	38021
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1346129
MB concentration:	0.514
M/B Counting Uncertainty:	0.332
MB MDC:	0.659
MB Numerical Performance Indicator:	3.03
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS38021	LCSD38021
Count Date:	10/11/2017	10/11/2017
Spike I.D.:	17-033	17-033
Spike Concentration (pCi/mL):	23.296	23.296
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.813	0.814
Target Conc. (pCi/L, g, F):	5.729	5.726
Uncertainty (Calculated):	0.413	0.412
Result (pCi/L, g, F):	5.697	6.233
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.646	0.643
Numerical Performance Indicator:	-0.08	1.30
Percent Recovery:	99.43%	108.85%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS38021	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD38021	
Sample Result (pCi/L, g, F):	5.697	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.646	
Sample Duplicate Result (pCi/L, g, F):	6.233	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.643	
Are sample and/or duplicate results below MDC?	NO	
Duplicate Numerical Performance Indicator:	-1.153	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	9.05%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

10/13/17

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/3/2017
Worklist:	38020
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1346118
MB concentration:	0.235
M/B Counting Uncertainty:	0.191
MB MDC:	0.342
MB Numerical Performance Indicator:	2.41
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS38020	LCSD38020
Count Date:	10/4/2017	10/4/2017
Spike I.D.:	17-030	17-030
Spike Concentration (pCi/mL):	80.191	80.191
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.512	0.512
Target Conc. (pCi/L, g, F):	15.673	15.674
Uncertainty (Calculated):	1.444	1.444
Result (pCi/L, g, F):	13.050	12.207
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.317	1.051
Numerical Performance Indicator:	-2.63	-3.80
Percent Recovery:	83.27%	77.89%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS38020	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD38020	
Sample Result (pCi/L, g, F):	13.050	
Sample Result Counting Uncertainty (pCi/L, g, F):	1.317	
Sample Duplicate Result (pCi/L, g, F):	12.207	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.051	
Are sample and/or duplicate results below MDC?	NO	
Duplicate Numerical Performance Indicator:	0.981	
Duplicate RPD:	6.68%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

10/13/17

Product Name: Low-Flow System

Date: 2017-03-06 14:46:11

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	50 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	44.7 ft

Well Information:		Pumping Information:	
Well ID	YGWA-4I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.570932 L
Well Total Depth	48.70 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	21 in
Depth to Water	24.32 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:22:08	900.03	16.71	6.21	153.88	2.14	25.90	1.27	77.23
Last 5	14:27:08	1200.02	16.65	6.21	152.09	1.39	26.10	1.06	78.34
Last 5	14:32:08	1500.01	17.12	6.21	151.23	1.22	26.20	1.00	78.71
Last 5	14:37:08	1800.01	17.17	6.21	150.71	1.05	26.10	0.96	79.51
Last 5	14:42:08	2100.01	17.09	6.20	150.48	0.95	26.10	0.97	80.98
Variance 0			0.47	0.00	-0.86			-0.05	0.36
Variance 1			0.05	-0.00	-0.52			-0.05	0.80
Variance 2			-0.08	-0.01	-0.23			0.01	1.47

Notes

Collected at 14:50. Sunny 60s. EB-3 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-07 10:06:35

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	85 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	81 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	85 mL/min
Well diameter	2 in	Total System Volume	2.331085 L
Well Total Depth	131.60 ft	Calculated Sample Rate	300 sec
Screen Length	50 ft	Stabilization Drawdown	4 in
Depth to Water	13.78 ft	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	09:43:41	900.01	16.74	7.41	294.09	4.19	14.10	0.43	-99.55
Last 5	09:48:41	1200.01	16.74	7.42	295.11	5.25	14.10	0.34	-91.01
Last 5	09:53:41	1500.00	16.73	7.42	295.25	5.02	14.10	0.24	-88.49
Last 5	09:58:41	1800.00	16.71	7.42	296.34	4.49	14.10	0.19	-88.46
Last 5	10:03:41	2099.99	16.69	7.43	295.99	4.12	14.10	0.15	-89.18
Variance 0			-0.00	0.00	0.14			-0.10	2.52
Variance 1			-0.02	0.00	1.09			-0.05	0.04
Variance 2			-0.02	0.01	-0.35			-0.04	-0.72

Notes

Collected at 10:10. Sunny 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-07 13:18:20

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	58 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	53 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.744681 L
Well Total Depth	58.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	19.72 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:55:04	7199.92	17.00	5.67	92.60	5.29	19.90	6.46	111.61
Last 5	13:00:04	7499.91	16.91	5.67	92.53	5.45	19.90	6.46	111.75
Last 5	13:05:04	7799.91	16.74	5.66	92.50	5.12	19.90	6.45	111.85
Last 5	13:10:04	8099.90	16.65	5.66	92.60	4.93	19.90	6.47	112.02
Last 5	13:15:04	8399.90	16.68	5.66	92.66	4.85	19.90	6.48	112.16
Variance 0			-0.18	-0.00	-0.03			-0.01	0.09
Variance 1			-0.09	-0.00	0.10			0.02	0.17
Variance 2			0.04	-0.00	0.05			0.00	0.15

Notes

Collected at 13:20. Light rain. 60s. FB-3 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-02 13:24:21

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	74 ft
Latitude	33º 27' 47.75"		
Longitude	-84º -53' -38.57"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	64 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6I	Final Pumping Rate	50 mL/min
Well diameter	2 in	Total System Volume	2.09218 L
Well Total Depth	69.1 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	122.28 in
Depth to Water	22.11 ft	Total Volume Pumped	12 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	12:58:35	12905.79	17.68	6.32	231.92	13.90	31.80	1.34	91.05
Last 5	13:03:35	13205.79	18.08	6.32	231.96	14.40	31.90	1.37	91.57
Last 5	13:08:35	13505.79	18.33	6.32	232.65	14.10	32.10	1.37	92.21
Last 5	13:13:35	13805.78	18.52	6.32	232.04	14.40	32.20	1.41	92.71
Last 5	13:18:40	14110.78	18.85	6.32	233.26	14.00	32.30	1.44	93.68
Variance 0			0.25	-0.01	0.68			0.00	0.64
Variance 1			0.19	0.00	-0.61			0.04	0.50
Variance 2			0.34	-0.00	1.22			0.02	0.96

Notes

Sunny 60's. Sampled at 13:25. Talked with Pete Robinson about turbidity being above 10 NTU. Got the ok to sample without filter.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-03 10:30:45

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	44 ft
Latitude	33º 27' 47.34"		
Longitude	-84º -53' -38.36"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6S	Final Pumping Rate	75 mL/min
Well diameter	2 in	Total System Volume	1.44062 L
Well Total Depth	39.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	11.04 in
Depth to Water	21.78 ft	Total Volume Pumped	1.88 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	10:08:11	300.12	14.76	5.96	143.83	1.37	22.60	7.02	115.02
Last 5	10:13:11	600.02	14.90	5.87	146.61	1.76	22.70	7.01	110.50
Last 5	10:18:11	900.02	14.97	5.88	146.60	1.18	22.70	7.03	107.07
Last 5	10:23:11	1200.02	14.97	5.87	146.57	1.36	22.70	7.04	105.63
Last 5	10:28:11	1500.01	14.87	5.87	146.00	0.91	22.70	7.04	104.34
Variance 0			0.07	0.01	-0.01			0.03	-3.43
Variance 1			0.00	-0.01	-0.04			0.01	-1.44
Variance 2			-0.10	0.00	-0.57			-0.01	-1.29

Notes

Sunny 50's. Sampled at 10:30.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-02 15:19:55

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	44 ft
Latitude	33º 27' 18.9"		
Longitude	-84º -53' -15.02"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-17S	Final Pumping Rate	170 mL/min
Well diameter	2 in	Total System Volume	1.44062 L
Well Total Depth	39.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.64 in
Depth to Water	12.43 ft	Total Volume Pumped	9.35 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	14:54:49	600.02	16.96	5.57	71.33	11.70	12.90	1.25	88.54
Last 5	14:59:49	900.03	16.92	5.56	72.09	7.09	12.90	1.09	86.87
Last 5	15:04:49	1200.03	16.89	5.55	72.71	6.78	12.90	1.04	88.62
Last 5	15:09:50	1501.03	17.01	5.57	73.16	6.50	12.90	0.95	85.49
Last 5	15:14:50	1800.99	17.14	5.54	73.61	4.90	12.90	1.03	86.86
Variance 0			-0.03	-0.01	0.62			-0.05	1.76
Variance 1			0.12	0.02	0.45			-0.09	-3.13
Variance 2			0.14	-0.03	0.45			0.08	1.37

Notes

Sunny 60's. Sampled at 15:20.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-01 14:35:43

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	84 ft
Latitude	33º 27' 13.53"		
Longitude	-84º -53' -11.74"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	74 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18I	Final Pumping Rate	130 mL/min
Well diameter	2 in	Total System Volume	2.309366 L
Well Total Depth	79.67 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.28 in
Depth to Water	24.61 ft	Total Volume Pumped	3.9 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	14:13:41	600.03	18.24	6.01	116.90	2.39	24.70	3.52	143.51
Last 5	14:18:41	900.01	18.17	5.98	116.86	2.61	24.80	3.42	143.87
Last 5	14:23:41	1200.00	18.21	5.96	117.01	2.44	24.80	3.21	143.82
Last 5	14:28:41	1500.01	18.04	5.95	116.73	2.09	24.80	3.09	143.24
Last 5	14:33:41	1799.99	17.99	5.94	116.92	2.64	24.80	3.03	140.39
Variance 0			0.04	-0.02	0.14			-0.21	-0.06
Variance 1			-0.17	-0.02	-0.27			-0.12	-0.58
Variance 2			-0.05	-0.01	0.18			-0.06	-2.85

Notes

Cloudy 70's. Sampled at 14:40.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-01 16:06:28

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	44 ft
Latitude	33º 27' 14.04"		
Longitude	-84º -53' -11.47"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18S	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	1.44062 L
Well Total Depth	39.86 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	10.32 in
Depth to Water	21.84 ft	Total Volume Pumped	5.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:43:56	1800.02	19.01	5.40	61.87	8.88	22.70	1.01	135.88
Last 5	15:48:56	2100.03	18.94	5.40	62.06	7.16	22.70	0.94	135.58
Last 5	15:53:56	2399.99	18.97	5.39	62.12	5.87	22.70	0.89	134.10
Last 5	15:58:56	2699.98	18.96	5.42	62.19	5.71	22.70	0.85	133.76
Last 5	16:03:56	2999.99	18.79	5.41	62.20	4.26	22.70	0.83	133.75
Variance 0			0.03	-0.01	0.05			-0.05	-1.48
Variance 1			-0.01	0.02	0.07			-0.04	-0.34
Variance 2			-0.17	-0.00	0.02			-0.02	-0.00

Notes

Cloudy 70's. Sampled at 1610.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-06 11:13:06

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	30 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	25 ft

Well Information:		Pumping Information:	
Well ID	YGWA-20S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.6189027 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9 in
Depth to Water	9.8 ft	Total Volume Pumped	18 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	10:49:20	3599.97	16.88	5.62	57.18	6.24	10.60	6.10	138.44
Last 5	10:54:20	3899.97	16.87	5.60	57.06	5.79	10.60	6.08	139.35
Last 5	10:59:20	4199.97	16.88	5.62	57.08	5.30	10.60	6.10	138.76
Last 5	11:04:20	4499.97	16.96	5.62	56.93	5.02	10.60	6.08	139.24
Last 5	11:09:21	4800.97	17.05	5.63	56.96	4.28	10.60	6.11	139.60
Variance 0			0.00	0.01	0.02			0.02	-0.59
Variance 1			0.08	0.01	-0.15			-0.02	0.48
Variance 2			0.10	0.00	0.03			0.03	0.36

Notes

Collected at 11:15. DUP 3 here. Cloudy 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-06 12:45:27

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	81 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA-21I	Final Pumping Rate	70 mL/min
Well diameter	2 in	Total System Volume	2.24421 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	30 in
Depth to Water	31.00 ft	Total Volume Pumped	3.3 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	12:21:58	900.02	18.21	6.29	140.39	2.54	33.00	0.64	21.26
Last 5	12:26:58	1200.02	18.08	6.34	139.01	2.28	33.30	0.57	13.16
Last 5	12:31:58	1500.02	18.61	6.36	135.01	2.13	33.40	0.52	10.92
Last 5	12:36:58	1800.02	18.68	6.35	132.40	2.00	33.50	0.44	11.49
Last 5	12:41:58	2100.02	19.00	6.34	130.89	1.91	33.50	0.33	12.27
Variance 0			0.53	0.02	-4.00			-0.05	-2.24
Variance 1			0.07	-0.00	-2.61			-0.08	0.57
Variance 2			0.31	-0.02	-1.50			-0.11	0.78

Notes

Collected at 12:45. Cloudy 60s

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-09 12:38:29

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	30 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	24.8 ft

Well Information:		Pumping Information:	
Well ID	YGWC-19S	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	0.6189027 L
Well Total Depth	29.82 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	16.25 ft	Total Volume Pumped	9 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	12:16:22	2400.01	19.73	5.64	42.35	9.12	16.50	6.41	142.60
Last 5	12:21:22	2700.00	19.68	5.63	42.01	7.83	16.50	6.43	143.08
Last 5	12:26:22	3000.00	19.89	5.63	42.18	6.95	16.50	6.40	144.48
Last 5	12:31:22	3299.99	19.80	5.64	42.27	4.95	16.50	6.39	144.37
Last 5	12:36:22	3599.98	19.90	5.63	42.13	3.40	16.50	6.39	145.19
Variance 0			0.21	0.00	0.18			-0.04	1.40
Variance 1			-0.09	0.01	0.09			-0.01	-0.11
Variance 2			0.10	-0.01	-0.14			0.00	0.82

Notes

Collected at 12:40. Sunny 60s. EB-3 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-08 13:21:09

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-22S	Final Pumping Rate	175 mL/min
Well diameter	2 in	Total System Volume	0.6635369 L
Well Total Depth	40.13 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	9.35 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:57:14	1200.02	19.63	4.87	693.55	2.75	9.90	0.30	260.99
Last 5	13:02:15	1501.02	19.68	4.88	695.80	3.43	9.90	0.39	246.99
Last 5	13:07:15	1801.00	19.68	4.89	695.84	3.26	9.90	0.61	244.16
Last 5	13:12:16	2102.00	19.53	4.89	696.99	4.02	9.90	0.71	244.54
Last 5	13:17:16	2402.00	19.38	4.89	699.11	2.80	9.90	0.68	239.75
Variance 0			0.00	0.01	0.05			0.22	-2.82
Variance 1			-0.15	0.01	1.15			0.10	0.37
Variance 2			-0.15	-0.00	2.11			-0.03	-4.79

Notes

Collected at 13:25. Sunny 60s. Extra Rad here

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-09 10:40:29

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWC-23S	Final Pumping Rate	220 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	39.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7 in
Depth to Water	14.97 ft	Total Volume Pumped	8.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:17:57	900.02	17.39	5.57	213.77	11.00	15.60	7.93	133.25
Last 5	10:22:57	1200.03	17.41	5.57	211.55	7.12	15.60	7.92	132.77
Last 5	10:27:57	1500.00	17.50	5.56	210.64	5.31	15.60	7.94	132.50
Last 5	10:32:57	1800.00	17.55	5.56	209.38	3.62	15.60	7.94	133.20
Last 5	10:37:57	2100.00	17.64	5.56	208.74	2.89	15.60	7.91	132.92
Variance 0			0.09	-0.00	-0.91			0.01	-0.27
Variance 1			0.05	-0.00	-1.26			-0.00	0.70
Variance 2			0.09	0.00	-0.64			-0.03	-0.29

Notes

Collected at 10:40. Sunny 60s. FB-4 here. DUP-4 here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-08 11:49:11

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	57 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWC-24S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	1.722963 L
Well Total Depth	57.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	28.55 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:25:05	1500.01	19.15	5.60	66.80	0.96	29.00	5.56	134.30
Last 5	11:30:05	1800.01	19.15	5.61	66.73	0.80	29.00	5.64	133.88
Last 5	11:35:05	2100.00	19.23	5.61	66.71	0.71	29.00	5.67	134.25
Last 5	11:40:05	2399.99	19.36	5.62	66.88	0.58	29.00	5.73	134.55
Last 5	11:45:05	2699.99	19.31	5.62	66.62	0.46	29.00	5.86	135.26
Variance 0			0.08	0.00	-0.02			0.04	0.36
Variance 1			0.13	0.01	0.18			0.06	0.30
Variance 2			-0.05	-0.00	-0.27			0.13	0.71

Notes

Collected at 11:50. Sunny 60s

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-01 12:41:22

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	43 ft
Latitude	33º 27' 19.44"		
Longitude	-84º -53' -35.09"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.418902 L
Well Total Depth	38.28 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.8 in
Depth to Water	19.55 ft	Total Volume Pumped	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	12:18:43	300.03	22.36	5.31	950.67	9.33	19.70	1.64	380.27
Last 5	12:23:43	600.01	22.63	5.29	952.51	4.87	19.70	0.97	374.91
Last 5	12:28:43	900.01	22.98	5.27	957.35	4.32	19.70	0.64	411.91
Last 5	12:33:43	1200.02	22.64	5.27	960.63	2.69	19.70	0.45	454.10
Last 5	12:38:43	1500.02	22.45	5.26	959.53	2.81	19.70	0.38	420.27
Variance 0			0.36	-0.01	4.83			-0.32	37.00
Variance 1			-0.34	-0.01	3.28			-0.19	42.19
Variance 2			-0.19	-0.01	-1.09			-0.07	-33.84

Notes

Cloudy 70's. Sampled at 12:45.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-01 11:02:58

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Peristaltic
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	28 ft
Latitude	33º 27' 19.41"		
Longitude	-84º -53' -35.16"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2149758 L
Well Total Depth	23.47 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9.12 in
Depth to Water	16.34 ft	Total Volume Pumped	13.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:40:38	4500.95	20.91	4.58	775.80	5.68	17.10	0.38	377.15
Last 5	10:45:38	4800.95	21.15	4.58	772.49	7.51	17.10	0.37	382.64
Last 5	10:50:38	5100.95	21.65	4.58	769.52	5.50	17.10	0.37	385.04
Last 5	10:55:40	5402.95	21.82	4.58	768.80	7.04	17.10	0.35	395.93
Last 5	11:00:40	5702.95	21.29	4.58	771.86	3.84	17.10	0.30	421.72
Variance 0			0.49	-0.00	-2.97			0.00	2.40
Variance 1			0.17	0.01	-0.72			-0.03	10.89
Variance 2			-0.53	-0.01	3.06			-0.05	25.80

Notes

Cloudy 70's. Sampled at 11:05.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-01 12:59:32

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	380 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	38.73 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	8.50 ft	Total Volume Pumped	80 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	12:33:48	10814.88	19.50	4.17	1348.00	6.67	8.80	0.08	227.81
Last 5	12:38:48	11114.87	19.50	4.17	1349.57	6.01	8.80	0.07	225.23
Last 5	12:43:48	11414.85	19.40	4.17	1350.19	5.41	8.80	0.07	224.34
Last 5	12:48:48	11714.86	19.50	4.17	1351.46	5.15	8.80	0.07	223.87
Last 5	12:53:48	12014.89	19.27	4.17	1349.71	4.68	8.80	0.07	222.38
Variance 0			-0.10	-0.00	0.62			-0.00	-0.89
Variance 1			0.10	0.00	1.27			-0.00	-0.47
Variance 2			-0.23	-0.00	-1.75			-0.00	-1.49

Notes

Collected at 12:55. Cloudy 70s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-28 16:10:36

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	43 ft
Latitude	33º 27' 17.97"		
Longitude	-84º -53' -32.86"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWC-34I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.418902 L
Well Total Depth	38.75 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.76 in
Depth to Water	24.47 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:47:20	600.02	18.72	4.76	715.70	0.63	24.70	1.27	115.14
Last 5	15:52:20	900.02	18.79	4.74	716.44	0.37	24.70	0.76	117.24
Last 5	15:57:20	1200.02	18.84	4.73	716.68	0.25	24.70	0.56	118.79
Last 5	16:02:20	1500.00	18.84	4.73	716.78	0.19	24.70	0.59	119.63
Last 5	16:07:20	1800.00	18.89	4.73	715.66	0.21	24.70	0.44	120.25
Variance 0			0.05	-0.01	0.24			-0.20	1.54
Variance 1			-0.00	-0.00	0.11			0.03	0.85
Variance 2			0.05	0.00	-1.12			-0.14	0.62

Notes

Cloudy 60's. Sampled at 16:15

Grab Samples

Product Name: Low-Flow System

Date: 2017-09-22 10:56:48

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	65 ft
Latitude	33º 27' 27.68"		
Longitude	-84º -53' -49.85"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	55 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	1.896712 L
Well Total Depth	60.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	13 in
Depth to Water	10.00 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:35:40	900.01	21.19	5.64	402.44	1.09	11.40	0.83	85.28
Last 5	10:40:41	1200.01	21.16	5.56	402.22	1.11	11.40	0.84	89.71
Last 5	10:45:40	1500.00	21.24	5.52	401.62	1.21	11.40	0.87	92.96
Last 5	10:50:40	1800.00	21.24	5.51	401.54	1.61	11.30	0.85	94.90
Last 5	10:55:41	2101.00	21.20	5.50	401.92	1.62	11.30	0.83	97.58
Variance 0			0.09	-0.04	-0.60			0.03	3.25
Variance 1			0.00	-0.01	-0.08			-0.01	1.94
Variance 2			-0.05	-0.02	0.38			-0.03	2.68

Notes

Sunny, 80's. Sampled at 10:55

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:

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
Client ID: EB-1-4-26-17
Date/Time Sampled: 4/26/2017 9:40:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAD0922-01
Date/Time Received: 4/27/2017 10:45:00AM

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	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
Client ID: YGWA-14S
Date/Time Sampled: 4/26/2017 10:30:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD0922-02
Date/Time Received: 4/27/2017 10:45:00AM

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
Client ID: YGWA-30I
Date/Time Sampled: 4/26/2017 12:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD0922-03
Date/Time Received: 4/27/2017 10:45:00AM

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
Client ID: YGWA-3D
Date/Time Sampled: 4/26/2017 1:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD0922-04
Date/Time Received: 4/27/2017 10:45:00AM

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

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922
Client ID: YGWA-3I
Date/Time Sampled: 4/26/2017 3:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD0922-05
Date/Time Received: 4/27/2017 10:45:00AM

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

Attention: Mr. Joju Abraham

May 04, 2017

Report No.: AAD0922
Client ID: YGWA-18I
Date/Time Sampled: 4/26/2017 1:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD0922-06
Date/Time Received: 4/27/2017 10:45:00AM

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
Client ID: YGWA-20S
Date/Time Sampled: 4/26/2017 12:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD0922-07
Date/Time Received: 4/27/2017 10:45:00AM

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
Client ID: YGWA-21I
Date/Time Sampled: 4/26/2017 10:25:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD0922-08
Date/Time Received: 4/27/2017 10:45:00AM

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
Client ID: Dup-1
Date/Time Sampled: 4/26/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD0922-09
Date/Time Received: 4/27/2017 10:45:00AM

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)		**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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m/DD/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)						LAB ID NUMBER
CONTAINER TYPE:							P	P	P	P					
PRESERVATION:							3	7	3						
4/26/17	0940	W		✓	EB-1-4-26-17	4	1	1	2						1
4/26/17	1030	GW		✓	YGWA-14S	4	1	1	2						2
4/26/17	1200	GW		✓	YGWA-30I	4	1	1	2						3
4/26/17	1330	GW		✓	YGWA-3D	4	1	1	2						4
4/26/17	1510	GW		✓	YGWA-3I	4	1	1	2						5
4/26/17	1320	GW		✓	YGWA-18I	4	1	1	2						6
4/26/17	1205	GW		✓	YGWA-20S	4	1	1	2						7
4/26/17	1325	GW		✓	YGWA-21I	4	1	1	2						8
4/26/17	—	GW		✓	DUP-1	4	1	1	2						9

(YGWA-21I)

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker (ACC)
DATE/TIME: 4-26-17 1615

RELINQUISHED BY: C. Parker
DATE/TIME: 4-27-17 1045

RECEIVED BY: Rahman
DATE/TIME: 04/27/17 1045

RELINQUISHED BY:
DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

Packed: No NA
Iced: Yes No NA
Temperature: 2 °C Min: 2 °C Max:

FOR LAB USE ONLY
LAB #: AAD0922
Entered into LIMS: MR
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: 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAD0922 Plant Yates
Pace Project No.: 30217522

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
Total Radium	Total Radium Calculation	**0.672 ± 0.559 (1.06)**	pCi/L	05/18/17 17:26	7440-14-4	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

30217522

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: AAD0922 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 5/22/2017

Report To:	Subcontract To:
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

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Radium 226, 228, Total	LAB USE ONLY
1	EB-1-4-26-17	G	4/26/2017 9:40	AAD0922-01	W	2	X	001
2	YGWA-14S	G	4/26/2017 10:30	AAD0922-02	GW	2	X	002
3	YGWA-30I	G	4/26/2017 12:00	AAD0922-03	GW	2	X	003
4	YGWA-3D	G	4/26/2017 13:30	AAD0922-04	GW	2	X	004
5	YGWA-3I	G	4/26/2017 15:10	AAD0922-05	GW	2	X	005
6	YGWA-18I	G	4/26/2017 13:20	AAD0922-06	GW	2	X	006
7	YGWA-20S	G	4/26/2017 12:05	AAD0922-07	GW	2	X	007
8	YGWA-21I	G	4/26/2017 10:25	AAD0922-08	GW	2	X	008
9	Dup-1	G	4/26/2017 0:00	AAD0922-09	GW	2	X	009
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	MLahman	04/27/17	Alyna R Muchoney Pace	4/29/17 10:15	
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.

WO#: 30217522

30217522

30217522-1

CHAIN OF CUSTODY RECORD

Pace Analytical®

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

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
4/26/17	0940	W		✓	EB-1-4-26-17	4	1	1	2	1
4/26/17	1030	GW		✓	YGWA-14S	4	1	1	2	2
4/26/17	1200	GW		✓	YGWA-30I	4	1	1	2	3
4/26/17	1330	GW		✓	YGWA-3D	4	1	1	2	4
4/26/17	1510	GW		✓	YGWA-3I	4	1	1	2	5
4/26/17	1320	GW		✓	YGWA-18I	4	1	1	2	6
4/26/17	1205	GW		✓	YGWA-20S	4	1	1	2	7
4/26/17	1225	GW		✓	YGWA-21I	4	1	1	2	8
4/26/17	—	GW		✓	DUP-1	4	1	1	2	9

(YGWA-21I)

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, R. Walker (ACC)

DATE/TIME: 4-26-17 1615

RELINQUISHED BY: [signature]

DATE/TIME: 4-27-17 1045

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

FOR LAB USE ONLY
LAB #: AAD0922
Entered into LIMS: MR

RECEIVED BY LAB: [signature] DATE/TIME: 04/27/17 1045

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

Tracking #:

pH Checked: Yes No NA

Temperature: 2 °C Min: 2 °C Max

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

30217522

Client Name: Pace GA Project #

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

Tracking #: 6812516397349

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: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			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.	✓			pH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: ARM 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: ARM Date: 4/29/17

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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	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	
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	

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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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):	0.075	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	0.271	30217522001
Duplicate RPD:	-152.59%	30217522001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

5/19/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	5/8/2017
Worklist:	35453
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS35453	LCSD35453
Count Date:	5/10/2017	5/10/2017
Spike I.D.:	17-005	17-005
Spike Concentration (pCi/mL):	24.575	24.575
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.810	0.811
Target Conc. (pCi/L, g, F):	6.068	6.063
Uncertainty (Calculated):	0.437	0.437
Result (pCi/L, g, F):	6.480	8.183
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.741	0.798
Numerical Performance Indicator:	0.94	4.57
Percent Recovery:	106.79%	134.96%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS35453	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD35453	
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	

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.

5/11/17

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: 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:

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
Client ID: GWA-18S
Date/Time Sampled: 4/26/2017 6:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD1012-01
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	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
Client ID: YGWA-1I
Date/Time Sampled: 4/27/2017 3:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD1012-02
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	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
Client ID: YGWA-1D
Date/Time Sampled: 4/27/2017 5:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD1012-03
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	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
Client ID: FB-1-4-28-17
Date/Time Sampled: 4/28/2017 9:30:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAD1012-04
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	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
Client ID: YGWA-2I
Date/Time Sampled: 4/28/2017 11:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAD1012-05
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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®
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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m/dd/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470) P 3	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C) P 7	Radium 226 & 228 (SW-846 9315/9320) P 3							LAB ID NUMBER
4-26-17	1850	GW		✓	GWA-18S	4		1	1	2							1
4-27-17	1545	GW		✓	YGWA-1I	4		1	1	2							2
4-27-17	1735	GW		✓	YGWA-1D	4		1	1	2							3
4-28-17	0930	W		✓	FB-1-4-28-17	4		1	1	2							4
4-28-17	1120	GW		✓	YGWA-2I	4		1	1	2							5
4-28-17	1250	W		✓	EB-2-4-28-17	4		1	1	2							6

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: E. Parker, R. Walker ACC
DATE/TIME: 4-28-17 1300
RELINQUISHED BY:
DATE/TIME: 4-29-17 1140

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 4/29/17 1140
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
pH Checked: Y No NA
Residual Chlorine: Yes No NA
Temperature: 5.5°C Min: 5.5°C Max:
Custody Seal: Intact Broken Not Present N/A
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AADI012
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: 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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAD1012 Plant Yates
Pace Project No.: 30217674

Sample: GWA-18S **Lab ID: 30217674001** Collected: 04/26/17 18:50 Received: 05/02/17 11:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.208 ± 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	

Sample: YGWA-1I **Lab ID: 30217674002** Collected: 04/27/17 15:45 Received: 05/02/17 11:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.151 ± 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	

Sample: YGWA-1D **Lab ID: 30217674003** Collected: 04/27/17 17:35 Received: 05/02/17 11:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0397 ± 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	

Sample: FB-1-4-28-17 **Lab ID: 30217674004** Collected: 04/28/17 09:30 Received: 05/02/17 11:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.0640 ± 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	

Sample: YGWA-2I **Lab ID: 30217674005** Collected: 04/28/17 11:20 Received: 05/02/17 11:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.425 ± 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAD1012 Plant Yates
Pace Project No.: 30217674

Sample: YGWA-2I **Lab ID: 30217674005** Collected: 04/28/17 11:20 Received: 05/02/17 11:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**0.548 ± 0.645 (1.24)**	pCi/L	05/18/17 17:33	7440-14-4	

Sample: EB-2-4-28-17 **Lab ID: 30217674006** Collected: 04/28/17 12:50 Received: 05/02/17 11:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.186 ± 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30217674

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAD1012 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 5/24/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	GWA-18S	G	4/26/2017 18:50	AAD1012-01	GW	2	X	001
2	YGWA-1I	G	4/27/2017 15:45	AAD1012-02	GW	2	X	002
3	YGWA-1D	G	4/27/2017 17:35	AAD1012-03	GW	2	X	003
4	FB-1-4-28-17	G	4/28/2017 9:30	AAD1012-04	W	2	X	004
5	YGWA-2I	G	4/28/2017 11:20	AAD1012-05	GW	2	X	005
6	EB-2-4-28-17	G	4/28/2017 12:50	AAD1012-06	W	2	X	006
7								
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	MDahlman	05/01/17	Ashley Tom/Pace	5-2-17/1130	
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.

30217674

CHAIN OF CUSTODY RECORD

Pace Analytical

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M/DD/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE		P	P	P	
					PRESERVATION		3	7	3	
4-26-17	1850	GW		✓	6WA-18S	4	1	1	2	1
4-27-17	1545	GW		✓	Y6WA-1I	4	1	1	2	2
4-27-17	1735	GW		✓	Y6WA-1D	4	1	1	2	3
4-28-17	0930	W		✓	FB-1-4-28-17	4	1	1	2	4
4-28-17	1120	GW		✓	Y6WA-2I	4	1	1	2	5
4-28-17	1250	W		✓	EB-2-4-28-17	4	1	1	2	6

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: E. Parker, R. Walker Acc
DATE/TIME: 4-29-17 1300

RECEIVED BY:
DATE/TIME:

RELINQUISHED BY: [signature]
DATE/TIME: 4-29-17 1140

RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: [signature]
DATE/TIME: 4/29/17 1140

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: 5.5C 5.5°C Max:

Custody Seal: Intact Broken Not Present N/A
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AA01012
Entered into LIMS: CH
Tracking #:

Plant Yates COC Ash Ponds

KEH

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace, GA Project # 30217674

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

Tracking #: 6812 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: DNR 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: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
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. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			15. pH<2 Initial when completed DNR 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: DNR Date: 5-2-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	5/9/2017
Worklist:	35555
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	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	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30217522001	Enter Duplicate
Duplicate Sample I.D.	30217522001DUP	sample IDs if
Sample Result (pCi/L, g, F):	-0.004	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.154	LCS/LCSD in the
Sample Duplicate Result (pCi/L, g, F):	-0.027	space below.
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	30217522001
Duplicate RPD:	-152.59%	30217522001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

5/19/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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
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	LCSD (Y or N)?	Y
	LCS35453	**LCSD35453**
Count Date:	5/10/2017	5/10/2017
Spike I.D.:	17-005	17-005
Spike Concentration (pCi/mL):	24.575	24.575
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.810	0.811
Target Conc. (pCi/L, g, F):	6.068	6.063
Uncertainty (Calculated):	0.437	0.437
Result (pCi/L, g, F):	6.480	8.183
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.741	0.798
Numerical Performance Indicator:	0.94	4.57
Percent Recovery:	106.79%	134.96%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

Duplicate Sample Assessment		
Sample I.D.:	LCS35453	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD35453	
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 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:	

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.

5/19/17

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: AAE0129
May 11, 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

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 11, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWA-5D	AAE0129-01	Ground Water	05/01/17 14:05	05/03/17 15:45
YGWA-4I	AAE0129-02	Ground Water	05/01/17 15:55	05/03/17 15:45
YGWA-6I	AAE0129-03	Ground Water	05/01/17 17:00	05/03/17 15:45
YGWA-6S	AAE0129-04	Ground Water	05/01/17 18:30	05/03/17 15:45
Dup-2	AAE0129-05	Ground Water	05/01/17 00:00	05/03/17 15:45
YGWA-17S	AAE0129-06	Ground Water	05/02/17 09:15	05/03/17 15:45
YGWA-5I	AAE0129-07	Ground Water	05/02/17 10:20	05/03/17 15:45
FB-2-5-2-17	AAE0129-08	Water	05/02/17 11:30	05/03/17 15:45
YGWC-19S	AAE0129-09	Ground Water	05/02/17 11:45	05/03/17 15:45
YGWC-22S	AAE0129-10	Ground Water	05/02/17 12:06	05/03/17 15:45
YGWC-24S	AAE0129-11	Ground Water	05/02/17 13:30	05/03/17 15:45
YGWC-23S	AAE0129-12	Ground Water	05/02/17 13:42	05/03/17 15:45
FB-3-5-2-17	AAE0129-13	Water	05/02/17 13:20	05/03/17 15:45
YGWC-34I	AAE0129-14	Ground Water	05/02/17 14:55	05/03/17 15:45

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 11, 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 11, 2017

Report No.: AAE0129
Client ID: YGWA-5D
Date/Time Sampled: 5/1/2017 2:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-01
Date/Time Received: 5/3/2017 3:45:00PM

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	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	7.2	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 17:59	7050174	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	05/04/17 14:56	05/04/17 17:59	7050174	RLC
Sulfate	20	1.0	0.09	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 17:59	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Arsenic	0.0010	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Barium	0.0083	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Boron	0.0061	0.0400	0.0060	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Calcium	37.0	25.0	0.522	mg/L	EPA 6020B		50	05/05/17 10:45	05/08/17 19:21	7050189	KLH
Chromium	0.0004	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Molybdenum	0.0045	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Lithium	0.0031	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:15	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:15	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWA-4I
Date/Time Sampled: 5/1/2017 3:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-02
Date/Time Received: 5/3/2017 3:45:00PM

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	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	4.3	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 19:01	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 19:01	7050174	RLC
Sulfate	8.4	1.0	0.09	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 19:01	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Barium	0.0149	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Calcium	13.4	5.00	0.522	mg/L	EPA 6020B		50	05/05/17 10:45	05/08/17 19:32	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Lithium	0.0132	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:27	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:18	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWA-6I
Date/Time Sampled: 5/1/2017 5:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-03
Date/Time Received: 5/3/2017 3:45:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	172	25	10	mg/L	SM 2540 C		1	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	7.6	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 19:22	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 19:22	7050174	RLC
Sulfate	54	2.0	0.18	mg/L	EPA 300.0		2	05/04/17 14:56	05/10/17 17:24	7050174	RLC
Metals, Total											
Antimony	0.0004	0.0030	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Arsenic	0.0008	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Barium	0.0225	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Boron	0.0538	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Calcium	13.1	5.00	0.522	mg/L	EPA 6020B		50	05/05/17 10:45	05/08/17 19:44	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Lead	0.0002	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Selenium	0.0015	0.0100	0.0014	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Lithium	0.0077	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 19:38	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:25	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWA-6S
Date/Time Sampled: 5/1/2017 6:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-04
Date/Time Received: 5/3/2017 3:45:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	121	25	10	mg/L	SM 2540 C		1	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	2.9	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 19:43	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 19:43	7050174	RLC
Sulfate	30	1.0	0.09	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 19:43	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Barium	0.0190	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Boron	0.0478	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Calcium	9.82	5.00	0.522	mg/L	EPA 6020B		50	05/05/17 10:45	05/08/17 20:07	7050189	KLH
Chromium	0.0056	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:01	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:27	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: Dup-2
Date/Time Sampled: 5/1/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-05
Date/Time Received: 5/3/2017 3:45:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	190	25	10	mg/L	SM 2540 C		1	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	7.5	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 20:03	7050174	RLC
Fluoride	0.04	0.30	0.004	mg/L	EPA 300.0	J	1	05/04/17 14:56	05/04/17 20:03	7050174	RLC
Sulfate	20	1.0	0.09	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 20:03	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Arsenic	0.0011	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Barium	0.0087	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Boron	0.0061	0.0400	0.0060	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Calcium	38.1	25.0	0.522	mg/L	EPA 6020B		50	05/05/17 10:45	05/08/17 20:18	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Molybdenum	0.0047	0.0100	0.0006	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Lithium	0.0032	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:12	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:29	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWA-17S
Date/Time Sampled: 5/2/2017 9:15:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-06
Date/Time Received: 5/3/2017 3:45:00PM

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	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	4.6	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 20:24	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 20:24	7050174	RLC
Sulfate	5.0	1.0	0.09	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 20:24	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Barium	0.0138	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Calcium	1.95	0.500	0.0104	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Chromium	0.0007	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:24	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:32	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWA-5I
Date/Time Sampled: 5/2/2017 10:20:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-07
Date/Time Received: 5/3/2017 3:45:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	103	25	10	mg/L	SM 2540 C		1	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	4.6	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 20:45	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 20:45	7050174	RLC
Sulfate	2.0	1.0	0.09	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 20:45	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Arsenic	0.0006	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Barium	0.0202	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Calcium	2.17	0.500	0.0104	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Lithium	0.0031	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:35	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:34	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: FB-2-5-2-17
Date/Time Sampled: 5/2/2017 11:30:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAE0129-08
Date/Time Received: 5/3/2017 3:45:00PM

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	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 23:09	7050174	RLC
Fluoride	0.02	0.30	0.004	mg/L	EPA 300.0	J	1	05/04/17 14:56	05/04/17 23:09	7050174	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 23:09	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Calcium	0.0143	0.500	0.0104	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 20:47	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:37	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWC-19S
Date/Time Sampled: 5/2/2017 11:45:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-09
Date/Time Received: 5/3/2017 3:45:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	106	25	10	mg/L	SM 2540 C		1	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	2.4	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 23:30	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 23:30	7050174	RLC
Sulfate	0.19	1.0	0.09	mg/L	EPA 300.0	J	1	05/04/17 14:56	05/04/17 23:30	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Arsenic	0.0006	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Barium	0.0072	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Calcium	0.923	0.500	0.0104	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:04	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:39	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWC-22S
Date/Time Sampled: 5/2/2017 12:06:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-10
Date/Time Received: 5/3/2017 3:45:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	476	25	10	mg/L	SM 2540 C		1	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	26	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/04/17 23:51	7050174	RLC
Fluoride	0.01	0.30	0.004	mg/L	EPA 300.0	J	1	05/04/17 14:56	05/04/17 23:51	7050174	RLC
Sulfate	300	10	0.92	mg/L	EPA 300.0		10	05/04/17 14:56	05/10/17 17:44	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Arsenic	0.0005	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Barium	0.0189	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Beryllium	0.0006	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Boron	4.02	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Cadmium	0.0001	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Calcium	56.1	25.0	0.522	mg/L	EPA 6020B		50	05/05/17 10:45	05/08/17 21:21	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Cobalt	0.0011	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Lead	0.0001	0.0050	0.00007	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Selenium	0.0149	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Lithium	0.0015	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:15	7050189	KLH
Mercury	0.00008	0.00050	0.000041	mg/L	EPA 7470A	J	1	05/08/17 10:45	05/08/17 16:41	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWC-24S
Date/Time Sampled: 5/2/2017 1:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-11
Date/Time Received: 5/3/2017 3:45:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	113	25	10	mg/L	SM 2540 C		1	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	5.7	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/05/17 00:11	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/05/17 00:11	7050174	RLC
Sulfate	0.29	1.0	0.09	mg/L	EPA 300.0	J	1	05/04/17 14:56	05/05/17 00:11	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Arsenic	0.0005	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Barium	0.0190	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Beryllium	0.0001	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Boron	0.0099	0.0400	0.0060	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Calcium	1.57	0.500	0.0104	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Chromium	0.0011	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:27	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:44	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWC-23S
Date/Time Sampled: 5/2/2017 1:42:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-12
Date/Time Received: 5/3/2017 3:45:00PM

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	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	1.8	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/05/17 00:32	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/05/17 00:32	7050174	RLC
Sulfate	60	5.0	0.46	mg/L	EPA 300.0		5	05/04/17 14:56	05/10/17 18:05	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Arsenic	0.0004	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Barium	0.0427	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Beryllium	0.00009	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Boron	1.20	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Calcium	12.9	5.00	0.522	mg/L	EPA 6020B		50	05/05/17 10:45	05/08/17 21:44	7050189	KLH
Chromium	0.0007	0.0100	0.0003	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Selenium	0.0395	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Lithium	0.0019	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:38	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:46	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: FB-3-5-2-17
Date/Time Sampled: 5/2/2017 1:20:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAE0129-13
Date/Time Received: 5/3/2017 3:45:00PM

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	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	ND	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/05/17 00:53	7050174	RLC
Fluoride	ND	0.30	0.004	mg/L	EPA 300.0		1	05/04/17 14:56	05/05/17 00:53	7050174	RLC
Sulfate	ND	1.0	0.09	mg/L	EPA 300.0		1	05/04/17 14:56	05/05/17 00:53	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Arsenic	0.0004	0.0050	0.0004	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Barium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Beryllium	ND	0.0030	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Boron	ND	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Cadmium	ND	0.0010	0.00006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Calcium	ND	0.500	0.0104	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Cobalt	ND	0.0100	0.0005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Molybdenum	ND	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Selenium	ND	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Lithium	ND	0.0500	0.0011	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 21:49	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:53	7050228	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

May 11, 2017

Report No.: AAE0129
Client ID: YGWC-34I
Date/Time Sampled: 5/2/2017 2:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0129-14
Date/Time Received: 5/3/2017 3:45:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	536	25	10	mg/L	SM 2540 C		1	05/05/17 16:40	05/05/17 16:40	7050196	JPT
Inorganic Anions											
Chloride	14	0.25	0.01	mg/L	EPA 300.0		1	05/04/17 14:56	05/05/17 01:13	7050174	RLC
Fluoride	0.17	0.30	0.004	mg/L	EPA 300.0	J	1	05/04/17 14:56	05/05/17 01:13	7050174	RLC
Sulfate	300	10	0.92	mg/L	EPA 300.0		10	05/04/17 14:56	05/10/17 18:26	7050174	RLC
Metals, Total											
Antimony	ND	0.0030	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Arsenic	ND	0.0050	0.0004	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Barium	0.0200	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Beryllium	0.0006	0.0030	0.00007	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Boron	3.26	0.0400	0.0060	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Cadmium	0.0002	0.0010	0.00006	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Calcium	92.8	25.0	0.522	mg/L	EPA 6020B		50	05/05/17 10:45	05/08/17 22:12	7050189	KLH
Chromium	ND	0.0100	0.0003	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Cobalt	0.0048	0.0100	0.0005	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Lead	ND	0.0050	0.00007	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Molybdenum	0.0255	0.0100	0.0006	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Selenium	0.0734	0.0100	0.0014	mg/L	EPA 6020B		1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Thallium	0.0002	0.0010	0.00005	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Lithium	0.0027	0.0500	0.0011	mg/L	EPA 6020B	J	1	05/05/17 10:45	05/08/17 22:07	7050189	KLH
Mercury	ND	0.00050	0.000041	mg/L	EPA 7470A		1	05/08/17 10:45	05/08/17 16:56	7050228	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

May 11, 2017

Report No.: AAE0129

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050196 - SM 2540 C											
Blank (7050196-BLK1)						Prepared & Analyzed: 05/05/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7050196-BS1)						Prepared & Analyzed: 05/05/17					
Total Dissolved Solids	374	25	10	mg/L	400.00		94	84-108			
Duplicate (7050196-DUP1)		**Source: AAE0129-08**				Prepared & Analyzed: 05/05/17					
Total Dissolved Solids	10	25	10	mg/L		ND				10	J
Duplicate (7050196-DUP2)		**Source: AAE0129-11**				Prepared & Analyzed: 05/05/17					
Total Dissolved Solids	83	25	10	mg/L		113			31	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 11, 2017

Report No.: AAE0129

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050174 - EPA 300.0											
Blank (7050174-BLK1)						Prepared & Analyzed: 05/04/17					
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 (7050174-BS1)						Prepared & Analyzed: 05/04/17					
Chloride	10.5	0.25	0.01	mg/L	10.010		105	90-110			
Fluoride	10.7	0.30	0.004	mg/L	10.020		107	90-110			
Sulfate	10.6	1.0	0.09	mg/L	10.020		106	90-110			
Matrix Spike (7050174-MS1)		**Source: AAE0129-01**				Prepared & Analyzed: 05/04/17					
Chloride	17.5	0.25	0.01	mg/L	10.010	7.22	102	90-110			
Fluoride	10.7	0.30	0.004	mg/L	10.020	0.04	106	90-110			
Sulfate	28.4	1.0	0.09	mg/L	10.020	19.8	87	90-110			QM-02
Matrix Spike (7050174-MS2)		**Source: AAE0129-07**				Prepared & Analyzed: 05/04/17					
Chloride	15.0	0.25	0.01	mg/L	10.010	4.59	104	90-110			
Fluoride	10.6	0.30	0.004	mg/L	10.020	ND	106	90-110			
Sulfate	12.2	1.0	0.09	mg/L	10.020	2.02	102	90-110			
Matrix Spike Dup (7050174-MSD1)		**Source: AAE0129-01**				Prepared & Analyzed: 05/04/17					
Chloride	17.4	0.25	0.01	mg/L	10.010	7.22	102	90-110	0.1	15	
Fluoride	10.7	0.30	0.004	mg/L	10.020	0.04	107	90-110	0.7	15	
Sulfate	28.5	1.0	0.09	mg/L	10.020	19.8	87	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

May 11, 2017

Report No.: AAE0129

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050189 - EPA 3005A											
Blank (7050189-BLK1)						Prepared: 05/05/17 Analyzed: 05/08/17					
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	0.00006	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 (7050189-BS1)						Prepared: 05/05/17 Analyzed: 05/08/17					
Antimony	0.108	0.0030	0.0003	mg/L	0.10000		108	80-120			
Arsenic	0.102	0.0050	0.0004	mg/L	0.10000		102	80-120			
Barium	0.107	0.0100	0.0003	mg/L	0.10000		107	80-120			
Beryllium	0.105	0.0030	0.00007	mg/L	0.10000		105	80-120			
Boron	1.07	0.0400	0.0060	mg/L	1.0000		107	80-120			
Cadmium	0.106	0.0010	0.00006	mg/L	0.10000		106	80-120			
Calcium	1.01	0.500	0.0104	mg/L	1.0000		101	80-120			
Chromium	0.106	0.0100	0.0003	mg/L	0.10000		106	80-120			
Cobalt	0.105	0.0100	0.0005	mg/L	0.10000		105	80-120			
Copper	0.103	0.0250	0.0003	mg/L	0.10000		103	80-120			
Lead	0.109	0.0050	0.00007	mg/L	0.10000		109	80-120			
Molybdenum	0.107	0.0100	0.0006	mg/L	0.10000		107	80-120			
Nickel	0.104	0.0100	0.0003	mg/L	0.10000		104	80-120			
Selenium	0.103	0.0100	0.0014	mg/L	0.10000		103	80-120			
Silver	0.106	0.0100	0.0003	mg/L	0.10000		106	80-120			
Thallium	0.110	0.0010	0.00005	mg/L	0.10000		110	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	0.109	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 11, 2017

Report No.: AAE0129

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050189 - EPA 3005A											
Matrix Spike (7050189-MS1)		**Source: AAE0129-01**			Prepared: 05/05/17 Analyzed: 05/08/17						
Antimony	0.107	0.0030	0.0003	mg/L	0.10000	ND	107	75-125			
Arsenic	0.102	0.0050	0.0004	mg/L	0.10000	0.0010	101	75-125			
Barium	0.113	0.0100	0.0003	mg/L	0.10000	0.0083	105	75-125			
Beryllium	0.0965	0.0030	0.00007	mg/L	0.10000	ND	97	75-125			
Boron	0.975	0.0400	0.0060	mg/L	1.0000	0.0061	97	75-125			
Cadmium	0.109	0.0010	0.00006	mg/L	0.10000	ND	109	75-125			
Calcium	39.7	25.0	0.522	mg/L	1.0000	37.0	267	75-125			QM-02
Chromium	0.106	0.0100	0.0003	mg/L	0.10000	0.0004	106	75-125			
Cobalt	0.106	0.0100	0.0005	mg/L	0.10000	ND	106	75-125			
Copper	0.101	0.0250	0.0003	mg/L	0.10000	0.0003	101	75-125			
Lead	0.106	0.0050	0.00007	mg/L	0.10000	ND	106	75-125			
Molybdenum	0.115	0.0100	0.0006	mg/L	0.10000	0.0045	111	75-125			
Nickel	0.104	0.0100	0.0003	mg/L	0.10000	ND	104	75-125			
Selenium	0.0960	0.0100	0.0014	mg/L	0.10000	ND	96	75-125			
Silver	0.0999	0.0100	0.0003	mg/L	0.10000	ND	100	75-125			
Thallium	0.109	0.0010	0.00005	mg/L	0.10000	ND	109	75-125			
Vanadium	0.105	0.0100	0.0014	mg/L	0.10000	ND	105	75-125			
Zinc	0.105	0.0100	0.0013	mg/L	0.10000	ND	105	75-125			
Lithium	0.0995	0.0500	0.0011	mg/L	0.10000	0.0031	96	75-125			
Matrix Spike Dup (7050189-MSD1)		**Source: AAE0129-01**			Prepared: 05/05/17 Analyzed: 05/08/17						
Antimony	0.110	0.0030	0.0003	mg/L	0.10000	ND	110	75-125	3	20	
Arsenic	0.105	0.0050	0.0004	mg/L	0.10000	0.0010	104	75-125	3	20	
Barium	0.116	0.0100	0.0003	mg/L	0.10000	0.0083	108	75-125	3	20	
Beryllium	0.0961	0.0030	0.00007	mg/L	0.10000	ND	96	75-125	0.4	20	
Boron	0.964	0.0400	0.0060	mg/L	1.0000	0.0061	96	75-125	1	20	
Cadmium	0.109	0.0010	0.00006	mg/L	0.10000	ND	109	75-125	0.3	20	
Calcium	39.8	25.0	0.522	mg/L	1.0000	37.0	277	75-125	0.2	20	QM-02
Chromium	0.108	0.0100	0.0003	mg/L	0.10000	0.0004	108	75-125	2	20	
Cobalt	0.106	0.0100	0.0005	mg/L	0.10000	ND	106	75-125	0.2	20	
Copper	0.102	0.0250	0.0003	mg/L	0.10000	0.0003	101	75-125	0.4	20	
Lead	0.105	0.0050	0.00007	mg/L	0.10000	ND	105	75-125	1	20	
Molybdenum	0.120	0.0100	0.0006	mg/L	0.10000	0.0045	116	75-125	4	20	
Nickel	0.104	0.0100	0.0003	mg/L	0.10000	ND	104	75-125	0.1	20	
Selenium	0.0974	0.0100	0.0014	mg/L	0.10000	ND	97	75-125	2	20	
Silver	0.104	0.0100	0.0003	mg/L	0.10000	ND	104	75-125	4	20	
Thallium	0.107	0.0010	0.00005	mg/L	0.10000	ND	107	75-125	1	20	
Vanadium	0.105	0.0100	0.0014	mg/L	0.10000	ND	105	75-125	0.03	20	
Zinc	0.106	0.0100	0.0013	mg/L	0.10000	ND	106	75-125	0.8	20	
Lithium	0.102	0.0500	0.0011	mg/L	0.10000	0.0031	99	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

May 11, 2017

Report No.: AAE0129

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050189 - EPA 3005A											
Post Spike (7050189-PS1)			**Source: AAE0129-01**			Prepared: 05/05/17 Analyzed: 05/08/17					
Antimony	107			ug/L	100.00	0.200	106	80-120			
Arsenic	102			ug/L	100.00	0.961	101	80-120			
Barium	113			ug/L	100.00	8.31	104	80-120			
Beryllium	95.9			ug/L	100.00	-0.0191	96	80-120			
Boron	946			ug/L	1000.0	6.11	94	80-120			
Cadmium	108			ug/L	100.00	-0.0132	108	80-120			
Calcium	38700			ug/L	1000.0	37000	170	80-120			QM-02
Chromium	102			ug/L	100.00	0.352	102	80-120			
Cobalt	101			ug/L	100.00	0.0122	101	80-120			
Copper	99.4			ug/L	100.00	0.271	99	80-120			
Lead	102			ug/L	100.00	0.0289	102	80-120			
Molybdenum	111			ug/L	100.00	4.46	107	80-120			
Nickel	102			ug/L	100.00	0.0894	102	80-120			
Selenium	99.5			ug/L	100.00	0.267	99	80-120			
Silver	98.8			ug/L	100.00	-0.0044	99	80-120			
Thallium	106			ug/L	100.00	-0.0019	106	80-120			
Vanadium	101			ug/L	100.00	0.267	101	80-120			
Zinc	103			ug/L	100.00	1.10	102	80-120			
Lithium	97.4			ug/L	100.00	3.13	94	80-120			
Batch 7050228 - EPA 7470A											
Blank (7050228-BLK1)						Prepared & Analyzed: 05/08/17					
Mercury	ND	0.00050	0.000041	mg/L							
LCS (7050228-BS1)						Prepared & Analyzed: 05/08/17					
Mercury	0.00231	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

May 11, 2017

Report No.: AAE0129

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7050228 - EPA 7470A											
Matrix Spike (7050228-MS1)			**Source: AAE0129-12**			Prepared & Analyzed: 05/08/17					
Mercury	0.00241	0.00050	0.000041	mg/L	2.5000E-3	ND	96	75-125			
Matrix Spike Dup (7050228-MSD1)			**Source: AAE0129-12**			Prepared & Analyzed: 05/08/17					
Mercury	0.00246	0.00050	0.000041	mg/L	2.5000E-3	ND	98	75-125	2	20	
Post Spike (7050228-PS1)			**Source: AAE0129-12**			Prepared & Analyzed: 05/08/17					
Mercury	1.68			ug/L	1.6667	0.0250	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

May 11, 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

CONTAINER TYPE:	P	P	P	P
PRESERVATION:	3	7	3	

Collection DATE M/D/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
5/1/17	1405	GW		✓	YGWA-5D	4		1	1	2							1	
5/1/17	1555	GW		✓	YGWA-4I	4		1	1	2							2	
5/1/17	1700	GW		✓	YGWA-6I	4		1	1	2							3	
5/1/17	1830	GW		✓	YGWA-6S	4		1	1	2							4	
5/1/17	—	GW		✓	DUP-2	4		1	1	2							5	
5/2/17	0915	GW		✓	YGWA-17S	6		1	1	4							6	extra Rad here
5/2/17	1020	GW		✓	YGWA-5I	4		1	1	2							7	
5/2/17	1130	W		✓	FB-2-5-2-17	4		1	1	2							8	

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, J. Berisford (Acc) — DATE/TIME: 5/2/17 1550

RELINQUISHED BY: [signature] — DATE/TIME: 5/3/17 1545

RECEIVED BY: — DATE/TIME:

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY/LAB: [signature] — DATE/TIME: 5/3/17 1545

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #:

Checked: No NA — Ice: Yes No NA — Temperature: 3 C Min: 3 C Max:

Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID:

FOR LAB USE ONLY
LAB #: AAE0129
Entered into LIMS: MP

Plant Yates COC Ash Ponds

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m/d/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
	CONTAINER TYPE:						P	P	P	
	PRESERVATION:						3	7	3	
5/2/17	1145	GW		✓	YGWC-19S	4	1	1	2	9
5/2/17	1206	GW		✓	YGWC-22S	4	1	1	2	10
5/2/17	1330	GW		✓	YGWC-24S	4	1	1	2	11
5/2/17	1342	GW		✓	YGWC-23S	4	1	1	2	12
5/2/17	1320	W		✓	FB-3-5-2-17	4	1	1	2	13
5/2/17	1455	GW		✓	YGWC-34I	4	1	1	2	14

CONTAINER TYPE
P - PLASTIC
A - AMBER GLASS
G - CLEAR GLASS
V - VOA VIAL
S - STERILE
O - OTHER

PRESERVATION
1 - HCl, ≤6°C
2 - H_2SO_4, ≤6°C
3 - HNO_3
4 - NaOH, ≤6°C
5 - NaOH/ZnAc, ≤6°C
6 - $Na_2S_2O_3$, ≤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: C. Parker, J. Berisford
DATE/TIME: 5/2/17 1550
RELINQUISHED BY:
DATE/TIME: 5/3/17 1545

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME: 5/3/17 1545
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:
Temperature: 3 °C Min: 3°C Max:
Packed: No NA
Ice: Yes No NA

FOR LAB USE ONLY
LAB #: AAE0129
Entered into LIMS:
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: 5/4/2017 12:42:31PM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 05/03/17 15:45

Work Order: AAE0129
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 14 **#Containers:** 58

Minimum Temp(C): 3.0 **Maximum Temp(C):** 3.0 **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

May 19, 2017

Maria Padilla
GA Power
2480 Maner Rd
Atlanta, GA 30339

RE: Project: AAE0129 Plant Yates
Pace Project No.: 30217925

Dear Maria Padilla:
Enclosed are the analytical results for sample(s) received by the laboratory on May 04, 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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30217925001	**YGWA-5D**	Water	05/01/17 14:05	05/04/17 09:45
30217925002	**YGWA-4I**	Water	05/01/17 15:55	05/04/17 09:45
30217925003	**YGWA-6I**	Water	05/01/17 17:00	05/04/17 09:45
30217925004	**YGWA-6S**	Water	05/01/17 18:30	05/04/17 09:45
30217925005	**Dup-2**	Water	05/01/17 00:00	05/04/17 09:45
30217925006	**YGWA-17S**	Water	05/02/17 09:15	05/04/17 09:45
30217925007	**YGWA-5I**	Water	05/02/17 10:20	05/04/17 09:45
30217925008	**FB-2-5-2-17**	Water	05/02/17 11:30	05/04/17 09:45
30217925009	**YGWC-19S**	Water	05/02/17 11:45	05/04/17 09:45
30217925010	**YGWC-22S**	Water	05/02/17 12:06	05/04/17 09:45
30217925011	**YGWC-24S**	Water	05/02/17 13:30	05/04/17 09:45
30217925012	**YGWC-23S**	Water	05/02/17 13:42	05/04/17 09:45
30217925013	**FB-3-5-2-17**	Water	05/02/17 13:20	05/04/17 09:45
30217925014	**YGWC-34I**	Water	05/02/17 14:55	05/04/17 09:45

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30217925001	YGWA-5D	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925002	YGWA-4I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925003	YGWA-6I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925004	YGWA-6S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925005	Dup-2	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925006	YGWA-17S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925007	YGWA-5I	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925008	FB-2-5-2-17	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925009	YGWC-19S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925010	YGWC-22S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925011	YGWC-24S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925012	YGWC-23S	EPA 9315	JC2	1
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925013	FB-3-5-2-17	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 9320	JLW	1
		Total Radium Calculation	RMK	1
30217925014	**YGWC-34I**	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

Sample: YGWA-5D **Lab ID: 30217925001** Collected: 05/01/17 14:05 Received: 05/04/17 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	**3.39 ± 0.737 (0.289) C:87% T:NA**	pCi/L	05/11/17 08:44	13982-63-3	
Radium-228	EPA 9320	**0.769 ± 0.390 (0.670) C:73% T:86%**	pCi/L	05/11/17 14:47	15262-20-1	
Total Radium	Total Radium Calculation	**4.16 ± 1.13 (0.959)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWA-4I **Lab ID: 30217925002** Collected: 05/01/17 15:55 Received: 05/04/17 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	**0.591 ± 0.256 (0.276) C:88% T:NA**	pCi/L	05/11/17 08:44	13982-63-3	
Radium-228	EPA 9320	**0.212 ± 0.385 (0.843) C:75% T:74%**	pCi/L	05/11/17 14:47	15262-20-1	
Total Radium	Total Radium Calculation	**0.803 ± 0.641 (1.12)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWA-6I **Lab ID: 30217925003** Collected: 05/01/17 17:00 Received: 05/04/17 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	**0.713 ± 0.300 (0.368) C:86% T:NA**	pCi/L	05/11/17 08:44	13982-63-3	
Radium-228	EPA 9320	**1.03 ± 0.712 (1.37) C:72% T:48%**	pCi/L	05/11/17 14:47	15262-20-1	
Total Radium	Total Radium Calculation	**1.74 ± 1.01 (1.74)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWA-6S **Lab ID: 30217925004** Collected: 05/01/17 18:30 Received: 05/04/17 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	**0.334 ± 0.205 (0.290) C:84% T:NA**	pCi/L	05/11/17 08:44	13982-63-3	
Radium-228	EPA 9320	**0.0209 ± 0.354 (0.824) C:70% T:77%**	pCi/L	05/11/17 14:47	15262-20-1	
Total Radium	Total Radium Calculation	**0.355 ± 0.559 (1.11)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: Dup-2 **Lab ID: 30217925005** Collected: 05/01/17 00:00 Received: 05/04/17 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	**3.25 ± 0.745 (0.272) C:90% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**0.763 ± 0.420 (0.755) C:75% T:76%**	pCi/L	05/11/17 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

Sample: Dup-2 **Lab ID: 30217925005** Collected: 05/01/17 00:00 Received: 05/04/17 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**4.01 ± 1.17 (1.03)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWA-17S **Lab ID: 30217925006** Collected: 05/02/17 09:15 Received: 05/04/17 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	**-0.0246 ± 0.107 (0.336) C:91% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**0.111 ± 0.358 (0.810) C:73% T:75%**	pCi/L	05/11/17 14:48	15262-20-1	
Total Radium	Total Radium Calculation	**0.111 ± 0.465 (1.15)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWA-5I **Lab ID: 30217925007** Collected: 05/02/17 10:20 Received: 05/04/17 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	**0.279 ± 0.226 (0.397) C:87% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**0.165 ± 0.357 (0.792) C:78% T:63%**	pCi/L	05/11/17 14:27	15262-20-1	
Total Radium	Total Radium Calculation	**0.444 ± 0.583 (1.19)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: FB-2-5-2-17 **Lab ID: 30217925008** Collected: 05/02/17 11:30 Received: 05/04/17 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	**-0.0399 ± 0.0961 (0.334) C:89% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**-0.0674 ± 0.309 (0.740) C:75% T:78%**	pCi/L	05/11/17 14:27	15262-20-1	
Total Radium	Total Radium Calculation	**0.000 ± 0.405 (1.07)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWC-19S **Lab ID: 30217925009** Collected: 05/02/17 11:45 Received: 05/04/17 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	**0.00608 ± 0.119 (0.334) C:88% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**0.408 ± 0.352 (0.705) C:78% T:76%**	pCi/L	05/11/17 14:28	15262-20-1	
Total Radium	Total Radium Calculation	**0.414 ± 0.471 (1.04)**	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

Sample: YGWC-22S **Lab ID: 30217925010** Collected: 05/02/17 12:06 Received: 05/04/17 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	**0.163 ± 0.198 (0.408) C:90% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**-0.254 ± 0.540 (1.27) C:72% T:76%**	pCi/L	05/11/17 14:38	15262-20-1	
Total Radium	Total Radium Calculation	**0.163 ± 0.738 (1.68)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWC-24S **Lab ID: 30217925011** Collected: 05/02/17 13:30 Received: 05/04/17 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	**0.253 ± 0.197 (0.323) C:91% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**0.253 ± 0.435 (0.949) C:79% T:72%**	pCi/L	05/11/17 14:38	15262-20-1	
Total Radium	Total Radium Calculation	**0.506 ± 0.632 (1.27)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWC-23S **Lab ID: 30217925012** Collected: 05/02/17 13:42 Received: 05/04/17 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	**0.133 ± 0.157 (0.308) C:92% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**0.0159 ± 0.438 (1.00) C:80% T:78%**	pCi/L	05/11/17 14:38	15262-20-1	
Total Radium	Total Radium Calculation	**0.149 ± 0.595 (1.31)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: FB-3-5-2-17 **Lab ID: 30217925013** Collected: 05/02/17 13:20 Received: 05/04/17 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	**0.182 ± 0.165 (0.278) C:92% T:NA**	pCi/L	05/16/17 08:58	13982-63-3	
Radium-228	EPA 9320	**-0.101 ± 0.411 (0.960) C:81% T:80%**	pCi/L	05/11/17 14:38	15262-20-1	
Total Radium	Total Radium Calculation	**0.182 ± 0.576 (1.24)**	pCi/L	05/18/17 17:37	7440-14-4	

Sample: YGWC-34I **Lab ID: 30217925014** Collected: 05/02/17 14:55 Received: 05/04/17 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	**0.238 ± 0.212 (0.387) C:90% T:NA**	pCi/L	05/16/17 08:46	13982-63-3	
Radium-228	EPA 9320	**0.0761 ± 0.415 (0.938) C:80% T:81%**	pCi/L	05/11/17 14:38	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

Sample: YGWC-34I **Lab ID: 30217925014** Collected: 05/02/17 14:55 Received: 05/04/17 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Total Radium	Total Radium Calculation	**0.314 ± 0.627 (1.33)**	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

QC Batch: 258120 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30217925005, 30217925006, 30217925007, 30217925008, 30217925009, 30217925010, 30217925011, 30217925012, 30217925013, 30217925014

METHOD BLANK: 1271204 Matrix: Water
Associated Lab Samples: 30217925005, 30217925006, 30217925007, 30217925008, 30217925009, 30217925010, 30217925011, 30217925012, 30217925013, 30217925014

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

QC Batch: 257587 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30217925001, 30217925002, 30217925003, 30217925004, 30217925005, 30217925006, 30217925007, 30217925008, 30217925009, 30217925010, 30217925011, 30217925012, 30217925013, 30217925014

METHOD BLANK: 1268847 Matrix: Water
Associated Lab Samples: 30217925001, 30217925002, 30217925003, 30217925004, 30217925005, 30217925006, 30217925007, 30217925008, 30217925009, 30217925010, 30217925011, 30217925012, 30217925013, 30217925014

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.178 ± 0.368 (0.813) C:72% T:73%	pCi/L	05/11/17 14:47	

Results presented on 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

QC Batch: 257831 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30217925001, 30217925002, 30217925003, 30217925004

METHOD BLANK: 1269948 Matrix: Water
Associated Lab Samples: 30217925001, 30217925002, 30217925003, 30217925004

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAE0129 Plant Yates
Pace Project No.: 30217925

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.

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

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAE0129 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 5/26/2017

Report To:	Subcontract To:
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

WO#:30217925

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3					Requested Analysis Radium 226, 228, Total	LAB USE ONLY
1	YGWA-5D	G	5/1/2017 14:05	AAE0129-01	GW	2					X	001
2	YGWA-4I	G	5/1/2017 15:55	AAE0129-02	GW	2					X	002
3	YGWA-6I	G	5/1/2017 17:00	AAE0129-03	GW	2					X	003
4	YGWA-6S	G	5/1/2017 18:30	AAE0129-04	GW	2					X	004
5	Dup-2	G	5/1/2017 0:00	AAE0129-05	GW	2					X	005
6	YGWA-17S	G	5/2/2017 9:15	AAE0129-06	GW	4					X	006
7	YGWA-5I	G	5/2/2017 10:20	AAE0129-07	GW	2					X	007
8	FB-2-5-2-17	G	5/2/2017 11:30	AAE0129-08	W	2					X	008
9	YGWC-19S	G	5/2/2017 11:45	AAE0129-09	GW	2					X	009
10	YGWC-22S	G	5/2/2017 12:06	AAE0129-10	GW	2					X	010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	5/3/17	RBig Pace	5/4/17	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.

30217925

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAE0129 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 5/26/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
11	YGWC-24S	G	5/2/2017 13:30	AAE0129-11	GW	2	X	011
12	YGWC-23S	G	5/2/2017 13:42	AAE0129-12	GW	2	X	012
13	FB-3-5-2-17	G	5/2/2017 13:20	AAE0129-13	W	2	X	013
14	YGWC-34I	G	5/2/2017 14:55	AAE0129-14	GW	2	X	014
15								
16								
17								
18								
19								
20								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	5/3/17	RBig Pace	5/4/17 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.

30217925

CHAIN OF CUSTODY RECORD

Pace Analytical®

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

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M/D/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
						CONTAINER TYPE:		P	P	P	P							
						PRESERVATION:		3	7	3								
5/1/17	1405	GW		✓	YGWA-5D	4		1	1	2							1	
5/1/17	1555	GW		✓	YGWA-4I	4		1	1	2							2	
5/1/17	1700	GW		✓	YGWA-6I	4		1	1	2							3	
5/1/17	1830	GW		✓	YGWA-6S	4		1	1	2							4	
5/1/17	—	GW		✓	DUP-2	4		1	1	2							5	
5/2/17	0915	GW		✓	YGWA-17S	6		1	1	4							6	extra Rad hrs
5/2/17	1020	GW		✓	YGWA-5I	4		1	1	2							7	
5/2/17	1130	W		✓	FB-2-5-2-17	4		1	1	2							8	

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C Parker, J. Berisford (Acc) DATE/TIME: 5/2/17 1550

RELINQUISHED BY: [signature] DATE/TIME: 5/3/17 1545

RECEIVED BY: DATE/TIME:

RELINQUISHED BY: DATE/TIME:

RECEIVED BY LAB: [signature] DATE/TIME: 5/3/17 1545

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA Ice: Yes No NA Temperature: 3 C Min: 3 C Max:

Custody Seal: Intact Broken Not Present # of Coolers Cooler ID:

FOR LAB USE ONLY
LAB #: AAE0129
Entered into LIMS: MP
Tracking #:

Plant Yates COC Ash Ponds

30217925

CHAIN OF CUSTODY RECORD

Pace Analytical®

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

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

Collection DATE m/d/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
						CONTAINER TYPE:		P	P	P	P					
						PRESERVATION:		3	7	3						
5/2/17	1145	GW		✓	YGWC-19S	4		1	1	2						9
5/2/17	1206	GW		✓	YGWC-22S	4		1	1	2						10
5/2/17	1330	GW		✓	YGWC-24S	4		1	1	2						11
5/2/17	1342	GW		✓	YGWC-23S	4		1	1	2						12
5/2/17	1320	W		✓	FB-3-5-2-17	4		1	1	2						13
5/2/17	1455	GW		✓	YGWC-34I	4		1	1	2						14

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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: C. Parker, J. Berisford — DATE/TIME: 5/2/17 1550

RELINQUISHED BY: [signature] — DATE/TIME: 5/3/17 1545

RECEIVED BY: — DATE/TIME:

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: [signature] — DATE/TIME: 5/3/17 1545

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA — lbs: Yes No NA — Temperature: 3°C Min 3°C Max — Custody Seal: Intact Broken Not Present — # of Coolers: — Cooler ID:

FOR LAB USE ONLY
LAB #: AAE0129
Entered into LIMS: mp
Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

30217925

Pace Analytical

Client Name: Pace GA Project #

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [ ] Pace Other

Tracking #: 6812 5104 1051

Custody Seal on Cooler/Box Present: [ ] yes [X] 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 5/4/17

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: -Includes date/time/ID Matrix: WT	X			5.
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. pH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed 5/4/17 RTB; 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: RTB Date: 5/4/17

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

[ ] **A check in this box indicates that additional information has been stored in ereports.**

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	5/15/2017
Worklist:	35596
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS35596	LCSD35596
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30217925005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	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	30217925005
Duplicate RPD:	24.49%	30217925005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

5/19/17

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	5/9/2017
Worklist:	35555
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	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	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30217522001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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):	0.075	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	0.271	30217522001
Duplicate RPD:	-152.59%	30217522001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

5/19/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	5/9/2017
Worklist:	35501
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1268847
MB concentration:	0.178
M/B Counting Uncertainty:	0.366
MB MDC:	0.813
MB Numerical Performance Indicator:	0.95
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS35501	LCSD35501
Count Date:	5/11/2017	
Spike I.D.:	17-005	
Spike Concentration (pCi/mL):	24.566	
Volume Used (mL):	0.30	
Aliquot Volume (L, g, F):	0.801	
Target Conc. (pCi/L, g, F):	9.205	
Uncertainty (Calculated):	0.663	
Result (pCi/L, g, F):	8.924	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.039	
Numerical Performance Indicator:	-0.45	
Percent Recovery:	96.95%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30217925006	Enter Duplicate
Duplicate Sample I.D.	30217925006DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.111	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.358	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.171	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.364	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.231	30217925006
Duplicate RPD:	42.55%	30217925006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

LMB

***Batch must be re-prepped due to unacceptable precision.

5/19/17

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: 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:

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
Client ID: YGWC-26S
Date/Time Sampled: 5/3/2017 3:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0238-01
Date/Time Received: 5/5/2017 3:40:00PM

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

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238
Client ID: YGWC-32S
Date/Time Sampled: 5/3/2017 12:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0238-02
Date/Time Received: 5/5/2017 3:40:00PM

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

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238
Client ID: YGWC-32I
Date/Time Sampled: 5/3/2017 1:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0238-03
Date/Time Received: 5/5/2017 3:40:00PM

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
Client ID: YGWC-33S
Date/Time Sampled: 5/3/2017 12:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0238-04
Date/Time Received: 5/5/2017 3:40:00PM

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

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238
Client ID: EB-3-5-3-17
Date/Time Sampled: 5/3/2017 9:35:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAE0238-05
Date/Time Received: 5/5/2017 3:40:00PM

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	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

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238
Client ID: Dup-3
Date/Time Sampled: 5/3/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0238-06
Date/Time Received: 5/5/2017 3:40:00PM

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

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238
Client ID: YGWC-28S
Date/Time Sampled: 5/5/2017 12:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0238-07
Date/Time Received: 5/5/2017 3:40:00PM

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

Attention: Mr. Joju Abraham

May 12, 2017

Report No.: AAE0238
Client ID: YGWC-28I
Date/Time Sampled: 5/5/2017 1:30:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAE0238-08
Date/Time Received: 5/5/2017 3:40:00PM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m/d/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470) P 3	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C) P 7	Radium 226 & 228 (SW-846 9315/9320) P 3						LAB ID NUMBER
5/3/17	1505	GW		✓	YGWC-26S	4		1	1	2						1
5/3/17	1230	GW		✓	YGWC-32S	4		1	1	2						2
5/3/17	1330	GW		✓	YGWC-32I	4		1	1	2						3
5/3/17	1250	GW		✓	YGWC-33S	4		1	1	2						4
5/3/17	0935	GW		✓	EB-3-5-3-17	4		1	1	2						5
5/3/17	—	GW		✓	DUP-3	4		1	1	2						6
5/5/17	1235	GW		✓	YGWC-28S	4		1	1	2						7
5/5/17	1330	GW		✓	YGWC-28I	4		1	1	2						8

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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
* Level IV report needed *

SAMPLED BY AND TITLE: C. Parker, J. Bernsford (Acc)
DATE/TIME: 5/5/17 1345
RELINQUISHED BY:
DATE/TIME: 5/5/17 1540

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: Laburman
DATE/TIME: 05/05/17 1540
SAMPLE SHIPPED VIA: UPS FED EX USPS COURIER CLIENT OTHER FS
Tracking #:
Packed: No NA
Ice: Yes No NA
Temperature: 2.5 Min: 2.5 Max:
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AAE0238
Entered into LIMS:

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: 5/8/2017 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAE0238 Plant Yates
Pace Project No.: 30218205

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
Total Radium	Total Radium Calculation	**0.0644 ± 0.526 (1.29)**	pCi/L	05/24/17 14:28	7440-14-4	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30218205

Chain of Custody

30218205

Pace Analytical®
www.pacelabs.com

Workorder: AAE0238 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 5/30/2017

Report To:	Subcontract To:
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

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Radium 226, 228, Total	LAB USE ONLY
1	YGWC-26S	G	5/3/2017 15:05	AAE0238-01	GW	2	X	001
2	YGWC-32S	G	5/3/2017 12:30	AAE0238-02	GW	2	X	002
3	YGWC-32I	G	5/3/2017 13:30	AAE0238-03	GW	2	X	003
4	YGWC-33S	G	5/3/2017 12:50	AAE0238-04	GW	2	X	004
5	EB-3-5-3-17	G	5/3/2017 9:35	AAE0238-05	W	2	X	005
6	Dup-3	G	5/3/2017 0:00	AAE0238-06	GW	2	X	006
7	YGWC-28S	G	5/5/2017 12:35	AAE0238-07	GW	2	X	007
8	YGWC-28I	G	5/5/2017 13:30	AAE0238-08	GW	2	X	008
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M Zalman	5/5/17	Michael [illegible]	5-8-17 925	
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.

30218205

CHAIN OF CUSTODY RECORD

Pace Analytical®

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

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

CONTAINER TYPE:	P	P	P	P
PRESERVATION:	3	7	3	

Collection DATE m/D/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
5/3/17	1505	GW		✓	YGWC-26S	4		1	1	2							1	* Level IV report needed *
5/3/17	1230	GW		✓	YGWC-32S	4		1	1	2							2	
5/3/17	1330	GW		✓	YGWC-32I	4		1	1	2							3	
5/3/17	1250	GW		✓	YGWC-33S	4		1	1	2							4	
5/3/17	0935	GW		✓	EB-3-5-3-17	4		1	1	2							5	
5/3/17	—	GW		✓	DUP-3	4		1	1	2							6	
5/5/17	1235	GW		✓	YGWC-28S	4		1	1	2							7	
5/5/17	1330	GW		✓	YGWC-28I	4		1	1	2							8	

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, J. Bertsford (Acc) DATE/TIME: 5/5/17 1345

RELINQUISHED BY: [signature] DATE/TIME: 5/5/17 1540

RECEIVED BY: DATE/TIME:

RELINQUISHED BY: DATE/TIME:

RECEIVED BY LAB: [signature] DATE/TIME: 05/05/17 1540

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA Ice: Yes No NA Temperature: 2.5 Min 2.5 Max Custody Seal: Intact Broken Not Present # of Coolers Cooler ID:

FOR LAB USE ONLY
LAB #: AAE0238
Entered into LIMS: MR
Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt Pittsburgh

ANL

Pace Analytical

Client Name: Pace GA Project # 30218205 - 1

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

Tracking #: 6812 5104 1864

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: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
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. All containers needing preservation are found to be in compliance with EPA recommendation.	X			15. PH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: ML 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: ML Date: 5-8-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	5/15/2017
Worklist:	35596
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS35596	LCSD35596
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30217925005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	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	30217925005
Duplicate RPD:	24.49%	30217925005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	5/17/2017
Worklist:	35627
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS35627	LCSD35627
Count Date:	5/22/2017	
Spike I.D.:	17-005	
Spike Concentration (pCi/mL):	24.478	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.803	
Target Conc. (pCi/L, g, F):	6.094	
Uncertainty (Calculated):	0.439	
Result (pCi/L, g, F):	7.211	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.712	
Numerical Performance Indicator:	2.62	
Percent Recovery:	118.33%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30218398001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30218398001DUP	
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	30218398001
Duplicate RPD:	60.95%	30218398001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

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: AAI0968
October 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:

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

October 12, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-36	AAI0968-01	Ground Water	09/29/17 11:55	09/29/17 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

October 12, 2017

Report No.: AAI0968
Client ID: YGWC-36
Date/Time Sampled: 9/29/2017 11:55:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAI0968-01
Date/Time Received: 9/29/2017 2:00:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	273	25	10	mg/L	SM 2540 C		1	10/03/17 12:00	10/03/17 12:00	7100055	JPT
Inorganic Anions											
Chloride	5.5	0.25	0.02	mg/L	EPA 300.0		1	10/05/17 17:12	10/05/17 21:51	7100160	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/05/17 17:12	10/05/17 21:51	7100160	RLC
Sulfate	160	5.0	0.08	mg/L	EPA 300.0		5	10/05/17 17:12	10/07/17 23:57	7100160	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Barium	0.0452	0.0100	0.0004	mg/L	EPA 6020B		1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Beryllium	0.0003	0.0030	0.00009	mg/L	EPA 6020B	J	1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Boron	0.235	0.0400	0.0060	mg/L	EPA 6020B		1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Cadmium	0.0002	0.0010	0.0001	mg/L	EPA 6020B	J	1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Calcium	16.1	5.00	2.02	mg/L	EPA 6020B		50	10/03/17 09:20	10/03/17 20:06	7100034	CSW
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Lead	0.0002	0.0050	0.00007	mg/L	EPA 6020B	J	1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Selenium	0.0020	0.0100	0.0018	mg/L	EPA 6020B	J	1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Lithium	0.0064	0.0500	0.0015	mg/L	EPA 6020B	J	1	10/03/17 09:20	10/03/17 20:01	7100034	CSW
Mercury	ND	0.00050	0.000036	mg/L	EPA 7470A		1	10/05/17 07:50	10/05/17 13:57	7100046	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

October 12, 2017

Report No.: AAI0968

General Chemistry - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100055 - SM 2540 C											
Blank (7100055-BLK1)						Prepared & Analyzed: 10/03/17					
Total Dissolved Solids	ND	25	10	mg/L							
LCS (7100055-BS1)						Prepared & Analyzed: 10/03/17					
Total Dissolved Solids	388	25	10	mg/L	400.00		97	84-108			
Duplicate (7100055-DUP1)		**Source: AAI0935-08**				Prepared & Analyzed: 10/03/17					
Total Dissolved Solids	ND	25	10	mg/L		ND				10	
Duplicate (7100055-DUP2)		**Source: AAI0976-07**				Prepared & Analyzed: 10/03/17					
Total Dissolved Solids	180	25	10	mg/L		174			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

October 12, 2017

Report No.: AAI0968

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100160 - EPA 300.0											
Blank (7100160-BLK1)						Prepared & Analyzed: 10/05/17					
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 (7100160-BS1)						Prepared & Analyzed: 10/05/17					
Chloride	10.6	0.25	0.02	mg/L	10.020		105	90-110			
Fluoride	10.2	0.30	0.03	mg/L	10.020		102	90-110			
Sulfate	10.8	1.0	0.02	mg/L	10.050		108	90-110			
Matrix Spike (7100160-MS1)		**Source: AAI0968-01**				Prepared & Analyzed: 10/05/17					
Chloride	15.9	0.25	0.02	mg/L	10.020	5.54	103	90-110			
Fluoride	10.3	0.30	0.03	mg/L	10.020	ND	103	90-110			
Sulfate	128	1.0	0.02	mg/L	10.050	132	NR	90-110			QM-02
Matrix Spike Dup (7100160-MSD1)		**Source: AAI0968-01**				Prepared & Analyzed: 10/05/17					
Chloride	16.3	0.25	0.02	mg/L	10.020	5.54	107	90-110	2	15	
Fluoride	10.3	0.30	0.03	mg/L	10.020	ND	102	90-110	0.8	15	
Sulfate	128	1.0	0.02	mg/L	10.050	132	NR	90-110	0.1	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

October 12, 2017

Report No.: AAI0968

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100034 - EPA 3005A											
Blank (7100034-BLK1)						Prepared & Analyzed: 10/03/17					
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	0.0019	0.0100	0.0012	mg/L							J
Lithium	ND	0.0500	0.0015	mg/L							
LCS (7100034-BS1)						Prepared & Analyzed: 10/03/17					
Antimony	0.104	0.0030	0.0006	mg/L	0.10000		104	80-120			
Arsenic	0.101	0.0050	0.0005	mg/L	0.10000		101	80-120			
Barium	0.100	0.0100	0.0004	mg/L	0.10000		100	80-120			
Beryllium	0.105	0.0030	0.00009	mg/L	0.10000		105	80-120			
Cadmium	0.105	0.0010	0.0001	mg/L	0.10000		105	80-120			
Chromium	0.102	0.0100	0.0005	mg/L	0.10000		102	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	0.101	0.0050	0.00007	mg/L	0.10000		101	80-120			
Nickel	0.104	0.0100	0.0005	mg/L	0.10000		104	80-120			
Selenium	0.0989	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	0.104	0.0010	0.00005	mg/L	0.10000		104	80-120			
Vanadium	0.105	0.0100	0.0012	mg/L	0.10000		105	80-120			
Zinc	0.102	0.0100	0.0012	mg/L	0.10000		102	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

October 12, 2017

Report No.: AAI0968

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100034 - EPA 3005A											
Matrix Spike (7100034-MS1)		**Source: AAI0935-01**			Prepared & Analyzed: 10/03/17						
Antimony	0.103	0.0030	0.0006	mg/L	0.10000	ND	103	75-125			
Arsenic	0.102	0.0050	0.0005	mg/L	0.10000	ND	102	75-125			
Barium	0.140	0.0100	0.0004	mg/L	0.10000	0.0408	99	75-125			
Beryllium	0.100	0.0030	0.00009	mg/L	0.10000	ND	100	75-125			
Cadmium	0.105	0.0010	0.0001	mg/L	0.10000	ND	105	75-125			
Chromium	0.116	0.0100	0.0005	mg/L	0.10000	0.0114	104	75-125			
Cobalt	0.104	0.0100	0.0003	mg/L	0.10000	ND	104	75-125			
Copper	0.103	0.0250	0.0003	mg/L	0.10000	ND	103	75-125			
Lead	0.100	0.0050	0.00007	mg/L	0.10000	ND	100	75-125			
Nickel	0.106	0.0100	0.0005	mg/L	0.10000	0.0013	105	75-125			
Selenium	0.101	0.0100	0.0018	mg/L	0.10000	ND	101	75-125			
Silver	0.0993	0.0100	0.0002	mg/L	0.10000	ND	99	75-125			
Thallium	0.103	0.0010	0.00005	mg/L	0.10000	ND	103	75-125			
Vanadium	0.127	0.0100	0.0012	mg/L	0.10000	0.0194	107	75-125			
Zinc	0.102	0.0100	0.0012	mg/L	0.10000	0.0021	100	75-125			
Lithium	0.104	0.0500	0.0015	mg/L	0.10000	ND	104	75-125			
Matrix Spike Dup (7100034-MSD1)		**Source: AAI0935-01**			Prepared & Analyzed: 10/03/17						
Antimony	0.104	0.0030	0.0006	mg/L	0.10000	ND	104	75-125	0.7	20	
Arsenic	0.101	0.0050	0.0005	mg/L	0.10000	ND	101	75-125	0.7	20	
Barium	0.138	0.0100	0.0004	mg/L	0.10000	0.0408	97	75-125	2	20	
Beryllium	0.0960	0.0030	0.00009	mg/L	0.10000	ND	96	75-125	4	20	
Cadmium	0.104	0.0010	0.0001	mg/L	0.10000	ND	104	75-125	1	20	
Chromium	0.118	0.0100	0.0005	mg/L	0.10000	0.0114	106	75-125	2	20	
Cobalt	0.106	0.0100	0.0003	mg/L	0.10000	ND	106	75-125	3	20	
Copper	0.101	0.0250	0.0003	mg/L	0.10000	ND	101	75-125	2	20	
Lead	0.0980	0.0050	0.00007	mg/L	0.10000	ND	98	75-125	2	20	
Nickel	0.105	0.0100	0.0005	mg/L	0.10000	0.0013	103	75-125	1	20	
Selenium	0.105	0.0100	0.0018	mg/L	0.10000	ND	105	75-125	3	20	
Silver	0.0989	0.0100	0.0002	mg/L	0.10000	ND	99	75-125	0.4	20	
Thallium	0.100	0.0010	0.00005	mg/L	0.10000	ND	100	75-125	2	20	
Vanadium	0.126	0.0100	0.0012	mg/L	0.10000	0.0194	107	75-125	0.5	20	
Zinc	0.105	0.0100	0.0012	mg/L	0.10000	0.0021	103	75-125	3	20	
Lithium	0.0969	0.0500	0.0015	mg/L	0.10000	ND	97	75-125	7	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

October 12, 2017

Report No.: AAI0968

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100034 - EPA 3005A											
Post Spike (7100034-PS1)			**Source: AAI0935-01**				Prepared & Analyzed: 10/03/17				
Antimony	94.5			ug/L	100.00	0.355	94	80-120			
Arsenic	100			ug/L	100.00	0.476	100	80-120			
Barium	138			ug/L	100.00	40.8	97	80-120			
Beryllium	98.0			ug/L	100.00	0.0156	98	80-120			
Cadmium	104			ug/L	100.00	-0.0276	104	80-120			
Chromium	116			ug/L	100.00	11.4	104	80-120			
Cobalt	103			ug/L	100.00	0.0363	103	80-120			
Copper	99.3			ug/L	100.00	0.241	99	80-120			
Lead	98.2			ug/L	100.00	0.0213	98	80-120			
Nickel	101			ug/L	100.00	1.35	100	80-120			
Selenium	103			ug/L	100.00	1.57	101	80-120			
Silver	98.9			ug/L	100.00	0.0065	99	80-120			
Thallium	102			ug/L	100.00	0.0253	102	80-120			
Vanadium	125			ug/L	100.00	19.4	105	80-120			
Zinc	97.6			ug/L	100.00	2.09	95	80-120			
Lithium	102			ug/L	100.00	0.936	101	80-120			
Batch 7100046 - EPA 7470A											
Blank (7100046-BLK1)							Prepared & Analyzed: 10/05/17				
Mercury	ND	0.00050	0.000036	mg/L							
LCS (7100046-BS1)							Prepared & Analyzed: 10/05/17				
Mercury	0.00253	0.00050	0.000036	mg/L	2.5000E-3		101	80-120			
Matrix Spike (7100046-MS1)			**Source: AAI0968-01**				Prepared & Analyzed: 10/05/17				
Mercury	0.00256	0.00050	0.000036	mg/L	2.5000E-3	ND	102	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

October 12, 2017

Report No.: AAI0968

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100046 - EPA 7470A											
Matrix Spike Dup (7100046-MSD1)		**Source: AAI0968-01**				Prepared & Analyzed: 10/05/17					
Mercury	0.00254	0.00050	0.000036	mg/L	2.5000E-3	ND	102	75-125	0.7	20	
Post Spike (7100046-PS1)		**Source: AAI0968-01**				Prepared & Analyzed: 10/05/17					
Mercury	1.77			ug/L	1.6667	-0.00118	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

October 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®
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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER
CONTAINER TYPE:							P	P	P	P					
PRESERVATION:							3	7	3						
9-29-17	1155	GW		X	YGWC-36	4	1	1	2						1

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: Ryan Walker ACC
DATE/TIME: 9-29-17/1155
RELINQUISHED BY:
DATE/TIME: 9-29-17 1400
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY/LAB: Rahman
DATE/TIME: 09/29/17 1400
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Cooked: No NA
Ice: Yes No NA
Temperature: Min: 0.1 Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: 44I0968
Entered into LIMS: CH
Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt

Pace Analytical

Client Name: Georgia Power Project # AAI0968

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

Optional
Proj. Due Date:
Proj. Name:

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°C Biological Tissue is Frozen: Yes (No)

Date and Initials of person examining contents: 9/29/17 DY

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 10/2/2017 10:58:38AM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 09/29/17 14:00

Work Order: AAI0968
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 1 **#Containers:** 4

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 27, 2017

Mr. Joju Abraham
Georgia Power
2480 Maner Road
Atlanta, GA 30339

RE: Project: AAI0968 Plant Yates
Pace Project No.: 30231662

Dear Mr. Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 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.

Revision 1: This report replaces the October 18, 2017 report. Report reissued October 27, 2017 to reflect correction of Client Sample ID due to error on COC.

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAI0968 Plant Yates
Pace Project No.: 30231662

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAI0968 Plant Yates
Pace Project No.: 30231662

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30231662001	**YGWC-36**	Water	09/29/17 11:55	10/02/17 09:40

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAI0968 Plant Yates
Pace Project No.: 30231662

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30231662001	**YGWC-36**	EPA 9315	JC2	1
		EPA 9320	VAL	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAI0968 Plant Yates
Pace Project No.: 30231662

Sample: YGWC-36 **Lab ID: 30231662001** Collected: 09/29/17 11:55 Received: 10/02/17 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	**0.697 ± 0.337 (0.468) C:81% T:NA**	pCi/L	10/06/17 09:06	13982-63-3	
Radium-228	EPA 9320	**0.934 ± 0.492 (0.893) C:80% T:77%**	pCi/L	10/12/17 15:34	15262-20-1	
Total Radium	Total Radium Calculation	**1.63 ± 0.829 (1.36)**	pCi/L	10/17/17 08:54	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAI0968 Plant Yates
Pace Project No.: 30231662

QC Batch: 273989 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30231662001

METHOD BLANK: 1347708 Matrix: Water
Associated Lab Samples: 30231662001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0956 ± 0.267 (0.656) C:81% T:80%	pCi/L	10/12/17 15:35	

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

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAI0968 Plant Yates
Pace Project No.: 30231662

QC Batch: 273988 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30231662001

METHOD BLANK: 1347707 Matrix: Water
Associated Lab Samples: 30231662001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.295 ± 0.217 (0.342) C:86% T:NA	pCi/L	10/06/17 09:02	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAI0968 Plant Yates
Pace Project No.: 30231662

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.

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

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAI0968 Workorder Name: Plant Yates Owner Received Date: 9/29/2017 Results Requested By: 10/27/2017

Report To:	Subcontract To:
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

WO# : 30231662

30231662

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWL-36	Grab	9/29/2017 11:55	AAI0968-01	GW	2	X	001
2								
3								
4								
5								
6								
7								
8								
9								
10								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1			[signature]	10-2-17 940	
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®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
9-29-17	1155	GW		X	YGWC-36	4	1	1	2	1

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

30231662

SAMPLED BY AND TITLE: Ryan Walker ACC

DATE/TIME: 9-29-17/1155

RELINQUISHED BY: Ryan

DATE/TIME: 9-29-17 1400

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB: Rackman

DATE/TIME: 09/29/17 1400

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH Checked: Yes No NA

Ice: Yes No NA

Temperature: Min: 0.1 Max:

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

FOR LAB USE ONLY

LAB #: AHI0968

Entered into LIMS: CH

Tracking #:

Plant Yates COC Ash Ponds

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Pace GA Project # 30231662

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

Label MC

LIMS Login ANL

Tracking #: 7413 6658 9400

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 10-2-17

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. JW 10/2/17
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
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: -Pace Containers Used:	X			10.
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			X	13.
Organic Samples checked for dechlorination:			X	14.
Filtered volume received for Dissolved tests			X	15.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	X			16. pH < 2
				Initial when completed: MC Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	17.
Trip Blank Present:		X		18.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: ML Date: 10-2-17

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

Pace Analytical®

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

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

CONTAINER TYPE:	P	P	P	P
PRESERVATION:	3	7	3	

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
9-29-17	1155	GW		X	YGWC-36	4		1	1	2						1	

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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

30231662

SAMPLED BY AND TITLE: Ryan Walker ACC
DATE/TIME: 9-29-17/1155
RELINQUISHED BY: [signature]
DATE/TIME: 9-29-17 1400

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: [signature]
DATE/TIME: 09/29/17 1400
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: 0.1 Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAI 0968
Entered into LIMS: CTH
Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt

30231662

Pace Analytical

Client Name: Georgia Power Project # AAI0968

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

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

Thermometer Used IR-4 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.1°C Biological Tissue is Frozen: Yes (No)

Date and Initials of person examining contents: 9/29/17 CDG

Temp should be above freezing to 6°C

Comments:

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	10/6/2017
Worklist:	38057
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1347708
MB concentration:	-0.096
M/B Counting Uncertainty:	0.267
MB MDC:	0.656
MB Numerical Performance Indicator:	-0.70
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS38057	LCSD38057
Count Date:	10/12/2017	
Spike I.D.:	17-033	
Spike Concentration (pCi/mL):	23.289	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.801	
Target Conc. (pCi/L, g, F):	5.812	
Uncertainty (Calculated):	0.418	
Result (pCi/L, g, F):	5.926	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.786	
Numerical Performance Indicator:	0.25	
Percent Recovery:	101.97%	
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):	
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:	

Duplicate Sample Assessment		
Sample I.D.:	30231661005	Enter Duplicate
Duplicate Sample I.D.	30231661005DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.418	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.335	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.435	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.325	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.070	30231661005
Duplicate RPD:	3.93%	30231661005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

10/16/2017

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JC2
Date:	10/5/2017
Worklist:	38056
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1347707
MB concentration:	0.295
M/B Counting Uncertainty:	0.212
MB MDC:	0.342
MB Numerical Performance Indicator:	2.72
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS38056	**LCSD38056**
Count Date:	10/6/2017	10/6/2017
Spike I.D.:	17-030	17-030
Spike Concentration (pCi/mL):	80.191	80.191
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.507
Target Conc. (pCi/L, g, F):	15.998	15.820
Uncertainty (Calculated):	1.474	1.457
Result (pCi/L, g, F):	13.819	12.457
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.181	1.116
Numerical Performance Indicator:	-2.26	-3.59
Percent Recovery:	86.38%	78.74%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS38056	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD38056	
Sample Result (pCi/L, g, F):	13.819	
Sample Result Counting Uncertainty (pCi/L, g, F):	1.181	
Sample Duplicate Result (pCi/L, g, F):	12.457	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.116	
Are sample and/or duplicate results below MDC?	NO	
Duplicate Numerical Performance Indicator:	1.643	
Duplicate RPD:	10.37%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

10/18/17

Product Name: Low-Flow System

Date: 2017-05-01 15:56:07

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.125 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	2 ft
Latitude	33º 26' 47.42"		
Longitude	-84º -53' -30.49"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	46.0 ft

Well Information:		Pumping Information:	
Well ID	YGWA-4I	Final Pumping Rate	75 mL/min
Well diameter	2 in	Total System Volume	0.4898264 L
Well Total Depth	49.70 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	15 in
Depth to Water	23.45 ft	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	15:35:16	1500.00	16.92	6.24	141.31	0.32	24.60	1.17	61.50
Last 5	15:40:16	1800.00	16.87	6.23	140.81	0.28	24.60	1.15	63.95
Last 5	15:45:16	2099.99	16.84	6.22	139.84	0.41	24.70	1.10	65.76
Last 5	15:50:16	2399.99	16.86	6.21	139.12	0.30	24.70	1.07	67.67
Last 5	15:55:16	2699.99	17.19	6.21	138.83	0.40	24.70	1.03	69.16
Variance 0			-0.04	-0.00	-0.98			-0.05	1.82
Variance 1			0.02	-0.01	-0.72			-0.02	1.91
Variance 2			0.33	0.00	-0.29			-0.04	1.49

Notes

Sunny, sample time-1550

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-01 14:06:57

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.125 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	2 ft
Latitude	33º 26' 47.53"		
Longitude	-84º -53' -20.89"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	120 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	90 mL/min
Well diameter	2 in	Total System Volume	0.4898264 L
Well Total Depth	131.6 ft	Calculated Sample Rate	300 sec
Screen Length	50 ft	Stabilization Drawdown	4.8 in
Depth to Water	16.9 ft	Total Volume Pumped	3.2 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	13:45:02	900.01	17.08	7.16	263.52	1.77	17.30	0.40	41.40
Last 5	13:50:02	1200.01	17.05	7.16	264.47	1.20	17.30	0.32	44.62
Last 5	13:55:02	1500.00	17.10	7.18	265.13	0.95	17.30	0.30	42.17
Last 5	14:00:02	1800.00	17.23	7.20	264.89	0.72	17.30	0.22	37.08
Last 5	14:05:02	2099.98	17.23	7.22	264.96	1.00	17.30	0.16	30.83
Variance 0			0.05	0.02	0.66			-0.02	-2.46
Variance 1			0.13	0.02	-0.24			-0.07	-5.09
Variance 2			-0.00	0.01	0.07			-0.06	-6.24

Notes

Sunny, sample time 1405, dup-2 sampled

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-02 10:23:23

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.125 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	2 ft
Latitude	33º 26' 46.92"		
Longitude	-84º -53' -20.62"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	56 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5I	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	0.4898264 L
Well Total Depth	58.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.4 in
Depth to Water	19.0 ft	Total Volume Pumped	3.9 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	10:00:58	900.01	16.46	5.68	90.10	0.95	19.20	6.48	109.36
Last 5	10:05:58	1200.00	16.43	5.66	89.95	1.32	19.20	6.49	109.14
Last 5	10:10:58	1500.00	16.47	5.63	89.87	1.18	19.20	6.50	110.20
Last 5	10:15:58	1800.01	16.49	5.66	89.86	1.27	19.20	6.52	109.03
Last 5	10:20:58	2100.00	16.50	5.65	89.77	147.00	19.20	6.52	109.81
Variance 0			0.04	-0.03	-0.08			0.00	1.06
Variance 1			0.02	0.03	-0.01			0.02	-1.17
Variance 2			0.01	-0.01	-0.09			0.00	0.78

Notes

Sunny, sample time-1020

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-01 17:02:25

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	70 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	64.1 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6I	Final Pumping Rate	50 mL/min
Well diameter	2 in	Total System Volume	2.005305 L
Well Total Depth	69.10 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	163 in
Depth to Water	22.15 ft	Total Volume Pumped	17 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	16:38:41	14117.81	21.49	6.21	234.91	5.25	35.60	4.86	14.34
Last 5	16:43:41	14417.80	21.39	6.20	235.09	5.31	35.60	4.92	13.51
Last 5	16:48:43	14719.80	21.28	6.22	234.95	5.21	35.70	4.91	13.11
Last 5	16:53:43	15019.80	21.24	6.21	235.08	5.09	35.80	4.87	13.39
Last 5	16:58:43	15319.80	21.19	6.22	234.79	4.94	35.80	4.88	12.72
Variance 0			-0.11	0.02	-0.15			-0.01	-0.40
Variance 1			-0.05	-0.01	0.13			-0.04	0.28
Variance 2			-0.05	0.01	-0.29			0.00	-0.67

Notes

Collected at 17:00. Sunny 70s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-01 18:29:08

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	34.6 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	39.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	15 in
Depth to Water	21.72 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	18:06:57	600.03	20.21	6.06	141.44	0.95	22.40	6.83	24.35
Last 5	18:11:57	900.02	19.59	5.95	139.23	0.80	22.80	7.02	26.01
Last 5	18:16:57	1200.02	19.90	5.93	137.81	0.73	22.90	6.93	26.66
Last 5	18:21:57	1500.02	19.95	5.90	137.36	0.65	22.90	6.82	28.34
Last 5	18:26:57	1800.00	20.26	5.86	137.28	0.72	22.90	6.89	31.21
Variance 0			0.30	-0.02	-1.43			-0.10	0.64
Variance 1			0.05	-0.03	-0.44			-0.10	1.68
Variance 2			0.31	-0.04	-0.08			0.07	2.87

Notes

Collected at 18:30. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-02 09:17:38

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	34.9 ft

Well Information:		Pumping Information:	
Well ID	YGWA-17S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	39.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	12.82 ft	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	08:52:42	600.02	16.38	5.65	74.79	1.95	13.10	1.99	79.06
Last 5	08:57:42	900.01	16.47	5.50	75.16	1.90	13.10	1.45	81.42
Last 5	09:02:42	1200.00	16.53	5.47	75.47	2.53	13.10	1.31	80.94
Last 5	09:07:42	1500.00	16.68	5.46	75.73	2.98	13.10	1.15	83.05
Last 5	09:12:42	1799.99	16.79	5.47	75.91	2.30	13.10	1.17	83.64
Variance 0			0.06	-0.03	0.31			-0.14	-0.48
Variance 1			0.14	-0.01	0.27			-0.16	2.11
Variance 2			0.11	0.01	0.17			0.03	0.59

Notes

Collected at 09:15. Sunny 50s. Extra Rad here

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-26 13:17:57

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	84 ft
Latitude	33º 27' 13.58"		
Longitude	-84º -53' -11.58"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	74 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	2.309366 L
Well Total Depth	79.67 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	24.10 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:55:57	300.04	18.48	6.09	122.67	1.74	24.30	2.32	93.95
Last 5	13:00:57	600.02	17.98	6.02	118.49	1.48	24.30	3.03	96.95
Last 5	13:05:57	900.02	17.81	5.98	117.87	0.95	24.30	2.89	99.13
Last 5	13:10:57	1200.01	17.90	5.98	118.11	0.96	24.30	2.81	100.31
Last 5	13:15:57	1500.00	17.74	5.99	119.55	1.41	24.30	2.78	103.00
Variance 0			-0.17	-0.03	-0.62			-0.14	2.17
Variance 1			0.09	0.00	0.24			-0.08	1.18
Variance 2			-0.16	0.00	1.44			-0.03	2.69

Notes

Sunny 70's. Sampled at 13:20.

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-26 18:53:22

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	43 ft
Latitude	33º 27' 14.64"		
Longitude	-84º -53' -11.77"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	33 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.418902 L
Well Total Depth	39.86 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	21.00 ft	Total Volume Pumped	31.2 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	18:27:44	14099.81	18.86	5.38	57.12	6.65	21.60	1.70	162.06
Last 5	18:32:48	14403.80	19.17	5.37	57.36	5.81	21.50	1.77	162.20
Last 5	18:37:48	14703.80	19.37	5.35	57.15	5.51	21.40	1.78	161.52
Last 5	18:42:48	15003.80	19.35	5.39	57.36	5.19	21.40	1.82	161.31
Last 5	18:47:55	15310.81	19.54	5.40	57.42	4.80	21.40	1.72	160.52
Variance 0			0.21	-0.02	-0.22			0.01	-0.68
Variance 1			-0.02	0.04	0.21			0.04	-0.21
Variance 2			0.19	0.00	0.06			-0.10	-0.79

Notes

Sunny 70's. Sampled at 16:50.

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-26 12:05:41

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	34 ft
Latitude	33º 26' 58.42"		
Longitude	-84º -53' -7.03"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	24 ft

Well Information:		Pumping Information:	
Well ID	YGWA-20S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.6367564 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	10.56 in
Depth to Water	9.82 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:44:04	300.09	17.74	5.79	57.46	9.06	10.40	6.27	37.24
Last 5	11:49:04	600.02	17.33	5.73	57.41	6.58	10.60	6.24	46.75
Last 5	11:54:04	900.03	17.23	5.71	57.57	5.28	10.70	6.22	54.73
Last 5	11:59:04	1200.02	17.27	5.69	57.33	3.66	10.70	6.14	61.27
Last 5	12:04:04	1500.04	17.23	5.66	57.19	3.71	10.70	6.16	68.02
Variance 0			-0.10	-0.02	0.17			-0.02	7.98
Variance 1			0.04	-0.01	-0.25			-0.08	6.54
Variance 2			-0.04	-0.03	-0.13			0.02	6.74

Notes

Sunny 70's. Sampled at 12:05.

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-26 10:25:30

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	85 ft
Latitude	33º 26' 58.48"		
Longitude	-84º -53' -14.51"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA-21I	Final Pumping Rate	70 mL/min
Well diameter	2 in	Total System Volume	2.331085 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	27.96 in
Depth to Water	30.97 ft	Total Volume Pumped	3.15 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	10:02:53	1500.00	18.87	6.26	140.81	0.57	32.80	0.45	49.31
Last 5	10:07:53	1800.00	19.01	6.29	140.89	0.53	33.00	0.40	43.86
Last 5	10:12:53	2099.99	19.19	6.30	139.44	0.66	33.10	0.30	40.71
Last 5	10:17:53	2399.98	19.33	6.32	137.19	1.05	33.20	0.28	35.34
Last 5	10:22:54	2700.98	19.48	6.32	134.73	0.76	33.30	0.24	33.08
Variance 0			0.18	0.02	-1.45			-0.10	-3.15
Variance 1			0.13	0.02	-2.26			-0.02	-5.37
Variance 2			0.16	-0.00	-2.46			-0.04	-2.26

Notes

Sunny 70's. Sampled at 10:25.

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-02 11:45:45

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	30 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	24.8 ft

Well Information:		Pumping Information:	
Well ID	YGWC-19S	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	0.6189027 L
Well Total Depth	29.82 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	16.38 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:20:43	300.10	19.25	5.63	42.35	1.91	16.60	5.63	81.27
Last 5	11:25:43	600.03	18.74	5.55	43.23	1.49	16.60	5.65	81.77
Last 5	11:30:43	900.01	18.54	5.54	43.12	1.35	16.60	5.45	82.36
Last 5	11:35:43	1200.01	18.46	5.53	43.02	1.26	16.60	5.29	83.01
Last 5	11:40:43	1500.01	18.53	5.46	43.15	1.45	16.60	5.31	86.15
Variance 0			-0.20	-0.01	-0.12			-0.20	0.59
Variance 1			-0.08	-0.01	-0.10			-0.16	0.65
Variance 2			0.07	-0.07	0.13			0.02	3.13

Notes

Collected at 11:45. Sunny 70s. FB-2 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-02 12:08:17

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.125 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	2 ft
Latitude	33º 27' 14.69"		
Longitude	-84º -53' -34.43"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	38 ft

Well Information:		Pumping Information:	
Well ID	YGWC-22S	Final Pumping Rate	175 mL/min
Well diameter	2 in	Total System Volume	0.4898264 L
Well Total Depth	40.13 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	9.37 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:46:31	1200.03	19.54	4.83	692.32	1.97	9.90	0.18	169.45
Last 5	11:51:31	1500.03	19.74	4.83	690.42	1.25	9.90	0.19	182.04
Last 5	11:56:31	1799.99	19.90	4.83	689.80	0.94	9.90	0.17	192.97
Last 5	12:01:31	2099.99	19.98	4.83	688.43	0.98	9.90	0.16	202.01
Last 5	12:06:31	2399.99	19.95	4.83	688.83	0.64	9.90	0.14	231.52
Variance 0			0.16	0.00	-0.62			-0.02	10.93
Variance 1			0.07	0.00	-1.37			-0.01	9.04
Variance 2			-0.03	-0.00	0.40			-0.02	29.52

Notes

Sunny, sample time - 1206

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-02 13:47:12

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.125 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	2 ft
Latitude	33º 27' 6.64"		
Longitude	-84º -53' -38.53"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	36 ft

Well Information:		Pumping Information:	
Well ID	YGWC-23S	Final Pumping Rate	230 mL/min
Well diameter	2 in	Total System Volume	0.4898264 L
Well Total Depth	39.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	12 in
Depth to Water	15.18 ft	Total Volume Pumped	9.2 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	13:22:49	1200.00	18.80	5.63	182.09	3.08	16.20	8.18	182.72
Last 5	13:27:49	1500.00	18.79	5.62	181.09	2.19	16.20	8.21	182.76
Last 5	13:32:49	1799.99	18.76	5.59	180.03	1.78	16.20	8.21	183.61
Last 5	13:37:49	2099.99	18.66	5.61	179.62	1.22	16.20	8.22	181.98
Last 5	13:42:49	2399.99	18.75	5.61	179.37	1.54	16.20	8.15	180.86
Variance 0			-0.03	-0.03	-1.06			0.00	0.85
Variance 1			-0.11	0.02	-0.41			0.01	-1.63
Variance 2			0.09	0.00	-0.24			-0.07	-1.13

Notes

Sunny sample time- 1342

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-02 13:30:41

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	58 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	52.0 ft

Well Information:		Pumping Information:	
Well ID	YGWC-24S	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	1.744681 L
Well Total Depth	57.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	28.60 ft	Total Volume Pumped	4.9 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	13:08:36	600.03	20.34	5.52	66.92	0.70	29.00	5.90	82.83
Last 5	13:13:36	900.03	19.43	5.45	67.37	0.64	29.00	5.97	87.11
Last 5	13:18:36	1200.00	19.24	5.48	67.11	0.58	29.00	5.97	86.30
Last 5	13:23:36	1500.00	19.13	5.48	67.07	0.51	29.00	5.99	90.29
Last 5	13:28:36	1800.01	19.15	5.46	67.24	0.53	29.00	6.01	86.28
Variance 0			-0.20	0.02	-0.27			-0.00	-0.81
Variance 1			-0.11	0.00	-0.04			0.02	3.99
Variance 2			0.02	-0.03	0.18			0.03	-4.01

Notes

Collected at 13:30. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-03 13:31:56

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	39 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	33.7 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32I	Final Pumping Rate	160 mL/min
Well diameter	2 in	Total System Volume	1.332027 L
Well Total Depth	38.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	19.74 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:10:41	600.02	21.77	5.39	953.55	9.66	19.90	1.14	295.61
Last 5	13:15:41	900.02	21.68	5.32	972.25	9.21	19.90	0.45	347.43
Last 5	13:20:41	1200.02	21.55	5.30	977.68	5.90	19.90	0.29	370.60
Last 5	13:25:41	1499.99	21.46	5.29	979.49	4.58	19.90	0.25	367.92
Last 5	13:30:41	1800.00	21.55	5.29	979.97	3.64	19.90	0.21	377.27
Variance 0			-0.13	-0.02	5.42			-0.16	23.17
Variance 1			-0.09	-0.01	1.82			-0.05	-2.68
Variance 2			0.09	-0.00	0.47			-0.03	9.35

Notes

Collected at13:30. Sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-03 12:30:20

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	peri Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	25 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	21 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32S	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	0.2015856 L
Well Total Depth	23.47 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	16.65 ft	Total Volume Pumped	21 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	12:03:29	6900.91	21.49	4.62	818.47	6.54	17.10	0.78	335.46
Last 5	12:08:29	7200.91	21.55	4.63	820.04	5.81	17.10	0.79	334.97
Last 5	12:13:29	7500.91	21.74	4.63	826.80	5.32	17.10	0.73	352.56
Last 5	12:18:29	7800.91	21.84	4.63	817.65	4.92	17.10	0.75	391.58
Last 5	12:23:29	8100.91	21.46	4.63	820.28	4.85	17.10	0.81	403.16
Variance 0			0.19	-0.00	6.76			-0.07	17.59
Variance 1			0.10	0.00	-9.15			0.03	39.01
Variance 2			-0.38	-0.00	2.63			0.05	11.59

Notes

Collected at 12:30. Sunny 70s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-03 12:51:56

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.125 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	2 ft
Latitude	33º 27' 26.06"		
Longitude	-84º -53' -44.46"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	360 mL/min
Well diameter	2 in	Total System Volume	0.4898264 L
Well Total Depth	38.73 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	8.86 ft	Total Volume Pumped	64.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:30:07	9603.88	19.55	4.19	1362.98	5.13	9.40	0.06	196.47
Last 5	12:35:07	9903.88	19.52	4.19	1361.85	5.82	9.40	0.05	199.22
Last 5	12:40:07	10203.88	19.57	4.17	1366.10	5.90	9.40	0.05	201.64
Last 5	12:45:07	10503.88	19.59	4.18	1366.34	5.20	9.40	0.05	203.93
Last 5	12:50:07	10803.88	19.59	4.19	1366.33	5.34	9.40	0.06	205.28
Variance 0			0.04	-0.01	4.26			-0.00	2.42
Variance 1			0.03	0.01	0.23			0.00	2.29
Variance 2			0.00	0.00	-0.01			0.00	1.35

Notes

Sunny, sample time-1250, dup-3 here, turbidity under 10 after purging 3 hours. Sampled per Pete R.

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-02 14:56:13

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.125 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	2 ft
Latitude	33º 27' 17.56"		
Longitude	-84º -53' -32.93"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-34I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.4898264 L
Well Total Depth	38.75 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	24.1 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:35:01	900.02	19.97	4.82	687.20	1.40	24.40	0.53	213.57
Last 5	14:40:01	1200.02	19.97	4.81	691.63	0.79	24.40	0.43	212.06
Last 5	14:45:01	1500.02	20.04	4.81	696.10	0.48	24.40	0.39	210.70
Last 5	14:50:01	1800.02	20.04	4.81	693.91	0.37	24.40	0.36	209.46
Last 5	14:55:01	2100.02	19.96	4.81	693.00	0.41	24.40	0.35	208.62
Variance 0			0.07	-0.00	4.47			-0.04	-1.35
Variance 1			0.00	-0.00	-2.19			-0.03	-1.25
Variance 2			-0.09	0.00	-0.92			-0.01	-0.84

Notes

Sunny, sample time- 1455

Grab Samples

Product Name: Low-Flow System

Date: 2017-09-29 11:56:08

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	65 ft
Latitude	33º 27' 27.72"		
Longitude	-84º -53' -50.03"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	55 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	1.896712 L
Well Total Depth	60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	19.2 in
Depth to Water	10.05 ft	Total Volume Pumped	7.7 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	11:34:18	1500.00	20.15	5.59	400.12	3.78	11.50	0.74	96.16
Last 5	11:39:18	1799.99	20.08	5.57	400.90	4.26	11.50	0.70	96.53
Last 5	11:44:18	2099.99	20.09	5.58	400.20	3.74	11.60	0.66	95.70
Last 5	11:49:18	2399.99	20.13	5.57	398.99	2.75	11.60	0.62	95.28
Last 5	11:54:18	2699.99	20.12	5.58	398.81	3.03	11.60	0.60	95.02
Variance 0			0.00	0.01	-0.70			-0.04	-0.84
Variance 1			0.04	-0.01	-1.20			-0.03	-0.42
Variance 2			-0.00	0.01	-0.18			-0.03	-0.25

Notes

Sunny 80's. Sampled at 11:55.

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:

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

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025
Client ID: YGWA-1I
Date/Time Sampled: 6/27/2017 3:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1025-01
Date/Time Received: 6/28/2017 4:35:00PM

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
Client ID: YGWA-1D
Date/Time Sampled: 6/27/2017 12:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1025-02
Date/Time Received: 6/28/2017 4:35:00PM

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

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025
Client ID: YGWA-5I
Date/Time Sampled: 6/27/2017 12:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1025-03
Date/Time Received: 6/28/2017 4:35:00PM

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
Client ID: YGWA-5D
Date/Time Sampled: 6/27/2017 2:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1025-04
Date/Time Received: 6/28/2017 4:35:00PM

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
Client ID: Dup-1
Date/Time Sampled: 6/27/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1025-05
Date/Time Received: 6/28/2017 4:35:00PM

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
Client ID: EB-1-6-27-17
Date/Time Sampled: 6/27/2017 4:00:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAF1025-06
Date/Time Received: 6/28/2017 4:35:00PM

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	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
Client ID: YGWA-2I
Date/Time Sampled: 6/28/2017 2:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1025-07
Date/Time Received: 6/28/2017 4:35:00PM

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
Client ID: YGWA-3I
Date/Time Sampled: 6/28/2017 11:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1025-08
Date/Time Received: 6/28/2017 4:35:00PM

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

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025
Client ID: YGWA-3D
Date/Time Sampled: 6/28/2017 12:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1025-09
Date/Time Received: 6/28/2017 4:35:00PM

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

Attention: Mr. Joju Abraham

July 05, 2017

Report No.: AAF1025
Client ID: FB-1-6-28-17
Date/Time Sampled: 6/28/2017 2:50:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAF1025-10
Date/Time Received: 6/28/2017 4:35:00PM

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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE MM/DD/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION		3	7	3	
6/27/17	1510	GW		✓	YGWA-1I	4	1	1	2	1
6/27/17	1250	GW		✓	YGWA-1D	4	1	1	2	2
6/27/17	1250	GW		✓	YGWA-5I	4	1	1	2	3
6/27/17	1425	GW		✓	YGWA-5D	4	1	1	2	4
6/27/17	—	GW		✓	DUP-1	4	1	1	2	5
6/27/17	1600	W		✓	EB-1-6-27-17	4	1	1	2	6
6/28/17	1415	GW		✓	YGWA-2I	4	1	1	2	7
6/28/17	1100	GW		✓	YGWA-3I	4	1	1	2	8
6/28/17	1235	GW		✓	YGWA-3D	4	1	1	2	9
6/28/17	1450	W		✓	FB-1-6-28-17	4	1	1	2	10

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C.Clerker, J.Berrisford

DATE/TIME: 6/28/17 1500

RELINQUISHED BY:

DATE/TIME: 6/28/17 1635

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB:

DATE/TIME: 06/28/17 1635

FOR LAB USE ONLY
LAB #: AAF1025
Entered Into LIMS: MK
Tracking #:

Packed: No NA | Ice: Yes No NA | Temperature: 1.2 Min: 1.2 Max:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present | # of Coolers | Cooler ID:

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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1025 Plant Yates
Pace Project No.: 30223178

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	

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	

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	

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	

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAF1025 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 7/24/2017

Report To:	Subcontract To:
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

WO#:30223178

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWA-1I	G	6/27/2017 15:10	AAF1025-01	GW	2	X	001
2	YGWA-1D	G	6/27/2017 12:50	AAF1025-02	GW	2	X	002
3	YGWA-5I	G	6/27/2017 12:50	AAF1025-03	GW	2	X	003
4	YGWA-5D	G	6/27/2017 14:25	AAF1025-04	GW	2	X	004
5	Dup-1	G	6/27/2017 0:00	AAF1025-05	GW	2	X	005
6	EB-1-6-27-17	G	6/27/2017 16:00	AAF1025-06	W	2	X	006
7	YGWA-2I	G	6/28/2017 14:15	AAF1025-07	GW	2	X	007
8	YGWA-3I	G	6/28/2017 11:00	AAF1025-08	GW	2	X	008
9	YGWA-3D	G	6/28/2017 12:35	AAF1025-09	GW	2	X	009
10	FB-1-6-28-17	G	6/28/2017 14:50	AAF1025-10	W	2	X	010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	6/29/17		6/30/17 1010	
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®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE MM/DD/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)						LAB ID NUMBER
CONTAINER TYPE:								P	P	P	P					
PRESERVATION:								3	7	3						
6/27/17	1510	GW		✓	YGWA-1I	4		1	1	2						1
6/27/17	1250	GW		✓	YGWA-1D	4		1	1	2						2
6/27/17	1250	GW		✓	YGWA-5I	4		1	1	2						3
6/27/17	1425	GW		✓	YGWA-5D	4		1	1	2						4
6/27/17	—	GW		✓	DUP-1	4		1	1	2						5
6/27/17	1600	W		✓	EB-1-6-27-17	4		1	1	2						6
6/28/17	1415	GW		✓	YGWA-2I	4		1	1	2						7
6/28/17	1100	GW		✓	YGWA-3I	4		1	1	2						8
6/28/17	1235	GW		✓	YGWA-3D	4		1	1	2						9
6/28/17	1450	W		✓	FB-1-6-28-17	4		1	1	2						10

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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
30223178

SAMPLED BY AND TITLE: C Locker, J Berrsford
DATE/TIME: 6/28/17 1500
RELINQUISHED BY:
DATE/TIME: 6/28/17 1635
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

FOR LAB USE ONLY
LAB #: AAF1025
Entered into LIMS:

RECEIVED BY LAB:
DATE/TIME: 6/28/17 1635
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Tracking #:
pH checked: Yes No NA
Ice: Yes No NA
Temperature: 1.2 Min 1.2 Max
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

Plant Yates COC Ash Ponds.xlsx

30223178

ZH

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: PACE-Atlanta Project # _____

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

Tracking #: 774136656858

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:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:	✓	—		4. RW 7/3/17
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓	✓		10.
Containers Intact:	✓			11.
Orthophosphate field filtered				12.
Organic Samples checked for dechlorination:			✓	13.
Filtered volume received for Dissolved tests			✓	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	✓			15. pH<2 Initial when completed ZH 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: ZH Date: 6/30/17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	7/14/2017
Worklist:	36626
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

	LCSD (Y or N)?	N
	LCS36626	LCSD36626
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	
LCS/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

Sample I.D.:	30223258006	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30223258006DUP	
Sample Result (pCi/L, g, F):	0.025	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.106	
Sample Duplicate Result (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	30223258006
Duplicate RPD:	126.71%	30223258006DUP
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:

***Batch must be re-prepped due to unacceptable precision.

7/25/17

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	7/19/2017
Worklist:	36628
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS36628	LCSD36628
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30223258006	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30223258006
Duplicate RPD:	19.47%	30223258006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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.

7/25/17

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: 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:

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
Client ID: YGWA-18I
Date/Time Sampled: 6/28/2017 11:05:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-01
Date/Time Received: 6/30/2017 3:58:00PM

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

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120
Client ID: YGWA-18S
Date/Time Sampled: 6/28/2017 4:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-02
Date/Time Received: 6/30/2017 3:58:00PM

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
Client ID: YGWA-4I
Date/Time Sampled: 6/29/2017 11:25:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-03
Date/Time Received: 6/30/2017 3:58:00PM

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
Client ID: YGWA-21I
Date/Time Sampled: 6/29/2017 1:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-04
Date/Time Received: 6/30/2017 3:58:00PM

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
Client ID: YGWA-20S
Date/Time Sampled: 6/29/2017 3:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-05
Date/Time Received: 6/30/2017 3:58:00PM

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
Client ID: YGWA-17S
Date/Time Sampled: 6/29/2017 10:50:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-06
Date/Time Received: 6/30/2017 3:58:00PM

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
Client ID: YGWA-6S
Date/Time Sampled: 6/29/2017 12:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-07
Date/Time Received: 6/30/2017 3:58:00PM

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
Client ID: YGWA-6I
Date/Time Sampled: 6/29/2017 5:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-08
Date/Time Received: 6/30/2017 3:58:00PM

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

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120
Client ID: EB-2-6-29-17
Date/Time Sampled: 6/29/2017 4:10:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAF1120-09
Date/Time Received: 6/30/2017 3:58:00PM

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	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

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120
Client ID: YGWA-14S
Date/Time Sampled: 6/30/2017 11:30:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-10
Date/Time Received: 6/30/2017 3:58:00PM

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

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120
Client ID: YGWA-30I
Date/Time Sampled: 6/30/2017 10:55:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-11
Date/Time Received: 6/30/2017 3:58:00PM

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

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120
Client ID: YGWC-27I
Date/Time Sampled: 6/30/2017 1:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-12
Date/Time Received: 6/30/2017 3:58:00PM

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
Client ID: YGWC-27S
Date/Time Sampled: 6/30/2017 1:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-13
Date/Time Received: 6/30/2017 3:58:00PM

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

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120
Client ID: FB-2-6-30-17
Date/Time Sampled: 6/30/2017 1:30:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAF1120-14
Date/Time Received: 6/30/2017 3:58:00PM

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	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

Attention: Mr. Joju Abraham

July 10, 2017

Report No.: AAF1120
Client ID: Dup-2
Date/Time Sampled: 6/30/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAF1120-15
Date/Time Received: 6/30/2017 3:58:00PM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE mm/dd/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P							
PRESERVATION								3	7	3								
6-28-17	1105	GW		✓	YGWA-18I	4		1	1	2							1	
6-28-17	1605	GW		✓	YGWA-18S	4		1	1	2							2	
6-29-17	1125	GW		✓	YGWA-4I	4		1	1	2							3	
6-29-17	1310	GW		✓	YGWA-21I	4		1	1	2							4	
6-29-17	1500	GW		✓	YGWA-20S	4		1	1	2							5	
6-29-17	1050	GW		✓	YGWA-17S	6		1	1	4							6	extra Rad collected here
6-29-17	1220	GW		✓	YGWA-6S	4		1	1	2							7	
6-29-17	1710	GW		✓	YGWA-6I	4		1	1	2							8	
6-29-17	1610	W		✓	EB-2-6-29-17	4		1	1	2							9	

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: C.Parker, R.Walker (ACC)
DATE/TIME: 6-30-17 1558
RELINQUISHED BY:
DATE/TIME: 6-30-17 1558

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 6/30/17 1558
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Chilled: No NA Ice: Yes No NA
Temperature: Min: 3°C Max:
Custody Seal: Intact Broken Not Present N/A
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: HAF1120
Entered into LIMS:
Tracking #:

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m/DD/YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P						
PRESERVATION								3	7	3							
6-30-17	1130	GW		✓	YGWA-14S	4		1	1	2						10	
6-30-17	1055	GW		✓	YGWA-30I	4		1	1	2						11	
6-30-17	1310	GW		✓	YGWC-27I	4		1	1	2						12	
6-30-17	1315	GW		✓	YGWC-27S	4		1	1	2						13	
6-30-17	1330	W		✓	FB-2-6-30-17	4		1	1	2						14	
6-30-17	—	GW		✓	DUP-2	4		1	1	2						15	

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: C. Parker, R. Walker (ACC)
DATE/TIME: 6-30-17 1558
RELINQUISHED BY: [signature]
DATE/TIME: 6-30-17 1558

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: [signature]
DATE/TIME: 6/30/17 1558
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Packed: No NA
Ice: Yes No NA
Temperature: Min: 3°C Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAF1120
Entered into LIMS: [initials]
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: 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

Sample: YGWA-18I **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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

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
Total Radium	Total Radium Calculation	**1.12 ± 0.531 (0.872)**	pCi/L	07/26/17 13:15	7440-14-4	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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	

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:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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) C:89% T:NA**	pCi/L	07/17/17 08:54	13982-63-3	
Radium-228	EPA 9320	**0.967 ± 0.420 (0.660) C:75% T:79%**	pCi/L	07/21/17 15:57	15262-20-1	
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) C:91% T:NA**	pCi/L	07/17/17 08:45	13982-63-3	
Radium-228	EPA 9320	**0.509 ± 0.303 (0.553) C:76% T:97%**	pCi/L	07/21/17 11:26	15262-20-1	
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) C:87% T:NA**	pCi/L	07/17/17 08:45	13982-63-3	
Radium-228	EPA 9320	**0.892 ± 0.384 (0.621) C:76% T:94%**	pCi/L	07/21/17 11:26	15262-20-1	
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) C:87% T:NA**	pCi/L	07/17/17 08:46	13982-63-3	
Radium-228	EPA 9320	**0.370 ± 0.342 (0.695) C:72% T:87%**	pCi/L	07/21/17 11:26	15262-20-1	
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) C:94% T:NA**	pCi/L	07/17/17 08:54	13982-63-3	
Radium-228	EPA 9320	**0.332 ± 0.337 (0.694) C:75% T:80%**	pCi/L	07/21/17 11:26	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

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
Total Radium	Total Radium Calculation	**0.460 ± 0.494 (1.02)**	pCi/L	07/26/17 13:15	7440-14-4	

Sample: Dup-2 **Lab ID: 30223258015** Collected: 06/30/17 00:00 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	**-0.00796 ± 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	

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAF1120 Plant Yates
Pace Project No.: 30223258

QC Batch: 264890 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30223258001, 30223258002, 30223258003, 30223258004, 30223258005, 30223258006, 30223258007, 30223258008, 30223258009, 30223258010

METHOD BLANK: 1304631 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-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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30223258

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: AAF1120 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 7/26/2017

Report To:	Subcontract To:
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 HNO3					Requested Analysis Radium 226, 228, Total												LAB USE ONLY
1	YGWA-18I	G	6/28/2017 11:05	AAF1120-01	GW	2					X												001
2	YGWA-18S	G	6/28/2017 16:05	AAF1120-02	GW	2					X												002
3	YGWA-4I	G	6/29/2017 11:25	AAF1120-03	GW	2					X												003
4	YGWA-21I	G	6/29/2017 13:10	AAF1120-04	GW	2					X												004
5	YGWA-20S	G	6/29/2017 15:00	AAF1120-05	GW	2					X												005
6	YGWA-17S	G	6/29/2017 10:50	AAF1120-06	GW	4					X												006
7	YGWA-6S	G	6/29/2017 12:20	AAF1120-07	GW	2					X												007
8	YGWA-6I	G	6/29/2017 17:10	AAF1120-08	GW	2					X												008
9	EB-2-6-29-17	G	6/29/2017 16:10	AAF1120-09	W	2					X												009
10	YGWA-14S	G	6/30/2017 11:30	AAF1120-10	GW	2					X												010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1				7/3/17 0940	
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.

30223258

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAF1120 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 7/26/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
11	YGWA-30I	G	6/30/2017 10:55	AAF1120-11	GW	2	X	011
12	YGWC-27I	G	6/30/2017 13:10	AAF1120-12	GW	2	X	012
13	YGWC-27S	G	6/30/2017 13:15	AAF1120-13	GW	2	X	013
14	FB-2-6-30-17	G	6/30/2017 13:30	AAF1120-14	W	2	X	014
15	Dup-2	G	6/30/2017 0:00	AAF1120-15	GW	2	X	015
16								
17								
18								
19								
20								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1				7/3/17 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.

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace - GA. Project# 30223258 ZH

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

Tracking #: 7413660564328

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 7/31/17

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: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓	✓		10.
Containers Intact:	✓			11.
Orthophosphate field filtered				12.
Organic Samples checked for dechlorination:			✓	13.
Filtered volume received for Dissolved tests			✓	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.	✓			15. pH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed ZH 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: ZH Date: 7/31/17

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.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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

Collection DATE mm/dd/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE								P	P	P	P						
PRESERVATION								3	7	3							
6-28-17	1105	GW		✓	YGWA-18I	4		1	1	2						1	
6-28-17	1605	GW		✓	YGWA-18S	4		1	1	2						2	
6-29-17	1125	GW		✓	YGWA-4I	4		1	1	2						3	
6-29-17	1310	GW		✓	YGWA-21I	4		1	1	2						4	
6-29-17	1500	GW		✓	YGWA-20S	4		1	1	2						5	
6-29-17	1050	GW		✓	YGWA-17S	6		1	1	4						6	extra Rad collected here
6-29-17	1220	GW		✓	YGWA-6S	4		1	1	2						7	
6-29-17	1710	GW		✓	YGWA-6I	4		1	1	2						8	
6-29-17	1610	W		✓	EB-2-6-29-17	4		1	1	2						9	
																10	

ANALYSIS REQUESTED

CONTAINER TYPE	CONTAINER TYPE	PRESERVATION
P - PLASTIC		1 - HCl, ≤6°C
A - AMBER GLASS		2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: C.Parker, R.Walker (ACC)
DATE/TIME: 6-30-17 1558
RELINQUISHED BY:
DATE/TIME: 6-30-17 1558
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY LAB:
DATE/TIME: 6/30/17 1558
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
pH checked: Yes No NA
Temperature: Min 3°C Max
Custody Seal: Intact Broken Not Present N/A
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: HAF1120
Entered into LIMS:
Tracking #:

CHAIN OF CUSTODY RECORD

Pace Analytical

Pace Analytical Services, Inc.
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

30223258

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

Collection DATE m/dd/yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
					ANALYSIS REQUESTED	CONTAINER TYPE:		P	P	P	P							
						PRESERVATION		3	7	3								
6-30-17	1130	GW		✓	YGWA-14S	4		1	1	2							10	
6-30-17	1055	GW		✓	YGWA-30I	4		1	1	2							11	
6-30-17	1310	GW		✓	YGWC-27I	4		1	1	2							12	
6-30-17	1315	GW		✓	YGWC-27S	4		1	1	2							13	
6-30-17	1330	W		✓	FB-2-6-30-17	4		1	1	2							14	
6-30-17	—	GW		✓	DUP-2	4		1	1	2							15	

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: C. Parker, R. Walker (Acc)
DATE/TIME: 6-30-17 1558
RELINQUISHED BY:
DATE/TIME: 6-30-17 1558

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB:
DATE/TIME: 6/30/17 1558
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: 3° Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAF1120
Entered into LIMS:
Tracking #:

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	7/14/2017
Worklist:	36626
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS36626	LCSD36626
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	
LCS/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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30223258006	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	30223258006DUP	
Sample Result (pCi/L, g, F):	0.025	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.106	
Sample Duplicate Result (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	30223258006
Duplicate RPD:	126.71%	30223258006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

7/26/17

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	7/14/2017
Worklist:	36627
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS36627	LCSD36627
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30223681001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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:	1.118	30223681001
Duplicate RPD:	25.14%	30223681001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

***Batch must be re-prepped due to unacceptable precision.

7/26/17

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	7/19/2017
Worklist:	36628
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS36628	LCSD36628
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30223258006	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30223258006
Duplicate RPD:	19.47%	30223258006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Pace Analytical™
www.pacelabs.com

Test:	Ra-228
Analyst:	JLW
Date:	7/19/2017
Worklist:	36629
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS36629	LCSD36629
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	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30223681001	Enter Duplicate
Duplicate Sample I.D.	30223681001DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.730	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.368	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.737	the space below.
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	30223681001
Duplicate RPD:	0.99%	30223681001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

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: 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:

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
Client ID: YGWC-22S
Date/Time Sampled: 7/5/2017 12:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0163-01
Date/Time Received: 7/7/2017 3:42:00PM

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
Client ID: YGWC-29I
Date/Time Sampled: 7/5/2017 2:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0163-02
Date/Time Received: 7/7/2017 3:42:00PM

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
Client ID: YGWC-28S
Date/Time Sampled: 7/7/2017 11:15:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0163-03
Date/Time Received: 7/7/2017 3:42:00PM

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
Client ID: YGWC-24S
Date/Time Sampled: 7/7/2017 12:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0163-04
Date/Time Received: 7/7/2017 3:42:00PM

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
Client ID: YGWC-28I
Date/Time Sampled: 7/5/2017 3:35:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0163-05
Date/Time Received: 7/7/2017 3:42:00PM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)						LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P						
PRESERVATION:								3	7	3							
7-5-17	1240	GW		X	YGWC-22S	4		1	1	2						1	
7-5-17	1420	GW		X	YGWC-29I	4		1	1	2						2	
~~7-5-17~~	~~1535~~	~~GW~~		~~X~~	~~YGWC-28I~~	~~4~~ 5		~~1~~	~~1~~	~~2~~ 3						~~5~~	~~Extra Red Here~~
7-7-17	1115	GW		X	YGWC-28S	4		1	1	2						3	
7-7-17	1240	GW		X	YGWC-24S	4		1	1	2						4	
7-5-17	1535	GW		X	YGWC-28I	5		1	1	3						5	Extra Red Here

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: J Benford (ACC)

DATE/TIME: 7/7/17 1542

RELINQUISHED BY:

DATE/TIME: 1542

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

FOR LAB USE ONLY

LAB #: AAG0163

Entered into LIMS: MR

RECEIVED BY LAB:

DATE/TIME: 7/7/17 1542

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Tracking #:

Checked: No NA

Temp: Yes No NA

Temperature: Min: 4.5°C Max:

Custody Seal: Intact Broken Not Present N/A

# of Coolers

Cooler ID:

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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

WO#:30223684

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAG0163 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 8/1/2017

Report To:	Subcontract To:
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 HNO3					Requested Analysis Radium 226, 228, Total												LAB USE ONLY
1	YGWC-22S	G	7/5/2017 12:40	AAG0163-01	GW	2					X												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 3					X												005
6						pH 7/7/2017																	
7																							
8																							
9																							
10																							

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M - RAHMAN	7/7/17	Courtney Ford/Pace	7-10-17/0915	
2					
3					

Cooler Temperature on Receipt NIT °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.

30223684

CHAIN OF CUSTODY RECORD

Pace Analytical®

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

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6/20/7470)	Cl, F, SO4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:							P	P	P		
PRESERVATION:							3	7	3		
7-5-17	1240	GW		X	YGWC-22S	4	1	1	2	1	
7-5-17	1420	GW		X	YGWC-29I	4	1	1	2	2	
~~7-5-17~~	~~1535~~	~~GW~~		~~X~~	~~YGWC-28I~~	~~4~~	~~1~~	~~1~~	~~23~~	~~3~~	Extra Rad Here
7-7-17	1115	GW		X	YGWC-28S	4	1	1	2	3	
7-7-17	1240	GW		X	YGWC-24S	4	1	1	2	4	
7-5-17	1535	GW		X	YGWC-28I	5	1	1	3	5	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_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: J Benford (ACC)

DATE/TIME: 7/7/17 1542

RELINQUISHED BY:

DATE/TIME: 1542

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB:

DATE/TIME: 7/7/17 1542

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH checked: Yes No NA

Rad: Yes No NA

Temperature: 4.5°C

Custody Seal: Intact Broken Not Present MR

# of Coolers:

Cooler ID:

FOR LAB USE ONLY

LAB #: AAG20163

Entered into LIMS: MR

Tracking #:

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace, GA Project # 30223684

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

Label ANL
LIMS Login BLM

Tracking #: 7413 6657 0505

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: -Includes date/time/ID Matrix: WT	X			5.
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. PH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	X			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed ANL 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: ANL Date: 7-10-17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	7/14/2017
Worklist:	36627
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	N
	LCS36627	LCSD36627
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30223681001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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:	4.118	30223681001
Duplicate RPD:	25.14%	30223681001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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.

7/27/17

***Batch must be re-prepped due to unacceptable precision.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

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	LCSD (Y or N)?	N
	LCS36629	LCSD36629
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	
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	

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:	

Duplicate Sample Assessment		
Sample I.D.:	30223681001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
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	30223681001
Duplicate RPD:	0.99%	30223681001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

7/27/17

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:

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
Client ID: YGWC-33S
Date/Time Sampled: 7/10/2017 11:30:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-01
Date/Time Received: 7/12/2017 9:50:00AM

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
Client ID: YGWC-34I
Date/Time Sampled: 7/10/2017 3:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-02
Date/Time Received: 7/12/2017 9:50:00AM

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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: YGWC-19S
Date/Time Sampled: 7/10/2017 2:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-03
Date/Time Received: 7/12/2017 9:50:00AM

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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: Dup-3
Date/Time Sampled: 7/10/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-04
Date/Time Received: 7/12/2017 9:50:00AM

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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: YGWC-23S
Date/Time Sampled: 7/10/2017 2:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-05
Date/Time Received: 7/12/2017 9:50:00AM

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
Client ID: YGWC-26S
Date/Time Sampled: 7/10/2017 11:40:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-06
Date/Time Received: 7/12/2017 9:50:00AM

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
Client ID: YGWC-26I
Date/Time Sampled: 7/10/2017 1:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-07
Date/Time Received: 7/12/2017 9:50:00AM

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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: EB-3-7-10-17
Date/Time Sampled: 7/10/2017 3:20:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAG0261-08
Date/Time Received: 7/12/2017 9:50:00AM

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	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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: FB-3-7-10-17
Date/Time Sampled: 7/10/2017 1:40:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAG0261-09
Date/Time Received: 7/12/2017 9:50:00AM

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	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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: YGWC-32I
Date/Time Sampled: 7/11/2017 11:25:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-10
Date/Time Received: 7/12/2017 9:50:00AM

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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: YGWC-32S
Date/Time Sampled: 7/11/2017 1:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-11
Date/Time Received: 7/12/2017 9:50:00AM

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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: EB-4-7-11-17
Date/Time Sampled: 7/11/2017 12:40:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAG0261-12
Date/Time Received: 7/12/2017 9:50:00AM

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	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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: Dup-4
Date/Time Sampled: 7/11/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAG0261-13
Date/Time Received: 7/12/2017 9:50:00AM

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

Attention: Mr. Joju Abraham

July 20, 2017

Report No.: AAG0261
Client ID: FB-4-7-11-17
Date/Time Sampled: 7/11/2017 10:55:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAG0261-14
Date/Time Received: 7/12/2017 9:50:00AM

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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE m-dd-yy	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER
CONTAINER TYPE:							P	P	P	P						
PRESERVATION:							3	7	3							
7-10-17	1130	GW		✓	YGWC-33S	4	1	1	2							1
7-10-17	1515	GW		✓	YGWC-34I	4	1	1	2							2
7-10-17	1440	GW		✓	YGWC-19S	4	1	1	2							3
7-10-17	—	GW		✓	DUP-3	4	1	1	2							4
7-10-17	1450	GW		✓	YGWC-23S	4	1	1	2							5
7-10-17	1140	GW		✓	YGWC-26S	4	1	1	2							6
7-10-17	1315	GW		✓	YGWC-26I	4	1	1	2							7
7-10-17	1520	W		✓	EB-3-7-10-17	4	1	1	2							8
7-10-17	1340	W		✓	FB-3-7-10-17	4	1	1	2							9

CONTAINER TYPE / PRESERVATION

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C Parker, R. Walker (ACC)

DATE/TIME: 7/11/17 1400

RELINQUISHED BY: [signature]

DATE/TIME: 7/12/17 0950

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB: [signature]

DATE/TIME: 07/12/17 0950

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present

# of Coolers:

Cooler ID:

Packed: No NA

Ice: Yes No NA

Temperature: 1.2 Min: 4.2 Max:

FOR LAB USE ONLY

LAB #: PAGC0261

Entered into LIMS: MR

Tracking #:

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)						LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
CONTAINER TYPE:								P	P	P	P						
PRESERVATION:								3	7	3							
7-11-17	1125	GW		✓	YGWC-32I	4		1	1	2						10	
7-11-17	1325	GW		✓	YGWC-32S	4		1	1	2						11	
7-11-17	1240	W		✓	EB-4-7-11-17	4		1	1	2						12	
7-11-17	—	GW		✓	DUP-4	4		1	1	2						13	
7-11-17	1055	W		✓	FB-4-7-11-17	4		1	1	2						14	

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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: C. Parker (Acc) — DATE/TIME: 7/11/17 1400 — RELINQUISHED BY: C. Parker — DATE/TIME: 7/12/17 0950

RECEIVED BY: — DATE/TIME: — RELINQUISHED BY: — DATE/TIME:

RECEIVED BY/LAB: Yolanda — DATE/TIME: 07/12/17 0952

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Seal: Intact Broken Not Present — # of Coolers — Cooler ID:

Temperature: 4.2 Min: 4.2 Max:

Ice: Yes No NA

Received: No NA

FOR LAB USE ONLY
LAB #: AAG0261
Entered into LIMS: MR
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: 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:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAG0261 Plant Yates
Pace Project No.: 30224006

Sample: YGWC-32I **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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

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.

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

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: AAG0261 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 8/4/2017

Report To:	Subcontract To:
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

WO#:30224006

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWC-33S	G	7/10/2017 11:30	AAG0261-01	GW	2	X	001
2	YGWC-34I	G	7/10/2017 15:15	AAG0261-02	GW	2	X	002
3	YGWC-19S	G	7/10/2017 14:40	AAG0261-03	GW	2	X	003
4	Dup-3	G	7/10/2017 0:00	AAG0261-04	GW	2	X	004
5	YGWC-23S	G	7/10/2017 14:50	AAG0261-05	GW	2	X	005
6	YGWC-26S	G	7/10/2017 11:40	AAG0261-06	GW	2	X	006
7	YGWC-26I	G	7/10/2017 13:15	AAG0261-07	GW	2	X	007
8	EB-3-7-10-17	G	7/10/2017 15:20	AAG0261-08	W	2	X	008
9	FB-3-7-10-17	G	7/10/2017 13:40	AAG0261-09	W	2	X	009
10	YGWC-32I	G	7/11/2017 11:25	AAG0261-10	GW	2	X	010

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	7/12/17		7/13/17 1015	
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

Pace Analytical
www.pacelabs.com

Workorder: AAG0261 Workorder Name: Plant Yates Owner Received Date: Results Requested By: 8/4/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis Radium 226, 228, Total	LAB USE ONLY
11	YGWC-32S	G	7/11/2017 13:25	AAG0261-11	GW	2	X	011
12	EB-4-7-11-17	G	7/11/2017 12:40	AAG0261-12	W	2	X	012
13	Dup-4	G	7/11/2017 0:00	AAG0261-13	GW	2	X	013
14	FB-4-7-11-17	G	7/11/2017 10:55	AAG0261-14	W	2	X	014
15								
16								
17								
18								
19								
20								

30224006

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M. RAHMAN	7/12/17		7/13/17 1015	
2					
3					

Cooler Temperature on Receipt ___ °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®

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: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE M-DD-YY	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		Metals App. III & IV (EPA 6020/7470)	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium 226 & 228 (SW-846 9315/9320)							LAB ID NUMBER
						CONTAINER TYPE:		P	P	P	P						
						PRESERVATION:		3	7	3							
7-10-17	1130	GW		✓	YGWC-33S	4		1	1	2							1
7-10-17	1515	GW		✓	YGWC-34I	4		1	1	2							2
7-10-17	1440	GW		✓	YGWC-19S	4		1	1	2							3
7-10-17	—	GW		✓	DUP-3	4		1	1	2							4
7-10-17	1450	GW		✓	YGWC-23S	4		1	1	2							5
7-10-17	1140	GW		✓	YGWC-26S	4		1	1	2							6
7-10-17	1315	GW		✓	YGWC-26I	4		1	1	2							7
7-10-17	1520	W		✓	EB-3-7-10-17	4		1	1	2							8
7-10-17	1340	W		✓	FB-3-7-10-17	4		1	1	2							9

CONTAINER TYPE
- P - PLASTIC
- A - AMBER GLASS
- G - CLEAR GLASS
- V - VOA VIAL
- S - STERILE
- O - OTHER

PRESERVATION
- 1 - HCl, ≤6°C
- 2 - H_2SO_4, ≤6°C
- 3 - HNO_3
- 4 - NaOH, ≤6°C
- 5 - NaOH/ZnAc, ≤6°C
- 6 - $Na_2S_2O_3$, ≤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

30224006

SAMPLED BY AND TITLE: C. Parker, R. Walker (ACC) DATE/TIME: 7/11/17 1400

RELINQUISHED BY: C. Parker DATE/TIME: 7/12/17 0950

RECEIVED BY: DATE/TIME:

RELINQUISHED BY: DATE/TIME:

RECEIVED BY LAB: M Zaliman DATE/TIME: 07/12/17 0950

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

pH Checked: Yes No NA Ice: Yes No NA Temperature: 4.2 Min 4.2 Max

Custody Seal: Intact Broken Not Present # of Coolers Cooler ID:

FOR LAB USE ONLY
LAB #: AAG0261
Entered into LIMS: MR
Tracking #:

Plant Yates COC Ash Ponds.xlsx

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# 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)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	P	
					PRESERVATION:		3	7	3	
7-11-17	1125	GW		✓	YGWC-32I	4	1	1	2	10
7-11-17	1325	GW		✓	YGWC-32S	4	1	1	2	11
7-11-17	1240	W		✓	EB-4-7-11-17	4	1	1	2	12
7-11-17	—	GW		✓	DUP-4	4	1	1	2	13
7-11-17	1055	W		✓	FB-4-7-11-17	4	1	1	2	14

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

30224006

SAMPLED BY AND TITLE: E. Parker (Acc)
DATE/TIME: 7/11/17 1400
RELINQUISHED BY: E. Parker
DATE/TIME: 7/12/17 0950

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY/LAB: Mallman
DATE/TIME: 7/12/17 0952
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Custody Sealed: Yes No NA
Ice: Yes No NA
Temperature: 1.9 Min. 2.2 Max.
Custody Seal: Intact Broken Not Present
#-of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: PAGC0261
Entered into LIMS: MR
Tracking #:

Sample Condition Upon Receipt Pittsburgh

30224006

Pace Analytical

Client Name: PACE - GA Project #

Label AM
LIMS Login AM

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

Tracking #: 7413666571247

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:	✓			ZH 7/13/17
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			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. PH<2
All containers needing preservation are found to be in compliance with EPA recommendation.	✓			
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed ZH 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: ZH Date: 7/13/17

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	7/20/2017
Worklist:	36692
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1306524
MB concentration:	0.278
M/B 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	LCSD (Y or N)?	Y
	LCS36692	LCSD36692
Count Date:	7/26/2017	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
LCS/LCSD 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

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:	

Duplicate Sample Assessment	
Sample I.D.:	LCS36692
Duplicate Sample I.D.	LCSD36692
Sample Result (pCi/L, g, F):	12.204
Sample Result Counting Uncertainty (pCi/L, g, F):	0.770
Sample Duplicate Result (pCi/L, g, F):	12.053
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.778
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.

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:

*The method blank result is below the reporting limit for this analysis and is acceptable.

8/3/17

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:	0.656
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)?	Y
	LCS36695	LCSD36695
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

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:	

Duplicate Sample Assessment		
Sample I.D.:	LCS36695	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD36695	
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	

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:

8/3/17

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: AAJ0237
October 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:

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

October 20, 2017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YGWC-36	AAJ0237-01	Ground Water	10/06/17 12:45	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

October 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

October 20, 2017

Report No.: AAJ0237
Client ID: YGWC-36
Date/Time Sampled: 10/6/2017 12:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0237-01
Date/Time Received: 10/6/2017 2:40:00PM

Analyte	Result	RL	MDL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
General Chemistry											
Total Dissolved Solids	287	25	10	mg/L	SM 2540 C		1	10/06/17 17:35	10/06/17 17:35	7100259	JPT
Inorganic Anions											
Chloride	5.5	0.25	0.02	mg/L	EPA 300.0		1	10/09/17 09:32	10/09/17 19:04	7100217	RLC
Fluoride	ND	0.30	0.03	mg/L	EPA 300.0		1	10/09/17 09:32	10/09/17 19:04	7100217	RLC
Sulfate	160	10	0.17	mg/L	EPA 300.0		10	10/09/17 09:32	10/09/17 23:33	7100217	RLC
Metals, Total											
Antimony	ND	0.0030	0.0006	mg/L	EPA 6020B		1	10/12/17 18:05	10/19/17 14:42	7100377	KLH
Arsenic	ND	0.0050	0.0005	mg/L	EPA 6020B		1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Barium	0.0508	0.0100	0.0004	mg/L	EPA 6020B		1	10/12/17 18:05	10/19/17 14:42	7100377	KLH
Beryllium	0.0003	0.0030	0.00009	mg/L	EPA 6020B	J	1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Boron	0.256	0.0400	0.0060	mg/L	EPA 6020B		1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Cadmium	0.0002	0.0010	0.0001	mg/L	EPA 6020B	J	1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Calcium	16.6	5.00	2.02	mg/L	EPA 6020B		50	10/12/17 18:05	10/16/17 17:53	7100377	KLH
Chromium	ND	0.0100	0.0005	mg/L	EPA 6020B		1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Cobalt	ND	0.0100	0.0003	mg/L	EPA 6020B		1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Lead	0.0002	0.0050	0.00007	mg/L	EPA 6020B	J	1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Molybdenum	ND	0.0100	0.0010	mg/L	EPA 6020B		1	10/12/17 18:05	10/19/17 14:42	7100377	KLH
Selenium	ND	0.0100	0.0018	mg/L	EPA 6020B		1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Thallium	ND	0.0010	0.00005	mg/L	EPA 6020B		1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Lithium	0.0065	0.0500	0.0015	mg/L	EPA 6020B	J	1	10/12/17 18:05	10/16/17 17:47	7100377	KLH
Mercury	ND	0.00050	0.000036	mg/L	EPA 7470A		1	10/13/17 09:20	10/13/17 14:40	7100286	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

October 20, 2017

Report No.: AAJ0237

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											
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

October 20, 2017

Report No.: AAJ0237

Inorganic Anions - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100217 - EPA 300.0											
Blank (7100217-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 (7100217-BS1)						Prepared & Analyzed: 10/09/17					
Chloride	10.8	0.25	0.02	mg/L	10.020		107	90-110			
Fluoride	9.91	0.30	0.03	mg/L	10.020		99	90-110			
Sulfate	11.0	1.0	0.02	mg/L	10.050		110	90-110			
Matrix Spike (7100217-MS1)			**Source: AAJ0126-05**			Prepared & Analyzed: 10/09/17					
Chloride	10.1	0.25	0.02	mg/L	10.020	0.08	100	90-110			
Fluoride	9.50	0.30	0.03	mg/L	10.020	ND	95	90-110			
Sulfate	10.5	1.0	0.02	mg/L	10.050	0.11	104	90-110			
Matrix Spike (7100217-MS2)			**Source: AAJ0237-01**			Prepared & Analyzed: 10/09/17					
Chloride	15.8	0.25	0.02	mg/L	10.020	5.48	103	90-110			
Fluoride	10.3	0.30	0.03	mg/L	10.020	ND	103	90-110			
Sulfate	129	1.0	0.02	mg/L	10.050	133	NR	90-110			QM-02
Matrix Spike Dup (7100217-MSD1)			**Source: AAJ0126-05**			Prepared & Analyzed: 10/09/17					
Chloride	10.1	0.25	0.02	mg/L	10.020	0.08	100	90-110	0.3	15	
Fluoride	9.55	0.30	0.03	mg/L	10.020	ND	95	90-110	0.5	15	
Sulfate	10.4	1.0	0.02	mg/L	10.050	0.11	102	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

October 20, 2017

Report No.: AAJ0237

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100286 - EPA 7470A											
Blank (7100286-BLK1)						Prepared & Analyzed: 10/13/17					
Mercury	ND	0.00050	0.000036	mg/L							
LCS (7100286-BS1)						Prepared & Analyzed: 10/13/17					
Mercury	0.00250	0.00050	0.000036	mg/L	2.5000E-3		100	80-120			
Matrix Spike (7100286-MS1)		**Source: AAJ0126-03**				Prepared & Analyzed: 10/13/17					
Mercury	0.00244	0.00050	0.000036	mg/L	2.5000E-3	ND	97	75-125			
Matrix Spike Dup (7100286-MSD1)		**Source: AAJ0126-03**				Prepared & Analyzed: 10/13/17					
Mercury	0.00241	0.00050	0.000036	mg/L	2.5000E-3	ND	97	75-125	1	20	
Post Spike (7100286-PS1)		**Source: AAJ0126-03**				Prepared & Analyzed: 10/13/17					
Mercury	1.68			ug/L	1.6667	0.0195	100	80-120			
Batch 7100377 - EPA 3005A											
Blank (7100377-BLK1)						Prepared: 10/12/17 Analyzed: 10/16/17					
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							

PACE ANALYTICAL SERVICES, LLC.

Environmental Monitoring & Laboratory Analysis
110 Technology 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 20, 2017

Report No.: AAJ0237

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100377 - EPA 3005A											
LCS (7100377-BS1)						Prepared: 10/12/17 Analyzed: 10/16/17					
Antimony	0.0994	0.0030	0.0006	mg/L	0.10000		99	80-120			
Arsenic	0.0981	0.0050	0.0005	mg/L	0.10000		98	80-120			
Barium	0.0949	0.0100	0.0004	mg/L	0.10000		95	80-120			
Beryllium	0.104	0.0030	0.00009	mg/L	0.10000		104	80-120			
Cadmium	0.0995	0.0010	0.0001	mg/L	0.10000		99	80-120			
Chromium	0.0976	0.0100	0.0005	mg/L	0.10000		98	80-120			
Cobalt	0.0983	0.0100	0.0003	mg/L	0.10000		98	80-120			
Copper	0.0974	0.0250	0.0003	mg/L	0.10000		97	80-120			
Lead	0.0960	0.0050	0.00007	mg/L	0.10000		96	80-120			
Nickel	0.0954	0.0100	0.0005	mg/L	0.10000		95	80-120			
Selenium	0.103	0.0100	0.0018	mg/L	0.10000		103	80-120			
Silver	0.0993	0.0100	0.0002	mg/L	0.10000		99	80-120			
Thallium	0.0967	0.0010	0.00005	mg/L	0.10000		97	80-120			
Vanadium	0.0974	0.0100	0.0012	mg/L	0.10000		97	80-120			
Zinc	0.0976	0.0100	0.0012	mg/L	0.10000		98	80-120			
Lithium	0.108	0.0500	0.0015	mg/L	0.10000		108	80-120			
Matrix Spike (7100377-MS1)		**Source: AAJ0310-21**				Prepared: 10/12/17 Analyzed: 10/19/17					
Antimony	0.0959	0.0150	0.0030	mg/L	0.10000	ND	96	75-125			
Arsenic	0.379	0.0050	0.0005	mg/L	0.10000	0.279	100	75-125			
Barium	0.156	0.0500	0.0021	mg/L	0.10000	0.0633	93	75-125			
Beryllium	0.0980	0.0030	0.00009	mg/L	0.10000	ND	98	75-125			
Cadmium	0.0943	0.0010	0.0001	mg/L	0.10000	ND	94	75-125			
Chromium	0.0947	0.0100	0.0005	mg/L	0.10000	ND	95	75-125			
Cobalt	0.0937	0.0100	0.0003	mg/L	0.10000	0.0015	92	75-125			
Copper	0.0922	0.0250	0.0003	mg/L	0.10000	0.0007	92	75-125			
Lead	0.0894	0.0050	0.00007	mg/L	0.10000	0.00007	89	75-125			
Nickel	0.0903	0.0100	0.0005	mg/L	0.10000	0.0006	90	75-125			
Selenium	0.105	0.0100	0.0018	mg/L	0.10000	ND	105	75-125			
Silver	0.0934	0.0500	0.0012	mg/L	0.10000	ND	93	75-125			
Thallium	0.0922	0.0010	0.00005	mg/L	0.10000	0.0003	92	75-125			
Vanadium	0.0943	0.0100	0.0012	mg/L	0.10000	ND	94	75-125			
Zinc	0.0937	0.0100	0.0012	mg/L	0.10000	0.0013	92	75-125			
Lithium	0.126	0.0500	0.0015	mg/L	0.10000	0.0256	100	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

October 20, 2017

Report No.: AAJ0237

Metals, Total - Quality Control

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7100377 - EPA 3005A											
Matrix Spike Dup (7100377-MSD1)		**Source: AAJ0310-21**			Prepared: 10/12/17 Analyzed: 10/19/17						
Antimony	0.0992	0.0150	0.0030	mg/L	0.10000	ND	99	75-125	3	20	
Arsenic	0.388	0.0050	0.0005	mg/L	0.10000	0.279	109	75-125	2	20	
Barium	0.162	0.0500	0.0021	mg/L	0.10000	0.0633	99	75-125	4	20	
Beryllium	0.0939	0.0030	0.00009	mg/L	0.10000	ND	94	75-125	4	20	
Cadmium	0.0972	0.0010	0.0001	mg/L	0.10000	ND	97	75-125	3	20	
Chromium	0.0938	0.0100	0.0005	mg/L	0.10000	ND	94	75-125	1	20	
Cobalt	0.0914	0.0100	0.0003	mg/L	0.10000	0.0015	90	75-125	2	20	
Copper	0.0913	0.0250	0.0003	mg/L	0.10000	0.0007	91	75-125	1	20	
Lead	0.0931	0.0050	0.00007	mg/L	0.10000	0.00007	93	75-125	4	20	
Nickel	0.0917	0.0100	0.0005	mg/L	0.10000	0.0006	91	75-125	2	20	
Selenium	0.102	0.0100	0.0018	mg/L	0.10000	ND	102	75-125	3	20	
Silver	0.0964	0.0500	0.0012	mg/L	0.10000	ND	96	75-125	3	20	
Thallium	0.0961	0.0010	0.00005	mg/L	0.10000	0.0003	96	75-125	4	20	
Vanadium	0.0953	0.0100	0.0012	mg/L	0.10000	ND	95	75-125	1	20	
Zinc	0.0973	0.0100	0.0012	mg/L	0.10000	0.0013	96	75-125	4	20	
Lithium	0.125	0.0500	0.0015	mg/L	0.10000	0.0256	99	75-125	0.5	20	
Post Spike (7100377-PS1)		**Source: AAJ0310-21**			Prepared: 10/12/17 Analyzed: 10/19/17						
Antimony	98.8			ug/L	100.00	0.258	99	80-120			
Arsenic	374			ug/L	100.00	279	95	80-120			
Barium	162			ug/L	100.00	63.3	99	80-120			
Beryllium	94.8			ug/L	100.00	0.0354	95	80-120			
Cadmium	100			ug/L	100.00	-0.0220	100	80-120			
Chromium	96.6			ug/L	100.00	0.207	96	80-120			
Cobalt	94.9			ug/L	100.00	1.50	93	80-120			
Copper	92.7			ug/L	100.00	0.677	92	80-120			
Lead	93.3			ug/L	100.00	0.0743	93	80-120			
Nickel	91.3			ug/L	100.00	0.639	91	80-120			
Selenium	105			ug/L	100.00	-1.29	105	80-120			
Silver	98.1			ug/L	100.00	0.0013	98	80-120			
Thallium	95.5			ug/L	100.00	0.276	95	80-120			
Vanadium	97.9			ug/L	100.00	-1.98	98	80-120			
Zinc	94.0			ug/L	100.00	1.34	93	80-120			
Lithium	127			ug/L	100.00	25.6	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

October 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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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 [redacted]

CC: Maria Padilla, Heath McCorkle

REQUESTED COMPLETION DATE:

PO #: la burch@southernco.com [redacted]

PROJECT NAME/STATE: Plant Yates AP

PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS		CONTAINER TYPE	P	P	P							LAB ID NUMBER
								PRESERVATION	3	7	3							
									Metals App. III (EPA 6020/7470) + App IV metals [redacted]	Cl, F, SO_4 & TDS (EPA 300.0 & SM 2540C)	Radium (226 + 228)							
10-6-17	1245	GW		✓	YGWC-36	4			1	1	2							1

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker (ACC) — DATE/TIME: 10-6-17 1420 — RELINQUISHED BY: [signature] — DATE/TIME: 10-6-17 1440

RECEIVED BY: — DATE/TIME: — RELINQUISHED BY: — DATE/TIME:

RECEIVED BY/LAB: [signature] — DATE/TIME: 10/06/17 1440

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER (CLIENT) OTHER FS

Packed: No NA — Ice: (Yes) No NA — Temperature: Min: 0.1 Max:

Custody Seal: (Intact) Broken Not Present — # of Coolers: — Cooler ID:

FOR LAB USE ONLY
LAB #: AAJ0237
Entered into LIMS: MR
Tracking #:

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project # AAJ0237

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

Optional: Proj. Due Date: Proj. Name:

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 8.1 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 10/06/17 MR

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

PACE ANALYTICAL 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 9:36:18AM**

Attn: Mr. Joju Abraham

Client: Georgia Power
Project: CCR Event
Date Received: 10/06/17 14:40

Work Order: AAJ0237
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 1 **#Containers:** 4

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
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 26, 2017

Mr. Joju Abraham
Georgia Power
2480 Maner Road
Atlanta, GA 30339

RE: Project: AAJ0237 Plant Yates
Pace Project No.: 30232471

Dear Mr. Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: AAJ0237 Plant Yates
Pace Project No.: 30232471

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

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: AAJ0237 Plant Yates
Pace Project No.: 30232471

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30232471001	**YGWC-36**	Water	10/06/17 12:45	10/10/17 09:50

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: AAJ0237 Plant Yates
Pace Project No.: 30232471

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30232471001	**YGWC-36**	EPA 9315	JC2	1
		EPA 9320	VAL	1

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AAJ0237 Plant Yates
Pace Project No.: 30232471

Sample: YGWC-36 **Lab ID: 30232471001** Collected: 10/06/17 12:45 Received: 10/10/17 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	**0.160 ± 0.178 (0.365) C:73% T:NA**	pCi/L	10/16/17 08:23	13982-63-3	
Radium-228	EPA 9320	**0.481 ± 0.348 (0.662) C:73% T:76%**	pCi/L	10/17/17 14:48	15262-20-1	
Total Radium	Total Radium Calculation	**0.641 ± 0.526 (1.03)**	pCi/L	10/24/17 11:20	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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAJ0237 Plant Yates
Pace Project No.: 30232471

QC Batch: 275133 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 30232471001

METHOD BLANK: 1352836 Matrix: Water
Associated Lab Samples: 30232471001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.254 ± 0.158 (0.215) C:88% T:NA	pCi/L	10/16/17 08:22	

Results presented on 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: AAJ0237 Plant Yates
Pace Project No.: 30232471

QC Batch: 275134 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 30232471001

METHOD BLANK: 1352837 Matrix: Water
Associated Lab Samples: 30232471001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.175 ± 0.298 (0.743) C:75% T:77%	pCi/L	10/17/17 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.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: AAJ0237 Plant Yates
Pace Project No.: 30232471

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.

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

Chain of Custody

Pace Analytical

Workorder: AAJ0237 Workorder Name: Plant Yates Owner Received Date: 10/5/2017 Results Requested By: 11/3/2017

Report To:	Subcontract To:
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 HNO3	Requested Analysis: Radium 226, 228, Total	LAB USE ONLY
1	YGWC-36	G	10/6/2017 12:45	AAJ0237-01	GW	2	X	01
2								
3								
4								
5								
6								
7								
8								
9								
10								

WO# : 30232471

30232471

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	M-RAHMAN	10/9/17	C. Carney	10/10/17 0950	
2					
3					

Cooler Temperature on Receipt 1.4 °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

Pace Analytical

Client Name: GA Power

Project # 30232471 AAJ0237

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 8.1 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 10/06/17 MR

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

F-ALLC003rev.3 11September2006

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: PACE GA Project # 30232471

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

Label AM

LIMS Login AM

Tracking #: 741366591319

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

Thermometer Used DJA Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp DJA °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10/10/17 CXX

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.	✓ ✓			16. pH<2
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed CXX Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present: Trip Blank Custody Seals Present			✓ ✓	18.
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: CXX Date: 10/10/17

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	10/13/2017
Worklist:	38208
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1352837
MB concentration:	-0.175
M/B Counting Uncertainty:	0.297
MB MDC:	0.743
MB Numerical Performance Indicator:	-1.16
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS38208	LCSD38208
Count Date:	10/17/2017	
Spike I.D.:	17-033	
Spike Concentration (pCi/mL):	23.251	
Volume Used (mL):	0.20	
Aliquot Volume (L, g, F):	0.818	
Target Conc. (pCi/L, g, F):	5.682	
Uncertainty (Calculated):	0.409	
Result (pCi/L, g, F):	5.065	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.630	
Numerical Performance Indicator:	-1.61	
Percent Recovery:	89.15%	
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):	
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:	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30232157001	
Duplicate Sample I.D.	30232157001DUP	
Sample Result (pCi/L, g, F):	0.962	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.487	
Sample Duplicate Result (pCi/L, g, F):	0.862	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.319	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	0.335	30232157001
Duplicate RPD:	10.92%	30232157001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	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:	

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	10/13/2017
Worklist:	38207
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment

MB Sample ID	1352836
MB concentration:	0.254
M/B Counting Uncertainty:	0.153
MB MDC:	0.215
MB Numerical Performance Indicator:	3.24
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment

	LCSD (Y or N)?	N
	LCS38207	LCSD38207
Count Date:	10/16/2017	
Spike I.D.:	17-030	
Spike Concentration (pCi/mL):	80.190	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.517	
Target Conc. (pCi/L, g, F):	15.507	
Uncertainty (Calculated):	1.428	
Result (pCi/L, g, F):	12.310	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.921	
Numerical Performance Indicator:	-3.69	
Percent Recovery:	79.38%	
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):	
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:	

Duplicate Sample Assessment

		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	30232157001	
Duplicate Sample I.D.	30232157001DUP	
Sample Result (pCi/L, g, F):	0.368	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.181	
Sample Duplicate Result (pCi/L, g, F):	0.498	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.208	
Are sample and/or duplicate results below MDC?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.924	30232157001
Duplicate RPD:	30.06%	30232157001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	

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:

*The method blank result is below the reporting limit for this analysis and is acceptable.

***Batch must be re-prepped due to unacceptable precision.

10/26/17

Product Name: Low-Flow System

Date: 2017-06-29 11:24:25

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	51.0 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	44.7 ft

Well Information:		Pumping Information:	
Well ID	YGWA-4I	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	1.592651 L
Well Total Depth	49.7 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	16 in
Depth to Water	23.63 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:00:17	600.02	19.59	6.64	149.24	1.73	24.40	2.26	81.38
Last 5	11:05:17	900.01	19.41	6.36	152.79	2.81	24.60	1.53	78.45
Last 5	11:10:17	1200.02	19.24	6.26	152.96	3.45	24.70	1.42	78.85
Last 5	11:15:17	1500.01	19.16	6.23	152.93	3.08	24.80	1.40	79.05
Last 5	11:20:17	1800.01	19.01	6.21	152.41	2.80	24.90	1.43	78.92
Variance 0			-0.18	-0.10	0.17			-0.11	0.39
Variance 1			-0.08	-0.03	-0.03			-0.02	0.20
Variance 2			-0.15	-0.01	-0.51			0.03	-0.12

Notes

Collected at 11:25. Cloudy 70s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-27 14:26:32

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	poly
Project Name	Plant Yates - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	110 ft
Latitude	33º 26' 47.28"		
Longitude	-84º -53' -20.92"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	106 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	90 mL/min
Well diameter	2 in	Total System Volume	3.199831 L
Well Total Depth	131.6 ft	Calculated Sample Rate	300 sec
Screen Length	50 ft	Stabilization Drawdown	5 in
Depth to Water	26.8 ft	Total Volume Pumped	3.2 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	14:05:07	900.01	19.68	7.27	283.31	0.87	27.20	0.37	-36.93
Last 5	14:10:07	1200.01	19.59	7.28	284.77	1.00	27.20	0.27	-26.79
Last 5	14:15:07	1500.00	19.55	7.30	283.79	1.02	27.20	0.23	-28.58
Last 5	14:20:07	1800.00	19.65	7.31	284.14	0.95	27.20	0.18	-37.54
Last 5	14:25:07	2100.00	19.50	7.32	283.88	0.75	27.20	0.15	-50.80
Variance 0			-0.05	0.02	-0.98			-0.03	-1.80
Variance 1			0.11	0.01	0.35			-0.05	-8.96
Variance 2			-0.16	0.01	-0.25			-0.04	-13.26

Notes

Sunny, sample time-14:25

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-27 12:53:16

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	poly
Project Name	Plant Yates - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	53 ft
Latitude	33º 26' 47.03"		
Longitude	-84º -53' -21.18"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	53.5 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5I	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	1.636088 L
Well Total Depth	58.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.6 in
Depth to Water	19.86 ft	Total Volume Pumped	3.3 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	12:30:11	600.02	20.78	5.77	87.62	1.30	20.10	5.77	104.28
Last 5	12:35:11	900.02	20.35	5.74	87.34	0.79	20.10	5.94	104.58
Last 5	12:40:11	1200.02	20.53	5.74	87.60	0.92	20.10	5.96	104.91
Last 5	12:45:11	1500.01	20.53	5.71	87.70	0.67	20.10	5.95	108.33
Last 5	12:50:11	1800.01	20.44	5.70	88.45	0.84	20.10	5.97	109.42
Variance 0			0.18	-0.00	0.27			0.01	0.34
Variance 1			-0.00	-0.03	0.10			-0.01	3.42
Variance 2			-0.09	-0.01	0.75			0.02	1.09

Notes

Sunny, sample time-12:50 , dup-1 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-29 17:05:20

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	74 ft
Latitude	33º 27' 47.15"		
Longitude	-84º -53' -38.29"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	64 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6I	Final Pumping Rate	50 mL/min
Well diameter	2 in	Total System Volume	2.09218 L
Well Total Depth	69.10 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	128 in
Depth to Water	21.30 ft	Total Volume Pumped	14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	16:44:08	13203.83	21.19	6.30	233.46	10.90	32.00	2.80	66.97
Last 5	16:49:09	13504.83	21.13	6.30	233.47	10.20	32.00	2.83	66.31
Last 5	16:54:09	13804.83	21.07	6.30	233.23	10.10	32.00	2.84	65.69
Last 5	16:59:09	14104.82	21.02	6.30	233.33	10.30	32.00	2.87	65.09
Last 5	17:04:09	14404.83	21.11	6.30	233.29	9.93	32.00	2.89	64.71
Variance 0			-0.05	-0.00	-0.24			0.01	-0.61
Variance 1			-0.05	0.00	0.10			0.02	-0.61
Variance 2			0.09	0.00	-0.04			0.03	-0.37

Notes

Sampled at 17:10. Rain 70's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-29 12:18:50

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	44 ft
Latitude	33º 27' 47.23"		
Longitude	-84º -53' -38.22"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-6S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.44062 L
Well Total Depth	39.06 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	13.56 in
Depth to Water	21.07 ft	Total Volume Pumped	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	11:57:05	600.03	20.72	5.92	140.93	2.51	22.00	6.97	88.62
Last 5	12:02:05	900.03	20.62	5.95	140.99	2.03	22.10	6.91	86.74
Last 5	12:07:05	1200.03	20.50	5.92	141.64	2.19	22.20	6.86	86.82
Last 5	12:12:05	1500.03	20.49	5.93	141.99	1.91	22.20	6.86	83.23
Last 5	12:17:05	1800.03	20.41	5.91	141.69	1.71	22.20	6.83	83.50
Variance 0			-0.13	-0.03	0.65			-0.05	0.09
Variance 1			-0.00	0.01	0.35			0.00	-3.59
Variance 2			-0.09	-0.02	-0.30			-0.03	0.27

Notes

Sampled at 12:20. Cloudy 80's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-29 10:49:59

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	44 ft
Latitude	33º 27' 18.6"		
Longitude	-84º -53' -14.77"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-17S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	1.44062 L
Well Total Depth	39.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4.68 in
Depth to Water	12.01 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:27:56	600.02	19.15	5.53	71.13	1.61	12.40	1.63	93.70
Last 5	10:32:56	900.02	19.06	5.55	71.84	2.72	12.40	1.41	91.00
Last 5	10:37:56	1200.02	19.10	5.54	71.90	2.36	12.40	1.35	85.97
Last 5	10:42:56	1500.02	19.21	5.51	72.34	2.66	12.40	1.31	85.04
Last 5	10:47:56	1800.07	19.24	5.56	72.71	3.38	12.40	1.29	81.27
Variance 0			0.04	-0.01	0.06			-0.06	-5.04
Variance 1			0.10	-0.03	0.45			-0.05	-0.93
Variance 2			0.03	0.05	0.37			-0.01	-3.77

Notes

Sampled at 10:50. Cloudy 70's. extra rad here.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-28 11:03:14

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	84 ft
Latitude	33º 27' 13.85"		
Longitude	-84º -53' -11.9"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	74 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18I	Final Pumping Rate	180 mL/min
Well diameter	2 in	Total System Volume	2.309366 L
Well Total Depth	79.66 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.48 in
Depth to Water	24.11 ft	Total Volume Pumped	5.4 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	10:41:18	600.02	17.99	6.04	116.91	0.87	24.30	3.02	86.49
Last 5	10:46:18	900.01	17.91	6.01	116.98	1.21	24.30	2.95	85.76
Last 5	10:51:18	1200.01	17.84	5.99	118.66	1.17	24.30	2.91	85.77
Last 5	10:56:18	1500.01	17.80	6.02	120.33	1.57	24.40	2.90	83.21
Last 5	11:01:18	1800.01	17.73	6.00	120.99	2.06	24.40	2.92	83.24
Variance 0			-0.07	-0.02	1.68			-0.03	0.01
Variance 1			-0.04	0.03	1.67			-0.01	-2.55
Variance 2			-0.06	-0.02	0.66			0.02	0.03

Notes

Sampled at 11:05. Sunny 80's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-28 16:03:12

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	Bladder
Company Name	Atlantic Coast Consulting, Inc.	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	44 ft
Latitude	33º 27' 14.12"		
Longitude	-84º -53' -11.6"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.44062 L
Well Total Depth	39.86 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8.16 in
Depth to Water	21.02 ft	Total Volume Pumped	18 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	15:39:35	9599.87	20.38	5.35	57.23	7.24	21.70	1.79	102.49
Last 5	15:44:35	9899.86	20.39	5.37	57.23	6.83	21.70	1.80	101.67
Last 5	15:49:35	10199.86	20.25	5.37	57.22	7.92	21.70	1.80	101.61
Last 5	15:54:35	10499.85	19.91	5.35	56.97	7.13	21.70	1.77	99.87
Last 5	15:59:35	10799.85	19.64	5.36	57.02	7.18	21.70	1.79	99.80
Variance 0			-0.14	-0.00	-0.00			-0.00	-0.06
Variance 1			-0.34	-0.02	-0.25			-0.03	-1.74
Variance 2			-0.28	0.01	0.05			0.02	-0.07

Notes

Sampled at 16:05. Sunny 80's.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-29 14:57:25

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	30 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	24.7 ft

Well Information:		Pumping Information:	
Well ID	YGWA-20S	Final Pumping Rate	190 mL/min
Well diameter	2 in	Total System Volume	1.136559 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	11.77 ft	Total Volume Pumped	7.6 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	14:34:14	600.03	21.17	5.98	60.43	12.00	12.30	6.86	82.41
Last 5	14:39:14	900.00	20.00	5.92	59.62	8.72	12.30	6.79	88.20
Last 5	14:44:14	1200.01	19.86	5.89	59.76	6.77	12.30	6.79	91.76
Last 5	14:49:14	1500.01	19.63	5.88	60.08	5.15	12.30	6.77	95.33
Last 5	14:54:14	1800.02	19.28	5.85	59.22	4.76	12.30	6.80	100.05
Variance 0			-0.14	-0.03	0.14			-0.01	3.56
Variance 1			-0.23	-0.02	0.32			-0.02	3.57
Variance 2			-0.35	-0.02	-0.86			0.03	4.72

Notes

Collected at 15:00. Cloudy 80.

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-29 13:10:23

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	80.0 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	75.0 ft

Well Information:		Pumping Information:	
Well ID	YGWA-21I	Final Pumping Rate	60 mL/min
Well diameter	2 in	Total System Volume	2.222492 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	41 in
Depth to Water	30.75 ft	Total Volume Pumped	3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:46:16	1500.01	22.67	6.43	158.40	1.95	32.50	0.36	-28.27
Last 5	12:51:16	1800.00	22.41	6.45	157.96	2.13	32.70	0.28	-26.08
Last 5	12:56:16	2100.00	22.32	6.46	155.79	2.34	32.90	0.27	-22.39
Last 5	13:01:16	2399.99	22.33	6.46	152.78	2.08	33.00	0.26	-19.16
Last 5	13:06:16	2699.99	22.53	6.47	148.58	2.53	33.10	0.25	-16.74
Variance 0			-0.09	0.01	-2.17			-0.01	3.70
Variance 1			0.01	-0.00	-3.01			-0.01	3.23
Variance 2			0.21	0.01	-4.21			-0.01	2.42

Notes

Collected at 13:10. Cloudy 70s

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-10 14:40:00

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	30.0 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	24.8 ft

Well Information:		Pumping Information:	
Well ID	YGWC-19S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.136559 L
Well Total Depth	29.82 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	14.55 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:16:42	900.04	19.54	5.55	42.37	2.34	14.90	3.89	130.66
Last 5	14:21:42	1200.00	19.15	5.53	42.38	1.92	14.90	3.92	123.73
Last 5	14:26:42	1500.01	19.00	5.54	42.13	1.55	14.90	3.92	121.27
Last 5	14:31:42	1800.01	19.15	5.54	42.32	1.48	14.90	3.97	119.19
Last 5	14:36:42	2100.00	19.55	5.55	42.20	1.32	14.90	3.94	132.10
Variance 0			-0.15	0.01	-0.25			-0.00	-2.46
Variance 1			0.15	0.00	0.19			0.05	-2.09
Variance 2			0.40	0.01	-0.12			-0.03	12.92

Notes

Collected at 14:40. Sunny 80s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-05 12:40:52

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 14.62"		
Longitude	-84º -53' -34.45"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	YGWC-22S	Final Pumping Rate	175 mL/min
Well diameter	2 in	Total System Volume	0.6635369 L
Well Total Depth	40.13 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7.7 in
Depth to Water	8.66 ft	Total Volume Pumped	6.1 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	12:20:02	900.05	21.34	4.89	675.59	0.77	9.30	0.15	285.77
Last 5	12:25:02	1200.03	21.39	4.89	675.25	0.89	9.30	0.14	282.49
Last 5	12:30:02	1500.03	21.28	4.88	676.98	0.97	9.30	0.13	281.01
Last 5	12:35:02	1800.03	21.24	4.88	675.73	1.13	9.30	0.14	283.45
Last 5	12:40:02	2100.03	21.15	4.88	678.81	1.06	9.30	0.11	285.13
Variance 0			-0.12	-0.01	1.73			-0.01	-1.48
Variance 1			-0.04	-0.01	-1.25			0.01	2.44
Variance 2			-0.09	-0.00	3.09			-0.04	1.68

Notes

Sunny, sample time-1240

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-10 14:51:52

Project Information:		Pump Information:	
Operator Name	Ryan Walker	Pump Model/Type	QED
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Default Site	Tubing Length	44 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	407447		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34 ft

Well Information:		Pumping Information:	
Well ID	YGWC-23S	Final Pumping Rate	210 mL/min
Well diameter	2 in	Total System Volume	1.34562 L
Well Total Depth	39.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9.6 in
Depth to Water	14.1 ft	Total Volume Pumped	6.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1%	+/- 3%	+/- 10		+/- 0.3%	+/- 10
Last 5	14:30:53	600.02	19.47	5.78	164.75	2.43	14.90	7.72	61.20
Last 5	14:35:53	900.02	19.50	5.72	163.65	2.66	14.90	7.69	60.18
Last 5	14:40:53	1200.02	19.36	5.71	162.52	2.38	14.90	7.67	65.19
Last 5	14:45:53	1500.02	19.39	5.68	162.45	2.09	14.90	7.64	64.61
Last 5	14:50:53	1800.02	19.34	5.68	160.50	1.79	14.90	7.65	63.92
Variance 0			-0.15	-0.01	-1.14			-0.02	5.01
Variance 1			0.03	-0.03	-0.07			-0.03	-0.57
Variance 2			-0.05	0.00	-1.95			0.01	-0.70

Notes

Sunny 90's. Sampled at 14:50.

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-07 12:41:07

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	57 ft
Latitude	33º 27' 31.21"		
Longitude	-84º -53' -48.59"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	52 ft

Well Information:		Pumping Information:	
Well ID	YGWC-24S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	1.722963 L
Well Total Depth	57.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	27.94 ft	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	12:20:05	900.02	20.74	5.88	66.49	0.35	28.50	6.04	86.23
Last 5	12:25:04	1200.01	20.22	5.88	66.67	0.29	28.50	6.14	95.23
Last 5	12:30:04	1500.01	20.30	5.85	67.05	0.44	28.50	6.23	105.56
Last 5	12:35:04	1799.98	20.61	5.84	67.52	0.31	28.50	6.29	113.06
Last 5	12:40:04	2100.00	20.99	5.81	67.72	0.45	28.50	6.33	121.14
Variance 0			0.08	-0.03	0.38			0.09	10.32
Variance 1			0.31	-0.01	0.47			0.06	7.50
Variance 2			0.37	-0.03	0.20			0.04	8.08

Notes

Sunny, 80's, sample time-1240

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-11 11:25:35

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	33.7 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32I	Final Pumping Rate	180 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	38.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	19.33 ft	Total Volume Pumped	7.2 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	11:02:52	600.03	22.14	5.88	951.12	2.39	19.60	1.23	273.99
Last 5	11:07:52	900.03	22.35	5.47	951.34	1.82	19.60	0.43	296.78
Last 5	11:12:52	1200.03	22.62	5.37	951.65	2.08	19.60	0.25	358.31
Last 5	11:17:52	1500.03	22.63	5.34	951.95	2.59	19.60	0.20	363.92
Last 5	11:22:52	1800.03	22.89	5.32	952.55	2.17	19.60	0.18	389.12
Variance 0			0.27	-0.10	0.31			-0.18	61.53
Variance 1			0.01	-0.03	0.30			-0.05	5.60
Variance 2			0.26	-0.02	0.61			-0.02	25.20

Notes

Collected at 11:25. Sunny 80s. FB-4 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-11 13:22:24

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Peri Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	26.0 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	20.0 ft

Well Information:		Pumping Information:	
Well ID	YGWC-32S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.206049 L
Well Total Depth	23.47 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	10 in
Depth to Water	15.80 ft	Total Volume Pumped	22 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	12:58:39	5105.96	23.78	4.65	827.84	7.14	16.70	0.50	403.44
Last 5	13:03:39	5405.96	23.88	4.64	828.66	6.54	16.70	0.58	406.99
Last 5	13:08:39	5705.95	24.14	4.65	832.63	5.85	16.70	0.54	413.03
Last 5	13:13:39	6005.95	24.07	4.65	825.33	4.97	16.70	0.50	416.57
Last 5	13:18:39	6305.95	23.98	4.65	828.56	4.73	16.70	0.59	424.80
Variance 0			0.26	0.00	3.97			-0.03	6.04
Variance 1			-0.07	0.01	-7.30			-0.05	3.54
Variance 2			-0.09	-0.00	3.23			0.10	8.22

Notes

Collected at 13:25. Sunny 80s. EB-4 here. DUP-4 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-10 11:40:37

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40.0 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	33.7 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	430 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	38.73 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	8.27 ft	Total Volume Pumped	17.2 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	11:05:47	600.03	19.59	3.97	1315.96	5.97	8.80	0.06	237.28
Last 5	11:10:47	900.03	19.53	3.99	1319.89	4.66	8.80	0.05	235.37
Last 5	11:15:47	1200.01	19.45	4.00	1320.10	4.08	8.80	0.05	232.76
Last 5	11:20:47	1500.01	19.46	4.01	1320.18	3.68	8.80	0.06	229.69
Last 5	11:25:47	1800.01	19.45	4.02	1321.74	3.45	8.80	0.06	228.52
Variance 0			-0.08	0.01	0.21			0.00	-2.61
Variance 1			0.01	0.01	0.08			0.01	-3.07
Variance 2			-0.01	0.01	1.56			-0.00	-1.17

Notes

Collected at 11:30. DUP -3 here. Sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2017-07-10 13:17:44

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	38.0 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	33.7 ft

Well Information:		Pumping Information:	
Well ID	YGWC-34I	Final Pumping Rate	190 mL/min
Well diameter	2 in	Total System Volume	1.310309 L
Well Total Depth	38.75 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	23.22 ft	Total Volume Pumped	7.6 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	12:53:33	1200.01	21.16	4.76	648.33	0.46	23.40	1.68	184.59
Last 5	12:58:33	1500.04	21.01	4.79	648.07	0.50	23.50	1.13	173.35
Last 5	13:03:33	1800.23	20.70	4.78	661.72	0.58	23.50	0.73	169.84
Last 5	13:08:33	2100.00	20.54	4.77	669.15	0.41	23.50	0.58	164.03
Last 5	13:13:33	2399.99	20.43	4.78	668.69	0.38	23.50	0.54	158.71
Variance 0			-0.31	-0.01	13.66			-0.40	-3.51
Variance 1			-0.16	-0.01	7.43			-0.15	-5.81
Variance 2			-0.11	0.01	-0.46			-0.04	-5.32

Notes

Collected at 15:15. Sunny 80s.

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-06 12:41:53

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	60 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	55 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	170 mL/min
Well diameter	2 in	Total System Volume	1.788119 L
Well Total Depth	60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	17 in
Depth to Water	10.17 ft	Total Volume Pumped	6.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:18:26	600.02	20.70	5.60	419.26	1.34	11.40	2.07	125.46
Last 5	12:23:26	900.01	21.03	5.56	419.58	1.65	11.60	1.48	127.56
Last 5	12:28:26	1200.01	20.83	5.50	418.59	1.85	11.60	1.23	131.30
Last 5	12:33:26	1500.01	20.93	5.53	419.63	1.43	11.60	1.14	130.80
Last 5	12:38:26	1800.00	20.79	5.51	419.35	1.20	11.60	1.14	132.28
Variance 0			-0.20	-0.06	-0.98			-0.25	3.74
Variance 1			0.10	0.03	1.04			-0.09	-0.50
Variance 2			-0.14	-0.02	-0.28			0.00	1.49

Notes

Collected at 12:45. Sunny 80s

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:

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
Client ID: YGWA-1I
Date/Time Sampled: 10/3/2017 1:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-01
Date/Time Received: 10/5/2017 11:45:00AM

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

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178
Client ID: YGWA-1D
Date/Time Sampled: 10/3/2017 3:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-02
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: YGWA-2I
Date/Time Sampled: 10/3/2017 4:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-03
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: EB-1-10-3-17
Date/Time Sampled: 10/3/2017 4:00:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAJ0178-04
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: YGWA-5I
Date/Time Sampled: 10/3/2017 12:50:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-05
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: YGWA-5D
Date/Time Sampled: 10/3/2017 2:00:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-06
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: YGWA-21I
Date/Time Sampled: 10/3/2017 3:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-07
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: FB-1-10-3-17
Date/Time Sampled: 10/3/2017 3:00:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAJ0178-08
Date/Time Received: 10/5/2017 11:45:00AM

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	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
Client ID: YGWA-3I
Date/Time Sampled: 10/4/2017 12:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-09
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: YGWA-3D
Date/Time Sampled: 10/4/2017 10:25:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-10
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: YGWA-17S
Date/Time Sampled: 10/4/2017 11:15:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-11
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: YGWA-20S
Date/Time Sampled: 10/4/2017 9:45:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-12
Date/Time Received: 10/5/2017 11:45:00AM

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
Client ID: YGWA-30I
Date/Time Sampled: 10/4/2017 2:15:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-13
Date/Time Received: 10/5/2017 11:45:00AM

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

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0178
Client ID: Dup-1
Date/Time Sampled: 10/4/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0178-14
Date/Time Received: 10/5/2017 11:45:00AM

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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®
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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com
PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III (EPA 6020/7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	
					PRESERVATION:		3	7	
10-3-17	1350	GW		✓	YGWA-1I	2	1	1	1
10-3-17	1505	GW		✓	YGWA-1D	2	1	1	2
10-3-17	1615	GW		✓	YGWA-2I	2	1	1	3
10-3-17	1600	W		✓	EB-1-10-3-17	2	1	1	4
10-3-17	1250	GW		✓	YGWA-5I	2	1	1	5
10-3-17	1400	GW		✓	YGWA-5D	2	1	1	6
10-3-17	1545	GW		✓	YGWA-21I	2	1	1	7
10-3-17	1500	W		✓	FB-1-10-3-17	2	1	1	8

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER
PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: C. Parker, J. Berrisford (ACC)
DATE/TIME: 10-3-17 1615
RELINQUISHED BY: C Parker
DATE/TIME: 10-5-17 1145
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY/LAB: Kalman
DATE/TIME: 10/05/17 1145
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Packed: No NA
Ice: Yes No NA
Temperature: Min: 0.1 Max:
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

FOR LAB USE ONLY
LAB #: AAJ0178
Entered into LIMS:
Tracking #:

Plant Yates COC Ash Ponds

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III (EPA 6020/7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	LAB ID NUMBER
					CONTAINER TYPE:	P	P		
					PRESERVATION:	3	7		
10-4-17	1240	GW		✓	YGWA-3I	2	1	1	9
10-4-17	1025	GW		✓	YGWA-3D	2	1	1	10
10-4-17	1115	GW		✓	YGWA-17S	2	1	1	11
10-4-17	0945	GW		✓	YGWA-20S	2	1	1	12
10-4-17	1415	GW		✓	YGWA-30I	2	1	1	13
10-4-17	—	GW		✓	DUP-1	2	1	1	14

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, J. Berisford (AQC)
DATE/TIME: 10-4-17 1415
RELINQUISHED BY: C Parker
DATE/TIME: 10-5-17 1145
RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:
RECEIVED BY/LAB: Myra Lunan
DATE/TIME: 10/05/17 1145
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:
Temperature: Min: 0°/ Max:
Ice: Yes No NA
Received: No NA

FOR LAB USE ONLY
LAB #: AAJ0178
Entered Into LIMS: MR
Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA power Project # AAJ0178

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

Optional: Proj Due Date: Proj Name:

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 6°C

Comments:

Date and Initials of person examining contents: 10/05/17 MR

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

PACE ANALYTICAL 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:

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
Client ID: YGWC-28S
Date/Time Sampled: 10/9/2017 2:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-01
Date/Time Received: 10/11/2017 5:25:00PM

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

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0389
Client ID: YGWC-27I
Date/Time Sampled: 10/9/2017 3:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-02
Date/Time Received: 10/11/2017 5:25:00PM

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
Client ID: YGWC-19S
Date/Time Sampled: 10/10/2017 2:55:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-03
Date/Time Received: 10/11/2017 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	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
Client ID: YGWC-26S
Date/Time Sampled: 10/10/2017 11:35:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-04
Date/Time Received: 10/11/2017 5:25:00PM

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
Client ID: YGWC-26I
Date/Time Sampled: 10/10/2017 12:20:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-05
Date/Time Received: 10/11/2017 5:25:00PM

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
Client ID: YGWC-23S
Date/Time Sampled: 10/11/2017 9:45:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-06
Date/Time Received: 10/11/2017 5:25:00PM

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
Client ID: YGWC-33S
Date/Time Sampled: 10/11/2017 10:45:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-07
Date/Time Received: 10/11/2017 5:25:00PM

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
Client ID: YGWC-36
Date/Time Sampled: 10/11/2017 12:10:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-08
Date/Time Received: 10/11/2017 5:25:00PM

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
Client ID: Dup-3
Date/Time Sampled: 10/11/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0389-09
Date/Time Received: 10/11/2017 5:25:00PM

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
Client ID: EB-3-10-10-17
Date/Time Sampled: 10/10/2017 12:00:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAJ0389-10
Date/Time Received: 10/11/2017 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	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
Client ID: FB-3-10-11-17
Date/Time Sampled: 10/11/2017 9:20:00AM
Matrix: Water

Project: CCR Event
Lab Number ID: AAJ0389-11
Date/Time Received: 10/11/2017 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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III (EPA 6020/7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	LAB ID NUMBER
					CONTAINER TYPE:		P	P	
					PRESERVATION:		3	7	
10-9-17	1420	GW		✓	YGWC-28S	2	1	1	1
10-9-17	1525	GW		✓	YGWC-27I	2	1	1	2
10-10-17	1455	GW		✓	YGWC-19S	2	1	1	3
10-10-17	1135	GW		✓	YGWC-26S	2	1	1	4
10-10-17	1220	GW		✓	YGWC-26I	2	1	1	5
10-11-17	0945	GW		✓	YGWC-23S	2	1	1	6
10-11-17	1045	GW		✓	YGWC-33S	2	1	1	7
10-11-17	1210	GW		✓	YGWC-36	2	1	1	8
10-11-17	—	GW		✓	Dup-3	2	1	1	9
10-10-17	1200	W		✓	EB-3-10-10-17	2	1	1	10
10-11-17	0920	W		✓	FB-3-10-11-17	2	1	1	11

CONTAINER TYPE	PRESERVATION
P - PLASTIC	1 - HCl, ≤6°C
A - AMBER GLASS	2 - H_2SO_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 - $Na_2S_2O_3$, ≤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

SAMPLED BY AND TITLE: C. Parker, J. Bernsford (Acc)
DATE/TIME: 10-11-17 1630
RELINQUISHED BY: C Parker
DATE/TIME: 10-11-17 1725

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB: Madman
DATE/TIME: 10/11/17 1725

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Checked: No NA
Ice: Yes No NA
Temperature: Min: 4.3 Max:
Custody Seal: Intact Broken Not Present
# of Coolers:
Cooler ID:

FOR LAB USE ONLY
LAB #: AAJ0389
Entered into LIMS: MR
Tracking #:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project # AAJ2389

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

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

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

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

F-ALLC003rev.3 11September2006

PACE ANALYTICAL 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:

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
Client ID: YGWA-18S
Date/Time Sampled: 10/4/2017 3:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-01
Date/Time Received: 10/6/2017 2:40:00PM

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
Client ID: YGWA-4I
Date/Time Sampled: 10/5/2017 3:40:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-02
Date/Time Received: 10/6/2017 2:40:00PM

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
Client ID: YGWA-14S
Date/Time Sampled: 10/5/2017 11:35:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-03
Date/Time Received: 10/6/2017 2:40:00PM

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

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238
Client ID: YGWA-18I
Date/Time Sampled: 10/5/2017 12:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-04
Date/Time Received: 10/6/2017 2:40:00PM

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
Client ID: YGWC-24S
Date/Time Sampled: 10/5/2017 4:45:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-05
Date/Time Received: 10/6/2017 2:40:00PM

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
Client ID: YGWC-28I
Date/Time Sampled: 10/5/2017 4:05:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-06
Date/Time Received: 10/6/2017 2:40:00PM

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
Client ID: YGWC-29I
Date/Time Sampled: 10/5/2017 2:25:00PM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-07
Date/Time Received: 10/6/2017 2:40:00PM

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
Client ID: EB-2-10-5-17
Date/Time Sampled: 10/5/2017 3:50:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAJ0238-08
Date/Time Received: 10/6/2017 2:40:00PM

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	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
Client ID: Dup-2
Date/Time Sampled: 10/5/2017 12:00:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-09
Date/Time Received: 10/6/2017 2:40:00PM

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
Client ID: YGWC-27S
Date/Time Sampled: 10/6/2017 11:45:00AM
Matrix: Ground Water

Project: CCR Event
Lab Number ID: AAJ0238-10
Date/Time Received: 10/6/2017 2:40:00PM

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

Attention: Mr. Joju Abraham

January 08, 2018

Report No.: AAJ0238
Client ID: FB-2-10-5-17
Date/Time Sampled: 10/5/2017 3:20:00PM
Matrix: Water

Project: CCR Event
Lab Number ID: AAJ0238-11
Date/Time Received: 10/6/2017 2:40:00PM

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	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-Nitrososdiphenylamine. Pace is not NELAC certified for N-Nitrososdiphenylamine.

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.

CHAIN OF CUSTODY RECORD

Pace Analytical®

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: Maria Padilla, Heath McCorkle
REQUESTED COMPLETION DATE:
PO #: laburch@southernco.com

PROJECT NAME/STATE: Plant Yates AP
PROJECT #: Phase 2 CCR

ANALYSIS REQUESTED

Collection DATE	Collection TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Metals App. III (EPA 6020/7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	LAB ID NUMBER
					CONTAINER TYPE:	P	P		
					PRESERVATION:	3	7		
10-4-17	1505	GW		✓	YGWA-18S	2	1	1	1
10-5-17	1540	GW		✓	YGWA-4I	3	1	2	2
10-5-17	1135	GW		✓	YGWA-14S	2	1	1	3
10-5-17	1245	GW		✓	YGWA-18I	3	1	2	4
10-5-17	1645	GW		✓	YGWC-24S	3	1	2	5
10-5-17	1605	GW		✓	YGWC-28I	3	1	2	6
10-5-17	1425	GW		✓	YGWC-29I	3	1	2	7
10-5-17	1550	W		✓	EB-2-10-5-17	2	1	1	8
10-5-17	—	GW		✓	DUP-2	2	1	1	9
10-6-17	1145	GW		✓	YGWC-27S	3	1	2	10
10-5-17	1520	W		✓	FB-2-10-5-17	2	1	1	11

CONTAINER TYPE: P - PLASTIC; A - AMBER GLASS; G - CLEAR GLASS; V - VOA VIAL; S - STERILE; O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤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: E. Parker, J. Berrisford
DATE/TIME: 10-6-17 1420
RELINQUISHED BY:
DATE/TIME: 10-6-17 1440

RECEIVED BY:
DATE/TIME:
RELINQUISHED BY:
DATE/TIME:

RECEIVED BY LAB:
DATE/TIME: 10/06/17 1440

FOR LAB USE ONLY
LAB #: AAJ0238
Entered Into LIMS:
Tracking #:

SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS

Packed: No NA
Ice: Yes No NA
Temperature: Min: 0.1 Max:
Custody Seal: Intact Broken Not Present
# of Coolers
Cooler ID:

Plant Yates COC Ash Ponds

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project # AAJ0238

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

Optional: Proj. Due Date: Proj. Name:

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

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

PACE ANALYTICAL 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: 2017-10-05 15:38:01

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	50.0 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	44.7 ft

Well Information:		Pumping Information:	
Well ID	YGWA-4I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	1.570932 L
Well Total Depth	49.70 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	29 in
Depth to Water	24.60 ft	Total Volume Pumped	7.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:13:20	1200.00	18.16	6.37	158.67	1.60	25.70	1.23	100.96
Last 5	15:18:20	1499.99	18.16	6.27	158.16	2.08	25.80	1.14	100.18
Last 5	15:23:20	1799.99	18.44	6.23	154.77	1.76	25.90	1.01	98.72
Last 5	15:28:19	2099.98	18.47	6.20	151.27	1.86	26.00	0.94	98.02
Last 5	15:33:19	2399.98	18.37	6.16	149.68	1.67	26.00	0.93	98.54
Variance 0			0.27	-0.04	-3.39			-0.13	-1.46
Variance 1			0.03	-0.03	-3.50			-0.07	-0.70
Variance 2			-0.10	-0.03	-1.59			-0.01	0.53

Notes

Collected at 15:40. Sunny 80s. FB-2 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-03 14:03:15

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	110 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	106.6 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5D	Final Pumping Rate	90 mL/min
Well diameter	2 in	Total System Volume	2.874051 L
Well Total Depth	131.6 ft	Calculated Sample Rate	300 sec
Screen Length	50 ft	Stabilization Drawdown	4.8 in
Depth to Water	28.21 ft	Total Volume Pumped	4.1 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		+/- 10%	+/- 10
Last 5	13:40:20	1500.77	18.90	7.51	281.76	1.21	28.60	1.11	-233.23
Last 5	13:45:20	1800.77	19.09	7.49	278.30	1.06	28.60	0.92	-231.95
Last 5	13:50:20	2100.77	18.99	7.49	275.02	0.81	28.60	0.75	-230.02
Last 5	13:55:20	2400.77	18.92	7.48	272.93	0.77	28.60	0.63	-228.77
Last 5	14:00:20	2700.77	18.92	7.48	271.29	0.63	28.60	0.48	-225.47
Variance 0			-0.10	-0.00	-3.29			-0.16	1.93
Variance 1			-0.06	-0.00	-2.08			-0.12	1.25
Variance 2			-0.01	-0.00	-1.65			-0.14	3.30

Notes

Sunny,80s, sample time-1400

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-03 12:54:48

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	58 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	53.5 ft

Well Information:		Pumping Information:	
Well ID	YGWA-5I	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	1.744681 L
Well Total Depth	58.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.4 in
Depth to Water	21.32 ft	Total Volume Pumped	3.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	12:30:20	600.12	18.55	5.83	89.12	1.38	23.70	6.58	145.22
Last 5	12:35:20	900.12	18.40	5.81	89.17	1.52	23.70	6.41	133.79
Last 5	12:40:20	1200.12	18.39	5.80	88.95	1.63	23.70	6.39	125.88
Last 5	12:45:20	1500.12	18.36	5.79	89.03	1.45	23.70	6.38	119.82
Last 5	12:50:20	1800.12	18.18	5.79	88.85	1.38	23.70	6.41	114.72
Variance 0			-0.01	-0.01	-0.22			-0.02	-7.91
Variance 1			-0.03	-0.01	0.08			-0.01	-6.06
Variance 2			-0.19	-0.00	-0.18			0.03	-5.10

Notes

Sunny 80's, sample time-1250,

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-04 11:16:03

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34.9 ft

Well Information:		Pumping Information:	
Well ID	YGWA-17S	Final Pumping Rate	220 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	39.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6.7 in
Depth to Water	12.94 ft	Total Volume Pumped	6.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	10:55:01	600.02	18.43	5.56	72.97	3.73	13.50	1.94	98.18
Last 5	11:00:01	900.02	18.39	5.57	73.98	3.28	13.50	1.79	93.06
Last 5	11:05:01	1200.02	18.39	5.57	74.69	3.61	13.50	1.81	90.48
Last 5	11:10:01	1500.02	18.39	5.57	75.04	3.42	13.50	1.80	88.88
Last 5	11:15:01	1800.02	18.39	5.57	75.52	3.31	13.50	1.91	86.06
Variance 0			-0.00	0.00	0.70			0.02	-2.58
Variance 1			-0.00	-0.00	0.35			-0.01	-1.60
Variance 2			0.00	0.01	0.48			0.11	-2.82

Notes

Sunny,70s, sample time-1115

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-05 12:46:19

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	79.6 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	74.6 ft

Well Information:		Pumping Information:	
Well ID	YGWA18I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	2.213804 L
Well Total Depth	79.67 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	24.65 ft	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			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	12:25:02	900.02	18.52	6.08	123.98	1.67	24.90	2.93	123.47
Last 5	12:30:08	1206.02	18.25	6.10	125.57	1.27	24.90	2.93	103.27
Last 5	12:35:08	1506.02	18.95	6.10	125.89	1.08	24.90	3.00	92.24
Last 5	12:40:08	1806.02	19.61	6.09	124.57	0.92	24.90	2.95	88.27
Last 5	12:45:09	2107.02	18.12	6.11	125.09	1.03	24.90	3.08	82.32
Variance 0			0.70	-0.01	0.31			0.08	-11.02
Variance 1			0.66	-0.01	-1.32			-0.05	-3.97
Variance 2			-1.48	0.02	0.52			0.13	-5.95

Notes

Sunny,80s,sample time -1245

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-04 15:06:43

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	39.8 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34.8 ft

Well Information:		Pumping Information:	
Well ID	YGWA-18S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	1.349402 L
Well Total Depth	39.86 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.5 in
Depth to Water	26.71 ft	Total Volume Pumped	27 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		+/- 10%	+/- 10
Last 5	14:45:05	9600.95	18.46	5.32	61.26	8.19	23.00	1.83	87.14
Last 5	14:50:05	9900.95	18.39	5.32	61.39	7.99	23.00	2.17	87.08
Last 5	14:55:05	10200.95	18.36	5.32	61.23	8.48	23.00	2.11	86.89
Last 5	15:00:05	10500.95	18.36	5.32	61.26	8.23	23.00	2.08	86.94
Last 5	15:05:05	10800.95	18.37	5.32	61.29	8.89	23.00	2.06	86.82
Variance 0			-0.03	-0.00	-0.15			-0.06	-0.19
Variance 1			-0.01	-0.00	0.03			-0.03	0.04
Variance 2			0.01	0.00	0.03			-0.02	-0.12

Notes

Sunny,70s, sample time-1505

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-04 09:46:28

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	29.7 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	24.7 ft

Well Information:		Pumping Information:	
Well ID	YGWA-20S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.6175637 L
Well Total Depth	29.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9.8 in
Depth to Water	12.38 ft	Total Volume Pumped	10 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		+/- 10%	+/- 10
Last 5	09:25:15	1800.02	17.23	5.84	57.96	8.37	13.20	7.18	113.20
Last 5	09:30:15	2100.02	17.23	5.84	57.84	7.10	13.20	7.16	109.66
Last 5	09:35:15	2400.02	17.26	5.84	57.46	5.63	13.20	7.17	107.23
Last 5	09:40:16	2700.93	17.27	5.84	57.41	5.13	13.20	7.18	105.89
Last 5	09:45:16	3000.93	17.28	5.83	57.18	4.95	13.20	7.18	104.67
Variance 0			0.03	0.00	-0.37			0.01	-2.43
Variance 1			0.01	0.00	-0.06			0.02	-1.34
Variance 2			0.01	-0.01	-0.22			0.00	-1.22

Notes

Sunny,70s, sample time-0945

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-03 15:49:31

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	80 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	YGWA-21I	Final Pumping Rate	60 mL/min
Well diameter	2 in	Total System Volume	2.222492 L
Well Total Depth	80.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	26.4 in
Depth to Water	32.90 ft	Total Volume Pumped	3.9 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		+/- 10%	+/- 10
Last 5	15:25:08	2701.32	24.01	6.60	151.88	0.62	34.90	1.11	-91.22
Last 5	15:30:08	3001.31	24.15	6.59	149.53	0.68	35.00	1.87	-98.18
Last 5	15:35:08	3301.31	23.93	6.58	148.27	0.71	35.00	1.62	-100.53
Last 5	15:40:08	3601.31	23.98	6.56	147.43	0.77	35.10	1.44	-101.81
Last 5	15:45:08	3901.31	24.13	6.56	145.77	0.63	35.10	1.50	-102.33
Variance 0			-0.22	-0.01	-1.26			-0.24	-2.35
Variance 1			0.05	-0.02	-0.84			-0.19	-1.28
Variance 2			0.15	-0.01	-1.66			0.07	-0.53

Notes

Sunny,80s, sample time-1545, FB-1 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-10 14:57:44

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates- AP -Phase 2 CCR	Tubing Diameter	.17 in
Site Name	Plant Yates	Tubing Length	29.8 ft
Latitude	33° 26' 59.2"		
Longitude	-84° -53' -29.4"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	24.8 ft

Well Information:		Pumping Information:	
Well ID	YGWC-19S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.61801 L
Well Total Depth	29.82 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.1 in
Depth to Water	15.61 ft	Total Volume Pumped	13 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 10
Last 5	14:35:27	900.01	22.42	5.50	40.72	1.40	16.00	3.90	95.31
Last 5	14:40:27	1200.01	21.77	5.52	40.41	1.37	16.00	3.83	98.17
Last 5	14:45:27	1500.00	22.52	5.62	40.61	1.11	16.00	3.78	94.90
Last 5	14:50:27	1800.00	22.90	5.58	40.52	1.32	16.00	3.72	99.71
Last 5	14:55:27	2100.00	22.89	5.60	40.42	1.76	16.00	3.70	101.89
Variance 0			0.75	0.10	0.20			-0.05	-3.27
Variance 1			0.38	-0.04	-0.10			-0.07	4.81
Variance 2			-0.01	0.02	-0.09			-0.02	2.18

Notes

Sunny,80s,sample time-1455

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-11 09:48:02

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates- AP -Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates	Tubing Length	39.1 ft
Latitude	33° 27' 4.04"		
Longitude	-84° -53' -41.83"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	34.1 ft

Well Information:		Pumping Information:	
Well ID	YGWC-23S	Final Pumping Rate	260 mL/min
Well diameter	2 in	Total System Volume	1.334199 L
Well Total Depth	39.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9.5 in
Depth to Water	14.91 ft	Total Volume Pumped	9.1 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 10
Last 5	09:25:12	900.01	18.96	5.65	163.36	2.71	15.70	8.23	122.10
Last 5	09:30:12	1200.00	18.97	5.62	161.91	2.20	15.70	8.21	124.13
Last 5	09:35:12	1499.99	19.06	5.49	160.72	1.99	15.70	8.21	133.05
Last 5	09:40:12	1799.99	19.06	5.42	159.83	1.86	15.70	8.23	133.86
Last 5	09:45:12	2099.98	19.11	5.46	159.81	1.53	15.70	8.20	133.00
Variance 0			0.09	-0.14	-1.18			-0.00	8.92
Variance 1			-0.00	-0.07	-0.89			0.02	0.81
Variance 2			0.05	0.04	-0.02			-0.03	-0.86

Notes

Sunny,80s, sample time-0945, FB3-10-11-17 here at 0920

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-05 16:42:00

Project Information:		Pump Information:	
Operator Name	Chris Parker	Pump Model/Type	Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	Poly
Project Name	Plant Yates AP - Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates - Ash Ponds	Tubing Length	57.0 ft
Latitude	33º 27' 46.22"		
Longitude	-84º -53' -53.23"		
Sonde SN	466086		
Turbidity Make/Model	Hach 2100 Q	Pump placement from TOC	52.0 ft

Well Information:		Pumping Information:	
Well ID	YGWC-24S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.722963 L
Well Total Depth	57.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	28.38 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	16:19:38	300.02	23.47	6.40	65.16	1.95	28.60	4.82	101.00
Last 5	16:24:38	600.02	20.48	5.51	67.77	2.31	28.70	5.92	127.72
Last 5	16:29:38	900.01	20.18	5.49	67.27	2.09	28.70	5.96	127.56
Last 5	16:34:38	1200.00	20.30	5.50	67.26	1.75	28.80	5.93	129.57
Last 5	16:39:38	1500.00	20.25	5.45	67.30	1.88	28.80	5.96	134.43
Variance 0			-0.30	-0.02	-0.50			0.03	-0.17
Variance 1			0.12	0.01	-0.02			-0.03	2.02
Variance 2			-0.05	-0.05	0.05			0.03	4.86

Notes

Collected at 16:45. Sunny 80s. DUP 2 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-11 10:46:33

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates- AP -Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates	Tubing Length	38.7 ft
Latitude	33° 27' 26.02"		
Longitude	-84° -53' -44.33"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	33.7 ft

Well Information:		Pumping Information:	
Well ID	YGWC-33S	Final Pumping Rate	340 mL/min
Well diameter	2 in	Total System Volume	1.325512 L
Well Total Depth	38.73 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	8.38 ft	Total Volume Pumped	10.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 10
Last 5	10:25:03	600.02	20.26	4.05	1355.66	5.14	8.80	0.31	198.25
Last 5	10:30:03	900.01	20.13	4.02	1354.22	4.11	8.80	0.11	200.47
Last 5	10:35:03	1200.01	20.13	4.01	1352.95	3.79	8.80	0.10	203.38
Last 5	10:40:03	1500.00	20.13	4.01	1357.59	3.99	8.80	0.10	205.65
Last 5	10:45:03	1800.00	20.11	4.01	1356.71	3.72	8.80	0.10	208.25
Variance 0			0.00	-0.01	-1.27			-0.01	2.92
Variance 1			0.00	-0.00	4.64			-0.00	2.27
Variance 2			-0.02	0.00	-0.88			0.00	2.59

Notes

Sunny,80s, sample time-1045,DUP-3 here

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-11 12:13:55

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	Plant Yates- AP -Phase 2 CCR	Tubing Diameter	.375 in
Site Name	Plant Yates	Tubing Length	60 ft
Latitude	33° 27' 27.58"		
Longitude	-84° -53' -50.08"		
Sonde SN	466058		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	55 ft

Well Information:		Pumping Information:	
Well ID	YGWC-36	Final Pumping Rate	190 mL/min
Well diameter	2 in	Total System Volume	1.788119 L
Well Total Depth	60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	18.6 in
Depth to Water	10.05 ft	Total Volume Pumped	5.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 10
Last 5	11:50:43	600.01	21.29	5.48	426.14	2.14	11.60	2.25	186.95
Last 5	11:55:43	900.01	21.13	5.50	426.77	2.08	11.60	1.49	184.70
Last 5	12:00:43	1200.00	21.06	5.50	427.53	1.18	11.60	1.19	182.95
Last 5	12:05:43	1500.00	21.15	5.51	425.81	0.88	11.60	1.14	181.93
Last 5	12:10:43	1799.99	21.00	5.47	426.03	0.84	11.60	1.12	182.83
Variance 0			-0.07	-0.00	0.76			-0.30	-1.75
Variance 1			0.09	0.00	-1.72			-0.05	-1.01
Variance 2			-0.15	-0.03	0.22			-0.02	0.89

Notes

Sunny,80s,sample time-1210

Grab Samples

APPENDIX C

STATISTICAL ANALYSES

Sanitas™ v.9.5.30 Sanitas software licensed to ACC. UG

100% Non-Detects

Date: 11/2/2017 4:38 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Boron

YGWA-18I, YGWA-20S

Interwell Prediction Limit

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B` Printed 11/2/2017, 4:15 PM

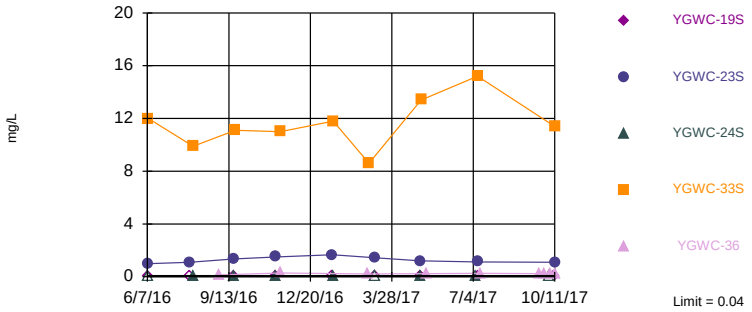
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	YGWC-19S	0.04	n/a	10/10/2017	0.04ND	No	72	63.89	n/a	0.0003703	NP Inter (NDs) 1 of 2
Boron (mg/L)	**YGWC-23S**	**0.04**	**n/a**	**10/11/2017**	**1.09**	**Yes**	**72**	**63.89**	**n/a**	**0.0003703**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	YGWC-24S	0.04	n/a	10/5/2017	0.04ND	No	72	63.89	n/a	0.0003703	NP Inter (NDs) 1 of 2
Boron (mg/L)	**YGWC-33S**	**0.04**	**n/a**	**10/11/2017**	**11.4**	**Yes**	**72**	**63.89**	**n/a**	**0.0003703**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**YGWC-36**	**0.04**	**n/a**	**10/11/2017**	**0.245**	**Yes**	**72**	**63.89**	**n/a**	**0.0003703**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	YGWC-19S	37	n/a	10/10/2017	0.895	No	72	0	n/a	0.0003703	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	10/11/2017	6.36	No	72	0	n/a	0.0003703	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24S	37	n/a	10/5/2017	1.7	No	72	0	n/a	0.0003703	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-33S**	**37**	**n/a**	**10/11/2017**	**125**	**Yes**	**72**	**0**	**n/a**	**0.0003703**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-36	37	n/a	10/11/2017	18.1	No	72	0	n/a	0.0003703	NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-19S	0.3	n/a	10/10/2017	0.3ND	No	72	63.89	n/a	0.0003703	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-23S	0.3	n/a	10/11/2017	0.3ND	No	72	63.89	n/a	0.0003703	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24S	0.3	n/a	10/5/2017	0.3ND	No	72	63.89	n/a	0.0003703	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-33S	0.3	n/a	10/11/2017	0.18	No	72	63.89	n/a	0.0003703	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36	0.3	n/a	10/11/2017	0.14	No	72	63.89	n/a	0.0003703	NP Inter (NDs) 1 of 2
pH (pH)	YGWC-19S	7.67	5.32	10/10/2017	5.6	No	72	0	n/a	0.0007406	NP Inter (normality) 1 of 2
pH (pH)	YGWC-23S	7.67	5.32	10/11/2017	5.46	No	72	0	n/a	0.0007406	NP Inter (normality) 1 of 2
pH (pH)	YGWC-24S	7.67	5.32	10/5/2017	5.45	No	72	0	n/a	0.0007406	NP Inter (normality) 1 of 2
pH (pH)	**YGWC-33S**	**7.67**	**5.32**	**10/11/2017**	**4.01**	**Yes**	**72**	**0**	**n/a**	**0.0007406**	**NP Inter (normality) 1 of 2**
pH (pH)	YGWC-36	7.67	5.32	10/11/2017	5.47	No	72	0	n/a	0.0007406	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-19S	20	n/a	10/10/2017	0.27	No	72	4.167	n/a	0.0003703	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-23S**	**20**	**n/a**	**10/11/2017**	**52**	**Yes**	**72**	**4.167**	**n/a**	**0.0003703**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-24S	20	n/a	10/5/2017	0.36	No	72	4.167	n/a	0.0003703	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-33S**	**20**	**n/a**	**10/11/2017**	**730**	**Yes**	**72**	**4.167**	**n/a**	**0.0003703**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-36**	**20**	**n/a**	**10/11/2017**	**150**	**Yes**	**72**	**4.167**	**n/a**	**0.0003703**	**NP Inter (normality) 1 of 2**
Total Dissolv...	YGWC-19S	192.2	n/a	10/10/2017	25ND	No	72	0	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolv...	YGWC-23S	192.2	n/a	10/11/2017	100	No	72	0	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolv...	YGWC-24S	192.2	n/a	10/5/2017	48	No	72	0	sqrt(x)	0.001504	Param Inter 1 of 2
Total Dissolv...	**YGWC-33S**	**192.2**	**n/a**	**10/11/2017**	**1110**	**Yes**	**72**	**0**	**sqrt(x)**	**0.001504**	**Param Inter 1 of 2**
Total Dissolv...	**YGWC-36**	**192.2**	**n/a**	**10/11/2017**	**264**	**Yes**	**72**	**0**	**sqrt(x)**	**0.001504**	**Param Inter 1 of 2**

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-23S, YGWC-33S, YGWC-36

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 72 background values. 63.89% NDs. Annual per-constituent alpha = 0.003697. Individual comparison alpha = 0.0003703 (1 of 2). Comparing 5 points to limit.

Constituent: Boron Analysis Run 11/2/2017 4:14 PM View: Interwell PL

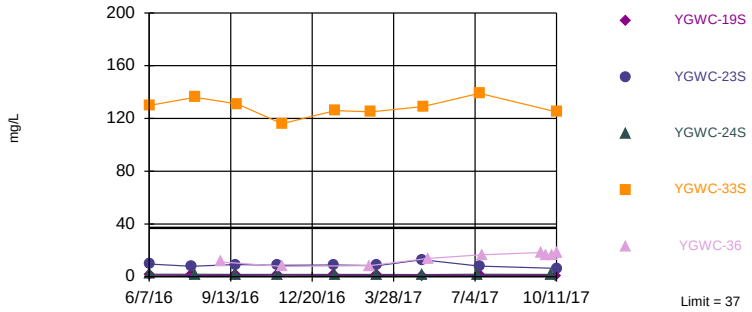
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Exceeds Limit: YGWC-33S

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 72 background values. Annual per-constituent alpha = 0.003697. Individual comparison alpha = 0.0003703 (1 of 2). Comparing 5 points to limit.

Constituent: Calcium Analysis Run 11/2/2017 4:14 PM View: Interwell PL

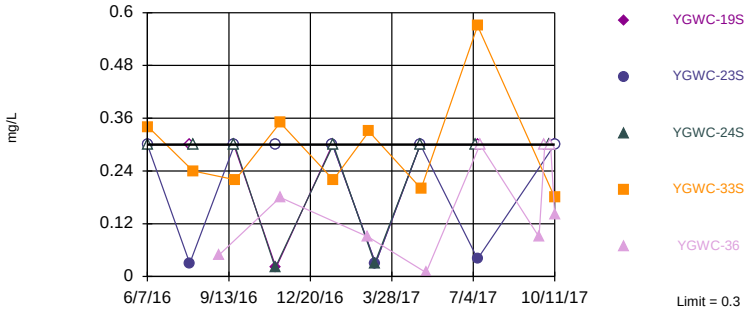
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 72 background values. 63.89% NDs. Annual per-constituent alpha = 0.003697. Individual comparison alpha = 0.0003703 (1 of 2). Comparing 5 points to limit.

Constituent: Fluoride Analysis Run 11/2/2017 4:14 PM View: Interwell PL

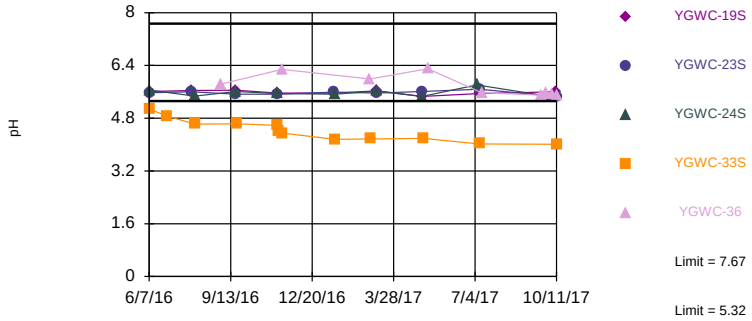
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Exceeds Limits: YGWC-33S

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. Limits are highest and lowest of 72 background values. Annual per-constituent alpha = 0.007394. Individual comparison alpha = 0.0007406 (1 of 2). Comparing 5 points to limit.

Constituent: pH Analysis Run 11/2/2017 4:14 PM View: Interwell PL

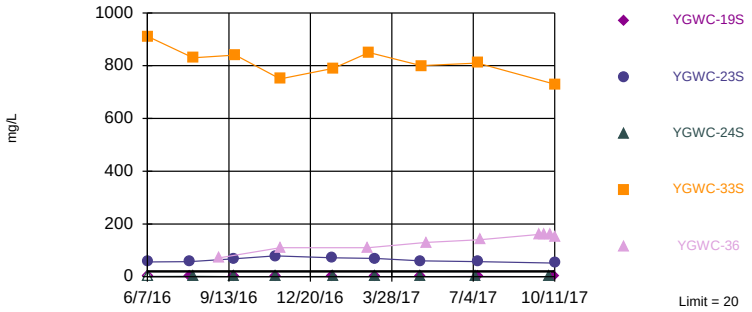
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-23S, YGWC-33S, YGWC-36

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 72 background values. 4.167% NDs. Annual per-constituent alpha = 0.003697. Individual comparison alpha = 0.0003703 (1 of 2). Comparing 5 points to limit.

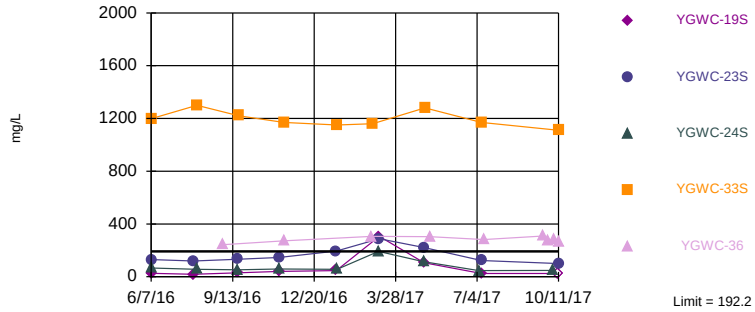
Constituent: Sulfate Analysis Run 11/2/2017 4:14 PM View: Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-33S, YGWC-36

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=9.482, Std. Dev.=2.4, n=72. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.97, critical = 0.954. Kappa = 1.826 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

Constituent: Total Dissolved Solids Analysis Run 11/2/2017 4:14 PM View: Interwell PL
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-19S	YGWA-20S (bg)	YGWA-21I (bg)
6/2/2016	<0.04	<0.04	<0.04						
6/6/2016				<0.04	<0.04				
6/7/2016						0.036 (J)	0.041 (J)	<0.04	<0.04
6/8/2016									
7/26/2016	<0.04	0.0047 (J)	0.0052 (J)						
7/27/2016				0.0059 (J)	<0.04	0.008 (J)		<0.04	
7/28/2016							<0.04		0.0096 (J)
8/1/2016									
9/2/2016									
9/14/2016	0.01 (J)	<0.04	0.0071 (J)						
9/16/2016				0.0079 (J)		0.0086 (J)			
9/19/2016					<0.04		0.0066 (J)	<0.04	<0.04
9/20/2016									
9/21/2016									
11/2/2016		<0.04	<0.04					<0.04	
11/3/2016				0.0082 (J)	<0.04	0.0077 (J)			<0.04
11/4/2016	<0.04								
11/8/2016									
11/9/2016							0.0085 (J)		
11/14/2016									
1/11/2017				0.0096 (J)	<0.04	0.0092 (J)			
1/12/2017	<0.04		0.0076 (J)						
1/13/2017		<0.04						<0.04	<0.04
1/16/2017							<0.04		
1/17/2017									
2/28/2017									
3/1/2017				0.0098 (J)	<0.04				
3/2/2017						0.0095 (J)			
3/6/2017		<0.04						<0.04	<0.04
3/7/2017	<0.04		0.0089 (J)						
3/8/2017									
3/9/2017							<0.04		
4/26/2017				0.0091 (J)	<0.04			<0.04	<0.04
5/1/2017		<0.04	0.0061 (J)						
5/2/2017	<0.04					<0.04	<0.04		
5/3/2017									
5/9/2017									
6/27/2017	<0.04		0.0079 (J)						
6/28/2017				0.0079 (J)	<0.04				
6/29/2017		<0.04				0.0074 (J)		<0.04	<0.04
7/7/2017									
7/10/2017							0.0195 (J)		
7/13/2017									
9/22/2017									
9/29/2017									
10/3/2017	<0.04		0.0094 (J)						<0.04
10/4/2017				0.009 (J)		0.0077 (J)		<0.04	
10/5/2017		<0.04			<0.04				
10/6/2017									
10/10/2017							<0.04		
10/11/2017									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36
6/2/2016				
6/6/2016				
6/7/2016	0.99			
6/8/2016		<0.04	12	
7/26/2016				
7/27/2016				
7/28/2016	1.09			
8/1/2016		0.0054 (J)	9.89	
9/2/2016				0.133
9/14/2016				
9/16/2016				
9/19/2016				
9/20/2016	1.35	0.0111 (J)		
9/21/2016			11.1	
11/2/2016				
11/3/2016				
11/4/2016				
11/8/2016	1.5	0.0121 (J)		
11/9/2016				
11/14/2016			11	0.287
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017	1.67			
1/17/2017		0.0079 (J)	11.8	
2/28/2017				0.215
3/1/2017			8.61	
3/2/2017				
3/6/2017				
3/7/2017				
3/8/2017		<0.04		
3/9/2017	1.44			
4/26/2017				
5/1/2017				
5/2/2017	1.2	0.0099 (J)		
5/3/2017			13.4	
5/9/2017				0.233
6/27/2017				
6/28/2017				
6/29/2017				
7/7/2017		0.0076 (J)		
7/10/2017	1.12		15.2	
7/13/2017				0.262
9/22/2017				0.238
9/29/2017				0.235
10/3/2017				
10/4/2017				
10/5/2017		<0.04		
10/6/2017				0.256
10/10/2017				
10/11/2017	1.09		11.4	0.245

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-19S	YGWA-20S (bg)	YGWA-21I (bg)
6/2/2016	2.4	8.8	33						
6/6/2016				1.4	6.2				
6/7/2016						2.2	1.1	2.3	3.7
6/8/2016									
7/26/2016	2.12	7.69	32.3						
7/27/2016				1.19	4.73	2		2.08	
7/28/2016							0.988		3.15
8/1/2016									
9/2/2016									
9/14/2016	2.18	8.49	31						
9/16/2016				1.5		1.97			
9/19/2016					4.76		1.03	1.97	3.17
9/20/2016									
9/21/2016									
11/2/2016		7.83	30.9					2.13	
11/3/2016				1.31	5.25	1.99			3.4
11/4/2016	2.17 (J)								
11/8/2016									
11/9/2016							1.07		
11/14/2016									
1/11/2017				1.25	4.74	2.28			
1/12/2017	2.37		35.7						
1/13/2017		8.08						2.45	4.98
1/16/2017							0.943		
1/17/2017									
2/28/2017									
3/1/2017				1.26	5.37				
3/2/2017						2.15			
3/6/2017		8.64						2.48	6.28
3/7/2017	2.34		32.7						
3/8/2017									
3/9/2017							0.936		
4/26/2017				1.05	4.28			2.3	6.65
5/1/2017		13.4	37						
5/2/2017	2.17					1.95	0.923		
5/3/2017									
5/9/2017									
6/27/2017	2.13		36.5						
6/28/2017				1.06	4.95				
6/29/2017		8.81				2.02		2.54	6.04
7/7/2017									
7/10/2017							0.964		
7/13/2017									
9/22/2017									
9/29/2017									
10/3/2017	2.15		30.9						8.28
10/4/2017				1.1		2.03		2.25	
10/5/2017		9.29			5.28				
10/6/2017									
10/10/2017							0.895		
10/11/2017									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36
6/2/2016				
6/6/2016				
6/7/2016	9.6			
6/8/2016		1.9	130	
7/26/2016				
7/27/2016				
7/28/2016	7.87			
8/1/2016		1.83	136	
9/2/2016				11.2
9/14/2016				
9/16/2016				
9/19/2016				
9/20/2016	9.28	1.78		
9/21/2016			131	
11/2/2016				
11/3/2016				
11/4/2016				
11/8/2016	8.6	1.77		
11/9/2016				
11/14/2016			116	7.79
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017	8.85			
1/17/2017		1.7	126	
2/28/2017				8.37
3/1/2017			125	
3/2/2017				
3/6/2017				
3/7/2017				
3/8/2017		1.77		
3/9/2017	8.4			
4/26/2017				
5/1/2017				
5/2/2017	12.9	1.57		
5/3/2017			129	
5/9/2017				13.9
6/27/2017				
6/28/2017				
6/29/2017				
7/7/2017		1.8		
7/10/2017	8.09		139	
7/13/2017				16.6
9/22/2017				18.4
9/29/2017				16.1
10/3/2017				
10/4/2017				
10/5/2017		1.7		
10/6/2017				16.6
10/10/2017				
10/11/2017	6.36		125	18.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-19S	YGWA-20S (bg)	YGWA-21I (bg)
6/2/2016	<0.3	<0.3	0.11 (J)						
6/6/2016				<0.3	<0.3				
6/7/2016						<0.3	<0.3	<0.3	<0.3
6/8/2016									
7/26/2016	<0.3	<0.3	0.05 (J)						
7/27/2016				<0.3	<0.3	<0.3		<0.3	
7/28/2016							<0.3		0.02 (J)
8/1/2016									
9/2/2016									
9/14/2016	<0.3	<0.3	0.04 (J)						
9/16/2016				<0.3		<0.3			
9/19/2016					<0.3		<0.3	<0.3	0.02 (J)
9/20/2016									
9/21/2016									
11/2/2016		0.07 (J)	0.2 (J)					<0.3	
11/3/2016				<0.3	<0.3	<0.3			0.07 (J)
11/4/2016	<0.3								
11/8/2016									
11/9/2016							0.02 (J)		
11/14/2016									
1/11/2017				<0.3	<0.3	<0.3			
1/12/2017	<0.3		0.04 (J)						
1/13/2017		<0.3						<0.3	<0.3
1/16/2017							<0.3		
1/17/2017									
2/28/2017									
3/1/2017				0.03 (J)	0.03 (J)				
3/2/2017						0.04 (J)			
3/6/2017		0.05 (J)						0.04 (J)	0.09 (J)
3/7/2017	0.03 (J)		0.09 (J)						
3/8/2017									
3/9/2017							0.03 (J)		
4/26/2017				<0.3	<0.3			<0.3	0.04 (J)
5/1/2017		<0.3	0.04 (J)						
5/2/2017	<0.3					<0.3	<0.3		
5/3/2017									
5/9/2017									
6/27/2017	<0.3		0.09 (J)						
6/28/2017				<0.3	<0.3				
6/29/2017		0.02 (J)				0.02 (J)		0.03 (J)	0.05 (J)
7/7/2017									
7/10/2017							<0.3		
7/13/2017									
9/22/2017									
9/29/2017									
10/3/2017	<0.3		0.05 (J)						0.08 (J)
10/4/2017				<0.3		<0.3		<0.3	
10/5/2017		<0.3			<0.3				
10/6/2017									
10/10/2017							<0.3		
10/11/2017									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36
6/2/2016				
6/6/2016				
6/7/2016	<0.3			
6/8/2016		<0.3	0.34	
7/26/2016				
7/27/2016				
7/28/2016	0.03 (J)			
8/1/2016		<0.3	0.24 (J)	
9/2/2016				0.05 (J)
9/14/2016				
9/16/2016				
9/19/2016				
9/20/2016	<0.3	<0.3		
9/21/2016			0.22 (J)	
11/2/2016				
11/3/2016				
11/4/2016				
11/8/2016	<0.3	0.02 (J)		
11/9/2016				
11/14/2016			0.35	0.18 (J)
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017	<0.3			
1/17/2017		<0.3	0.22 (J)	
2/28/2017				0.09 (J)
3/1/2017			0.33	
3/2/2017				
3/6/2017				
3/7/2017				
3/8/2017		0.03 (J)		
3/9/2017	0.03 (J)			
4/26/2017				
5/1/2017				
5/2/2017	<0.3	<0.3		
5/3/2017			0.2 (J)	
5/9/2017				0.009 (J)
6/27/2017				
6/28/2017				
6/29/2017				
7/7/2017		<0.3		
7/10/2017	0.04 (J)		0.57	
7/13/2017				<0.3
9/22/2017				0.09 (J)
9/29/2017				<0.3
10/3/2017				
10/4/2017				
10/5/2017		<0.3		
10/6/2017				<0.3
10/10/2017				
10/11/2017	<0.3		0.18 (J)	0.14 (J)

Prediction Limit

Constituent: pH (pH) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWC-23S	YGWC-19S	YGWA-21I (bg)	YGWA-20S (bg)
6/2/2016	7.67	5.75	6.36						
6/6/2016				5.71	6.17				
6/7/2016						5.57	5.61	6.1	5.77
6/8/2016									
6/28/2016									
7/26/2016	7.66	5.72	6.22						
7/27/2016				5.46	6.14				5.79
7/28/2016						5.6	5.64	6.12	
8/1/2016									
9/2/2016									
9/14/2016	7.6	5.74	6.23						
9/16/2016									
9/19/2016				5.59	6.04		5.65	6.12	5.73
9/20/2016						5.53			
9/21/2016									
11/2/2016	7.35		6.08						5.67
11/3/2016				5.39	5.97			6.07	
11/4/2016		5.61							
11/8/2016						5.53			
11/9/2016							5.56		
11/10/2016									
11/14/2016									
1/11/2017				5.48	6.05				
1/12/2017	7.49	5.71							
1/13/2017			6.19					6.41	5.79
1/16/2017						5.59	5.56		
1/17/2017									
2/28/2017									
3/1/2017				5.41	5.94				
3/2/2017									
3/6/2017			6.2					6.34	5.63
3/7/2017	7.43	5.66							
3/8/2017									
3/9/2017						5.56	5.63		
4/26/2017				5.4	5.99			6.32	5.66
5/1/2017	7.22		6.21						
5/2/2017		5.65				5.61	5.46		
5/3/2017									
5/9/2017									
6/27/2017	7.32	5.7							
6/28/2017				5.36	6				
6/29/2017			6.21					6.47	5.85
7/7/2017									
7/10/2017						5.68	5.55		
7/13/2017									
9/22/2017									
9/29/2017									
10/3/2017	7.48	5.79						6.56	
10/4/2017				5.32					5.83
10/5/2017			6.16		6.11				
10/6/2017									
10/10/2017							5.6		

Prediction Limit

Constituent: pH (pH) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWC-23S	YGWC-19S	YGWA-21I (bg)	YGWA-20S (bg)
10/11/2017						5.46			

Prediction Limit

Constituent: pH (pH) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWC-24S	YGWC-33S	YGWC-36
6/2/2016				
6/6/2016				
6/7/2016	5.62			
6/8/2016		5.65	5.07	
6/28/2016			4.87	
7/26/2016				
7/27/2016	5.59			
7/28/2016				
8/1/2016		5.47	4.62	
9/2/2016				5.84
9/14/2016				
9/16/2016	5.58			
9/19/2016				
9/20/2016		5.61		
9/21/2016			4.63	
11/2/2016				
11/3/2016	5.59			
11/4/2016				
11/8/2016		5.55	4.58	
11/9/2016				
11/10/2016			4.42	
11/14/2016			4.35	6.28
1/11/2017	5.59			
1/12/2017				
1/13/2017				
1/16/2017				
1/17/2017		5.53	4.16	
2/28/2017				5.99
3/1/2017			4.17	
3/2/2017	5.54			
3/6/2017				
3/7/2017				
3/8/2017		5.62		
3/9/2017				
4/26/2017				
5/1/2017				
5/2/2017	5.47	5.46		
5/3/2017			4.19	
5/9/2017				6.3
6/27/2017				
6/28/2017				
6/29/2017	5.56			
7/7/2017		5.81		
7/10/2017			4.02	
7/13/2017				5.57
9/22/2017				5.5
9/29/2017				5.58
10/3/2017				
10/4/2017	5.57			
10/5/2017		5.45		
10/6/2017				5.51
10/10/2017				

Prediction Limit

Constituent: pH (pH) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWC-24S	YGWC-33S	YGWC-36
10/11/2017			4.01	5.47

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-19S	YGWA-20S (bg)	YGWA-21I (bg)
6/2/2016	1.9	8	20						
6/6/2016				1.8	1.2				
6/7/2016						4.4	<1	<1	5.2
6/8/2016									
7/26/2016	1.8	7.7	20						
7/27/2016				1.9	1.7	4.7		0.08 (J)	
7/28/2016							0.43 (J)		5.1
8/1/2016									
9/2/2016									
9/14/2016	1.8	7.5	19						
9/16/2016				1.7		4.8			
9/19/2016					1.8		0.4 (J)	0.08 (J)	4.8
9/20/2016									
9/21/2016									
11/2/2016		8.2	20					0.1 (J)	
11/3/2016				1.9	0.69 (J)	5.3			5
11/4/2016	2								
11/8/2016									
11/9/2016							0.39 (J)		
11/14/2016									
1/11/2017				1.7	0.99 (J)	5.2			
1/12/2017	1.9		19						
1/13/2017		8.1						0.1 (J)	4.3
1/16/2017							0.39 (J)		
1/17/2017									
2/28/2017									
3/1/2017				1.6	1.8				
3/2/2017						5			
3/6/2017		8						<1	4.5
3/7/2017	2.1		20						
3/8/2017									
3/9/2017							0.25 (J)		
4/26/2017				1.9	1.6			<1	4.9
5/1/2017		8.4	20						
5/2/2017	2					5	0.19 (J)		
5/3/2017									
5/9/2017									
6/27/2017	2.1		18						
6/28/2017				1.5	1.7				
6/29/2017		9.2				5.2		0.15 (J)	5.5
7/7/2017									
7/10/2017							0.54 (J)		
7/13/2017									
9/22/2017									
9/29/2017									
10/3/2017	2.3		16						5.8
10/4/2017				1.7		5.3		0.14 (J)	
10/5/2017		9.6			1.6				
10/6/2017									
10/10/2017							0.27 (J)		
10/11/2017									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36
6/2/2016				
6/6/2016				
6/7/2016	56			
6/8/2016		<1	910	
7/26/2016				
7/27/2016				
7/28/2016	57			
8/1/2016		1.1	830	
9/2/2016				72
9/14/2016				
9/16/2016				
9/19/2016				
9/20/2016	68	0.38 (J)		
9/21/2016			840	
11/2/2016				
11/3/2016				
11/4/2016				
11/8/2016	79	0.39 (J)		
11/9/2016				
11/14/2016			750	110
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017	72			
1/17/2017		0.48	790	
2/28/2017				110
3/1/2017			850	
3/2/2017				
3/6/2017				
3/7/2017				
3/8/2017		0.29 (J)		
3/9/2017	69			
4/26/2017				
5/1/2017				
5/2/2017	60	0.29 (J)		
5/3/2017			800	
5/9/2017				130
6/27/2017				
6/28/2017				
6/29/2017				
7/7/2017		0.37 (J)		
7/10/2017	57		810	
7/13/2017				140
9/22/2017				160
9/29/2017				160
10/3/2017				
10/4/2017				
10/5/2017		0.36 (J)		
10/6/2017				160
10/10/2017				
10/11/2017	52		730	150

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-5I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWC-19S	YGWA-20S (bg)	YGWA-21I (bg)
6/2/2016	66	96	160						
6/6/2016				58	120				
6/7/2016						28	26	38	60
6/8/2016									
7/26/2016	78	92	177						
7/27/2016				35	94	74		74	
7/28/2016							18 (J)		81
8/1/2016									
9/2/2016									
9/14/2016	73	102	187						
9/16/2016				35		67			
9/19/2016					92		29	45	68
9/20/2016									
9/21/2016									
11/2/2016		115	181					53	
11/3/2016				48	104	41			61
11/4/2016	75								
11/8/2016									
11/9/2016							40		
11/14/2016									
1/11/2017				95	133	104			
1/12/2017	86		202						
1/13/2017		67						46	76
1/16/2017							47		
1/17/2017									
2/28/2017									
3/1/2017				79	119				
3/2/2017						77			
3/6/2017		159						164	167
3/7/2017	108		257						
3/8/2017									
3/9/2017							306		
4/26/2017				36	162			34	50
5/1/2017		107	165						
5/2/2017	103					142	106		
5/3/2017									
5/9/2017									
6/27/2017	73		189						
6/28/2017				45	98				
6/29/2017		79				53		68	94
7/7/2017									
7/10/2017							24 (J)		
7/13/2017									
9/22/2017									
9/29/2017									
10/3/2017	89		170						149
10/4/2017				45		61		54	
10/5/2017		95			104				
10/6/2017									
10/10/2017							<25		
10/11/2017									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/2/2017 4:15 PM View: Interwell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-23S	YGWC-24S	YGWC-33S	YGWC-36
6/2/2016				
6/6/2016				
6/7/2016	130			
6/8/2016		66	1200	
7/26/2016				
7/27/2016				
7/28/2016	119			
8/1/2016		56	1300	
9/2/2016				243
9/14/2016				
9/16/2016				
9/19/2016				
9/20/2016	132	53		
9/21/2016			1220	
11/2/2016				
11/3/2016				
11/4/2016				
11/8/2016	146	58		
11/9/2016				
11/14/2016			1170	272
1/11/2017				
1/12/2017				
1/13/2017				
1/16/2017	194			
1/17/2017		56	1150	
2/28/2017				306
3/1/2017			1160	
3/2/2017				
3/6/2017				
3/7/2017				
3/8/2017		192		
3/9/2017	288			
4/26/2017				
5/1/2017				
5/2/2017	221	113		
5/3/2017			1280	
5/9/2017				303
6/27/2017				
6/28/2017				
6/29/2017				
7/7/2017		46		
7/10/2017	123		1170	
7/13/2017				282
9/22/2017				309
9/29/2017				273
10/3/2017				
10/4/2017				
10/5/2017		48		
10/6/2017				287
10/10/2017				
10/11/2017	100		1110	264

Intrawell Prediction Limit

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B` Printed 11/2/2017, 4:29 PM

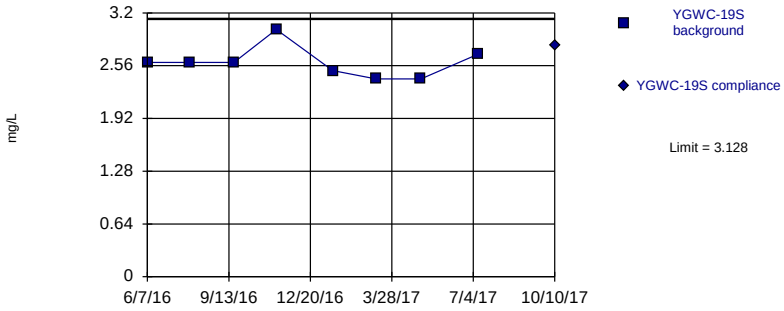
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Chloride (mg/L)	YGWC-19S	3.128	n/a	10/10/2017	2.8	No	8	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/L)	YGWC-23S	4.162	n/a	10/11/2017	2.4	No	8	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/L)	YGWC-24S	6.633	n/a	10/5/2017	6	No	8	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/L)	YGWC-33S	8.023	n/a	10/11/2017	5.8	No	8	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/L)	YGWC-36	7.918	n/a	10/11/2017	6.4	No	7	0	No	0.001504	Param Intra 1 of 2

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.6, Std. Dev.=0.1927, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8695, critical = 0.749. Kappa = 2.74 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Chloride Analysis Run 11/2/2017 4:28 PM View: Intrawell PL

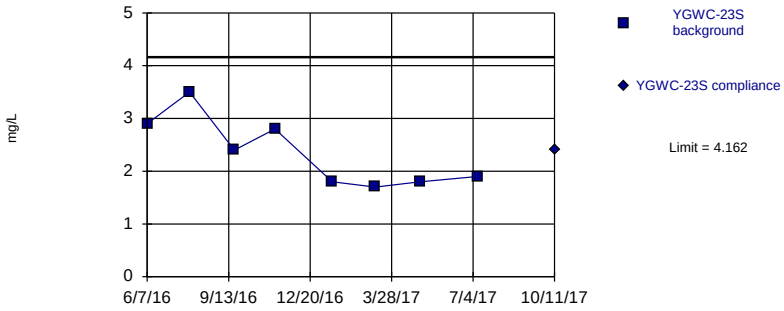
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.35, Std. Dev.=0.6612, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8787, critical = 0.749. Kappa = 2.74 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Chloride Analysis Run 11/2/2017 4:28 PM View: Intrawell PL

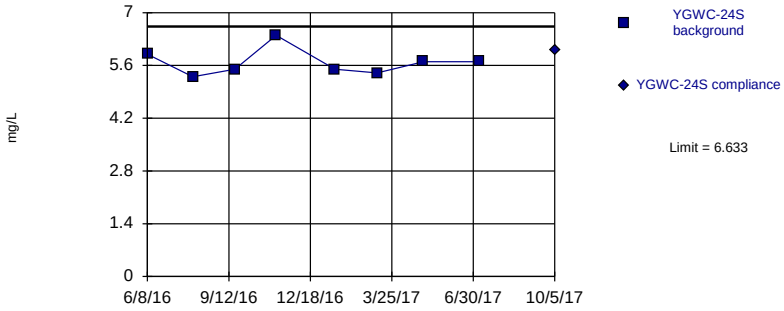
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.675, Std. Dev.=0.3495, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8853, critical = 0.749. Kappa = 2.74 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Chloride Analysis Run 11/2/2017 4:28 PM View: Intrawell PL

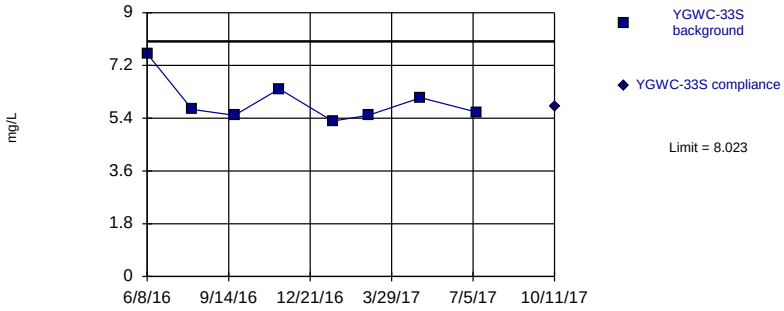
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.963, Std. Dev.=0.752, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8066, critical = 0.749. Kappa = 2.74 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Chloride Analysis Run 11/2/2017 4:28 PM View: Intrawell PL

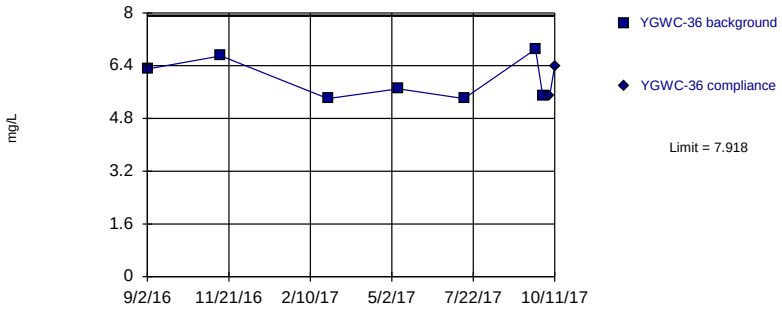
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.986, Std. Dev.=0.6388, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8481, critical = 0.73. Kappa = 3.024 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Chloride Analysis Run 11/2/2017 4:28 PM View: Intrawell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/2/2017 4:29 PM View: Intrawell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-19S	YGWC-19S
6/7/2016	2.6	
7/28/2016	2.6	
9/19/2016	2.6	
11/9/2016	3	
1/16/2017	2.5	
3/9/2017	2.4	
5/2/2017	2.4	
7/10/2017	2.7	
10/10/2017		2.8

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/2/2017 4:29 PM View: Intrawell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-23S	YGWC-23S
6/7/2016	2.9	
7/28/2016	3.5	
9/20/2016	2.4	
11/8/2016	2.8	
1/16/2017	1.8	
3/9/2017	1.7	
5/2/2017	1.8	
7/10/2017	1.9	
10/11/2017		2.4

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/2/2017 4:29 PM View: Intrawell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-24S	YGWC-24S
6/8/2016	5.9	
8/1/2016	5.3	
9/20/2016	5.5	
11/8/2016	6.4	
1/17/2017	5.5	
3/8/2017	5.4	
5/2/2017	5.7	
7/7/2017	5.7	
10/5/2017		6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/2/2017 4:29 PM View: Intrawell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-33S	YGWC-33S
6/8/2016	7.6	
8/1/2016	5.7	
9/21/2016	5.5	
11/14/2016	6.4	
1/17/2017	5.3	
3/1/2017	5.5	
5/3/2017	6.1	
7/10/2017	5.6	
10/11/2017		5.8

Prediction Limit

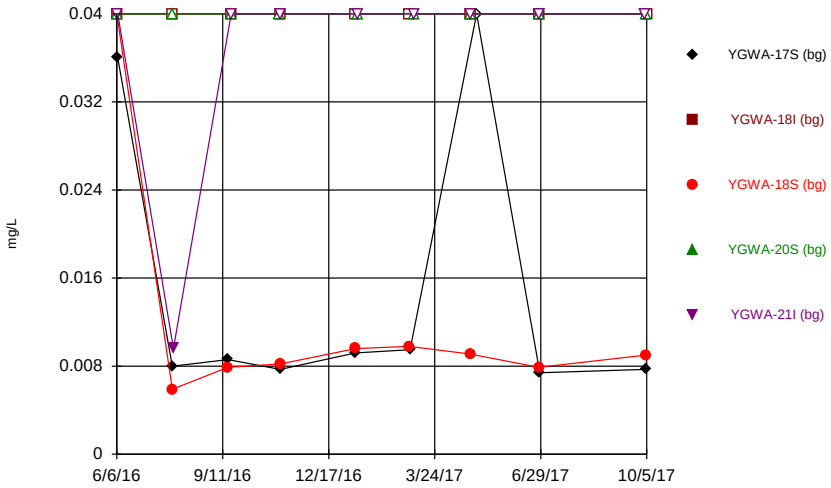
Constituent: Chloride (mg/L) Analysis Run 11/2/2017 4:29 PM View: Intrawell PL

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-36	YGWC-36
9/2/2016	6.3	
11/14/2016	6.7	
2/28/2017	5.4	
5/9/2017	5.7	
7/13/2017	5.4	
9/22/2017	6.9	
9/29/2017	5.5	
10/6/2017		5.5
10/11/2017		6.4

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

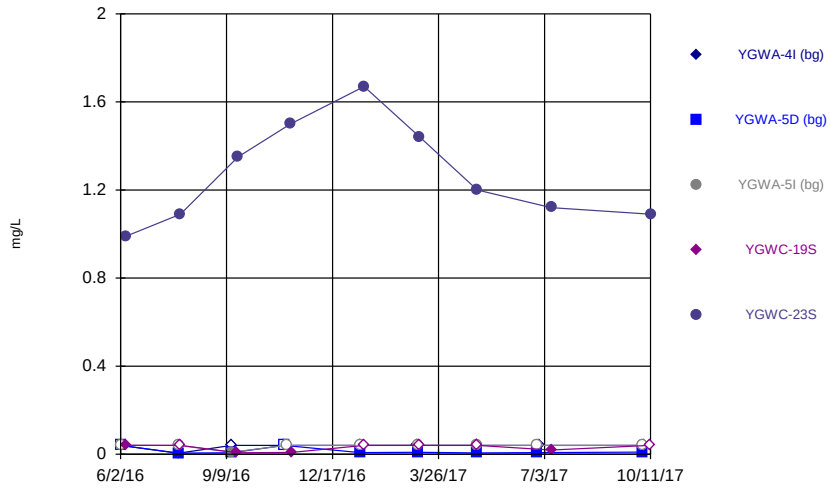
Time Series



Constituent: Boron Analysis Run 11/2/2017 3:48 PM
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

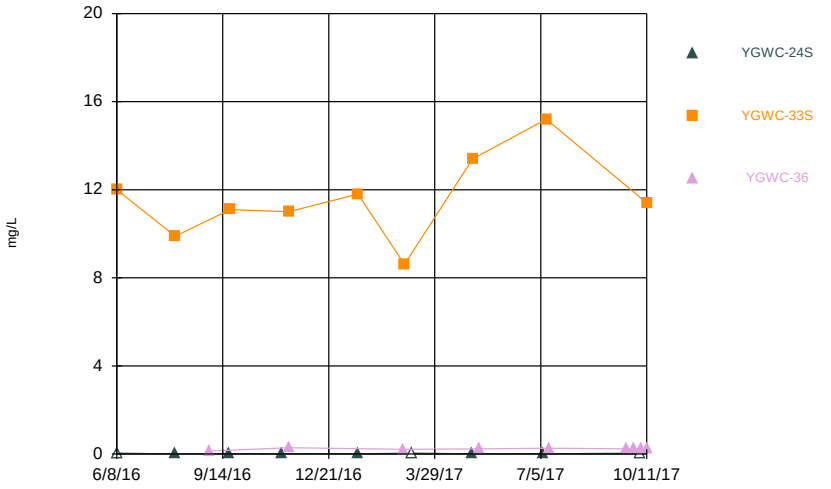
Time Series



Constituent: Boron Analysis Run 11/2/2017 3:48 PM
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

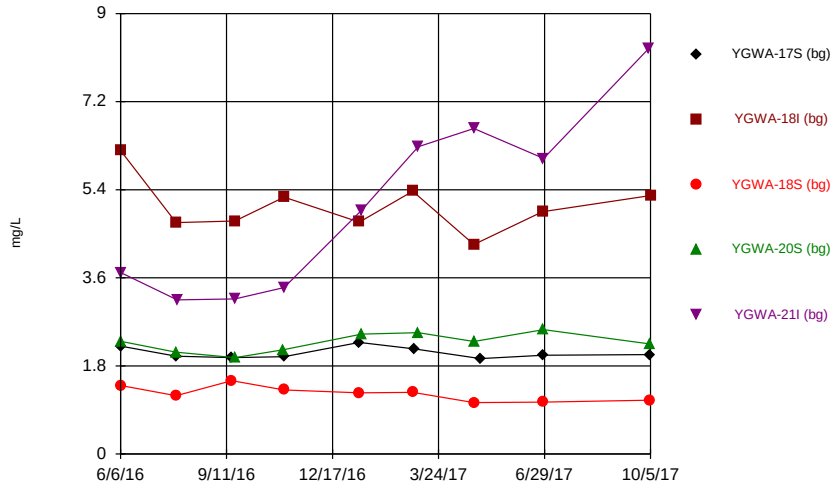
Time Series



Constituent: Boron Analysis Run 11/2/2017 3:48 PM
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

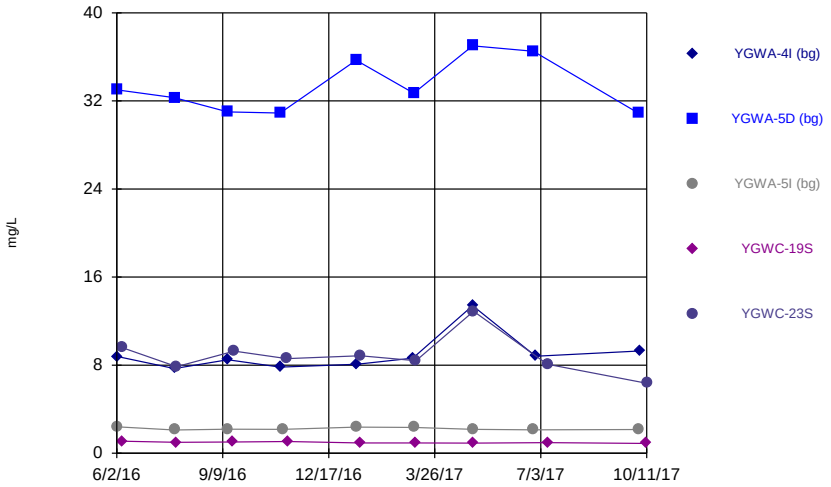
Time Series



Constituent: Calcium Analysis Run 11/2/2017 3:48 PM
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Time Series

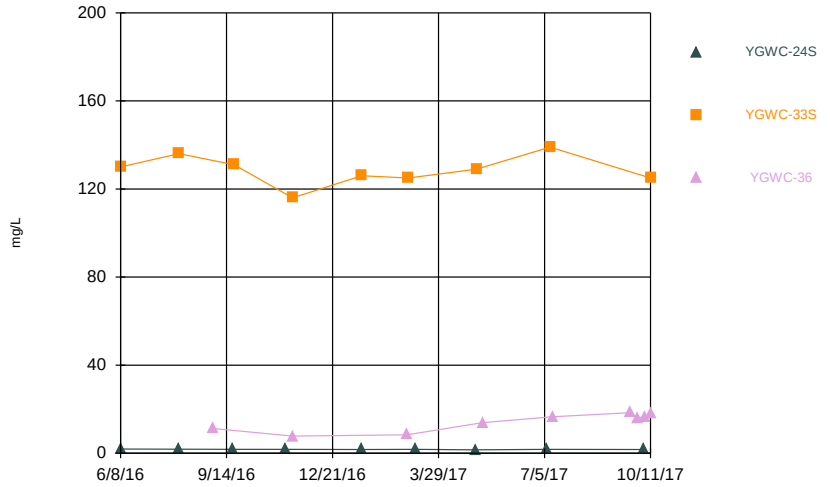


Constituent: Calcium Analysis Run 11/2/2017 3:48 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Time Series

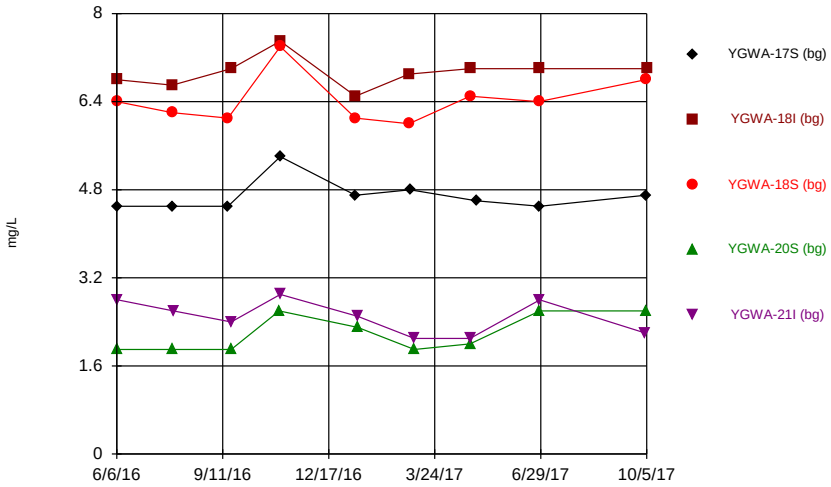


Constituent: Calcium Analysis Run 11/2/2017 3:48 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Time Series

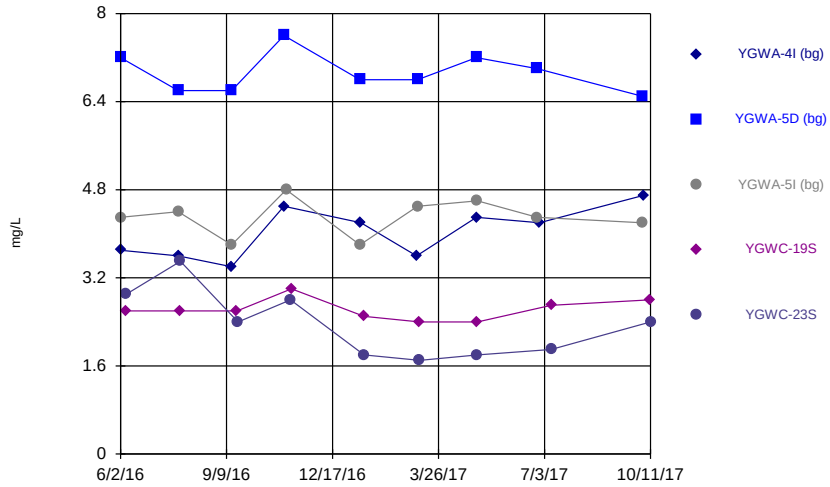


Constituent: Chloride Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Time Series

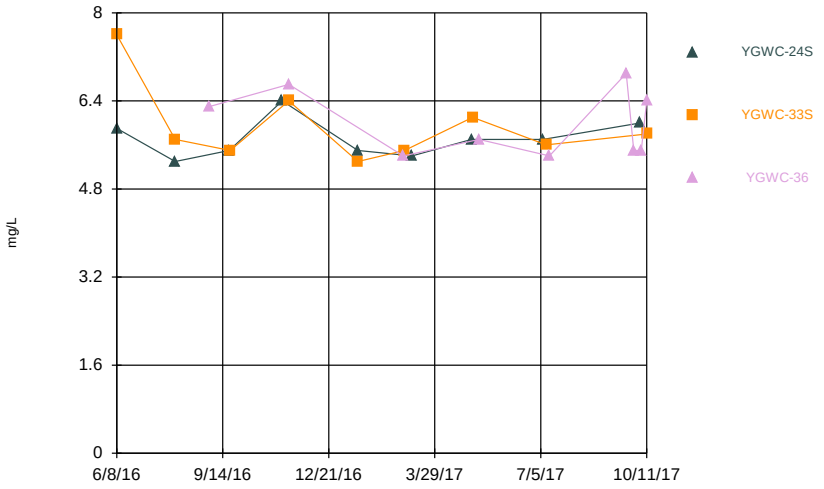


Constituent: Chloride Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Time Series

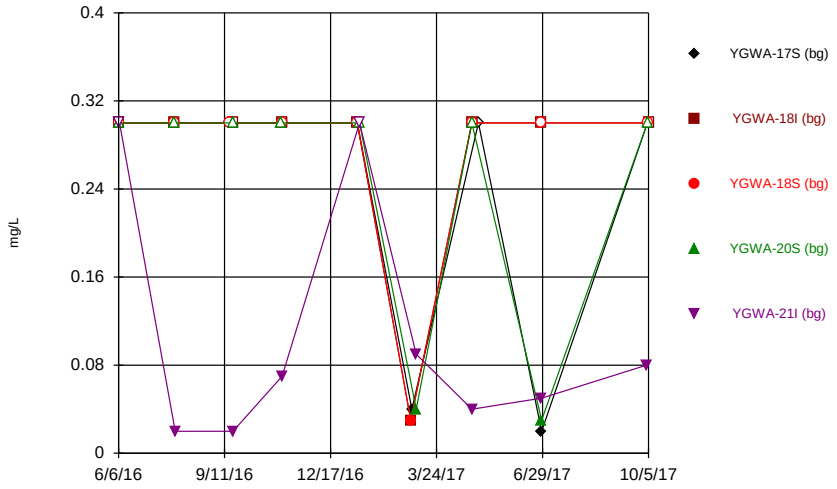


Constituent: Chloride Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Time Series

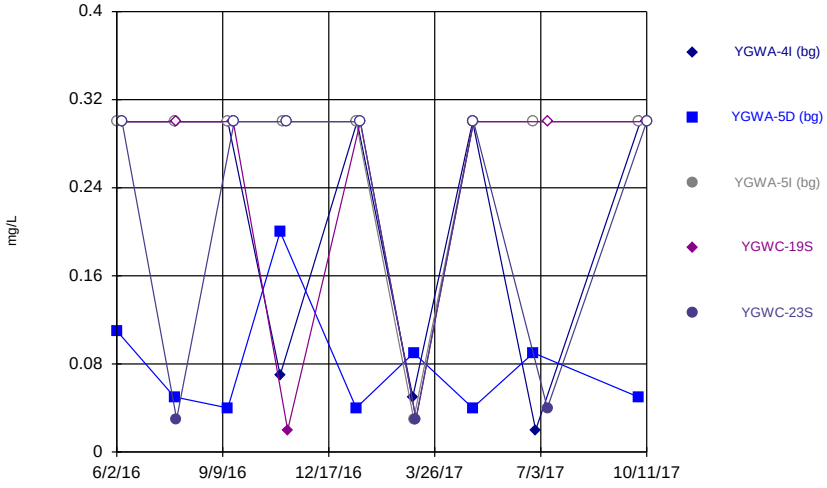


Constituent: Fluoride Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Time Series

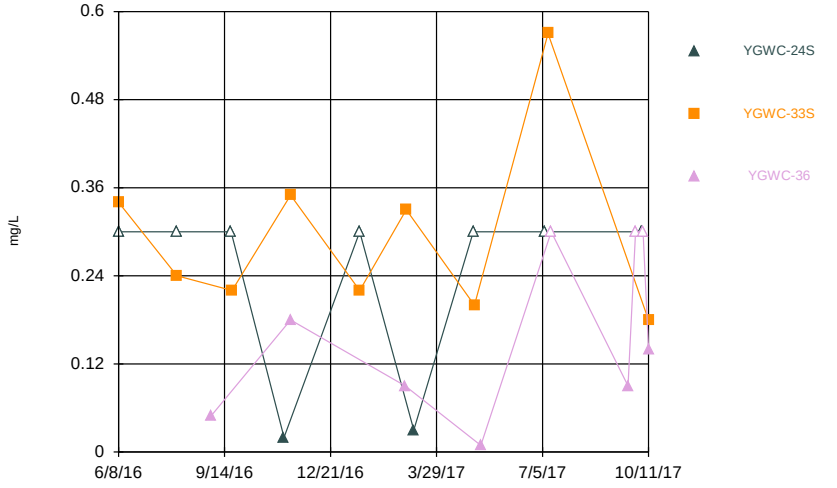


Constituent: Fluoride Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Time Series

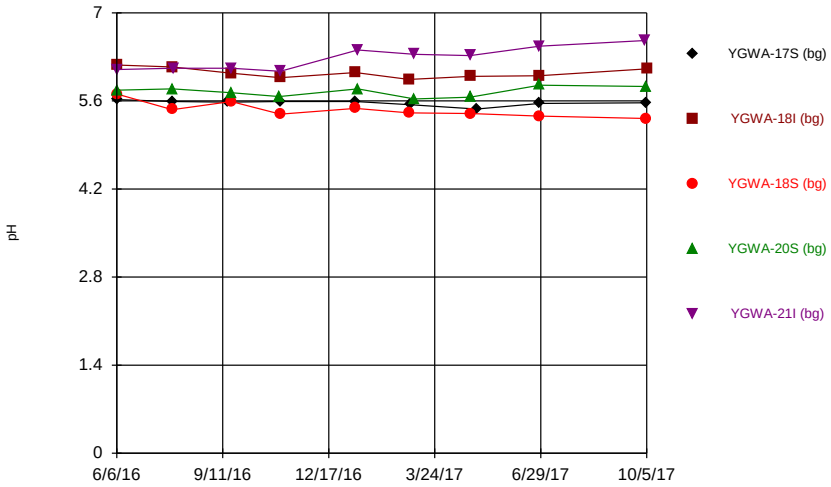


Constituent: Fluoride Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Time Series

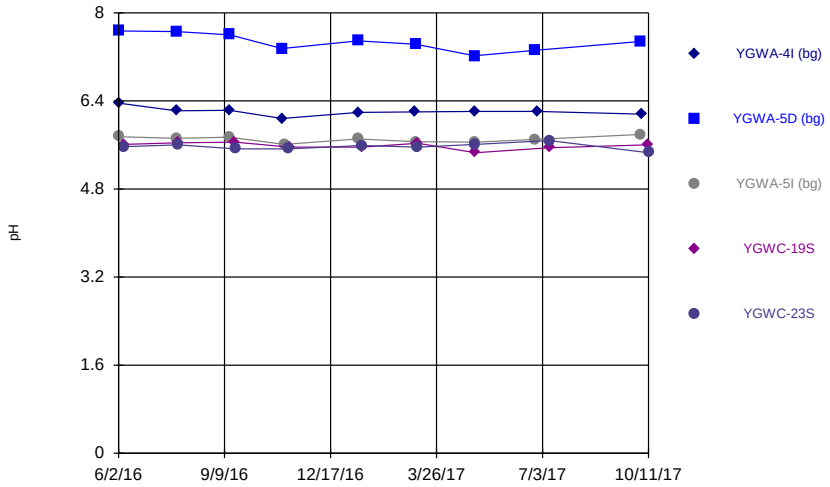


Constituent: pH Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Time Series

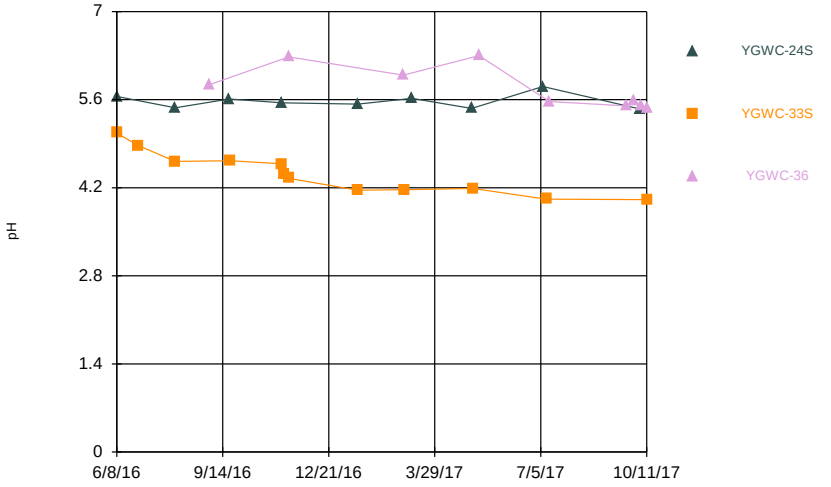


Constituent: pH Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Time Series



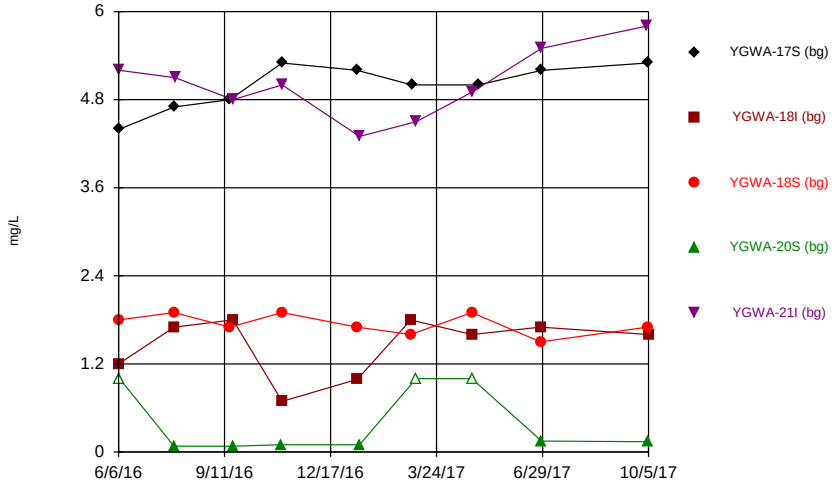
Constituent: pH Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

Hollow symbols indicate censored values.

Time Series

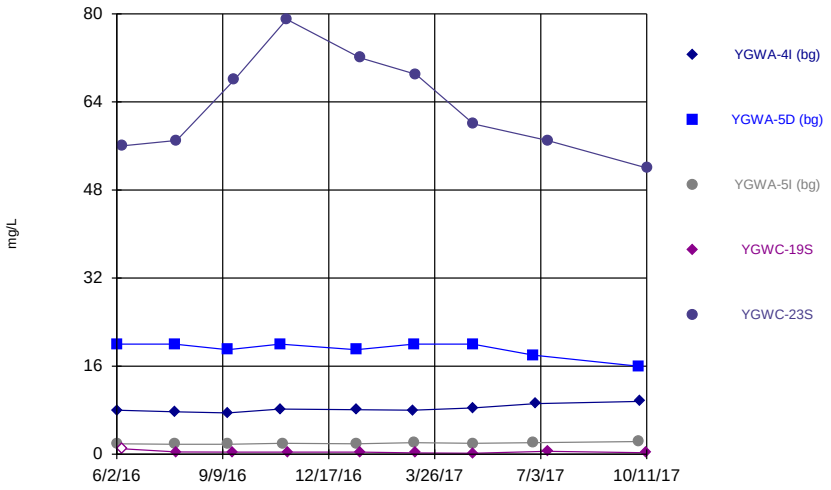


Constituent: Sulfate Analysis Run 11/2/2017 3:49 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

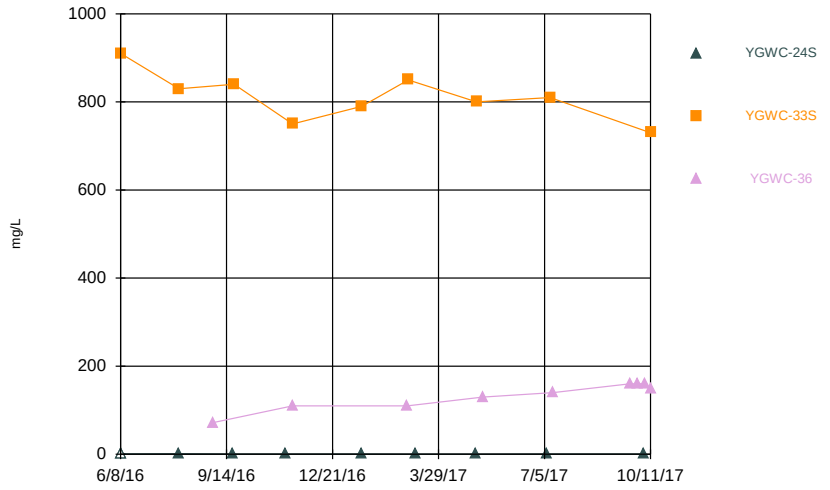
Time Series



Constituent: Sulfate Analysis Run 11/2/2017 3:49 PM
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

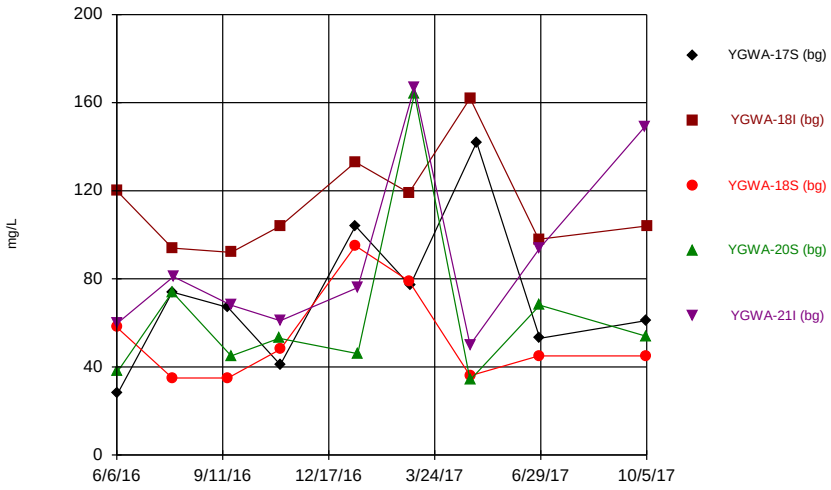
Time Series



Constituent: Sulfate Analysis Run 11/2/2017 3:49 PM
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG

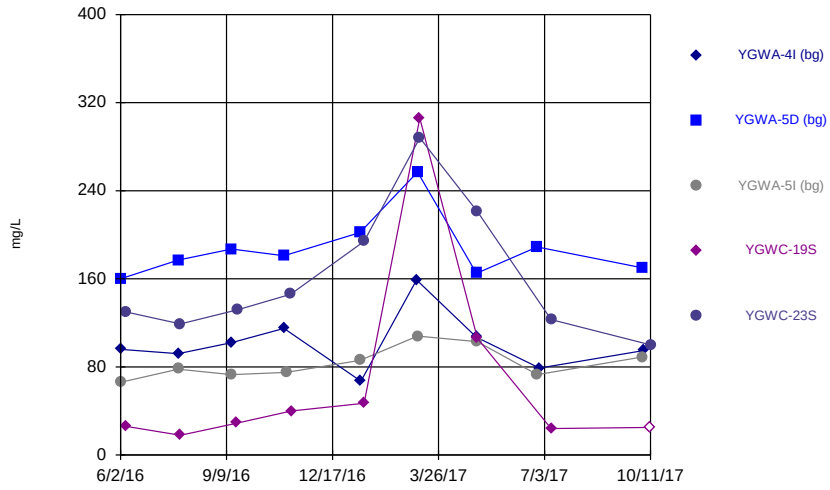
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/2/2017 3:49 PM
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

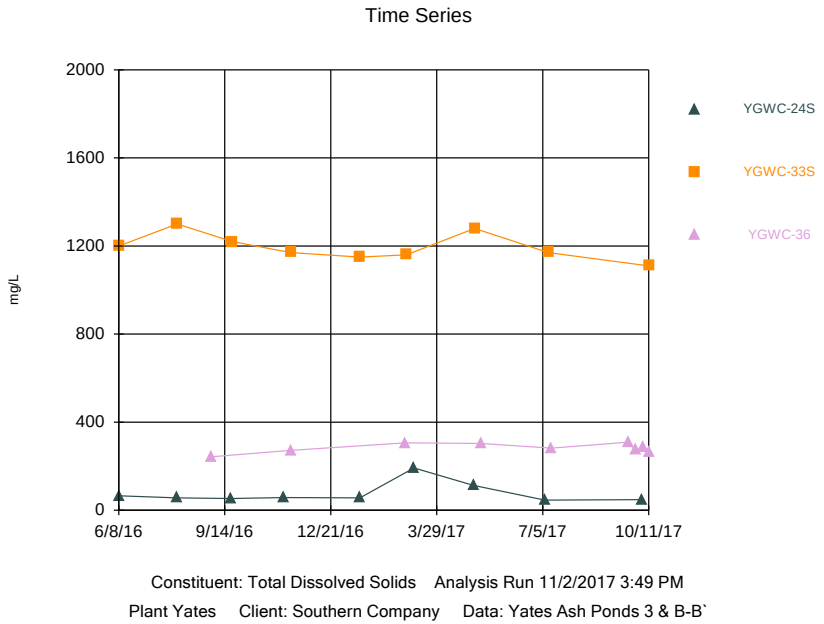
Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/2/2017 3:49 PM
Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

Sanitas™ v.9.5.32 Sanitas software licensed to ACC. UG



Time Series

Constituent: Boron (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016		<0.04	<0.04		
6/7/2016	0.036 (J)			<0.04	<0.04
7/27/2016	0.008 (J)	<0.04	0.0059 (J)	<0.04	
7/28/2016					0.0096 (J)
9/16/2016	0.0086 (J)		0.0079 (J)		
9/19/2016		<0.04		<0.04	<0.04
11/2/2016				<0.04	
11/3/2016	0.0077 (J)	<0.04	0.0082 (J)		<0.04
1/11/2017	0.0092 (J)	<0.04	0.0096 (J)		
1/13/2017				<0.04	<0.04
3/1/2017		<0.04	0.0098 (J)		
3/2/2017	0.0095 (J)				
3/6/2017				<0.04	<0.04
4/26/2017		<0.04	0.0091 (J)	<0.04	<0.04
5/2/2017	<0.04				
6/28/2017		<0.04	0.0079 (J)		
6/29/2017	0.0074 (J)			<0.04	<0.04
10/3/2017					<0.04
10/4/2017	0.0077 (J)		0.009 (J)	<0.04	
10/5/2017		<0.04			

Time Series

Constituent: Boron (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-19S	YGWC-23S
6/2/2016	<0.04	<0.04	<0.04		
6/7/2016				0.041 (J)	0.99
7/26/2016	0.0047 (J)	0.0052 (J)	<0.04		
7/28/2016				<0.04	1.09
9/14/2016	<0.04	0.0071 (J)	0.01 (J)		
9/19/2016				0.0066 (J)	
9/20/2016					1.35
11/2/2016	<0.04	<0.04			
11/4/2016			<0.04		
11/8/2016					1.5
11/9/2016				0.0085 (J)	
1/12/2017		0.0076 (J)	<0.04		
1/13/2017	<0.04				
1/16/2017				<0.04	1.67
3/6/2017	<0.04				
3/7/2017		0.0089 (J)	<0.04		
3/9/2017				<0.04	1.44
5/1/2017	<0.04	0.0061 (J)			
5/2/2017			<0.04	<0.04	1.2
6/27/2017		0.0079 (J)	<0.04		
6/29/2017	<0.04				
7/10/2017				0.0195 (J)	1.12
10/3/2017		0.0094 (J)	<0.04		
10/5/2017	<0.04				
10/10/2017				<0.04	
10/11/2017					1.09

Time Series

Constituent: Boron (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-24S	YGWC-33S	YGWC-36
6/8/2016	<0.04	12	
8/1/2016	0.0054 (J)	9.89	
9/2/2016			0.133
9/20/2016	0.0111 (J)		
9/21/2016		11.1	
11/8/2016	0.0121 (J)		
11/14/2016		11	0.287
1/17/2017	0.0079 (J)	11.8	
2/28/2017			0.215
3/1/2017		8.61	
3/8/2017	<0.04		
5/2/2017	0.0099 (J)		
5/3/2017		13.4	
5/9/2017			0.233
7/7/2017	0.0076 (J)		
7/10/2017		15.2	
7/13/2017			0.262
9/22/2017			0.238
9/29/2017			0.235
10/5/2017	<0.04		
10/6/2017			0.256
10/11/2017		11.4	0.245

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016		6.2	1.4		
6/7/2016	2.2			2.3	3.7
7/27/2016	2	4.73	1.19	2.08	
7/28/2016					3.15
9/16/2016	1.97		1.5		
9/19/2016		4.76		1.97	3.17
11/2/2016				2.13	
11/3/2016	1.99	5.25	1.31		3.4
1/11/2017	2.28	4.74	1.25		
1/13/2017				2.45	4.98
3/1/2017		5.37	1.26		
3/2/2017	2.15				
3/6/2017				2.48	6.28
4/26/2017		4.28	1.05	2.3	6.65
5/2/2017	1.95				
6/28/2017		4.95	1.06		
6/29/2017	2.02			2.54	6.04
10/3/2017					8.28
10/4/2017	2.03		1.1	2.25	
10/5/2017		5.28			

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-19S	YGWC-23S
6/2/2016	8.8	33	2.4		
6/7/2016				1.1	9.6
7/26/2016	7.69	32.3	2.12		
7/28/2016				0.988	7.87
9/14/2016	8.49	31	2.18		
9/19/2016				1.03	
9/20/2016					9.28
11/2/2016	7.83	30.9			
11/4/2016			2.17 (J)		
11/8/2016					8.6
11/9/2016				1.07	
1/12/2017		35.7	2.37		
1/13/2017	8.08				
1/16/2017				0.943	8.85
3/6/2017	8.64				
3/7/2017		32.7	2.34		
3/9/2017				0.936	8.4
5/1/2017	13.4	37			
5/2/2017			2.17	0.923	12.9
6/27/2017		36.5	2.13		
6/29/2017	8.81				
7/10/2017				0.964	8.09
10/3/2017		30.9	2.15		
10/5/2017	9.29				
10/10/2017				0.895	
10/11/2017					6.36

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-24S	YGWC-33S	YGWC-36
6/8/2016	1.9	130	
8/1/2016	1.83	136	
9/2/2016			11.2
9/20/2016	1.78		
9/21/2016		131	
11/8/2016	1.77		
11/14/2016		116	7.79
1/17/2017	1.7	126	
2/28/2017			8.37
3/1/2017		125	
3/8/2017	1.77		
5/2/2017	1.57		
5/3/2017		129	
5/9/2017			13.9
7/7/2017	1.8		
7/10/2017		139	
7/13/2017			16.6
9/22/2017			18.4
9/29/2017			16.1
10/5/2017	1.7		
10/6/2017			16.6
10/11/2017		125	18.1

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016		6.8	6.4		
6/7/2016	4.5			1.9	2.8
7/27/2016	4.5	6.7	6.2	1.9	
7/28/2016					2.6
9/16/2016	4.5		6.1		
9/19/2016		7		1.9	2.4
11/2/2016				2.6	
11/3/2016	5.4	7.5	7.4		2.9
1/11/2017	4.7	6.5	6.1		
1/13/2017				2.3	2.5
3/1/2017		6.9	6		
3/2/2017	4.8				
3/6/2017				1.9	2.1
4/26/2017		7	6.5	2	2.1
5/2/2017	4.6				
6/28/2017		7	6.4		
6/29/2017	4.5			2.6	2.8
10/3/2017					2.2
10/4/2017	4.7		6.8	2.6	
10/5/2017		7			

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-19S	YGWC-23S
6/2/2016	3.7	7.2	4.3		
6/7/2016				2.6	2.9
7/26/2016	3.6	6.6	4.4		
7/28/2016				2.6	3.5
9/14/2016	3.4	6.6	3.8		
9/19/2016				2.6	
9/20/2016					2.4
11/2/2016	4.5	7.6			
11/4/2016			4.8		
11/8/2016					2.8
11/9/2016				3	
1/12/2017		6.8	3.8		
1/13/2017	4.2				
1/16/2017				2.5	1.8
3/6/2017	3.6				
3/7/2017		6.8	4.5		
3/9/2017				2.4	1.7
5/1/2017	4.3	7.2			
5/2/2017			4.6	2.4	1.8
6/27/2017		7	4.3		
6/29/2017	4.2				
7/10/2017				2.7	1.9
10/3/2017		6.5	4.2		
10/5/2017	4.7				
10/10/2017				2.8	
10/11/2017					2.4

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-24S	YGWC-33S	YGWC-36
6/8/2016	5.9	7.6	
8/1/2016	5.3	5.7	
9/2/2016			6.3
9/20/2016	5.5		
9/21/2016		5.5	
11/8/2016	6.4		
11/14/2016		6.4	6.7
1/17/2017	5.5	5.3	
2/28/2017			5.4
3/1/2017		5.5	
3/8/2017	5.4		
5/2/2017	5.7		
5/3/2017		6.1	
5/9/2017			5.7
7/7/2017	5.7		
7/10/2017		5.6	
7/13/2017			5.4
9/22/2017			6.9
9/29/2017			5.5
10/5/2017	6		
10/6/2017			5.5
10/11/2017		5.8	6.4

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016		<0.3	<0.3		
6/7/2016	<0.3			<0.3	<0.3
7/27/2016	<0.3	<0.3	<0.3	<0.3	
7/28/2016					0.02 (J)
9/16/2016	<0.3		<0.3		
9/19/2016		<0.3		<0.3	0.02 (J)
11/2/2016				<0.3	
11/3/2016	<0.3	<0.3	<0.3		0.07 (J)
1/11/2017	<0.3	<0.3	<0.3		
1/13/2017				<0.3	<0.3
3/1/2017		0.03 (J)	0.03 (J)		
3/2/2017	0.04 (J)				
3/6/2017				0.04 (J)	0.09 (J)
4/26/2017		<0.3	<0.3	<0.3	0.04 (J)
5/2/2017	<0.3				
6/28/2017		<0.3	<0.3		
6/29/2017	0.02 (J)			0.03 (J)	0.05 (J)
10/3/2017					0.08 (J)
10/4/2017	<0.3		<0.3	<0.3	
10/5/2017		<0.3			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-19S	YGWC-23S
6/2/2016	<0.3	0.11 (J)	<0.3		
6/7/2016				<0.3	<0.3
7/26/2016	<0.3	0.05 (J)	<0.3		
7/28/2016				<0.3	0.03 (J)
9/14/2016	<0.3	0.04 (J)	<0.3		
9/19/2016				<0.3	
9/20/2016					<0.3
11/2/2016	0.07 (J)	0.2 (J)			
11/4/2016			<0.3		
11/8/2016					<0.3
11/9/2016				0.02 (J)	
1/12/2017		0.04 (J)	<0.3		
1/13/2017	<0.3				
1/16/2017				<0.3	<0.3
3/6/2017	0.05 (J)				
3/7/2017		0.09 (J)	0.03 (J)		
3/9/2017				0.03 (J)	0.03 (J)
5/1/2017	<0.3	0.04 (J)			
5/2/2017			<0.3	<0.3	<0.3
6/27/2017		0.09 (J)	<0.3		
6/29/2017	0.02 (J)				
7/10/2017				<0.3	0.04 (J)
10/3/2017		0.05 (J)	<0.3		
10/5/2017	<0.3				
10/10/2017				<0.3	
10/11/2017					<0.3

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-24S	YGWC-33S	YGWC-36
6/8/2016	<0.3	0.34	
8/1/2016	<0.3	0.24 (J)	
9/2/2016			0.05 (J)
9/20/2016	<0.3		
9/21/2016		0.22 (J)	
11/8/2016	0.02 (J)		
11/14/2016		0.35	0.18 (J)
1/17/2017	<0.3	0.22 (J)	
2/28/2017			0.09 (J)
3/1/2017		0.33	
3/8/2017	0.03 (J)		
5/2/2017	<0.3		
5/3/2017		0.2 (J)	
5/9/2017			0.009 (J)
7/7/2017	<0.3		
7/10/2017		0.57	
7/13/2017			<0.3
9/22/2017			0.09 (J)
9/29/2017			<0.3
10/5/2017	<0.3		
10/6/2017			<0.3
10/11/2017		0.18 (J)	0.14 (J)

Time Series

Constituent: pH (pH) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016		6.17	5.71		
6/7/2016	5.62			5.77	6.1
7/27/2016	5.59	6.14	5.46	5.79	
7/28/2016					6.12
9/16/2016	5.58				
9/19/2016		6.04	5.59	5.73	6.12
11/2/2016				5.67	
11/3/2016	5.59	5.97	5.39		6.07
1/11/2017	5.59	6.05	5.48		
1/13/2017				5.79	6.41
3/1/2017		5.94	5.41		
3/2/2017	5.54				
3/6/2017				5.63	6.34
4/26/2017		5.99	5.4	5.66	6.32
5/2/2017	5.47				
6/28/2017		6	5.36		
6/29/2017	5.56			5.85	6.47
10/3/2017					6.56
10/4/2017	5.57		5.32	5.83	
10/5/2017		6.11			

Time Series

Constituent: pH (pH) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-19S	YGWC-23S
6/2/2016	6.36	7.67	5.75		
6/7/2016				5.61	5.57
7/26/2016	6.22	7.66	5.72		
7/28/2016				5.64	5.6
9/14/2016	6.23	7.6	5.74		
9/19/2016				5.65	
9/20/2016					5.53
11/2/2016	6.08	7.35			
11/4/2016			5.61		
11/8/2016					5.53
11/9/2016				5.56	
1/12/2017		7.49	5.71		
1/13/2017	6.19				
1/16/2017				5.56	5.59
3/6/2017	6.2				
3/7/2017		7.43	5.66		
3/9/2017				5.63	5.56
5/1/2017	6.21	7.22			
5/2/2017			5.65	5.46	5.61
6/27/2017		7.32	5.7		
6/29/2017	6.21				
7/10/2017				5.55	5.68
10/3/2017		7.48	5.79		
10/5/2017	6.16				
10/10/2017				5.6	
10/11/2017					5.46

Time Series

Constituent: pH (pH) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-24S	YGWC-33S	YGWC-36
6/8/2016	5.65	5.07	
6/28/2016		4.87	
8/1/2016	5.47	4.62	
9/2/2016			5.84
9/20/2016	5.61		
9/21/2016		4.63	
11/8/2016	5.55	4.58	
11/10/2016		4.42	
11/14/2016		4.35	6.28
1/17/2017	5.53	4.16	
2/28/2017			5.99
3/1/2017		4.17	
3/8/2017	5.62		
5/2/2017	5.46		
5/3/2017		4.19	
5/9/2017			6.3
7/7/2017	5.81		
7/10/2017		4.02	
7/13/2017			5.57
9/22/2017			5.5
9/29/2017			5.58
10/5/2017	5.45		
10/6/2017			5.51
10/11/2017		4.01	5.47

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016		1.2	1.8		
6/7/2016	4.4			<1	5.2
7/27/2016	4.7	1.7	1.9	0.08 (J)	
7/28/2016					5.1
9/16/2016	4.8		1.7		
9/19/2016		1.8		0.08 (J)	4.8
11/2/2016				0.1 (J)	
11/3/2016	5.3	0.69 (J)	1.9		5
1/11/2017	5.2	0.99 (J)	1.7		
1/13/2017				0.1 (J)	4.3
3/1/2017		1.8	1.6		
3/2/2017	5				
3/6/2017				<1	4.5
4/26/2017		1.6	1.9	<1	4.9
5/2/2017	5				
6/28/2017		1.7	1.5		
6/29/2017	5.2			0.15 (J)	5.5
10/3/2017					5.8
10/4/2017	5.3		1.7	0.14 (J)	
10/5/2017		1.6			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-19S	YGWC-23S
6/2/2016	8	20	1.9		
6/7/2016				<1	56
7/26/2016	7.7	20	1.8		
7/28/2016				0.43 (J)	57
9/14/2016	7.5	19	1.8		
9/19/2016				0.4 (J)	
9/20/2016					68
11/2/2016	8.2	20			
11/4/2016			2		
11/8/2016					79
11/9/2016				0.39 (J)	
1/12/2017		19	1.9		
1/13/2017	8.1				
1/16/2017				0.39 (J)	72
3/6/2017	8				
3/7/2017		20	2.1		
3/9/2017				0.25 (J)	69
5/1/2017	8.4	20			
5/2/2017			2	0.19 (J)	60
6/27/2017		18	2.1		
6/29/2017	9.2				
7/10/2017				0.54 (J)	57
10/3/2017		16	2.3		
10/5/2017	9.6				
10/10/2017				0.27 (J)	
10/11/2017					52

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-24S	YGWC-33S	YGWC-36
6/8/2016	<1	910	
8/1/2016	1.1	830	
9/2/2016			72
9/20/2016	0.38 (J)		
9/21/2016		840	
11/8/2016	0.39 (J)		
11/14/2016		750	110
1/17/2017	0.48	790	
2/28/2017			110
3/1/2017		850	
3/8/2017	0.29 (J)		
5/2/2017	0.29 (J)		
5/3/2017		800	
5/9/2017			130
7/7/2017	0.37 (J)		
7/10/2017		810	
7/13/2017			140
9/22/2017			160
9/29/2017			160
10/5/2017	0.36 (J)		
10/6/2017			160
10/11/2017		730	150

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016		120	58		
6/7/2016	28			38	60
7/27/2016	74	94	35	74	
7/28/2016					81
9/16/2016	67		35		
9/19/2016		92		45	68
11/2/2016				53	
11/3/2016	41	104	48		61
1/11/2017	104	133	95		
1/13/2017				46	76
3/1/2017		119	79		
3/2/2017	77				
3/6/2017				164	167
4/26/2017		162	36	34	50
5/2/2017	142				
6/28/2017		98	45		
6/29/2017	53			68	94
10/3/2017					149
10/4/2017	61		45	54	
10/5/2017		104			

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-19S	YGWC-23S
6/2/2016	96	160	66		
6/7/2016				26	130
7/26/2016	92	177	78		
7/28/2016				18 (J)	119
9/14/2016	102	187	73		
9/19/2016				29	
9/20/2016					132
11/2/2016	115	181			
11/4/2016			75		
11/8/2016					146
11/9/2016				40	
1/12/2017		202	86		
1/13/2017	67				
1/16/2017				47	194
3/6/2017	159				
3/7/2017		257	108		
3/9/2017				306	288
5/1/2017	107	165			
5/2/2017			103	106	221
6/27/2017		189	73		
6/29/2017	79				
7/10/2017				24 (J)	123
10/3/2017		170	89		
10/5/2017	95				
10/10/2017				<25	
10/11/2017					100

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/2/2017 3:51 PM

Plant Yates Client: Southern Company Data: Yates Ash Ponds 3 & B-B`

	YGWC-24S	YGWC-33S	YGWC-36
6/8/2016	66	1200	
8/1/2016	56	1300	
9/2/2016			243
9/20/2016	53		
9/21/2016		1220	
11/8/2016	58		
11/14/2016		1170	272
1/17/2017	56	1150	
2/28/2017			306
3/1/2017		1160	
3/8/2017	192		
5/2/2017	113		
5/3/2017		1280	
5/9/2017			303
7/7/2017	46		
7/10/2017		1170	
7/13/2017			282
9/22/2017			309
9/29/2017			273
10/5/2017	48		
10/6/2017			287
10/11/2017		1110	264

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