

2020 Annual Groundwater Monitoring and Corrective Action Report

Georgia Power Company – Plant Mitchell Ash Ponds A, 1, and 2 Project No.: 6122160170

Prepared for:



Atlanta, Georgia 7/31/2020

CERTIFICATION STATEMENT

This 2020 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company Plant Mitchell - Ash Ponds A, 1, and 2 has been prepared in compliance with Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 under the supervision of a licensed professional engineer and a licensed professional geologist with Wood Environment & Infrastructure Solutions, Inc.

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1.0 INTRODUCTION

In accordance with the Georgia Environmental Protection Division (GA EPD) Rules of Solid Waste Management 391-3-4-.10(6)(a)-(c), this 2020 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document groundwater monitoring activities conducted at Georgia Power Company's (GPC) Plant Mitchell Ash Ponds A, 1, and 2. To specify groundwater monitoring requirements, GA EPD Rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule 40 Code of Federal Regulations (CFR) § 257 Subpart D. For ease of reference, the US EPA CCR Rules are cited within this report.

Groundwater monitoring and reporting for Plant Mitchell are performed in accordance with the monitoring requirements of § 257.90 through § 257.95 and the Georgia EPD Rule 391-3-4-.10(6)(a)-(c). This annual report documents the activities completed during the second half of 2019 and the first half of 2020 in accordance with EPD Rule 391-3-4-.10(6)(c). Three monitoring events were conducted during this monitoring period: (1) an initial assessment monitoring constituent screening event was conducted in August 2019 as a result of statistical exceedances of Appendix III constituents during the first detection monitoring event in March 2019, and (2) the subsequent two semi-annual monitoring events were conducted in October 2019 and March 2020 for assessment monitoring.

1.1 Site Description and Background

Georgia Power Company's Plant Mitchell is located approximately eight miles south of Albany, Georgia. The Plant Mitchell site (the Site) is comprised of approximately 516 acres, with the northern portion of the Site located in Dougherty County and the southern portion located in Mitchell County. Baker County is located immediately to the west of the Site, with the Flint River forming the county boundary (Figure 1: Site Location Map). As depicted in Figure 2:

Monitoring Network Well Location Map, the Plant Mitchell site is generally composed of the former coal-fired electric generating facility to the north and Ash Ponds A, 1, and 2 to the south. The Site is partly bounded by the Flint River on the west, the Georgia and Florida Railway on the east, pecan orchards to the south. The northern boundary of the Site is a residential property with a mowed lot. The wooded land immediately north of the former plant buildings is owned by GPC.

There are three CCR surface impoundments (ash ponds) at the Site: Ash Pond A, Ash Pond 1, and Ash Pond 2. The three ash ponds are located adjacent to each other and are therefore considered to be one multi-unit for groundwater monitoring purposes. The former coal-fired plant buildings have been demolished. The CCR material is being removed from the ash ponds

and the ponds are in the process of being closed. The removed CCR material will be transported by rail and/or by truck for disposal at an approved landfill or beneficially reused.

Plant Mitchell Ash Pond A was closed in 1962, Ash Pond 1 closed in 1980, and Ash Pond 2 ceased accepting CCR prior to October 19, 2015. Because the units ceased receiving waste prior to October 19, 2015, Ash Ponds A, 1, and 2 are not subject to Federal monitoring requirements of the CCR rule. The Plant Mitchell CCR Surface Impoundments (Ash Pond A, Ash Pond 1, and Ash Pond 2) Permit Application was submitted to Georgia EPD in November 2018 and is currently under review. Groundwater monitoring has been initiated in order to meet GA EPD CCR requirements. The CCR background study was initiated in August 2016 and was completed in October 2018. The first detection monitoring event was conducted in March 2019 and the first assessment monitoring event was in October 2019.

1.2 Regional Geology & Hydrogeologic Setting

The geology and hydrogeology of the Plant Mitchell Ash Ponds A, 1, and 2 are summarized below. The Plant Mitchell site is located in the Dougherty Plain physiographic district within the Gulf Coastal Plain Physiographic Province (Watson, 1981; Clark and Zisa, 1976). The Dougherty Plain is characterized as relatively flat to gently rolling lowland karst terrain consisting of solutional features including caves, ephemeral streams, springs, and solution features which manifest surficially as shallow depressions.

The sur face and near surface soils in the region consist of approximately 0 to 70 feet of unconsolidated sediment collectively referred to as residuum or overburden. This overburden is typically composed of discontinuous layers of sand and clay derived from the in-place weathering of the underlying Ocala Limestone. The overburden clay content ranges from 10 to 70 percent, with clay content typically being greater than 25 percent (Watson, 1981) making the overburden material less permeable than the underlying carbonate bedrock.

The Ocala Limestone in the region is described as a light-colored fossiliferous friable to well-indurated limestone (Gordon and Gonthier, 2017). Regionally, the Ocala Limestone is between 125 and 275 feet thick with increasing thickness to the southeast. The Ocala Limestone is part of the Floridan aquifer, which is hydraulically separated from the underlying Claiborne aquifer by the Lisbon Confining Unit (Gordon and Gonthier, 2017).

1.2.1 Site Geology

Based on the borings drilled to establish the detection monitoring network, the lithologies underlying the ash pond area from the ground surface to depth are overburden (residuum) and carbonate bedrock. The overburden (residuum) at the Site consists of an interlayered sequence of predominantly fine-grained unconsolidated material including reddish brown to gray silty and

clayey sands overlying sandy clay and clay. The overburden material is composed of the residual product of weathering of the underlying Ocala Limestone in the form of non-calcareous clay interlayered with quartz sand alluvium deposits (Hicks et al, 1981). A discontinuous zone of low permeability fine-grained sediments overlying the Ocala Limestone may serve as a barrier that restricts vertical movement of groundwater from the overburden to the limestone beneath the ash pond area, as indicated by many of the boring logs from multiple subsurface investigations at the Site. Laboratory analysis of undisturbed samples collected from fine-grained sediment directly overlying the limestone indicate this material can exhibit a permeability on the order of 10⁻⁴ to 10⁻⁸ cm/sec or 10⁻¹ to 10⁻⁵ ft/day. These values are generally consistent with the published range of literature values for overburden materials in the Dougherty Plain area. Hayes, et al. (1983) estimated horizontal hydraulic conductivity ranging from 0.0004 ft/day to 30 ft/day with a median value of 0.002 ft/day for samples gathered in the Dougherty Plain. A sample collected to the north of the study area of Hayes, et al. (1983) estimated a hydraulic conductivity value of 0.001 ft/day.

Locally, the Ocala Limestone bedrock is characterized as a pink to white, slightly silty, friable to well indurated fossiliferous limestone. The contact between overburden and bedrock at the Site is noted as an abrupt and distinct change in color, texture, and carbonate content from the overburden to bedrock. The Ocala Limestone is often described in the boring logs as a fine to coarse calcareous sand with increasing consolidation and cementation with depth. The surface of the carbonate bedrock is highly irregular due to differential weathering. In general, the bedrock surface slopes from the Site toward the Flint River in the west and southwest, and toward the unnamed creek in the east. In-situ hydraulic conductivity (slug) tests in the bedrock at the Site ranged from 3.83×10^{-4} to 2.05×10^{-3} cm/sec or 1.08 to 5.81 feet/day with an average of 1.07×10^{-3} cm/sec or 3.04 feet/day.

1.2.2 Site Hydrogeology

Two main hydrostratigraphic units are present at the Site: overburden (residuum) and carbonate bedrock comprise the uppermost aquifer. The bedrock and lower part of the overburden are saturated. Where there is CCR/embankment material overlying the overburden and bedrock, it is predominantly unsaturated as indicated by several piezometers screened in the CCR/overburden contact. The monitoring well network for the Ash Ponds monitors the carbonate upper bedrock because the limestone yields usable, continuous, and persistent water, unlike the overlying overburden.

General groundwater flow in the bedrock aquifer is from the northern and eastern boundaries of the Site toward Ash Ponds 1 and 2 where a more dominant westerly flow direction is present (Figure 3: Potentiometric Surface – Upper Bedrock –August 2019, Figure 4: Potentiometric Surface – Upper Bedrock –October 2019), and Figure 5: Potentiometric Surface – Upper Bedrock – March 2020).

1.3 Groundwater Monitoring System

Ash Ponds A, 1, and 2 are located adjacent to each other and are therefore considered to be one multi-unit for groundwater monitoring purposes. The groundwater monitoring system is described below.

Pursuant to § 257.91 and § 391-3-4-.10(6)(a), GPC installed a groundwater monitoring system within the uppermost aquifer at Ash Ponds A, 1, and 2. The monitoring system is designed to monitor groundwater passing the waste boundary of the Ash Ponds A, 1, and 2 within the uppermost aquifer. Wells were located to serve as upgradient or downgradient monitoring points based on groundwater flow direction). The monitoring well locations are shown in **Figure 2: Monitoring Network Well Location Map**. The current monitoring well network at Ash Ponds A, 1, and 2 consists of 14 wells (4 upgradient wells, and 10 downgradient wells). The upgradient wells used to monitor groundwater quality include wells PZ-1D, PZ-2D, PZ-31, and PZ-32. Downgradient wells used to monitor groundwater quality include wells PZ-7D, PZ-14, PZ-15, PZ-16, PZ-17, PZ-18, PZ-19, PZ-23A, PZ-25, and PZ-33 (**Table 1: Monitoring Network Well Summary**). Twenty-six piezometers are used for water level measurements only (**Table 2: Piezometer Well Network Summary**).

2.0 GROUNDWATER MONITORING ACTIVITIES

As required by § 257.90(e), the following describes monitoring-related activities performed during the October 2019 and March 2020 assessment compliance monitoring events during the second half of 2019 and the first half of the 2020 calendar years. The groundwater sampling was performed in accordance with § 257.93. Samples were collected from each of the 14 wells in the monitoring system shown on **Figure 2**. **Table 3: Groundwater Sampling Events**, presents a summary of CCR groundwater sampling events completed during this monitoring period at Plant Mitchell's Ash Ponds A, 1, and 2.

2.1 Monitoring Well Installation and Maintenance

Monitoring well-related activities conducted during this period included the following:

- Visual inspection of well conditions prior to sampling, recording the Site conditions, and performing exterior maintenance to conduct sampling under safe and clean conditions. The March 2020 inspection indicated the monitoring wells were in good condition and corrective actions are not needed at this time.
- Abandoning six piezometers and one monitoring well to accommodate construction and pond closure activities. The well abandonment is documented in the *Phase I* Well Abandonment Report at Plant Mitchell (CCR Wells), dated November 15, 2019. The report is provided in Appendix A: Well Abandonment Report and Groundwater Monitoring Well and Piezometer Installation Report.
- Installation of one new monitoring well (PZ-23A) and one new piezometer (PZ-24A) to replace the monitoring well and piezometer abandoned to accommodate construction and pond closure activities. The well installation is documented in *Groundwater Monitoring Well and Piezometer Installation Report* (July 2020). The report is provided Appendix A: Well Abandonment Report and Groundwater Monitoring Well and Piezometer Installation Report.
- The elevations of the top of well casings (TOC) for the CCR network monitoring wells and piezometers were re-surveyed in June 2020 to confirm the elevations were surveyed to 0.01 feet accuracy. The new TOC elevations surveyed in June 2020 are included in **Appendix A**.

2.2 Detection Monitoring Program

In accordance with § 257.94(b), the detection groundwater monitoring program was implemented by collecting 8 background groundwater samples beginning in August 2016. In addition, a 9th round of groundwater samples was collected from the 14 CCR monitoring wells as the initial detection monitoring event. Groundwater samples were collected from each monitoring well and analyzed for Appendix III constituents according to § 257.94(a). The

background study and the initial detection monitoring event were documented in the 2019 Annual Groundwater Monitoring & Corrective Action Report, dated August 5, 2019.

2.3 Assessment Monitoring

Statistically Significant Increases (SSI) of Appendix III constituents were identified in the initial detection monitoring event (March 2019). Pursuant to § 257.94(e)(1), GPC implemented assessment monitoring in accordance with § 257.95. The initial assessment monitoring constituent screening event was conducted from August 20 to 22, 2019. Pursuant to § 257.95(b), the CCR monitoring wells were sampled for the full suite of Appendix IV constituents during the initial assessment monitoring screening event. Following receipt of the initial Appendix IV screening results, the first and second semi-annual assessment monitoring events were conducted October 1 to 3, 2019 and March 24 to 26, 2020, respectively. Pursuant to § 257.95(d)(1), groundwater samples collected from the CCR monitoring network wells were analyzed for Appendix III constituents and those Appendix IV constituents detected during the initial assessment monitoring screening event in August 2019. Data reports for the August and October 2019, and March 2020 assessment monitoring events are included in Appendix B: Laboratory Analytical and Field Sampling Reports. Well PZ-23 was sampled on September 10, 2019 for the October 2019 semi-annual monitoring event, prior to being abandoned on September 11, 2019. New replacement well PZ-23A was sampled for the first time during the March 2020 event.

3.0 SAMPLE METHODOLOGY & ANALYSES

The following sections describe the methods used to complete groundwater monitoring at Plant Mitchell Ash Ponds A, 1, and 2.

3.1 Groundwater Elevation Measurements and Flow Direction

Prior to each sampling event, groundwater elevations were recorded from each well in the network for Plant Mitchell Ash Ponds A, 1, and 2. Groundwater elevations recorded during the initial assessment monitoring screening (August 2019) and the October 2019 and March 2020 semi-annual monitoring events are summarized in Table 4: Summary of Groundwater **Elevations.** Groundwater elevation data from the three monitoring events were used to develop potentiometric surface elevation contour maps (Figure 3: Potentiometric Surface -Upper Bedrock – August 2019, Figure 4: Potentiometric Surface – Upper Bedrock – October 2019, and Figure 5: Potentiometric Surface – Upper Bedrock –March 2020. The elevations of the top of well casings were re-surveyed in June 2020. The August and October 2019 groundwater elevations were calculated using the top of casing elevations from before the June 2020 resurvey. The March 2020 groundwater elevations were calculated using the June 2020 re-surveyed top of casing elevations. Groundwater flow in the carbonate upper bedrock (Figures 3 through 5) is to the west-southwest. The June 2020 re-surveyed elevations did not affect the direction of groundwater flow. An exception to this general flow regime in March 2020 is a groundwater mound in the bedrock aquifer on the southwest side of Ash Pond 2. The groundwater mound is attributed to a period of heavy rainfall causing water to pond in the southwest corner of Ash Pond 2 resulting in radial groundwater flow away from the southwest area of Ash Pond 2. The March 2020 potentiometric surface map (Figure 5) is very similar to the March 2019 potentiometric surface map where heavy rainfall in early 2019 contributed to the mounding seen on the March 2019 potentiometric surface map. The groundwater flow pattern observed during the August 2019, October 2019, and March 2020 assessment monitoring events, including the mounding, is consistent with conditions observed during previous monitoring events.

3.2 Groundwater Gradient and Flow Velocity

The groundwater flow velocity at Plant Mitchell Ash Ponds A, 1, and 2 was calculated using a derivation of Darcy's Law. Specifically,

$$V = \frac{K * i}{n_e}$$

Where:

 $V = Groundwater flow velocity \left(\frac{feet}{day} \right)$

 $K = Average hydraulic conductivity of the aquifer <math>\left(\frac{feet}{day}\right)$

 $i = Horizontal hydraulic gradient \left(\frac{feet}{feet}\right)$

 $n_{a} = Effective porosity$

Although Darcy's equation is primarily applicable to diffuse flow in porous media, it is also used where flow is analogous to conditions in a homogenous aquifer. Stewart, et al. (1999) states that "water flow in the Upper Floridan (Ocala Limestone) can be classified generally as (1) diffuse, where flow is analogous to conditions in homogenous aquifer, and can be described by using basic Darcian equations; and (2) conduit, where water flows in distinct conduits and surrounding rock has comparatively low porosity and low permeability." While the presence of interpreted karst features is documented on the surface at the Plant Mitchell site, little evidence exists for the presence of well interconnected karst features within the upper bedrock aquifer. Groundwater flow in the shallow Ocala Limestone at Plant Mitchell likely is diffuse based on the above evidence. Based on the lack of karst features such as cavities in boring logs, the narrow range and relatively low values of hydraulic conductivity, and relatively uniform potentiometric surface for the bedrock aquifer at the Site, the application of Darcy's equation produces approximate linear groundwater flow velocities for the shallow bulk carbonate bedrock aquifer.

Groundwater flow velocities were calculated using an average hydraulic conductivity value of 3.04 feet/day, and an effective porosity of 20% (Hayes, et al., 1983). **Table 5: Groundwater Flow Velocity Calculations** summarize the groundwater flow velocities. Results for groundwater flow velocities ranged from 0.01 to 0.06 feet/day (3.7 to 21.9 feet/year).

3.3 Groundwater Sampling

Groundwater samples were collected for the initial Appendix IV screening and the two semi-annual assessment monitoring events in accordance with § 257.95(b) and (d). Each of the monitoring wells at the Site is equipped with a dedicated QED bladder pump. The 14 monitoring wells were purged and sampled using low-flow sampling procedures. Sampling equipment and pump intakes were placed at the midpoint of the well screen. Care was taken to maintain a water level above the top of screen and not draw the water level down below the pump during purging. Water level stabilization was achieved when three consecutive water level measurements vary by 0.3 foot or less at a pumping rate of no less than 100 milliliters per minute (mL/min). A SmarTroll (In-Situ field instrument) was used to monitor and record field

water quality parameters (pH, conductivity, dissolved oxygen, temperature, and ORP) and a Hach 2100Q was used to measure turbidity during well purging to verify stabilization prior to sampling. Groundwater samples were collected when the following stabilization criteria were met:

- pH ± 0.1 Standard Units (S.U.).
- Specific conductance ± 5%;
- 10% for DO > 0.5 mg/l. No criterion applies if DO < 0.5 mg/L.
- Turbidity measurements less than 5 NTU
- Temperature Record only, not used for stabilization criteria
- ORP Record only, not used for stabilization criteria

Once stabilization was achieved, samples were collected 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.

3.4 Laboratory Analyses

Groundwater samples collected in August 2019 for the initial assessment monitoring screening event were analyzed for all Appendix IV monitoring constituents only.

Groundwater samples collected in September-October 2019 and March 2020 semi-annual monitoring events were analyzed for all of the Appendix III constituents and all of the Appendix IV constituents detected in the initial assessment monitoring screening event (August 2019). Beryllium, cadmium, and mercury were not detected in the groundwater samples collected during the initial assessment screening monitoring event and were, therefore, not analyzed during the subsequent semi-annual event in accordance with § 257.95(d)(1). Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in Appendix B.

Laboratory analyses were performed by Pace Analytical Services, LLC, of Peachtree Corners, Georgia, and Greensburg, Pennsylvania. Both Pace laboratories are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all constituents analyzed. In addition, Pace laboratories are certified to perform analysis by the State of Georgia.

3.5 Groundwater Analytical Results

Table 6: Analytical Data Summary Appendix III - September-October 2019 and March 2020, summarize the analytical data for the Appendix III constituents for the two semi-annual monitoring events. The complete laboratory and field data sheets are included in **Appendix B**.

Table 7: Analytical Data Summary Appendix IV – August, September-October 2019 and March 2020 summarize the analytical data for the Appendix IV assessment screening and the detected Appendix IV constituents for the October 2019 and March 2020 semi-annual monitoring events. The complete laboratory and field data sheets are included in **Appendix B**.

3.6 Quality Assurance & Quality Control

Quality assurance and quality control of the groundwater data was assessed by performing a data quality evaluation of the results reported. A data quality evaluation was conducted on the data using laboratory precision and accuracy, analytical method requirements and requirements in the field sampling plan. The constituent concentrations were generally within the historical range of concentrations. Those few concentrations higher than the historical range were identified as statistical exceedances. The data quality evaluations are included in **Appendix B**. The data quality evaluation showed the data is usable.

The analytical results provided in **Tables 6** and **7** provide concentrations from the August 2019, October 2019, and March 2020 assessment sampling events as reported by the laboratory. When values are followed by a "J" flag, this indicates that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (RL). 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. The relative percent difference for the data was less than 20% indicating good sampling precision.

4.0 STATISTICAL ANALYSIS

The Site has initiated assessment monitoring. Statistical analysis of Appendix III groundwater monitoring data was performed on samples collected from the groundwater monitoring network pursuant to § 257.93(f) and following the statistical analysis plans. The statistical analysis plan used at the Site was developed in April 2019 by Groundwater Stats Consulting in accordance with § 257.93(f) using methodology presented in Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance, March 2009, EPA 530/R-09-007 (US EPA, 2009). To develop the statistical method, analytical data collected during the background period were evaluated and used to develop statistical limits for each Appendix III constituent. Subsequent detection monitoring results were compared to the statistical limits to determine if concentrations were statistically different from background.

Pursuant to § 257.95(d)(2), GPC established groundwater protection standards (GWPS) for the Appendix IV monitoring constituents and conducted statistical analysis of the Appendix IV groundwater monitoring data obtained during the October 2019 and March 2020 semi-annual assessment monitoring events to evaluate if concentrations statistically exceeded the established GWPS. The following subsections provide an overview of the statistical methods used to evaluate Appendix III and IV parameters and statistical analyses results.

4.1 Statistical Method

Sanitas groundwater statistical software was used to perform the statistical analyses at the Site. Sanitas is a commercially available decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by US EPA regulations and guidance as recommended in the Unified Guidance (US EPA, 2009) document. The Sanitas groundwater statistical software was used to perform the statistical analyses of groundwater quality data obtained in September-October 2019 and March 2020. The Interwell method was used for the analysis of the Appendix III constituents. Confidence intervals were calculated for each of the detected Appendix IV parameters in each downgradient well. The following table provides a summary of the statistical methodology used at Ash Ponds A, 1, and 2 for the monitoring events conducted in 2019 and March 2020 and will be used for routine monitoring in the future. Specific methodology information is described in the following paragraphs.

Table 8: Statistical Method Summary

	Data Screening on Proposed Background	Evaluate outliers, trends, and seasonality when sufficient data are available.
	Statistical Limits	Interwell statistical limits will be applied on a parameter basis, depending on the appropriateness of the method as determined by the Analysis of Variance.
	Prediction Limits	Parametric when data follow a normal or transformed normal distribution and when less than 50% non-detects, utilizing Kaplan Meier non-detect adjustment when applicable.
		Nonparametric when data sets contain greater than 50% non-detects or when data are not normally or transformed-normally distributed.
Statistical	Management of Non- Detects	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.
Methodology		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.
	Confidence Intervals	Used in Assessment and Corrective Action monitoring.
	No Statistical Testing	Statistical testing is not required for parameters containing 100% non-detects (US EPA Unified Guidance, 2009, Chapter 6).
	Verification Resample Plan	Optional 1-of-2 with minimum of 8 samples per well for interwell testing.
	Optional	 Initial statistical exceedance warrants optional independent resampling within 90 days. If resample passes, well/parameter is not a confirmed statistically significant increase (SSI). If resample exceeds, well/parameter has a confirmed SSI. If no resample is collected, the original result is
		deemed verified.

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4.1.1 Appendix III Statistical Method

When using the interwell method, upgradient well data are pooled to establish a background statistical limit for each constituent. Appendix III data from the September-October 2019 and March 2020 monitoring events were compared to the statistical limit to determine whether downgradient well concentrations exceed background statistical limits. The interwell statistical method uses an optional 1-of-2 verification resample plan. When an initial statistically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier. Interwell prediction limits were used for the following locations and constituents:

• Ash Ponds A, 1, and 2: Interwell statistical methods were used for boron, calcium, chloride, fluoride, sulfate, Total Dissolved Solids (TDS), and pH.

Data from groundwater samples from downgradient wells collected in the September-October 2019 and March 2020 detection monitoring events were compared to the statistical limits to evaluate whether concentrations exceed background statistical limits.

If data from a sampling event initially exceeds the prediction limit (PL), an optional resampling strategy can be used to verify the result. In 1-of-2 resampling, one independent resample is collected and evaluated within 90 days to determine whether the initial exceedance is verified. If the resample exceeds the PL, the initial exceedance is verified, and an SSI is identified. When a resample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance. If the initial finding is not verified by a resampling result, the resampled value will replace the initial finding. When the resample confirms the initial finding, the exceedance will be reported.

4.1.2 Appendix IV Statistical Method

The assessment monitoring program statistics for Appendix IV constituents at Plant Mitchell were conducted in two parts. The first part was the calculation of tolerance limits for site-specific background limits for Appendix IV constituents. The second part was the calculation of confidence limits for individual downgradient well/constituent pairs.

Interwell tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents. Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for barium and radium. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR § 257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

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

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule specified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR § 257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

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

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the October 2019 and March 2020 sample events. **Table 9: Summary of Groundwater Protection Standards** summarizes the background limits established for each Appendix IV constituent for each event and the GWPS established under Georgia EPD Rules for each event.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well for each event. The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified.

4.2 Statistical Analyses Results – Appendix III

Analytical data for Appendix III constituents from the October 2019 and March 2020 semiannual monitoring events were analyzed in accordance with the statistical analysis plan. The statistical analysis and comparison to prediction limits are included as **Appendix C: Statistical Analyses**. Tables summarizing the SSIs identified during the October 2019 and March 2020 semi-annual monitoring events are included in **Appendix C**.

4.3 Statistical Analyses Results- Appendix IV

Appendix C: Statistical Analyses shows the individual well/constituent pairs with their respective confidence intervals in comparison to the respective constituent GWPS. There are no confidence intervals of the individual well/constituent pairs above a GWPS, established according to Georgia EPD Rules 391-3-4-.10(6)(a). Therefore, no SSLs were identified for the October 2019 and March 2020 sampling events.

5.0 MONITORING PROGRAM STATUS

The Plant Mitchell Ash Ponds A, 1, and 2 CCR multi-unit is in assessment monitoring due to the detection of SSIs of Appendix III constituents in March 2019. Similar SSIs of Appendix III constituents were detected in the October 2019 and March 2020 semi-annual events. Pursuant to § 257.94(e)(1), GPC will continue assessment monitoring in accordance with § 257.95 and 391-3-4-.10(6).

6.0 CONCLUSIONS & FUTURE ACTIONS

Statistical evaluations of the groundwater monitoring data for Plant Mitchell Ash Ponds A, 1, and 2 identified SSIs of Appendix III groundwater monitoring constituents. GPC has initiated assessment monitoring pursuant to § 257.95 and 391-3-4-.10(6). During the next semi-annual reporting period of 2020, GPC will update the groundwater protection standards for Appendix IV constituents and conduct statistical analysis according to the regulations. An Appendix IV screening event will be conducted in August 2020 in preparation for the third semi-annual assessment event. The next semi-annual sampling event is planned for September/October 2020.

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TABLE 1
MONITORING NETWORK WELL SUMMARY

Well Name	Installation Date	Latitude ⁽¹⁾	Longitude ⁽¹⁾	Ground Surface Elevation (feet above MSL) (Prior to June 2020 Resurvey)	Ground Surface Elevation (feet above MSL) (June 2020 Resurvey)	Top of Casing Elevation (feet above MSL) (Prior to June 2020 Resurvey)	Top of Casing Elevation (feet above MSL) (June 2020 Resurvey)	Top of Screen Elevation (feet above MSL)	Bottom of Screen Elevation (feet above MSL)	Total Well Depth Measured March 2020 (feet below TOC)	Total Well Depth on Construction Log (feet below land surface)	Groundwater Zone Screened	Location
PZ-1D	6/11/2014	31.4472510	-84.1320950	192.7	193.4	196.21	196.44	125.1	115.1	81.2	78.0	Bedrock	Upgradient
PZ-2D	6/10/2014	31.4464580	-84.1295560	175.1	175.6	178.39	178.51	107.5	97.5	81.0	78.0	Bedrock	Upgradient
PZ-31	10/13/2016	31.4490140	-84.1337190	180.1	180.3	182.86	182.96	133.1	123.1	61.6	57.0	Bedrock	Upgradient
PZ-32	10/12/2016	31.4464859	-84.1309419	178.0	178.2	180.72	180.75	128.7	118.7	65.3	62.0	Bedrock	Upgradient
PZ-7D	6/3/2014	31.4337010	-84.1364880	170.0	170.3	173.13	173.08	123.6	113.6	60.4	57.0	Bedrock	Downgradient
PZ-14	7/25/2016	31.4338283	-84.1338940	180.4	180.9	183.62	183.46	140.4	130.4	53.2	50.0	Bedrock	Downgradient
PZ-15	7/23/2016	31.4341791	-84.1385315	166.9	167.4	170.10	170.37	96.9	86.9	83.2	80.0	Bedrock	Downgradient
PZ-16	7/25/2016	31.4356195	-84.1385225	170.7	171.2	173.71	173.92	130.7	120.7	53.2	50.0	Bedrock	Downgradient
PZ-17	7/22/2016	31.4368865	-84.1368364	169.5	170.1	172.66	172.91	119.5	109.5	62.7	60.0	Bedrock	Downgradient
PZ-18	7/23/2016	31.4384247	-84.1360169	166.6	167.3	169.78	170.11	116.6	106.6	63.2	60.0	Bedrock	Downgradient
PZ-19	7/13/2016	31.4396256	-84.1359816	169.1	169.4	171.96	172.05	120.1	110.1	62.6	59.0	Bedrock	Downgradient
PZ-23A	3/10/2020	31.4403100	-84.1308800	188.9	189.1	191.91	191.85	134.4	124.4	67.4	64.5	Bedrock	Downgradient
PZ-25	7/20/2016	31.4421293	-84.1359850	167.9	168.2	171.12	171.14	117.9	107.9	63.2	60.0	Bedrock	Downgradient
PZ-33	10/1/2016	31.4358587	-84.1325124	186.9	187.1	189.52	189.61	129.1	119.1	73.6	70.4	Bedrock	Downgradient

Notes:

- 1. Horizontal locations referenced to the North American Datum of 1983 (2011).
- 2. MSL indicates feet above mean sea level and referenced to North American Vertical Datum of 1988
- 3. TOC indicates top of casing.

TABLE 2
PIEZOMETER WELL NETWORK SUMMARY

Well Name	Installation Date	Latitude	Longitude	Ground Surface Elevation (feet above MSL) (Prior to June 2020 Resurvey)	Ground Surface Elevation (feet above MSL) (June 2020 Resurvey)	Top of Casing Elevation (feet above MSL) (Prior to June 2020 Resurvey)	Top of Casing Elevation (feet above MSL) (June 2020 Resurvey)	Elevation	Bottom of Screen Elevation (feet above MSL)	Total Well Depth Measured March 2020 (feet below TOC)	Total Well Depth on Construction Log (feet below land surface)	Lithology Screened
PZ-01R	2/10/2016	31.44186900	-84.13488969	188.0	not surveyed	191.87	not surveyed	132.0	122.0	NM	66.7	Overburden (Clay)/Bedrock
PZ-02R	2/3/2016	31.43719112	-84.13433471	188.5	not surveyed	191.66	not surveyed	131.6	121.6	NM	67.2	Overburden (Clay)/Bedrock
PZ-2S	6/10/2014	31.4464610	-84.1295300	175.0	175.6	178.60	178.61	131.0	121.0	57.8	54.4	Overburden (Clay)
PZ-03R	2/9/2016	31.43426595	-84.13546813	189.7	not surveyed	192.35	not surveyed	143.5	133.5	NM	56.4	Overburden (Clay)/Bedrock
PZ-3D	5/28/2014	31.4445480	-84.1303150	187.7	188.1	190.82	190.98	110.1	100.1	91.2	88.0	Bedrock
PZ-4D	5/29/2014	31.4413170	-84.1300250	187.7	188.3	190.84	191.10	142.1	132.1	58.4	56.0	Bedrock
PZ-6S	6/13/2014	31.4359750	-84.1326040	186.2	186.5	189.34	189.47	148.6	138.6	51.4	48.0	Overburden (Clay)
PZ-8D	6/5/2014	31.4337460	-84.1390140	166.7	167.2	170.27	170.35	100.1	90.1	80.9	77.0	Bedrock
PZ-9D	6/4/2014	31.4346460	-84.1392670	162.6	163.2	166.08	166.16	126.0	116.0	49.8	47.0	Bedrock
PZ-10S	6/3/2014	31.43655800	-84.13839400	172.3	172.6	175.51	175.63	136.7	126.7	48.3	46.0	Bedrock
PZ-11S	6/12/2014	31.43833700	-84.13797600	188.2	188.7	191.57	191.69	140.6	130.6	61.4	58.0	Bedrock
PZ-12S	6/4/2014	31.4402100	-84.1375100	169.8	170.9	173.19	173.92	132.2	122.2	51.6	48.0	Bedrock
PZ-20	7/14/2016	31.4408438	-84.1359833	170.4	170.6	173.43	173.44	120.9	110.9	63.0	60.0	Bedrock
PZ-21	7/29/2016	31.4425300	-84.1334808	176.7	177.1	179.83	179.84	116.7	106.7	72.6	70.0	Bedrock
PZ-22	7/28/2016	31.4424857	-84.1308619	184.5	184.8	187.68	187.69	134.5	124.5	62.9	60.0	Bedrock
PZ-24A	3/6/2020	31.4384420	-84.1318360	192.2	192.3	195.07	194.97	142.2	132.2	63.3	61.0	Bedrock
PZ-26	10/1/2016	31.4338003	-84.1395468	163.7	163.9	166.60	166.70	125.2	115.2	52.4	48.5	Bedrock
PZ-27	10/4/2016	31.4364880	-84.1389277	161.5	161.9	164.40	164.58	123.2	113.2	52.2	48.3	Bedrock
PZ-28	10/13/2016	31.4379002	-84.1385672	163.0	163.5	165.67	165.96	126.0	116.0	50.8	47.0	Bedrock
PZ-29	10/4/2016	31.4403815	-84.1377770	170.0	170.4	172.95	173.18	123.5	113.5	60.5	56.5	Bedrock
MW-102	2/22/1995	31.4421720	-84.1359780	168.0	168.1	170.75	170.93	131.9	122.7	49.4	45.9	Bedrock
MW-108	2/16/1995	31.4340710	-84.1336680	183.0	182.8	185.59	185.47	145.3	136.2	54.5	47.4	Bedrock
MW-111	2/21/1995	31.4342270	-84.1386880	165.3	165.3	168.00	168.06	127.8	118.8	48.1	47.1	Bedrock
MW-113	2/21/1995	31.4362570	-84.1378240	172.1	171.9	174.76	174.61	129.8	120.4	52.0	52.4	Bedrock
MW-115	2/21/1995	31.4375780	-84.1362130	166.2	166.2	168.97	169.05	88.6	79.5	90.2	87.3	Bedrock
MW-116	2/23/1995	31.4398160	-84.1362120	169.0	168.9	171.86	171.69	100.8	94.4	79.3	75.2	Bedrock

Notes:

- 1. Horizontal locations referenced to the North American Datum of 1983 (2011).
- 2. MSL indicates feet above mean sea level and referenced to North American Vertical Datum of 1988
- 3. TOC indicates top of casing.
- 4. Wells PZ-01R, PZ-02R, PZ-03R were not accessible due to construction activities and were not resurveyed
- 5. NM indicates not measured

TABLE 3 GROUNDWATER SAMPLING EVENTS

		Sui	mmary of Sar	npling Eve	ents	
Well ID	Hydraulic Location	March 25 - 28, 2019	August 20 - 22, 2019	September 10 and October 1 - 3, 2019	March 24 - 26, 2020	Status of Monitoring Well
Purpose of Sampli	ng Event	Detection	Initial Assessment Screening	Assessment	Assessment	
ASH PONDS MONITORING	WELL NETWORK					
PZ-1D	Upgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-2D	Upgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-7D	Downgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-14	Downgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-15	Downgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-16	Downgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-17	Downgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-18	Downgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-19	Downgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-23	Downgradient	D01	Initial	A01		Assessment Monitoring
PZ-23A	Downgradient				A02	Assessment Monitoring
PZ-25	Downgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-31	Upgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-32	Upgradient	D01	Initial	A01	A02	Assessment Monitoring
PZ-33	Downgradient	D01	Initial	A01	A02	Assessment Monitoring

Notes:

DXX - Detection Event Number

AXX - Assessment Event Number

Initial - Initial Assessment Screening Event for Appendix IV constituents

New well PZ-23A replaces PZ-23 after PZ-23 was abandoned due to construction activities in pond area

TABLE 4
SUMMARY OF GROUNDWATER ELEVATIONS

Well ID	Top of Casing Elevation (feet above MSL) (Elevations prior to June 2020 Resurvey)	Event #10 8/20/2019 Depth to Water (ft below TOC)	Event #10 8/20/2019 Groundwater Elevation * (feet above MSL)	Event #11 10/1/2019 Depth to Water (ft below TOC)	Event #11 10/1/2019 Groundwater Elevation * (feet above MSL)	Top of Casing Elevation (feet above MSL) (June 2020 Resurvey TOC Elevations)	Event #12 3/23/2020 Depth to Water (ft below TOC)	Event #12 3/23/2020 Groundwater Elevation ** (feet above MSL)	Differences in TOC Elevations
MW-102	170.75	32.65	138.10	34.38	136.37	170.93	22.37	148.56	0.18
MW-105	187.52	48.19	139.33	Aban	doned		Aban	doned	1
MW-108	185.59	47.62	137.97	48.69	136.90	185.47	37.71	147.76	-0.12
MW-111	168.00	30.63	137.37	32.60	135.40	168.06	22.95	145.11	0.06
MW-113	174.76	37.42	137.34	38.33	136.43	174.61	22.65	151.96	-0.15
MW-115	168.97	31.15	137.82	33.11	135.86	169.05	22.70	146.35	0.08
MW-116	171.86	34.21	137.65	35.72	136.14	171.69	24.17	147.52	-0.17
PZ-1D	196.21	53.98	142.23	55.95	140.26	196.44	40.42	156.02	0.23
PZ-01R	191.87	53.39	138.48	55.54	136.33		N	М	1
PZ-2D	178.39	37.15	141.24	39.42	138.97	178.51	22.64	155.87	0.12
PZ-02R	191.66	53.34	138.32	54.78	136.88		N	М	
PZ-2S	178.60	37.25	141.35	39.45	139.15	178.61	22.55	156.06	0.01
PZ-3D	190.82	50.27	140.55	52.24	138.58	190.98	37.44	153.54	0.16
PZ-03R	192.35	54.71	137.64	56.00	136.35		N	М	
PZ-4D	190.84	51.16	139.68	52.49	138.35	191.10	39.61	151.49	0.26
PZ-5D	193.82	52.99	140.83	Aban	doned		Aban	doned	1
PZ-6S	189.34	20.23	169.11	24.87	164.47	189.47	11.22	178.25	0.13
PZ-7D	173.13	35.34	137.79	37.15	135.98	173.08	27.04	146.04	-0.05
PZ-8D	170.27	32.95	137.32	34.89	135.38	170.35	25.03	145.32	0.08
PZ-9D	166.08	28.86	137.22	30.66	135.42	166.16	20.94	145.22	0.08
PZ-10S	175.51	38.42	137.09	39.61	135.90	175.63	27.48	148.15	0.12
PZ-11S	191.57	54.51	137.06	55.89	135.68	191.69	45.63	146.06	0.12
PZ-12S	173.19	36.26	136.93	38.13	135.06	173.92	27.16	146.76	0.73
PZ-14	183.62	45.58	138.04	46.72	136.90	183.46	36.02	147.44	-0.16
PZ-15	170.10	32.88	137.22	34.87	135.23	170.37	25.21	145.16	0.27
PZ-16	173.71	36.81	136.90	38.13	135.58	173.92	27.27	146.65	0.21
PZ-17	172.66	34.82	137.84	36.65	136.01	172.91	25.21	147.70	0.25
PZ-18	169.78	32.19	137.59	33.97	135.81	170.11	22.71	147.40	0.33
PZ-19	171.96	34.52	137.44	35.91	136.05	172.05	24.16	147.89	0.09
PZ-20	173.43	35.87	137.56	37.15	136.28	173.44	24.60	148.84	0.01
PZ-21	179.83	41.04	138.79	42.61	137.22	179.84	30.71	149.13	0.01
PZ-22	187.68	48.25	139.43	49.63	138.05	187.69	36.71	150.98	0.01
PZ-23	191.62	52.84	138.78	Aban	doned		Aban	doned	
PZ-23A	191.91	Not Ir	nstalled	Not Ir	stalled	191.85	40.11	151.74	-0.06
PZ-24	194.91	56.26	138.65		doned		Aban	doned	
PZ-24A	195.07	Not Ir	stalled	Not Ir	stalled	194.97	45.26	149.71	-0.10
PZ-25	171.12	32.89	138.23	34.66	136.46	171.14	22.41	148.73	0.02
PZ-26	166.60	29.28	137.32	31.26	135.34	166.70	21.63	145.07	0.10
PZ-27	164.40	27.47	136.93	28.83	135.57	164.58	16.88	147.70	0.18
PZ-28	165.67	28.83	136.84	29.73	135.94	165.96	19.03	146.93	0.29
PZ-29	172.95	35.44	137.51	37.41	135.54	173.18	26.91	146.27	0.23
PZ-31	182.86	40.73	142.13	42.56	140.30	182.96	26.84	156.12	0.10
PZ-32	180.72	39.64	141.08	41.57	139.15	180.75	25.02	155.73	0.03
PZ-33	189.52	51.23	138.29	52.54	136.98	189.61	41.40	148.21	0.09

Notes:

NM - Not measured.

MSL - Mean Sea Level

TOC - Top of Casing

Wells PZ-01R, PZ-03R, PZ-03R could not be measured during Event #12 as the wells were inaccessible due to construction activities near wells.

 $^{^{\}star}$ Events #10 and #11 Groundwater elevations calculated using TOC elevations from prior to June 2020

^{**} Event #12 Groundwater elevations calculated using TOC elevations re-surveyed in June 2020

TABLE 5
GROUNDWATER FLOW VELOCITY CALCULATIONS

Potentiometric Map Date	Water-Bearing Zone	Location	Groundwate in Wel (h ₁ ,	l Pairs h ₂)	Change in Elevation (Δh) (feet)	Distance Measured (L) (feet)	Hydraulic Gradient (i) (feet/feet)	Average Hydraulic Conductivity (K) (feet/day)	Estimated Effective Porosity (n _e)	Calculated Groundwater Flow Velocity (V) (feet/day)	Calculated Groundwater Flow Velocity (V) (feet/year)
August 2019	Limestone	PZ-01D to PZ-21	142.23	138.79	3.44	1740	0.002	3.04	0.2	0.03	11.0
August 2019	Limestone	PZ-22 to PZ-19	139.43	137.44	1.99	1920	0.001	3.04	0.2	0.02	7.3
August 2019	Limestone	PZ-2R to PZ-16	138.32	136.90	1.42	1440	0.001	3.04	0.2	0.01	3.7
October 2019	Limestone	PZ-01D to PZ-1R	140.26	136.33	3.93	2130	0.002	3.04	0.2	0.03	11.0
October 2019	Limestone	PZ-04D to PZ-19	138.35	136.05	2.30	1950	0.001	3.04	0.2	0.02	7.3
October 2019	Limestone	PZ-33 to PZ-15	136.98	135.23	1.75	1980	0.001	3.04	0.2	0.01	3.7
March 2020	Limestone	PZ-32 to PZ-21	155.73	149.13	6.60	1620	0.004	3.04	0.2	0.06	21.9
March 2020	Limestone	PZ-23A to MW-115	151.74	146.35	5.39	1980	0.003	3.04	0.2	0.04	14.6
March 2020	Limestone	PZ-33 to PZ-07D	148.21	146.04	2.17	1470	0.001	3.04	0.2	0.02	7.3

TABLE 6 ANALYTICAL DATA SUMMARY APPENDIX III

SEPTEMBER-OCTOBER 2019 AND MARCH 2020

Well Name	Sample Date	Boron	Calcium	Chloride	Fluoride	рН	Sulfate	TDS
PZ-1D	10/1/2019	0.0064 (J)	46.8	3.6	0.062 (J)	7.5	2.8	146
PZ-1D	3/24/2020	0.013 (J)	48.0	2.8	< 0.050	7.8	3.0	228
PZ-2D	10/2/2019	0.011 (J)	21.0	2.7	0.11 (J)	9.0	4.1	95.0
PZ-2D	3/24/2020	0.015 (J)	26.5	2.2	0.051 (J)	8.6	3.1	123
PZ-7D	10/3/2019	0.24	127	5.9	0.041 (J)	6.9	59.6	405
PZ-7D	3/26/2020	0.24	122	4.8	< 0.050	7.1	57.1	332
PZ-14	10/2/2019	0.021 (J)	103	5.4	0.056 (J)	7.0	6.2	312
PZ-14	3/25/2020	0.027 (J)	105	4.2	< 0.050	7.0	11.9	330
PZ-15	10/2/2019	0.17	101	8.0	0.075 (J)	7.2	83.0	355
PZ-15	3/26/2020	0.21	103	7.0	0.056 (J)	7.1	83.6	330
PZ-16	10/2/2019	0.19	89.1	7.7	0.053 (J)	7.2	48.5	284
PZ-16	3/26/2020	0.19	89.8	7.0	< 0.050	7.1	43.5	286
PZ-17	10/2/2019	0.28	115	7.9	0.063 (J)	7.0	104	415
PZ-17	3/25/2020	0.33	121	6.1	< 0.050	6.9	92.4	408
PZ-18	10/3/2019	0.35	139	7.0	0.043 (J)	6.8	95.8	464
PZ-18	3/26/2020	0.36	138	5.7	< 0.050	7.0	91.0	415
PZ-19	10/3/2019	0.52	125	5.6	0.084 (J)	6.9	84.9	485
PZ-19	3/26/2020	0.60	158	5.4	0.077 (J)	6.7	84.9	440
PZ-23	9/10/2019	0.15	137	3.8	< 0.050	6.8	45.1	420
PZ-23A	3/25/2020	0.19	157	6.4	0.066 (J)	6.8	47.0	454
PZ-25	10/2/2019	0.21	92.3	2.6	0.16 (J)	7.2	43.0	312
PZ-25	3/25/2020	0.21	97.5	1.6	0.13 (J)	7.0	39.1	280
PZ-31	10/2/2019	0.0084 (J)	95.5	4.3	0.057 (J)	7.1	1.6	263
PZ-31	3/25/2020	0.011 (J)	95.8	3.0	< 0.050	7.2	1.5	278
PZ-32	10/1/2019	0.011 (J)	64.3	3.1	0.042 (J)	7.4	2.2	187
PZ-32	3/25/2020	0.016 (J)	66.6	2.2	< 0.050	7.2	1.9	178
PZ-33	10/3/2019	0.36	110	4.1	0.060 (J)	7.0	72.1	414
PZ-33	3/26/2020	0.38	122	2.9	< 0.050	7.0	66.6	336
Dup-01 (PZ-17)	10/2/2019	0.30	125	7.8	0.063 (J)	7.0	102	418
Dup-02 (PZ-25)	10/2/2019	0.21	93.2	2.6	0.17 (J)	7.2	42.9	315
Dup-01 (PZ-7D)	3/26/2020	0.25	125	4.8	<0.050	7.1	57.8	333
Dup-02 (PZ-19)	3/26/2020	0.61	155	5.3	0.075 (J)	6.7	83.9	512

Notes:

- 1. Results for metals and anions are reported in milligrams per liter (mg/L). Results for pH are reported in standard units
- 2. < indicates the analyte was not detected above the analytical method detection limit (MDL).
- 3. (J) indicates the constituent was detected between the analytical method detection limit and laboratory reporting limit. The value followed by (J) is qualified by the laboratory as estimated.
- 4. TDS indicates total dissolved solids.

TABLE 7 ANALYTICAL DATA SUMMARY APPENDIX IV

AUGUST, SEPTEMBER-OCTOBER 2019 AND MARCH 2020

Well Name	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium	Selenium	Thallium
PZ-1D	8/20/2019	0.00074 (J)	< 0.00035	0.017	<0.00074	< 0.00011	0.0028 (J)	< 0.00030	< 0.029	0.00021 (J)	< 0.00078	< 0.00014	< 0.00095	0.595 U	< 0.0013	< 0.000052
PZ-1D	10/1/2019	0.00076 (J)	< 0.00035	0.016	NA	NA	0.0022 (J)	< 0.00030	0.062 (J)	< 0.000046	< 0.00078	NA	0.0010 (J)	0.953 U	< 0.0013	< 0.000052
PZ-1D	3/24/2020	0.00055 (J)	< 0.00035	0.015	NA	NA	0.0036 (J)	< 0.00030	< 0.050	0.000062 (J)	< 0.00078	NA	0.0010 (J)	2.23	< 0.0013	< 0.000052
PZ-2D	8/21/2019	0.00030 (J)	0.0014 (J)	0.0042 (J)	<0.000074	< 0.00011	0.0057 (J)	< 0.00030	0.046 (J)	< 0.000046	0.0018 (J)	< 0.00014	< 0.00095	0.710 U	< 0.0013	< 0.000052
PZ-2D	10/2/2019	0.00042 (J)	0.0022 (J)	0.0046 (J)	NA	NA	0.0049 (J)	< 0.00030	0.11 (J)	0.000047 (J)	0.0016 (J)	NA	< 0.00095	0.712 U	< 0.0013	< 0.000052
PZ-2D	3/24/2020	0.00037 (J)	< 0.00035	0.0046 (J)	NA	NA	0.0047 (J)	< 0.00030	0.051 (J)	< 0.000046	0.0019 (J)	NA	< 0.00095	0.898 U	< 0.0013	< 0.000052
PZ-7D	8/22/2019	< 0.00027	< 0.00035	0.0067 (J)	<0.000074	< 0.00011	0.0013 (J)	< 0.00030	< 0.029	< 0.000046	0.0029 (J)	< 0.00014	< 0.00095	0.672 U	< 0.0013	0.000086 (J)
PZ-7D	10/3/2019	0.00029 (J)	< 0.00035	0.0070 (J)	NA	NA	0.00040 (J)	< 0.00030	0.041 (J)	< 0.000046	0.0032 (J)	NA	< 0.00095	1.37	0.0017 (J)	0.000078 (J)
PZ-7D	3/26/2020	0.00042 (J)	< 0.00035	0.0072 (J)	NA	NA	0.0016 (J)	< 0.00030	< 0.050	< 0.000046	0.0031 (J)	NA	< 0.00095	0.430 U	< 0.0013	0.000085 (J)
PZ-14	8/21/2019	0.00039 (J)	< 0.00035	0.017	<0.000074	< 0.00011	0.00073 (J)	< 0.00030	< 0.029	0.000064 (J)	< 0.00078	< 0.00014	< 0.00095	0.705 U	< 0.0013	< 0.000052
PZ-14	10/2/2019	< 0.00027	0.00083 (J)	0.017	NA	NA	< 0.00039	< 0.00030	0.056 (J)	< 0.000046	< 0.00078	NA	< 0.00095	0.915 U	0.0015 (J)	< 0.000052
PZ-14	3/25/2020	< 0.00027	< 0.00035	0.021	NA	NA	0.0013 (J)	< 0.00030	< 0.050	< 0.000046	< 0.00078	NA	< 0.00095	0.694 U	< 0.0013	< 0.000052
PZ-15	8/21/2019	< 0.00027	< 0.00035	0.050	<0.000074	< 0.00011	0.00048 (J)	< 0.00030	0.044 (J)	< 0.000046	0.0013 (J)	< 0.00014	< 0.00095	1.86	< 0.0013	0.00022 (J)
PZ-15	10/2/2019	< 0.00027	< 0.00035	0.049	NA	NA	< 0.00039	< 0.00030	0.075 (J)	< 0.000046	0.0013 (J)	NA	< 0.00095	1.00 U	< 0.0013	0.00016 (J)
PZ-15	3/26/2020	< 0.00027	< 0.00035	0.048	NA	NA	< 0.00039	< 0.00030	0.056 (J)	< 0.000046	0.0014 (J)	NA	< 0.00095	0.863 U	< 0.0013	0.00014 (J)
PZ-16	8/21/2019	< 0.00027	0.00036 (J)	0.034	<0.000074	< 0.00011	0.00095 (J)	< 0.00030	< 0.029	< 0.000046	< 0.00078	< 0.00014	< 0.00095	0.453 U	< 0.0013	0.000057 (J)
PZ-16	10/2/2019	< 0.00027	< 0.00035	0.038	NA	NA	0.00044 (J)	< 0.00030	0.053 (J)	0.000081 (J)	< 0.00078	NA	< 0.00095	0.650 U	< 0.0013	0.000053 (J)
PZ-16	3/26/2020	< 0.00027	< 0.00035	0.034	NA	NA	0.0013 (J)	< 0.00030	< 0.050	< 0.000046	< 0.00078	NA	< 0.00095	0.522 U	< 0.0013	< 0.000052
PZ-17	8/22/2019	< 0.00027	< 0.00035	0.078	<0.000074	< 0.00011	< 0.00039	< 0.00030	0.11 (J)	< 0.000046	0.0025 (J)	< 0.00014	< 0.00095	0.977 U	< 0.0013	0.00018 (J)
PZ-17	10/2/2019	< 0.00027	< 0.00035	0.074	NA	NA	< 0.00039	< 0.00030	0.063 (J)	< 0.000046	0.0024 (J)	NA	< 0.00095	1.34 U	< 0.0013	0.00016 (J)
PZ-17	3/25/2020	0.00094 (J)	< 0.00035	0.077	NA	NA	< 0.00039	0.00032 (J)	< 0.050	< 0.000046	0.0030 (J)	NA	< 0.00095	0.385 U	< 0.0013	0.00020 (J)
PZ-18	8/22/2019	0.00045 (J)	< 0.00035	0.022	<0.000074	< 0.00011	0.00081 (J)	< 0.00030	< 0.029	< 0.000046	0.0026 (J)	< 0.00014	< 0.00095	0.753 U	< 0.0013	0.000070 (J)
PZ-18	10/3/2019	< 0.00027	< 0.00035	0.025	NA	NA	< 0.00039	< 0.00030	0.043 (J)	< 0.000046	0.0027 (J)	NA	< 0.00095	2.07	< 0.0013	< 0.000052
PZ-18	3/26/2020	0.0018 (J)	< 0.00035	0.023	NA	NA	0.00056 (J)	< 0.00030	< 0.050	< 0.000046	0.0027 (J)	NA	< 0.00095	1.05	< 0.0013	0.000071 (J)
PZ-19	8/22/2019	< 0.00027	< 0.00035	0.047	<0.000074	< 0.00011	< 0.00039	< 0.00030	0.10 (J)	< 0.000046	0.012 (J)	< 0.00014	0.0021 (J)	1.37	< 0.0013	0.00055 (J)
PZ-19	10/3/2019	0.00044 (J)	< 0.00035	0.057	NA	NA	< 0.00039	< 0.00030	0.084 (J)	< 0.000046	0.016 (J)	NA	0.0024 (J)	1.90	0.0034 (J)	0.00071 (J)
PZ-19	3/26/2020	< 0.00027	< 0.00035	0.052	NA	NA	0.00073 (J)	< 0.00030	0.077 (J)	< 0.000046	0.013 (J)	NA	0.0021 (J)	1.66	0.0016 (J)	0.00068 (J)
PZ-23	8/21/2019	0.00055 (J)	< 0.00035	0.032	<0.000074	< 0.00011	0.0024 (J)	< 0.00030	< 0.029	< 0.000046	0.00090 (J)	< 0.00014	< 0.00095	2.31	0.0022 (J)	0.00016 (J)
PZ-23	9/10/2019	< 0.00027	0.00036 (J)	0.029	NA	NA	0.0044 (J)	< 0.00030	< 0.050	< 0.000046	< 0.00078	NA	< 0.00095	0.575 U	0.0018 (J)	< 0.000052
PZ-23A	3/25/2020	< 0.00027	< 0.00035	0.048	NA	NA	0.0012 (J)	0.00030 (J)	0.066 (J)	0.00015 (J)	0.0011 (J)	NA	0.0011 (J)	1.39	0.0030 (J)	0.00015 (J)
PZ-25	8/21/2019	0.0014 (J)	< 0.00035	0.10	<0.000074	< 0.00011	< 0.00039	0.0015 (J)	0.11 (J)	0.00041 (J)	0.0072 (J)	< 0.00014	0.0014 (J)	1.18 U	< 0.0013	0.00046 (J)
PZ-25	10/2/2019	< 0.00027	0.00063 (J)	0.11	NA	NA	< 0.00039	0.0017 (J)	0.16 (J)	< 0.000046	0.0074 (J)	NA	< 0.00095	1.48	< 0.0013	0.00024 (J)
PZ-25	3/25/2020	< 0.00027	< 0.00035	0.11	NA	NA	< 0.00039	0.0018 (J)	0.13 (J)	< 0.000046	0.0066 (J)	NA	< 0.00095	0.910 U	< 0.0013	0.00037 (J)
PZ-31	8/21/2019	0.00056 (J)	< 0.00035	0.0070 (J)	<0.000074	< 0.00011	0.0016 (J)	< 0.00030	< 0.029	0.00011 (J)	< 0.00078	< 0.00014	< 0.00095	1.20 U	< 0.0013	0.000061 (J)
PZ-31	10/2/2019	< 0.00027	< 0.00035	0.0067 (J)	NA	NA	0.00043 (J)	< 0.00030	0.057 (J)	0.000081 (J)	< 0.00078	NA	< 0.00095	0.0883 U	< 0.0013	< 0.000052
PZ-31	3/25/2020	< 0.00027	< 0.00035	0.0082 (J)	NA	NA	0.0013 (J)	< 0.00030	< 0.050	< 0.000046	< 0.00078	NA	< 0.00095	1.79	< 0.0013	< 0.000052
PZ-32	8/20/2019	< 0.00027	< 0.00035	0.016	<0.00074	< 0.00011	0.00044 (J)	< 0.00030	< 0.029	< 0.000046	< 0.00078	< 0.00014	< 0.00095	0.334 U	< 0.0013	< 0.000052
PZ-32	10/1/2019	< 0.00027	< 0.00035	0.015	NA	NA	< 0.00039	< 0.00030	0.042 (J)	< 0.000046	< 0.00078	NA	< 0.00095	1.01 U	< 0.0013	< 0.000052
PZ-32	3/25/2020	< 0.00027	< 0.00035	0.015	NA	NA	0.00086 (J)	< 0.00030	< 0.050	< 0.000046	< 0.00078	NA	< 0.00095	0.333 U	< 0.0013	< 0.000052
PZ-33	8/22/2019	< 0.00027	< 0.00035	0.064	<0.00074	< 0.00011	< 0.00039	< 0.00030	< 0.029	< 0.000046	< 0.00078	< 0.00014	< 0.00095	0.513 U	< 0.0013	0.00017 (J)
PZ-33	10/3/2019	< 0.00027	< 0.00035	0.057	NA	NA	< 0.00039	< 0.00030	0.060 (J)	0.000047 (J)	< 0.00078	NA	< 0.00095	1.62 U	< 0.0013	0.00018 (J)
PZ-33	3/26/2020	< 0.00027	< 0.00035	0.057	NA	NA	< 0.00039	< 0.00030	< 0.050	< 0.000046	< 0.00078	NA	< 0.00095	0.473 U	< 0.0013	0.00015 (J)

TABLE 7

ANALYTICAL DATA SUMMARY

APPENDIX IV

AUGUST, SEPTEMBER-OCTOBER 2019 AND MARCH 2020

Well Name	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium	Selenium	Thallium
Dup-01 (PZ-19)	8/22/2019	< 0.00027	< 0.00035	0.049	<0.000074	< 0.00011	< 0.00039	< 0.00030	0.079 (J)	< 0.000046	0.012 (J)	< 0.00014	0.0022 (J)	1.55	< 0.0013	0.00058 (J)
Dup-02 (PZ-33)	8/22/2019	< 0.00027	< 0.00035	0.062	<0.000074	< 0.00011	< 0.00039	< 0.00030	< 0.029	< 0.000046	< 0.00078	< 0.00014	< 0.00095	0.907 U	< 0.0013	0.00017 (J)
Dup-01 (PZ-17)	10/2/2019	< 0.00027	< 0.00035	0.083	NA	NA	< 0.00039	< 0.00030	0.063 (J)	< 0.000046	0.0026 (J)	NA	< 0.00095	1.17 U	< 0.0013	0.00017 (J)
Dup-02(PZ-25)	10/2/2019	< 0.00027	0.00045 (J)	0.12	NA	NA	< 0.00039	0.0017 (J)	0.17 (J)	< 0.000046	0.0078 (J)	NA	< 0.00095	0.977 U	< 0.0013	0.00024 (J)
DUP-01(PZ-7D)	3/26/2020	0.00065 (J)	< 0.00035	0.0075 (J)	NA	NA	0.0019 (J)	<0.00030	<0.050	<0.000046	0.0032 (J)	NA	<0.00095	0.594 U	<0.0013	0.000085 (J)
DUP-02 (PZ-19)	3/26/2020	< 0.00027	< 0.00035	0.052	NA	NA	< 0.00039	<0.00030	0.075 (J)	<0.000046	0.013 (J)	NA	0.0020 (J)	1.63	0.0017 (J)	0.00068 (J)

Notes:

- 1. Results for metals are reported in milligrams per liter (mg/L). Results for radium are reported in pCi/L (picocuries per liter).
- 2. < indicates the analyte was not detected above the analytical method detection limit (MDL).
- 3. (J) indicates the constituent was detected between the analytical method detection limit and laboratory reporting limit. The value followed by (J) is qualified by the laboratory as estimated.
- 4. U indicates the constituent was not detected above the analytical Minimum Detection Concentration (MDC), specific to combined radium results. The value followed by U is qualified by the laboratory as estimated.
- 5. NA indicates constituent was not analyzed.
- 6. Beryllium, Cadmium, and Mercury were not detected in the initial assessment constituent screening and were not analyzed in the October 2019 and March 2020 events.

TABLE 9
SUMMARY OF GROUNDWATER PROTECTION STANDARDS

Constituent	Units	MCL	Federal CCR Rule Specified Limit	Site-Specific Background October 2019	Site-Specific Background March 2020	State Derived Site GWPS ⁽²⁾ October 2019	State Derived Site GWPS ⁽²⁾ March 2020
Antimony	mg/L	0.006		0.0035	0.0035	0.006	0.006
Arsenic	mg/L	0.01		0.005	0.005	0.01	0.01
Barium	mg/L	2.0		0.066	0.067	2.0	2.0
Beryllium	mg/L	0.004		0.003	0.003	0.004	0.004
Cadmium	mg/L	0.005		0.001	0.001	0.005	0.005
Chromium	mg/L	0.1		0.011	0.011	0.1	0.1
Cobalt ⁽¹⁾	mg/L		0.006	0.005	0.005	0.005	0.005
Fluoride	mg/L	4.0		0.3	0.3	4.0	4.0
Lead ^{(1) (3)}	mg/L		0.015	0.005	0.005	0.005	0.005
Lithium ^{(1) (4)}	mg/L		0.04	0.03	0.03	0.03	0.03
Mercury	mg/L	0.002		0.0005	0.0005	0.002	0.002
Molybdenum ⁽¹⁾	mg/L		0.1	0.01	0.01	0.01	0.01
Combined Radium	piC/L	5.0		1.36	1.906	5.0	5.0
Selenium	mg/L	0.05		0.01	0.01	0.05	0.05
Thallium	mg/L	0.002		0.001	0.001	0.002	0.002

Notes:

mg/L - milligrams per liter

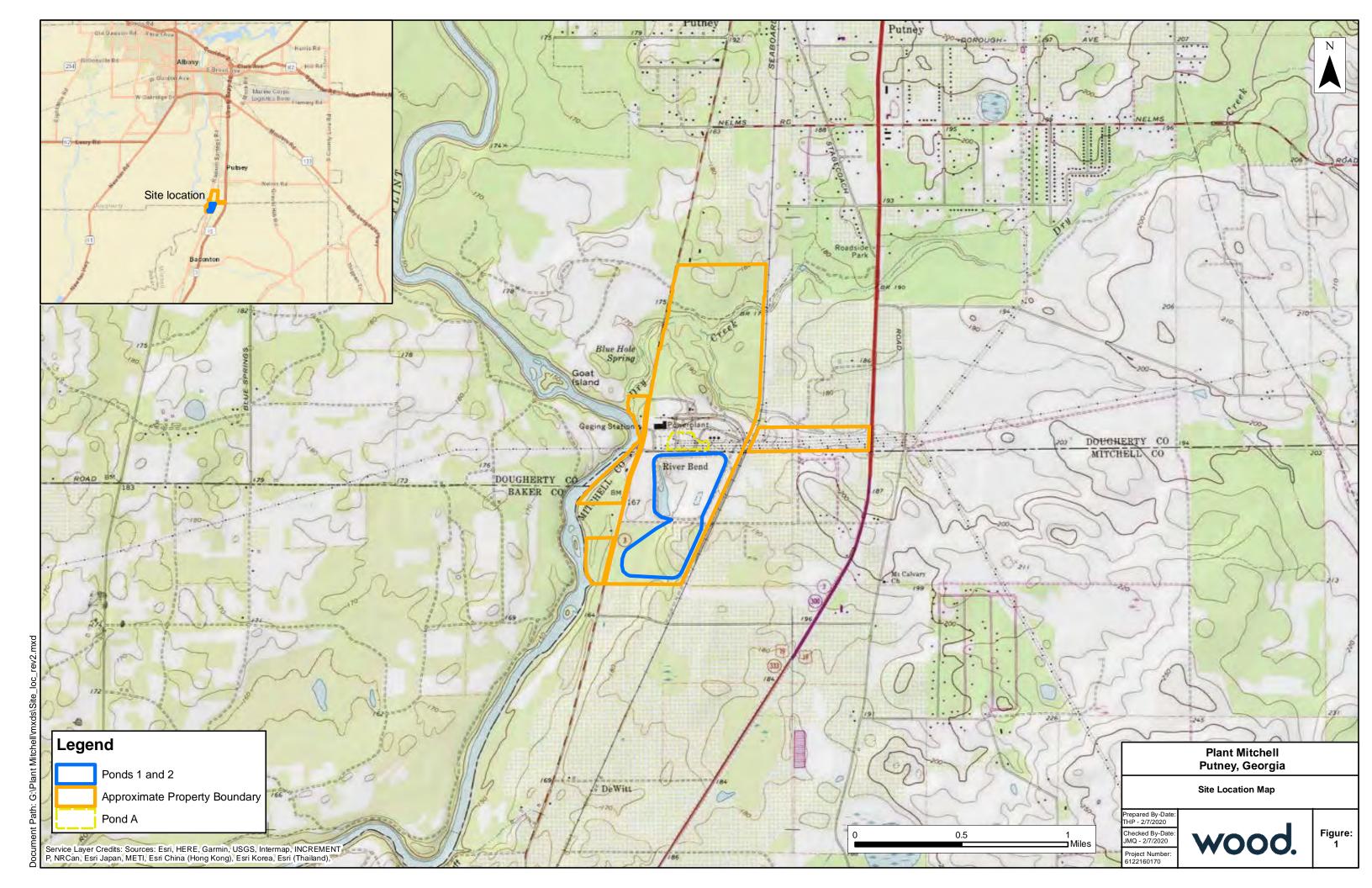
piC/L - picoCuries per liter

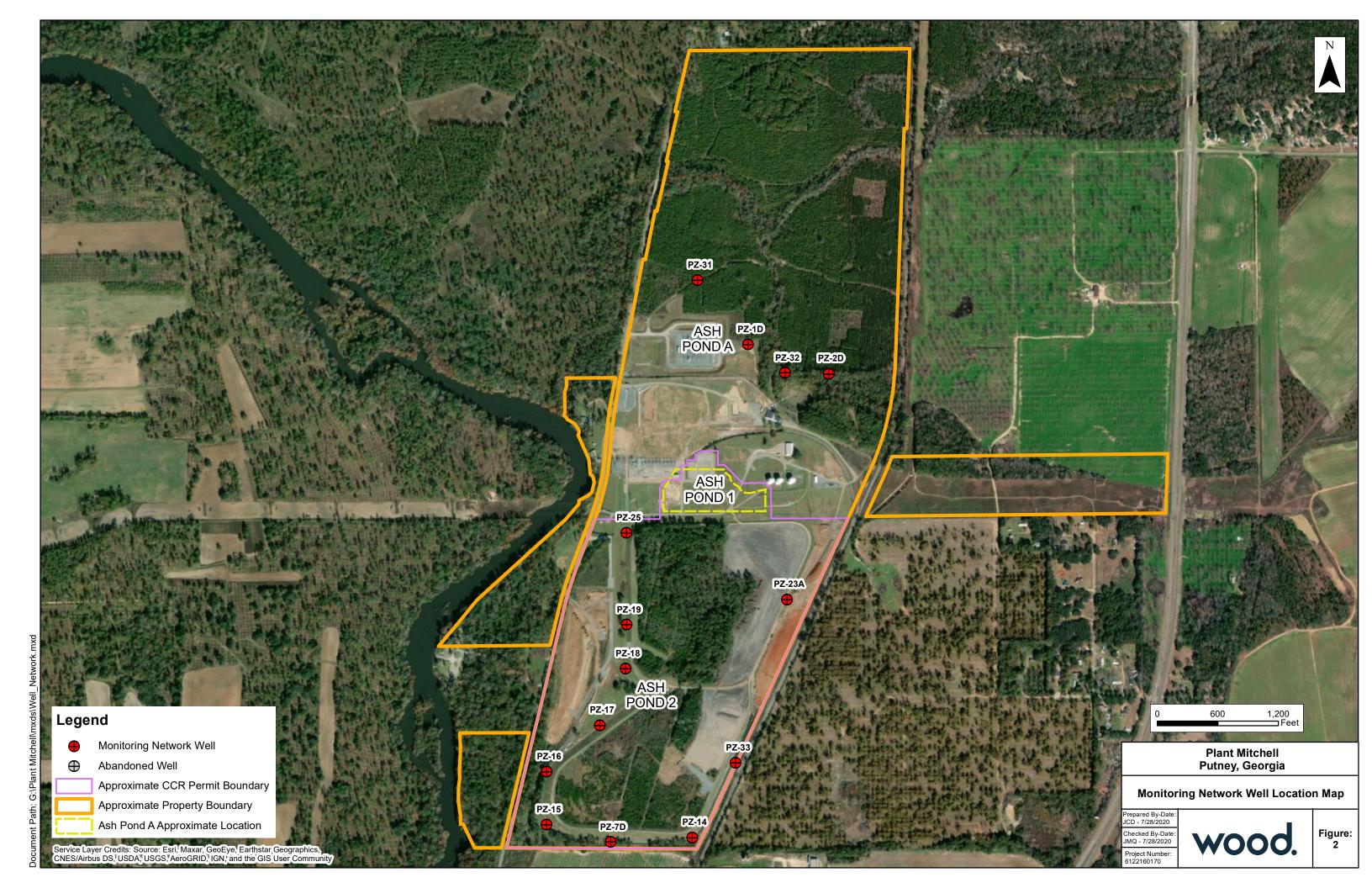
MCL - Maximum Contaminant Level

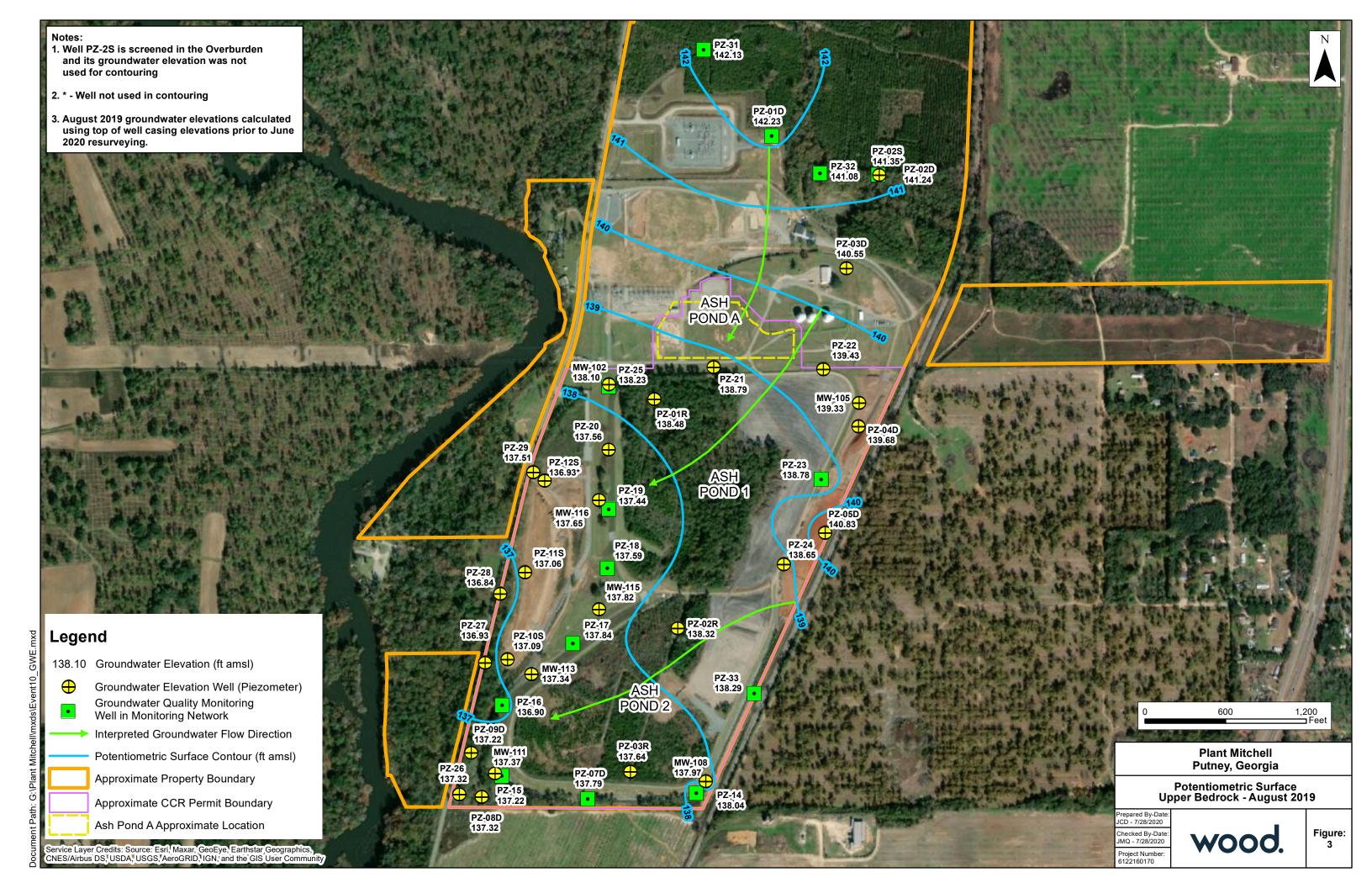
Federal CCR Rule 40 CFR § 257.95 (h) Amendment July 30, 2018 lists levels for cobalt, lead, lithium, and molybdenum.

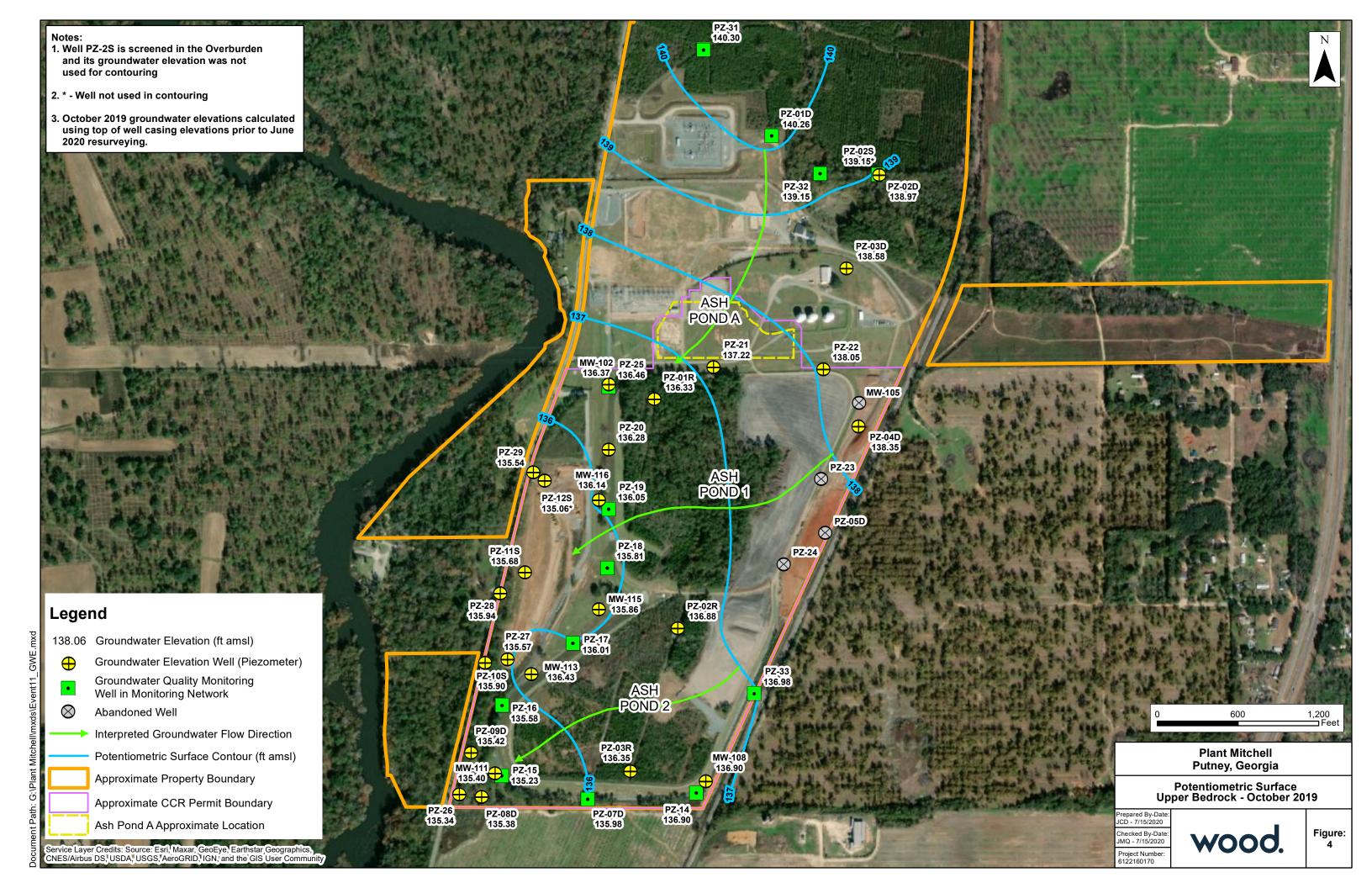
GWPS - Groundwater Protection Standard

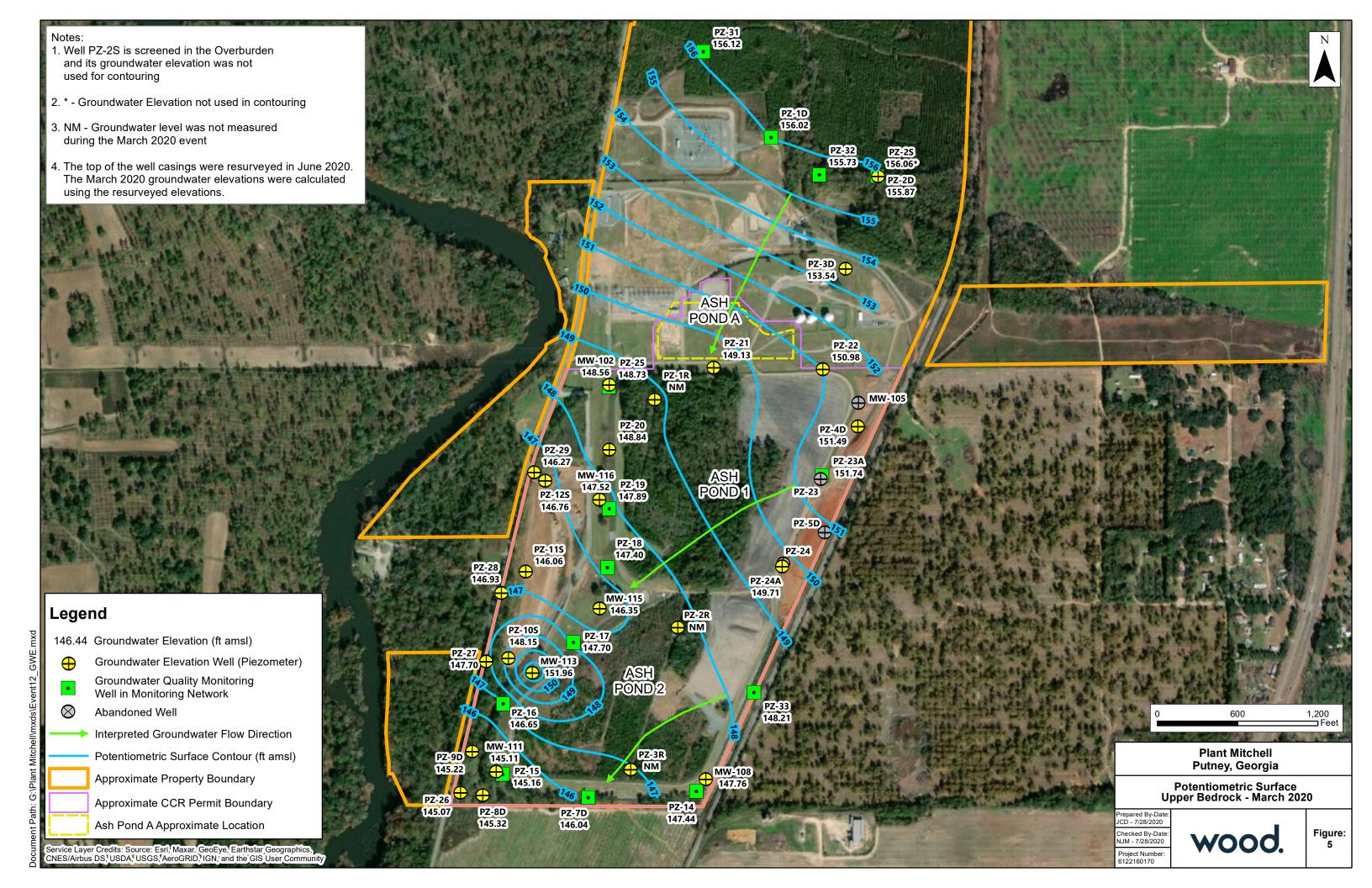
- (1) Constituent without an established MCL. The background limits were used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia Environmental Protection Division (EPD) Rule 391-3-4-.10(6)(a).
- (2) Under the existing Georgia EPD Rules, the GWPS is: (i) the MCL, (ii) where the MCL is not established, the background concentration, or (iii) background concentrations for constituents where the background level is higher than the MCL.
- (3) Currently, there is no MCL established for lead. The value listed is the established USEPA Action Level for drinking water.
- (4) The background tolerance limit (TL) used to evaluate GWPS for lithium is equal to the most recent laboratory specified reporting limit (RL). Per the Statistical Analysis Plan, and in accordance with the Unified Guidance, a non-parametric limit approach was used since the data set contains greater than 50% non-detect results for this analyte. Under this approach, the TL equals the highest value reported, for which is the laboratory RL. However, the highest laboratory RL used was 0.05 mg/L. As a result, we have modified the GWPS to be equal to the most recently used RL (0.03 mg/L).

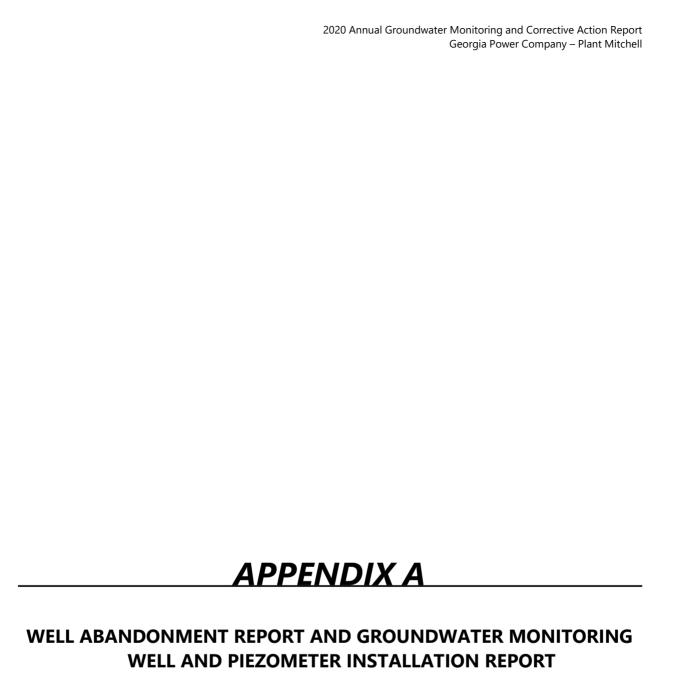














November 15, 2019

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Mr. Ben Hodges Southern Company 241 Ralph McGill Blvd NE Bin 10185 Atlanta, GA 30308

Subject: Phase I Well Abandonment Report at Plant Mitchell (CCR Wells)

Albany, Dougherty and Mitchell County, Georgia

Wood Project No. 6122160170.1919

Dear Mr. Hodges:

Wood Environment & Infrastructure Solutions, Inc. (Wood) is pleased to submit this letter summarizing the abandonment of monitoring wells at Plant Mitchell in Albany, Dougherty County, Georgia (Site). The closure of the monitoring wells was conducted in preparation for Phase 1 construction activities relating to ash removal that would impact the current locations of select monitoring wells in the Coal Combustion Residuals (CCR) monitoring and gauging program.

Summary of Abandonment Activities

The following CCR wells located around the ash ponds were abandoned: MW-104, MW-105, PZ-05D, PZ-23 and PZ-24 located along the eastern perimeter of Ash Pond 1 and MW-106 and MW-109 located along the eastern and southern perimeter of Ash Pond 2. Well abandonment records are included as Attachment A and the locations are shown on the figure included as Attachment B.

A Wood representative provided oversight and documentation of the abandonment activities, which were conducted by Southern Company's Civil Field Services (CFS) personnel. Well abandonment activities were conducted from September 9 – 18, 2019. Abandonment activities were conducted in accordance with the guidance outlined in the Georgia Water Well Standards Act (O.C.G.A. §12-5-120 through 138), Georgia Geologic Survey (GGS) Circular 13 (Grouting and Plugging of Domestic Water Wells in Georgia), and the U.S. EPA Region 4 Science and Ecosystem Support Division (SESD) guidance (SESDGUID-101-R1, Design and Installation of Monitoring Wells, dated January 29, 2013). A summary of the abandoned wells, including construction details, are provided in Table 1.

The wells were abandoned under the direction of a Georgia Professional Engineer. The depth to groundwater and total depth of each well were measured prior to its abandonment. Each of the 7 wells were abandoned by overdrilling, although MW-105 had a 6-inch outer casing that extended to a depth of approximately 18 feet could not be removed and was cut off approximately 18 inches below ground surface and grouted in place.

Following overdrilling, the boreholes were backfilled with five to 10 percent bentonite cement grout placed into the borehole from the bottom to the top by pressure grouting via positive displacement.

Mr. Ben Hodges Well Abandonment at Plant Mitchell Albany, Dougherty and Mitchell County, Georgia



Grout emplacement continued until undiluted grout was visible at the surface. The grout was allowed to settle and cure for a minimum of four hours to monitor for grout settlement and the need to add additional grout prior to restoring the surface. The protective well covers and pads were demolished, and surface restoration of the abandoned locations were completed similar to the surrounding conditions.

Thank you for the opportunity to be of service on this project. Please call us with any questions regarding the information presented herein.

Sincerely,

Wood Environment & Infrastructure Solutions, Inc.

Tanya Kinnard, CHMM Senior Professional

Jana Kinn

Gregory J. Wrenn, PE Project Manager

Theyez A. Wien

Attachments:

Table 1 – Monitoring Well Construction and Abandonment - September 2019 Attachment A – Well Abandonment Records Attachment B – CCR Well Location Map

cc: Joju Abraham, Southern Company Services

Table 1 - Well Construction Table

GPC - Plant Mitchell (Project No. 6122-16-0170) Phase I Well Abandonment

	Well ID	Date of Construction	Latitude*	Longitude*	Water- Bearing Zone Monitoring Interval	Well Type	Well Diameter (inches)	Boring Depth (ft bgs)	Well Depth (ft bgs)	Well Depth (ft btoc)	Field Measured Depth (ft bgs)	Field Measured Depth (ft btoc)	Well Screen Length (ft)	Stick-up Height (ft ags)	Depth to Water (ft btoc)	Date Decom- missioned	Decommission Method	Grout Volume Used (gallons)
	PZ-5D (05D)	5/30/2014	31.4391380	-84.1308150	Deep	Type II	2.0	58	57.6	60.9	57.60	60.70	10	3.32	DRY	9/11/2019	Overdrill	121
	PZ-23	7/27/2016	31.4402368	-84.1309165	Deep	Type II	2.0	60	60	63.1	60.50	63.50	10	3.12	52.49	9/11/2019	Overdrill	99
ells	PZ-24	7/26/2016	31.4385015	-84.1318094	Deep	Type II	2.0	70	70	73.1	70.00	73.00	10	3.10	57.30	9/10/2019	Overdrill	100
≥	MW-104	2/28/1995	31.4418320	-84.1299930	Shallow	Type II	2.0	18	17.6	20.2	17.50	20.50	10	2.58	12.53	9/11/2019	Overdrill	22
SS	MW-105	2/23/1995	31.4417960	-84.1300110	Deep	Type III	2.0	75	74.6	77.3	75.30	78.30	10	2.75	49.10	9/11/2019	Grout in-place	44
	MW-106	2/15/1995	31.4379010	-84.1319660	Shallow	Type II	2.0	40.5	39.6	42.3	40.00	43.30	10	2.69	22.98	9/10/2019	Overdrill	44
	MW-109	2/16/1995	31.4337420	-84.1356980	Shallow	Type II	2.0	28.5	28.2	31.5	29.00	32.00	10	3.34	17.04	9/10/2019	Overdrill	28

Notes:

ft Feet

bgs Below ground surface

btoc Below top of casing

ags Above ground surface

* Horizontal locations referenced to the North American Datum of 1983

AP-A Ash Pond A ('North' location near MW-119; 'South' location near MW-120)

NA Not applicable or not available

Prepare by:

A.S. 10/9/2019

Checked by: T.K. 10/22/2019

ATTACHMENT A WELL ABANDONMENT RECORDS



Date Well Abandonment Completed_

WELL NO.: MW-104
PROJECT NAME: GPC - Plant Mitchell
PROJECT NO.: 6121-17-0611

DATE: 9-11-19

Name of Property OwnerGPC – Plant Mitchell									
Address of Property <u>5200 Radium Springs Road, Albany, GA 31075</u>									
Original Purpose of Well Installation <u>ground-water quality monitoring</u>									
Total Depth of Well (Measured from Top of Riser) Z0.50 ft btoc total well depth 17.50 ft bgs total boring depth									
Well Diameter Z inches									
Screen Slot Size0.010 - inch									
Length of Screen 10 ft (10,50 to 20,50 ft bgs)									
Depth to Water/Date (Measured from Top of Riser) 12,53 20,05 9-11-19									
Description of Well Abandonment Method Overdrilling and grouting									
Type and Volume of Materials Used to Plug Well/Borehole 22 Gallons of AquaGuard Bentonite Grout									
Riser and Screen Removed or Left in Placeremoved									
Drilling Contractor GPC Drilling Driller's Name Tim MILAM									
Additional Notes -									
Wood Environment & Infrastructure Solutions Field Representative <u>Ever Guillen</u>									



Date Well Abandonment Completed_

WELL NO.: MW-105
PROJECT NAME: GPC - Plant Mitchell
PROJECT NO.: 6121-17-0611
DATE: 9-1/-/9

Name of Property OwnerGPC - Plant Mitchell										
Address of Property <u>5200 Radium Springs Road, Albany, GA 31075</u>										
Original Purpose of Well Installation <u>ground-water quality monitoring</u>										
Total Depth of Well (Measured from Top of Riser) 78,30 ft btoc total well depth 75,3 ft bgs total boring depth										
Well Diameter Z inches										
Screen Slot Size 0.010 - inch										
Length of Screen 10 ft (65.3 to 75.3 ft bgs)										
Depth to Water/Date (Measured from Top of Riser) 49,10 / 9-11-19										
Description of Well Abandonment Method <u>Overdrilling and grouting</u>										
Type and Volume of Materials Used to Plug Well/Borehole										
Riser and Screen Removed or Left in Place <u>removed</u>										
Drilling Contractor GPC Drilling Driller's Name TIM MILAM										
Additional Notes - WELL HAS 6" OUTER CASING DOWN TO 18' - COULD NOT REMOVE OUTER CASING - GROUTED WELL IN PLACE FROM BOTTOM-UP: CUT CASING ± 18" BELOW GROUND SURFACE.										
Wood Environment & Infrastructure Solutions Field Representative <u>Ever Guillen</u>										



Name of Property OwnerGPC – Plant Mitchell									
Address of Property5200 Radium Springs Road, Albany, GA 31075									
Original Purpose of Well Installation <u>ground-water quality monitoring</u>									
Total Depth of Well (Measured from Top of Riser) 43,30 ft btoc total well depth 40,0 ft bgs total boring depth									
Well Diameter Z inches									
Screen Slot Size0.010 - inch									
Length of Screen 10 ft (30 to 40 ft bgs)									
Depth to Water/Date (Measured from Top of Riser) ZZ 98 /9-10-19									
Description of Well Abandonment Method <u>Overdrilling and grouting</u>									
Type and Volume of Materials Used to Plug Well/Borehole									
Riser and Screen Removed or Left in Placeremoved									
Drilling Contractor GPC Drilling Driller's Name Tim Micage									
Additional Notes -									
Wood Environment & Infrastructure Solutions Field Representative <u>Ever Guillen</u>									

9-10-19

Date Well Abandonment Completed_



Date Well Abandonment Completed 9-10-19

WELL NO.: MW - 109
PROJECT NAME: GPC - Plant Mitchell
PROJECT NO.: 6121-17-0611
DATE: 9-10-19

(Measured from Top of Riser) 32.00 ft btoc total well depth 29.0 ft bgs total boring depth Well Diameter 2 inches Screen Slot Size 0.010 - inch Length of Screen 10 ft (19 to 29 ft bgs) Depth to Water/Date (Measured from Top of Riser) 17.04 9-9-19 Description of Well Abandonment Method Overdrilling and grouting Type and Volume of Materials Used to Plug Well/Borehole 28 Gallons of AquaGuard Bentonite Grout Riser and Screen Removed or Left in Place removed Drilling Contractor GPC Drilling Driller's Name Tim MicaM
Total Depth of Well (Measured from Top of Riser) 32,00 ft btoc total well depth 29,0 ft bgs total boring depth Well Diameter 2 inches Screen Slot Size 0.010 - inch Length of Screen 10 ft (19 to 29 ft bgs) Depth to Water/Date (Measured from Top of Riser) 17,04 9-9-19 Description of Well Abandonment Method Overdrilling and grouting Type and Volume of Materials Used to Plug Well/Borehole 28 Gallons of AquaGuard Bentonite Grout Riser and Screen Removed or Left in Place removed Drilling Contractor GPC Drilling Driller's Name Tim Millard
Length of Screen
Screen Slot Size
Length of Screen
Depth to Water/Date (Measured from Top of Riser)
Description of Well Abandonment Method Overdrilling and grouting Type and Volume of Materials Used to Plug Well/Borehole Z8 Gallons of AquaGuard Bentonite Grout Riser and Screen Removed or Left in Place removed Drilling Contractor GPC Drilling Driller's Name Tim Milam
Type and Volume of Materials Used to Plug Well/Borehole
Riser and Screen Removed or Left in Place <u>removed</u> Drilling Contractor <u>GPC Drilling</u> Driller's Name <u>Tim Milam</u>
Drilling Contractor GPC Drilling Driller's Name Tim Milam
Additional Notes -
Wood Environment & Infrastructure Solutions Field Representative <u>Ever Guillen</u>



Date Well Abandonment Completed_

Name of Property OwnerGPC – Plant Mitchell										
Address of Property <u>5200 Radium Springs Road, Albany, GA 31075</u>										
Original Purpose of Well Installation <u>ground-water quality monitoring</u>										
Total Depth of Well (Measured from Top of Riser) 60.70 ft btoc total well depth 57.60 ft bgs total boring depth										
Well Diameter 2 inches										
Screen Slot Size0.010 - inch										
Length of Screen 10 ft (47,60 to 57,60 ft bgs)										
Depth to Water/Date (Measured from Top of Riser)										
Description of Well Abandonment MethodOverdrilling and grouting										
Type and Volume of Materials Used to Plug Well/Borehole/Z/ Gallons of AquaGuard Bentonite Grout										
Riser and Screen Removed or Left in Placeremoved										
Drilling Contractor GPC Drilling Driller's Name TIM MILAM										
Additional Notes -										
Additional Notes										
Wood Environment & Infrastructure Solutions Field Representative <u>Ever Guillen</u>										



Date Well Abandonment Completed_

WELL NO.: PZ 23

PROJECT NAME: GPC - Plant Mitchell

PROJECT NO.: 6121-17-0611

DATE: 9-10-19

Names of Dispracts Owners CDO Disprace Mitaball									
Name of Property OwnerGPC – Plant Mitchell									
Address of Property5200 Radium Springs Road, Albany, GA 31075									
Original Purpose of Well Installation <u>ground-water quality monitoring</u>									
Total Depth of Well (Measured from Top of Riser) 63.50 ft btoc total well depth 60.50 ft bgs total boring depth									
Well Diameter inches									
Screen Slot Size0.010 inch									
Length of Screen 10 ft (50,50 to 60,50 ft bgs)									
Depth to Water/Date (Measured from Top of Riser) 52,49 / 9-10-19									
Description of Well Abandonment MethodOverdrilling and grouting									
Type and Volume of Materials Used to Plug Well/Borehole									
Riser and Screen Removed or Left in Placeremoved									
Drilling Contractor GPC Drilling Driller's Name Tim Micam									
Additional Notes -									
Wood Environment & Infrastructure Solutions Field Representative <u>Ever Guillen</u>									



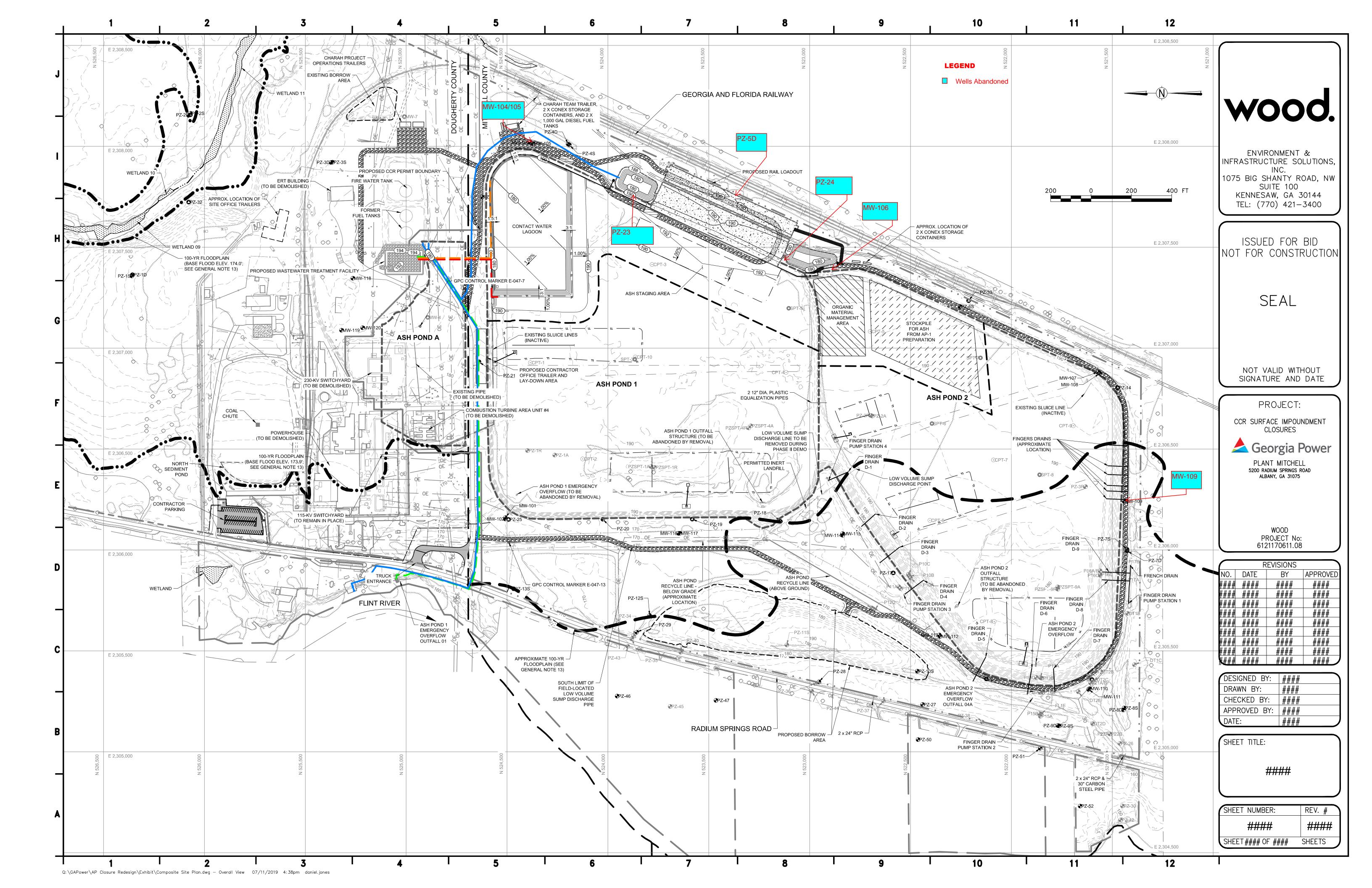
Date Well Abandonment Completed_

WELL NO.: PZ 24 PROJECT NAME: GPC – Plant Mitchell
PROJECT NO.: 6121-17-0611
DATE: 9-10-19

Name of Property Owner <u>GPC – Plant Mitchell</u>										
Address of Property5200 Radium Springs Road, Albany, GA 31075										
Original Purpose of Well Installation <u>ground-water quality monitoring</u>										
Total Depth of Well (Measured from Top of Riser) 73.0 ft btoc total well depth 70.0 ft bgs total boring depth										
Well Diameter Z inches										
Screen Slot Size0.010 - inch										
Length of Screen 10 ft (60.0 to 70.0 ft bgs)										
Depth to Water/Date (Measured from Top of Riser) 57.30 9-10-19										
Description of Well Abandonment Method <u>Overdrilling and grouting</u>										
Type and Volume of Materials Used to Plug Well/Borehole										
Riser and Screen Removed or Left in Placeremoved										
Drilling Contractor GPC Drilling Driller's Name Tim Micand										
Additional Notes -										
y .										
Wood Environment & Infrastructure Solutions Field Representative <u>Ever Guillen</u>										

ATTACHMENT B

CCR WELL LOCATION MAP



GROUNDWATER MONITORING WELL AND PIEZOMETER INSTALLATION REPORT

PLANT MITCHELL – ASH PONDS A,1 & 2 DOUGHERTY AND MITCHELL COUNTIES, GEORGIA

FOR





Wood Environment & Infrastructure Solutions, Inc. 1075 Big Shanty Road NW, Suite 100 Kennesaw, Georgia 30144

Groundwater Monitoring Well and Groundwater Piezometer Installation Report Georgia Power Company Plant Mitchell Ash Ponds A, 1 & 2

Professional Groundwater Scientist Certification

I certify that I am a qualified ground-water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction. We certify that the information included is to the best of our knowledge and belief, true, accurate and complete. In preparing this report, we have relied on information provided by Southern Company Services and Georgia Power.

Rhonda N. Quinn, P.G.

Senior Geologist

Georgia Registered

Professional Geologist No.

1031

Gregory J. Wrenn, P.E.

Associate Engineer

Georgia Registered

Professional Engineer No.

025565

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1.0 INTRODUCTION

The Georgia Power Company (GPC) Plant Mitchell Ash Ponds are located on the boundary of Dougherty and Mitchell Counties off Radium Springs Road (Georgia Route 3), approximately 2 miles southwest of Putney and 10 miles south of Albany, and east of the Flint River.

Ash pond closure and construction activites at Plant Mitchell required the abandonment of two montoring wells and five piezometers in September 2019. A well abandonment report was submitted to Georgia EPD in November 2019 (Wood, 2019a). The two monitoring wells, PZ-23 and PZ-24, that were abandoned during this time are included in the Groundwater Monitoring Plan, which was established in accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Rule (§257.90). As described in the Groundwater Montitoring Plan (Wood, 2019b), certain wells and piezometers (included in the groundwater monitoring network) located in areas that interfere with planned construction activities will be decommissioned and replaced as appropriate. The two wells that are part of the Groundwater Monitoring Plan were monitoring well PZ-23 and groundwater piezometer PZ-24 located along the outer eastern edge of the Ash Pond 1 dike system. The replacement wells, PZ-23A and PZ-24A, were installed as near as practical to the original locations of the two abandoned wells (Figure 1: Monitoring Well and Groundwater Piezometer Location Map) in order to maintain the coverage of the groundwater monitoring system. This report provides details for the drilling and well installation for replacement wells PZ-23A and PZ-24A at the Plant Mitchell site.

2.0 DRILLING AND WELL INSTALLATION

The following sections provide details and description of drilling and installation procedures for the replacement wells. Well installation details are also provided in **Table 1: Monitoring Well and Piezometer Details**.

2.1 Drilling Method

Wood observed and documented installation of the two replacement wells installed by Southern Company between March 3 and March 10, 2020. To clear any potential utilities at depth, the first 5 feet of PZ-23A was completed by hand auger and the first 10 feet of PZ-24A was completed by hydrovac. Following the clearing of utilities, 2 ¼ inch internal diameter hollow stem augers were used to drill to depths of 64.5 and 61.0 feet at PZ-23A and PZ-24A, respectively.

2.2 Screened Interval

The replacement wells are screened in the limestone bedrock as shown in the boring logs in Appendix A. The replacement wells are constructed with 10 foot slotted screens. These screened intervals are similar to the original groundwater monitoring network wells.

2.3 Well Casing and Screens

The replacement wells installed are constructed of 2-inch inside diameter ASTM Schedule 40 PVC casing affixed to a pre-packed slotted PVC screen. Well construction materials are designed to be sufficiently durable to resist chemical and physical degradation and not interfere with the quality of groundwater samples. Casing and screen sections are flush-threaded and do not require the use of solvent or glue to construct the wells; however, the above ground uppermost coupling of the PZ-23A casing was glued to provide an adequate well stick up.

2.4 Well Intake Design

Wells were designed and constructed to: (1) allow sufficient groundwater flow to the well for sampling; (2) minimize the passage of formation materials (turbidity) into the wells; and (3) ensure sufficient structural integrity to prevent collapse of the well. The replacement wells installed are screened using 0.010-inch slotted PVC pre-packed dual-wall well screens. Well screens are 10 feet nominal length. The pre-packed dual-wall well

screens combine a centralized inner well screen, a void for site-specific filter sand pack, and an outer conductor screen (mesh) in one integrated unit.

2.5 Filter Pack

The filter pack sand size used for the filter packs at the site is a 20/40 mesh and is a medium to coarse well-rounded quartz (silica) sand. Filter pack material was packed onsite and placed within the pre-packed dual-wall well screens and in the annular space between the outside of the pre-pack screen and borehole wall to ensure an adequate thickness of filter pack material between the well and the formation. Filter pack material placed in the annular space outside of the well screen extended approximately 2 feet above the top of screen. Potable water was used to prevent bridging occurring during filter pack placement.

After placing the filter pack, the wells were pumped to ensure settlement of the filter pack, prior to installing the annular seal. The depth of top of filter pack was measured and recorded in well construction logs provided in **Appendix A**.

2.6 Annular Seal

After installing the filter pack, approximately 5 feet of bentonite pellets were placed in the annular space above the filter pack to seal the annulus and prevent vertical flow of water along the well casing. Bentonite pellets were allowed to hydrate and settle in accordance with manufacturers recommendations prior to grouting the well. A cement-bentonite grout was used as the annular sealant above the bentonite seal. The cement-bentonite grout was tremied into place from the top of the bentonite seal to approximately land surface. The grout was injected at a low velocity to not disrupt the bentonite seal and the tremie pipe was raised as grout filled the annular space. A concrete seal extends from approximately 1.5 feet below land surface to land surface and was blended into a mounded cement apron extending outward from the edge of the borehole to direct rainwater run-off away from the well.

2.7 Cap and Protective Casing

The well was fitted with a cap and a locking 4-inch square steel stick-up protective casing was installed over the well to protect the PVC well pipe from damage and secure the well from tampering. The annular space between the well pipe and protective casing was filled

Groundwater Monitoring Well and Groundwater Piezometer Installation Report Georgia Power ■ Plant Mitchell ■ July 2020

with pea-size gravel and a small weep-hole was drilled near the base of the protective cover to allow for drainage from inside the protective casing. Bollards were installed around the four corners of the concrete pad to protect the well. Wells are clearly marked with signs with the proper well identification and locked for safety. Construction details are documented in Well Construction Logs provided in **Appendix A**.

3.0 WELL DEVELOPMENT

Wells and piezometers were developed using a submersible pump to (1) restore the natural hydraulic conductivity of the formation, and (2) to remove fine-grained sediment to ensure low-turbidity groundwater samples. Wells were alternately surged and purged until visually clear of particulates. Turbidity, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), and conductivity measurements were made to ensure that each well was fully developed. During development of PZ-23A, technical issues with the multiparameter meter prevented the recording of these parameters electronically; therefore, manual turbidity measurements only were recorded. The goal was to cease well development activities when the water was visibly free of sediment and turbidity of 10 Nephelometric Turbidity Unit (NTUs) or less was documented. However, because of an equipment malfunction, the final reading for PZ-24A was 15.8 NTU, which did not reach the development goal of less than 10 NTU. The development forms are included in **Appendix B: Well Development Forms**. All equipment and tubing placed in the well was decontaminated or disposed of between wells.

4.0 SURVEY

Wells locations and top of casing (TOC) and ground surface elevations were surveyed by McKim & Creed, Inc. Northings and easting are in feet relative to the North America Datum of 1983 (2011) (NAD 83/2011) Georgia West Zone. TOC and ground surface elevations are in feet relative to NAVD 88. Survey data are tabulated in **Table 1**. Well survey documents are provided in **Appendix C: Well Survey Documents**.

5.0 GENERAL REFERENCES

- Georgia Department of Natural Resources, Environmental Protection Division. 1991. Manual for Groundwater Monitoring (EPD, 1991).
- USEPA, 2015. Science and Ecosystem Support Division Operating Procedures: SESDPROC-205-R3 Field Equipment and Decontamination, US Environmental Protection Agency, Region 4, Athens, Georgia, December 18, 2015.
- USEPA, 2013. Science and Ecosystem Support Division Operating Procedures: SESDGUID-101-R1 Design and Installation of Monitoring Wells, US Environmental Protection Agency, Region 4, Athens, Georgia, January 29, 2013.
- Wood, 2019a. Groundwater Monitoring Plan, Revision 1, Plant Mitchell Ash Ponds A, 1 & 2, Dougherty and Mitchell Counties, Georgia, October, 2019.
- Wood, 2019b. Phase I Well Abandoment Report at Plant Mitchell, Albany, Dougherty and Mitchell County, Georgia, October 24, 2019.

Groundwater Monitoring Well and Groundwater Piezometer Installation Report Georgia Power ■ Plant Mitchell ■ July 2020

TABLE

Table 1
Monitoring Well and Piezomter Details

Prepared By: NJM 7/2/2020

Checked By: RNQ 7/8/2020

Well Name	Purpose	Installation Date	Latitude ⁽¹⁾		Ground Surface Elevation (ft msl) ⁽²⁾	Top of Casing Elevation (ft msl)	Top of Screen Elevation (ft msl)	Screen	Total Well Depth on Construction Log (ft below land surface)	Groundwater Zone Screened	Location
PZ-23A	Monitoring Network Well	3/10/2020	31.440310	-84.130880	189.06	191.85	134.56	124.56	64.5	Bedrock	Downgradient
PZ-24A	Groundwater Piezometer	3/6/2020	31.438442	-84.131835	192.25	194.97	142.25	132.25	61.0	Bedrock	Downgradient

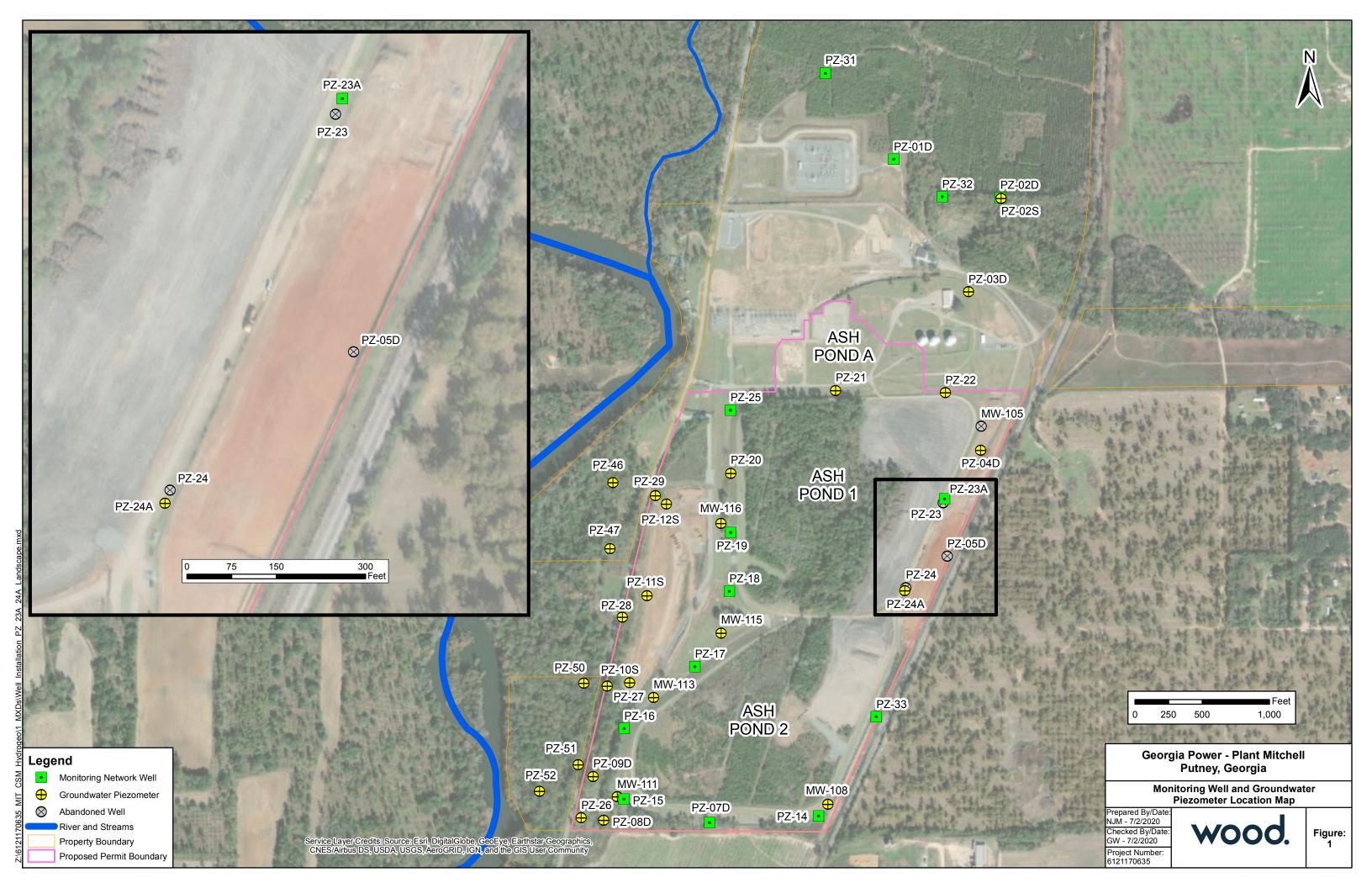
Notes:

1. Horizontal locations referenced to the North American Datum of 1983.

- 2. ft msl indicates feet mean sea level.
- 3. TOC indicates top of casing.

Groundwater Monitoring Well and Groundwater Piezometer Installation Report Georgia Power ■ Plant Mitchell ■ July 2020

FIGURE



APPENDIX A WELL CONSTRUCTION AND BORING LOGS

LOG OF TEST BORING

BORING PZ-24A PAGE 1 OF 2 61621170611

CONTRAC DRILLED I BORING D	TOR SCS Field S BY SM EPTH 61 ft bgs	COMPLETED 3/6/20 Services EQ LOGGED BY ML GROUND WATER DEF	LOC 20 SURF. ELE UIPMENT CHECK	METHOD KED BY NJ	y, GA sl C Hollo	COORDIN w Stem A	ATES uger		
OEPTH (ft) GRAPHIC		MATERIAL DESCRIPTION	ON	ELEV.	Weak Moderate HCL Strong REACTION	GROUNDWATER OBSERVATIONS		WELL DATA	ELE (DEPT
10 10 20 25 30 35		no description obtained	sand, moist	182.3				Annular Fill: Cement Grout	



50

55

60

65

70

75

80

85

SIMPLE GEOLOGY WITH WELL - ESEE DATABASE.GDT - 5/15/20 12:36 - C.PROGRAM FILES (X86)/GINT/PROJECTS/PLANT MITCHELL PZ-23-PZ-24/GPJ

LOG OF TEST BORING

BORING PZ-24A PAGE 2 OF 2 61621170611

142.

(50.0)

2" OD PVC (SCH 40)

10 feet of 0.01-inch slotted 2" OD PVC (SCH 40)

Silica Filter Sand Stand Pipe:

Filter:

Screen:

PROJECT Plant Mitchell - Geotech **LOCATION** Albany, GA HCL REACTION GROUNDWATER WELL DATA GRAPHIC LOG DEPTH (ft) MATERIAL DESCRIPTION ELEV (DEPTH (Cont.) Annular Fill: Cement Grout -CLAY (CL), reddish brown, stiff, with silty sand, moist 150.3 (42.0 Annular Seal: 148.3 Bentonite Pellets 45 -LIMESTONE, white, fine-medium grained, very weathered 145.3 (47.0) Filter: Silica Filter Sand

Bottom of borehole at 61.0 feet.



131



LOG OF TEST BORING

BORING PZ-23A PAGE 1 OF 2 61621170611

DRILL BORIN	RACTOF ED BY _ IG DEPT	SCS Field S SM H 70 ft bgs	ServicesLOGGED BY GROUND WAT	EQUIPMENT_FM TER DEPTH: DURIN	M CHECKED E	.06 ft m	ny, GA sl C Hollow	OORDIN w Stem A	ATES uger	440310 W:84.130880 2 40.11 ft after 14 days	
DEPTH (ft)	GRAPHIC LOG	of casing elev	vation: 191.85 ft msi			ELEV	Weak Moderate HCL Strong REACTION	GROUNDWATER OBSERVATIONS		WELL DATA	ELE (DEPTI
5 —10 —15 —20 —25 —30 —35 —40			nottled gray and rec	I, stiff, moist		175.6				Annular Fill: Cement Grout	



LOG OF TEST BORING

BORING PZ-23A PAGE 2 OF 2 61621170611

PROJECT Plant Mitchell - Geotech **LOCATION** Albany, GA HCL REACTION **GROUNDWATER**OBSERVATIONS WELL DATA GRAPHIC LOG DEPTH (ft) MATERIAL DESCRIPTION Completion: Protective casing set in concrete pad; 2-foot square concrete pad ELEV. (DEPTH) (Cont.) Annular Fill: Cement Grout -CLAY (CL), mottled gray and red, stiff, moist 45 143.6 (45.5) Annular Seal: Bentonite Pellets 141.1 -LIMESTONE, white, fine-medium grained, very weathered, moist 50 138. (50.7 Filter: SIMPLE GEOLOGY WITH WELL - ESEE DATABASE.GDT - 5/15/20 12:36 - C.PROGRAM FILES (X86)/GINT/PROJECTS/PLANT MITCHELL PZ-23-PZ-24/GPJ Silica Filter Sand 134.6 55 (54.5 Filter: Silica Filter Sand Stand Pipe: 60 2" OD PVC (SCH 40) Screen: 10 feet of 0.01-inch slotted 2" OD PVC (SCH 40) 65 70 119 Bottom of borehole at 70.0 feet. 75 80 85

APPENDIX B WELL DEVELOPMENT FORMS

WELL DEVELOPMENT LOG

wood.

WELL ID *PZ-23A*STATIC WL 26.7

DATE/TIME	3/11	12020	1430
	1		11.00

Project No.	* * * * * * * * * * * * * * * * * * * *
	V- / -
Sheet	of

FINAL WATER LEVEL SAMPLERS: F-MAYILA

Well ID	Time	pH (s.u.)	Spec. cond. (ms/cm)	Turbidity (NTU)	Temp.	DO (mg/l)	ORP (mV)	Ferrous Iron (mg/l)	Observations	Vol Purged	Remarks
	1430	Start	pumpi	ng w/s	ent 1	neter.	Water	is m	uddy - reddish bown	15 gal	lons
	1445	6.92	/1	- 6	20.73	3.89	133.5		Clear		
	* Bay	Hery po	ower f	ailure.	Canno	+ Laur	ich 1-	Site S	mart Troll - Call P.	y [Greg W.	renn]*
v 71	1600		·	32.1	· + 1 ·					-31.5	
) Alt-	1605			28:4						-34.2	
	1610	- 4		15.7		1				~36.9	100 M
* *	1615	1.2		10.9		1			12	-39.6	
1	1620			9.84					- /s	~42.3	
	1625			8.60	100					~45.0	
	· The state of the	*6								7	
									v (%)		4
Remarks	Pour Las	lux or	The hand	set Cohan	12). PI	n agr	ees to	reco	rd terbidity ont	y. ·	₩.
(1) Purge Rat	te: 7 4/m	i ~	0.53	gallmin.	1	Romos	ed a	4	rd terbidity ont	chetr =	45 gallon
(2)	- 1000		0		· ·				0		
(3)									1		
(4)		7							9	6)	

Product Name: Low-Flow System

Date: 2020-03-1114:05:04

Pump Information:

Pump Model/Type

Tubing Diameter

Tubing Length

Tubing Type

Project Information:

Operator Name Ferdinand Mayila Company Name Wood Project Name Plant Mitchell

Hach 2100Q

Site Name PZ-24A 00 0' 0" Latitude 00 0' 0" Longitude Sonde SN 369323

Pump placement from TOC 60 ft

Well Information:

Turbidity Make/Model

Well ID PZ-24A mL/min Well diameter 2 in Well Total Depth 63 ft Screen Length 10 ft Depth to Water 30.85 ft Pumping Information:

Final Pumping Rate 2000 Total System Volume 1.816868 L Calculated Sample Rate 5 min Stabilization Drawdown 3 in **Total Volume Pumped** 60 L

Whale

.375 in

Idpe

68 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5%	+/- 0.1%	+/- 3%	+/- 10%		+/- 0.3%	+/- 10%
Last 5	13:45:28	1000.02	21.11	7.08	553.07	114	37.45	3.72	115.03
Last 5	13:50:22	1300.03	21.10	7.08	552.09	102	37.45	3.75	114.38
Last 5	13:55:16	1600.02	21.11	7.08	548.12	70.1	37.46	3.73	114.53
Last 5	14:00:10	1900.03	21.11	7.08	557.00	25.8	37.45	3.73	114.10
Last 5	14:05:04	2100.12	21.10	7.08	555.67	15.8	37.43	3.75	113.90
Variance 0			0.00	-0.01	-3.97			-0.02	0.15
Variance 1			0.00	0.00	8.88			-0.00	-0.43
Variance 2			-0.01	0.00	-1.33			0.02	-0.19

Notes

Grab Samples

APPENDIX C WELL SURVEY DOCUMENTS



PLANNERS

Date: June 15, 2020

To: Gregory Wrenn Project Manager

Wood Environment & Infrastructure Solutions, Inc.

dreynolds@charah.com

From: Robert Patten

Geomatics Project Manager

McKim & Creed, Inc.

bpatten@mckimcreed.com

RE: Plant Mitchell Monitoring Well Locations

Horizontal grid coordinates were established with eGPS VRS/RTK system, using a Trimble R8 Model 3 GPS/GNSS receiver and a Trimble S6 robotic total station, to achieve +/-0.25′ accuracy. Horizontal positions are referenced to the Georgia state plane west zone in US Survey Feet, NAD 83(2011).

Vertical coordinates were established with differential leveling, using a Trimble Dini Digital level. All vertical traverses achieved 0.01' or less closure. Vertical positions are referenced to NAVD88.

Georgia State Plane West Zone (NAD 83/2011), NAVD88

MW101 524508.4 2306160.1 168.14 CONC MW101 524507.6 2306160.1 170.93 TOP MW102 524508.6 2306153.7 168.10 CONC MW102 524508.2 2306153.6 170.93 TOP MW103 524613.2 2307329.2 184.92 CONC MW103 524612.5 2307329.1 187.78 TOP MW107 521570.7 2306881.0 182.89 CONC MW107 521570.4 2306881.4 185.71 TOP MW108 521562.1 2306874.9 182.75 CONC MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW113 522356.8 2305578	STRUCTURE	NORTH	EAST	ELEVATION	LOCATION
MW102 524508.6 2306153.7 168.10 CONC MW102 524508.2 2306153.6 170.93 TOP MW103 524613.2 2307329.2 184.92 CONC MW103 524612.5 2307329.1 187.78 TOP MW107 521570.7 2306881.0 182.89 CONC MW107 521570.4 2306881.4 185.71 TOP MW108 521562.1 2306874.9 182.75 CONC MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW113 522356.8 2305578.8 171.88 CONC MW114 522835.9 230607	MW101	524508.4	2306160.1	168.14	CONC
MW102 524508.2 2306153.6 170.93 TOP MW103 524613.2 2307329.2 184.92 CONC MW103 524612.5 2307329.1 187.78 TOP MW107 521570.7 2306881.0 182.89 CONC MW107 521570.4 2306881.4 185.71 TOP MW108 521562.1 2306874.9 182.75 CONC MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072	MW101	524507.6	2306160.1	170.93	TOP
MW103 524613.2 2307329.2 184.92 CONC MW103 524612.5 2307329.1 187.78 TOP MW107 521570.7 2306881.0 182.89 CONC MW107 521570.4 2306881.4 185.71 TOP MW108 521562.1 2306874.9 182.75 CONC MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW102	524508.6	2306153.7	168.10	CONC
MW103 524612.5 2307329.1 187.78 TOP MW107 521570.7 2306881.0 182.89 CONC MW107 521570.4 2306881.4 185.71 TOP MW108 521562.1 2306874.9 182.75 CONC MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305578.8 171.88 CONC MW113 522356.8 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW102	524508.2	2306153.6	170.93	TOP
MW107 521570.7 2306881.0 182.89 CONC MW107 521570.4 2306881.4 185.71 TOP MW108 521562.1 2306874.9 182.75 CONC MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW103	524613.2	2307329.2	184.92	CONC
MW107 521570.4 2306881.4 185.71 TOP MW108 521562.1 2306874.9 182.75 CONC MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW103	524612.5	2307329.1	187.78	TOP
MW108 521562.1 2306874.9 182.75 CONC MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW107	521570.7	2306881.0	182.89	CONC
MW108 521561.7 2306874.5 185.47 TOP MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW107	521570.4	2306881.4	185.71	TOP
MW110 521613.4 2305313.3 165.19 CONC MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW108	521562.1	2306874.9	182.75	CONC
MW110 521612.9 2305312.7 167.86 TOP MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW108	521561.7	2306874.5	185.47	TOP
MW111 521618.5 2305309.6 165.28 CONC MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW110	521613.4	2305313.3	165.19	CONC
MW111 521618.2 2305308.8 168.06 TOP MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW110	521612.9	2305312.7	167.86	TOP
MW112 522352.7 2305571.6 171.76 CONC MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW111	521618.5	2305309.6	165.28	CONC
MW112 522353.4 2305571.0 174.56 TOP MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW111	521618.2	2305308.8	168.06	TOP
MW113 522356.8 2305578.8 171.88 CONC MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW112	522352.7	2305571.6	171.76	CONC
MW113 522357.4 2305578.4 174.61 TOP MW114 522835.9 2306072.8 166.30 CONC	MW112	522353.4	2305571.0	174.56	TOP
MW114 522835.9 2306072.8 166.30 CONC	MW113	522356.8	2305578.8	171.88	CONC
	MW113	522357.4	2305578.4	174.61	TOP
NAV414 52202C 2 220C072 5 1C0 11 TOD	MW114	522835.9	2306072.8	166.30	CONC
WW114 522836.2 2306072.5 169.11 TOP	MW114	522836.2	2306072.5	169.11	TOP

4536 Nelson Brogdon Boulevard
Suite E-2
Sugar Hill, GA 30518

770.962.4125 770.962.4126 (fax)

www.mckimcreed.com

MW115	522836.8	2306080.7	166.23	CONC
MW115	522837.4	2306080.2	169.05	TOP
MW116	523649.8	2306081.8	168.93	CONC
MW116	523649.9	2306082.5	171.69	TOP
MW117	523643.6	2306082.2	168.84	CONC
MW117	523643.7	2306082.7	171.66	TOP
MW118	525264.3	2307346.6	192.11	CONC
MW118	525264.1	2307346.3	194.82	TOP
MW119	525320.5	2307088.2	191.60	CONC
MW119	525320.7	2307088.8	194.49	TOP
MW120	525216.0	2307100.3	191.03	CONC
MW120	525216.0	2307100.9	193.79	TOP
MW121	524618.6	2307325.7	184.80	CONC
MW121	524618.0	2307325.5	187.96	TOP
MW122	524088.4	2306092.1	169.44	CONC
MW122	524088.5	2306092.8	172.09	TOP
MW123	524096.4	2306094.0	169.39	CONC
MW123	524096.4	2306094.7	172.01	TOP
PZ01D	526354.6	2307362.9	193.44	NAIL
PZ01D	526353.9	2307362.8	196.44	TOP
PZ01S	526357.7	2307356.9	193.43	CONC
PZ01S	526357.1	2307356.7	196.52	TOP
PZ02D	526068.1	2308155.8	175.64	NAIL
PZ02D	526067.3	2308155.4	178.51	TOP
PZ02S	526067.5	2308163.4	175.63	NAIL
PZ02S	526066.7	2308163.4	178.61	TOP
PZ03D	525373.1	2307919.2	188.08	NAIL
PZ03D	525373.2	2307918.1	190.98	TOP
PZ03S	525365.7	2307919.8	188.14	NAIL
PZ03S	525365.6	2307918.8	191.12	TOP
PZ04D	524197.9	2308010.3	188.25	NAIL
PZ04D	524198.2	2308009.5	191.10	TOP
PZ04S	524191.6	2308005.8	188.42	NAIL
PZ04S	524192.1	2308005.0	191.20	TOP
PZ06S	522253.8	2307208.2	186.52	NAIL
PZ06S	522254.0	2307207.5	189.47	TOP
PZ07D	521425.8	2305995.1	170.28	NAIL
PZ07D	521425.1	2305995.3	173.08	TOP
PZ07S	521425.1	2306002.6	170.10	NAIL



PZ07S	521424.4	2306002.8	173.10	ТОР
PZ08D	521443.1	2305207.8	167.24	NAIL
PZ08D	521442.1	2305207.9	170.35	ТОР
PZ08S	521440.6	2305217.1	167.67	NAIL
PZ08S	521440.2	2305217.4	170.78	TOP
PZ09D	521770.5	2305128.4	163.18	NAIL
PZ09D	521770.9	2305127.5	166.16	ТОР
PZ09S	521763.5	2305126.8	163.06	NAIL
PZ09S	521763.7	2305125.7	166.02	TOP
PZ10S	522465.8	2305400.7	172.64	NAIL
PZ10S	522465.8	2305401.6	175.63	TOP
PZ11S	523113.1	2305530.7	188.71	NAIL
PZ11S	523112.9	2305532.1	191.69	TOP
PZ12S	523794.3	2305676.1	170.93	NAIL
PZ12S	523794.9	2305676.8	173.92	TOP
PZ13S	524467.4	2305809.3	170.23	NAIL
PZ13S	524467.0	2305810.0	173.22	TOP
PPZ14	521473.8	2306804.2	180.85	CONC
PZ14	521473.1	2306804.8	183.46	TOP
PZ15	521600.8	2305357.9	167.38	NAIL
PZ15	521600.2	2305357.3	170.37	TOP
PZ16	522124.7	2305360.7	171.21	NAIL
PZ16	522125.0	2305359.9	173.92	TOP
PZ17	522587.2	2305887.2	170.12	NAIL
PZ17	522587.9	2305886.7	172.91	TOP
PZ18	523145.3	2306141.8	167.34	NAIL
PZ18	523145.7	2306142.3	170.11	TOP
PZ19	523582.0	2306152.7	169.40	NAIL
PZ19	523582.1	2306153.6	172.05	TOP
PZ20	524025.1	2306152.0	170.62	NAIL
PZ20	524025.0	2306152.6	173.44	TOP
PZ21	524638.7	2306932.3	177.08	NAIL
PZ21	524639.5	2306932.0	179.84	TOP
PZ22	524622.8	2307749.0	184.76	NAIL
PZ22	524622.4	2307749.0	187.69	TOP
PZ23	523830.4	2307743.0	189.06	NAIL
PZ23	523831.5	2307743.4	191.85	TOP
PZ24	523152.3	2307444.7	192.25	NAIL
PZ24	523151.8	2307445.9	194.97	TOP



PZ25	524492.7	2306151.3	168.24	CONC
PZ25	524492.6	2306152.0	171.14	TOP
PZ26	521462.8	2305041.2	163.94	NAIL
PZ26	521463.1	2305040.7	166.70	TOP
PZ27	522440.6	2305234.0	161.88	NAIL
PZ27	522440.4	2305235.1	164.58	TOP
PZ28	522954.2	2305346.4	163.49	NAIL
PZ28	522953.9	2305347.3	165.96	TOP
PZ29	523856.9	2305592.7	170.42	NAIL
PZ29	523857.8	2305593.0	173.18	TOP
PZ31	526997.0	2306857.3	180.32	NAIL
PZ31	526996.3	2306857.6	182.96	TOP
PZ32	526077.8	2307723.5	178.19	NAIL
PZ32	526078.7	2307723.7	180.75	TOP
PZ33	522212.3	2307235.0	187.08	NAIL
PZ33	522212.6	2307233.9	189.61	TOP
PZ42	521458.8	2304662.3	142.61	NAIL
PZ42	521459.1	2304661.2	145.66	TOP
PZ46	523954.9	2305276.3	166.50	CONC
PZ46	523954.3	2305276.0	166.79	TOP
PZ47	523464.1	2305254.4	164.46	CONC
PZ47	523464.4	2305254.9	164.08	TOP
PZ50	522463.3	2305061.0	162.96	CONC
PZ50	522462.8	2305060.4	162.68	TOP
PZ51	521779.5	2304837.1	155.85	CONC
PZ51	521779.2	2304836.5	155.52	TOP



Robert H Patten, PLS Geomatics Project Manager bpatten@mckimcreed.com





APPENDIX B

LABORATORY ANALYTICAL AND FIELD SAMPLING REPORTS

AUGUST 2019 LABORATORY DATA

Well ID	Sample Date	Purge Volume (liter)	Time Elapsed	DTW (feet, TOC)	Drawdown (feet)	Temperature (C)	pH (su)	Specific Conductance (uS/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)
PZ-1D	8/20/2019	11.0	3346	53.92	0	22.9	7.9	240.0	1.6	4.0	76.1
PZ-2D	8/21/2019	12.0	1500	37.15	0	21.5	8.8	147.8	2.9	3.0	125.2
PZ-7D	8/22/2019	7.0	2100	35.34	0	21.8	7.3	552.5	1.0	0.3	53.4
PZ-14	8/21/2019	10.0	3050	45.58	0	22.8	7.3	489.0	0.7	3.6	75.3
PZ-15	8/21/2019	7.0	2100	32.88	0	26.0	7.5	509.9	1.6	0.2	-41.2
PZ-16	8/21/2019	6.0	1800	36.81	0.01	23.5	7.2	480.6	0.5	1.3	170.3
PZ-17	8/22/2019	9.0	2701	34.82	0	23.0	7.2	592.2	1.8	0.1	-42.5
PZ-18	8/22/2019	9.0	2702	32.19	0	26.6	7.0	623.3	1.1	0.2	13.7
PZ-19	8/22/2019	6.0	1800	34.52	0.01	24.0	6.7	848.2	1.1	0.4	58.4
PZ-23	8/21/2019	5.0	1500	52.84	0	23.1	7.1	669.4	0.6	4.4	84.3
PZ-25	8/21/2019	6.0	1800	32.89	0.04	22.9	7.1	500.0	0.3	0.4	-125.2
PZ-31	8/21/2019	5.0	1500	40.73	0	21.2	7.4	428.3	0.8	4.8	77.5
PZ-32	8/20/2019	7.0	2100	39.64	0	20.7	7.4	339.1	1.1	0.8	106.3
PZ-33	8/22/2019	6.0	1800	51.23	0	22.6	6.9	661.9	1.8	0.5	61.2





December 18, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622265

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 22, 2019. 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.

This revised report replaces the report issued on 9/3/2019. The report has been revised to correct Metals RLs to correspond with contract. No other changes have been made to this report.

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

Sincerely,

Tyler Forney for Betsy McDaniel

tegh Pagar

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622265

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622265

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2622265001	EB-1	Water	08/21/19 08:30	08/22/19 09:10	
2622265002	PZ-2D	Water	08/21/19 10:52	08/22/19 09:10	
2622265003	PZ-16	Water	08/21/19 13:16	08/22/19 09:10	
2622265004	PZ-25	Water	08/21/19 14:42	08/22/19 09:10	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622265

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2622265001	— — EB-1	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622265002	PZ-2D	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622265003	PZ-16	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622265004	PZ-25	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1



Project: Plant Mitchell Pace Project No.: 2622265

Date: 12/18/2019 11:50 AM

Sample: EB-1	Lab ID: 2622265001		Collecte	ed: 08/21/19	9 08:30	Received: 08/	22/19 09:10 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	 6020B Pre	paration Met	hod: EF	PA 3005A	-		
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 19:24	7440-36-0	
Arsenic	0.00064J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 19:24	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 19:24	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 19:24	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 19:24	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 19:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 19:24	7440-48-4	
Lead	0.000058J	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 19:24	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 19:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 19:24	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 19:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 19:24	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 12:39	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 22:55	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622265

Date: 12/18/2019 11:50 AM

Sample: PZ-2D	Lab ID:	2622265002	Collecte	ed: 08/21/19	10:52	Received: 08/	22/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00030J	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 19:30	7440-36-0	
Arsenic	0.0014J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 19:30	7440-38-2	
Barium	0.0042J	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 19:30	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 19:30	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 19:30	7440-43-9	
Chromium	0.0057J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 19:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 19:30	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 19:30	7439-92-1	
Lithium	0.0018J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 19:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 19:30	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 19:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 19:30	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 12:42	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	0.046J	mg/L	0.30	0.029	1		08/30/19 00:03	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622265

Date: 12/18/2019 11:50 AM

Sample: PZ-16	Lab ID:	2622265003	Collecte	ed: 08/21/19	13:16	Received: 08/	22/19 09:10 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	 6020B Pre	 paration Met	hod: FF	 PA 3005A			
	·			•					
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 19:35		
Arsenic	0.00036J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 19:35		
Barium	0.034	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 19:35	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 19:35	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 19:35	7440-43-9	
Chromium	0.00095J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 19:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 19:35	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 19:35	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 19:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 19:35	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 19:35	7782-49-2	
Thallium	0.000057J	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 19:35		
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 12:44	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 00:26	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622265

Date: 12/18/2019 11:50 AM

Sample: PZ-25	Lab ID: 2622265004 Collected: 08/21/19 14:42 Received: 08/22/19 09:10 Ma							atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical I	Method: EPA 6	6020B Pre	paration Met	nod: EF	PA 3005A			
Antimony	0.0014J	mg/L	0.0030	0.00027	1	08/23/19 14:12	08/26/19 19:22	7440-36-0	В
Arsenic	ND	mg/L	0.0050	0.00035	1	08/23/19 14:12	08/26/19 19:22	7440-38-2	
Barium	0.10	mg/L	0.010	0.00049	1	08/23/19 14:12	08/26/19 19:22	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:12	08/26/19 19:22	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:12	08/26/19 19:22	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:12	08/26/19 19:22	7440-47-3	
Cobalt	0.0015J	mg/L	0.0050	0.00030	1	08/23/19 14:12	08/26/19 19:22	7440-48-4	
Lead	0.00041J	mg/L	0.0050	0.000046	1	08/23/19 14:12	08/26/19 19:22	7439-92-1	
Lithium	0.0072J	mg/L	0.030	0.00078	1	08/23/19 14:12	08/26/19 19:22	7439-93-2	
Molybdenum	0.0014J	mg/L	0.010	0.00095	1	08/23/19 14:12	08/26/19 19:22	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:12	08/26/19 19:22	7782-49-2	
Thallium	0.00046J	mg/L	0.0010	0.000052	1	08/23/19 14:12	08/26/19 19:22	7440-28-0	
7470 Mercury	Analytical I	Method: EPA 7	7470A Prej	paration Met	nod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 12:46	7439-97-6	
300.0 IC Anions 28 Days	Analytical I	Method: EPA 3	300.0						
Fluoride	0.11J	mg/L	0.30	0.029	1		08/30/19 00:48	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622265

QC Batch: 34233 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Associated Lab Samples: 2622265001, 2622265002, 2622265003, 2622265004

METHOD BLANK: 154036 Matrix: Water
Associated Lab Samples: 2622265001, 2622265002, 2622265003, 2622265004

Blank Reporting

Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury mg/L ND 0.00050 0.00014 08/27/19 12:05

LABORATORY CONTROL SAMPLE: 154037

Date: 12/18/2019 11:50 AM

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154038 154039

MS MSD

MSD 2622267002 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual ND 0.0025 0.0025 0.0025 101 75-125 20 Mercury mg/L 0.0026 102

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



Project: Plant Mitchell Pace Project No.: 2622265

QC Batch: 34176 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2622265001, 2622265002, 2622265003

METHOD BLANK: 153777 Matrix: Water

Associated Lab Samples: 2622265001, 2622265002, 2622265003

_		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	08/26/19 16:54	
Arsenic	mg/L	ND	0.0050	0.00035	08/26/19 16:54	
Barium	mg/L	ND	0.010	0.00049	08/26/19 16:54	
Beryllium	mg/L	ND	0.0030	0.000074	08/26/19 16:54	
Cadmium	mg/L	ND	0.0025	0.00011	08/26/19 16:54	
Chromium	mg/L	ND	0.010	0.00039	08/26/19 16:54	
Cobalt	mg/L	ND	0.0050	0.00030	08/26/19 16:54	
Lead	mg/L	ND	0.0050	0.000046	08/26/19 16:54	
Lithium	mg/L	ND	0.030	0.00078	08/26/19 16:54	
Molybdenum	mg/L	ND	0.010	0.00095	08/26/19 16:54	
Selenium	mg/L	ND	0.010	0.0013	08/26/19 16:54	
Thallium	mg/L	ND	0.0010	0.000052	08/26/19 16:54	

ı	ABORATORY	CONTROL	CAMDI E.	153778

Date: 12/18/2019 11:50 AM

LABORATORT CONTROL CAMILE	L. 155776					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SP	PIKE DUPL	ICATE: 1537 2622250005	79 MS Spike	MSD Spike	153780 MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Arsenic	mg/L	0.00059J	0.1	0.1	0.098	0.098	97	98	75-125	1	20	
Barium	mg/L	0.020	0.1	0.1	0.12	0.12	95	96	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	

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



Project: Plant Mitchell Pace Project No.: 2622265

Date: 12/18/2019 11:50 AM

MATRIX SPIKE & MATRIX	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 153779						153780								
Parameter	Units	2622250005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual			
Chromium	mg/L	0.00051J	0.1	0.1	0.10	0.10	101	100	75-125	1	20				
Cobalt	mg/L	0.0010J	0.1	0.1	0.10	0.10	100	99	75-125	0	20				
Lead	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	0	20				
Lithium	mg/L	0.00094J	0.1	0.1	0.096	0.096	95	95	75-125	0	20				
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20				
Selenium	mg/L	0.0030J	0.1	0.1	0.098	0.10	95	97	75-125	2	20				
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20				

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



Project: Plant Mitchell Pace Project No.: 2622265

QC Batch: 34179 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2622265004

METHOD BLANK: 153793 Matrix: Water

Associated Lab Samples: 2622265004

Lithium

Selenium

Thallium

Molybdenum

Date: 12/18/2019 11:50 AM

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	 mg/L	0.00075J	0.0030	0.00027	08/26/19 19:11	
Arsenic	mg/L	ND	0.0050	0.00035	08/26/19 19:11	
Barium	mg/L	ND	0.010	0.00049	08/26/19 19:11	
Beryllium	mg/L	ND	0.0030	0.000074	08/26/19 19:11	
Cadmium	mg/L	ND	0.0025	0.00011	08/26/19 19:11	
Chromium	mg/L	ND	0.010	0.00039	08/26/19 19:11	
Cobalt	mg/L	ND	0.0050	0.00030	08/26/19 19:11	
Lead	mg/L	ND	0.0050	0.000046	08/26/19 19:11	
Lithium	mg/L	ND	0.030	0.00078	08/26/19 19:11	
Molybdenum	mg/L	ND	0.010	0.00095	08/26/19 19:11	
Selenium	mg/L	ND	0.010	0.0013	08/26/19 19:11	
Thallium	mg/L	ND	0.0010	0.000052	08/26/19 19:11	

LABORATORY CONTROL SAMPLE:	153794					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.092	92	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	105	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.081	81	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.086	86	80-120	

0.1

0.1

0.1

0.1

mg/L

mg/L

mg/L

mg/L

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1537	95		153796							
Parameter	Units	2622267002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00039J	0.1	0.1	0.11	0.10	108	103	75-125	5	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20	
Barium	mg/L	0.017	0.1	0.1	0.13	0.12	108	101	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	

0.10

0.10

0.093

0.091

105

91

103

93

80-120

80-120

80-120

80-120

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



Project: Plant Mitchell Pace Project No.: 2622265

Date: 12/18/2019 11:50 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1537	95		153796							
Parameter	Units	2622267002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	0.00073J	0.1	0.1	0.10	0.10	99	100	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	0	20	
Lead	mg/L	0.000064J	0.1	0.1	0.095	0.097	94	97	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.097	101	97	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	98	75-125	3	20	

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



Project: Plant Mitchell Pace Project No.: 2622265

QC Batch: 34532 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2622265001, 2622265002, 2622265003, 2622265004

METHOD BLANK: 155480 Matrix: Water
Associated Lab Samples: 2622265001, 2622265002, 2622265003, 2622265004

Blank Reporting

 Parameter
 Units
 Result
 Limit
 MDL
 Analyzed
 Qualifiers

 Fluoride
 mg/L
 ND
 0.30
 0.029
 08/29/19 22:10

LABORATORY CONTROL SAMPLE: 155481

Date: 12/18/2019 11:50 AM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Fluoride mg/L 10 9.4 94 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155482 155483

MS MSD MSD 2622265001 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Fluoride ND 10 9.2 mg/L 10 9.3 93 92 90-110 0 15

 MATRIX SPIKE SAMPLE:
 155490

 2622267002
 Spike
 MS
 MS
 % Rec

 Parameter
 Units
 Result
 Conc.
 Result
 % Rec
 Limits
 Qualifiers

Fluoride mg/L ND 10 8.5 85 90-110 M1

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622265

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/18/2019 11:50 AM

- B Analyte was detected in the associated method blank.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622265

Date: 12/18/2019 11:50 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622265001	EB-1	EPA 3005A	34176	EPA 6020B	34193
2622265002	PZ-2D	EPA 3005A	34176	EPA 6020B	34193
2622265003	PZ-16	EPA 3005A	34176	EPA 6020B	34193
2622265004	PZ-25	EPA 3005A	34179	EPA 6020B	34192
2622265001	EB-1	EPA 7470A	34233	EPA 7470A	34310
2622265002	PZ-2D	EPA 7470A	34233	EPA 7470A	34310
2622265003	PZ-16	EPA 7470A	34233	EPA 7470A	34310
2622265004	PZ-25	EPA 7470A	34233	EPA 7470A	34310
2622265001	EB-1	EPA 300.0	34532		
2622265002	PZ-2D	EPA 300.0	34532		
2622265003	PZ-16	EPA 300.0	34532		
2622265004	PZ-25	EPA 300.0	34532		

CHAIN-OF-CUST

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

(V/V) tionesof) easts SAMPLE CONDITIONS Samples (N/A) TelooD ð belse2 (pojsnj (N/A) JO# : 2622265 Received on Residual Chlorine (Y/N) 3 Page: TEMP in C 8 1 Tale: 22119 119 DATE Signed: 8/21 18 2022 ママヌ Address:
Pace Quote:
Pace Project Manager: betsy modariel@pacelabs.com. RSZ/9ZZ mulpey COPTED BY AFFLIATION Fluoride (VI xibrisqqA) alateM N. JEOT GORVIERA Attention: scsinvoices@southernco.com Company Name: Hower John lonsiteM Preservatives Na28203 HOBN Pace Profile #: 333.6.2 ЮН avoice information: EONH X BAMPLER NAME AND SIGNATURE HSSO4 Section C 715 ヹ Unpreserved # OF CONTAINERS SIGNATURE of SAMPLER PRINT Name of SAMPLER: SAMPLE TEMP AT COLLECTION 8/21/19 DATE 1052 13)6 1447 8/m/x/0830 TIME 읈 DATE //Wood COLLECTED RELEASEMENT BY / ATTILIATION Purchase Order #: SCS10382775

Project Name: Plant Mitchell

Project #: 6 (1,3, 1 6,0 17 0 TIME START Hewill Homen Required Project Information: Report To: Joju Abraham Copy To: Wood E&I 3 3 3 3 3 S SAMPLE TYPE (G-GRAB C-COMP) MATRIX CODE (see valid codes to left) Section B MATRIX
Dirinking Water
Water
Water
Water
Water
Product
SourSodd
Oil
Wipe
An
An
Other
Tissue Georgia Power - Coal Combustion Residuals ADDITIONAL COLLECTS Metats list: Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl Phone: (404)506-7239 Fax Requested Due Date: STandar One Character per box. (A-Z, 0-9 /, -). Sample Ids must be unique SAMPLE ID PZ-25 12-16 PZ-2D jabraham@southernco.com E8-1 2480 Maner Road Atlanta, GA 30339 Required Client Information: Сопралу: N 6 5 1 8. 10 .6 į. Email: Page 17 of 18 # MBTI

Sample Condition Upon Receipt



Face Analytical Client Name	: GIA	Power	Project #
: Courier: □ Fed Ex □ UPS □ USPS □ Clie Tracking #: <u>8/2/9594</u> 5448	nt Commercial	☐ Pace Other	MO# 2622265
Custody Seal on Cooler/Box Present: Tyes		intact: yes	PM: BM Due Date: 08/29/1 CLIENT: GAPouer-CCR
	e Bags None	☐ Other	CLIENT: GALONEL -OOK
Thermometer Used	Type of Ice: Wet] Samples on ice, cooling,process has begun
11 5	Biological Tissue		Date and Initials of person examining
Cooler Temperature 7.5 Temp should be above freezing to 6°C	Diological Hissue	Comments:	contents: 8/21/19 //
Chain of Custody Present:	EYes □No □N/A	1.	
Chain of Custody Filled Out:	EYes ONO ON/A		
Chain of Custody Relinquished:	₽Yes □No □N/A	 :	
Sampler Name & Signature on COC:	ÐYes □No □N/A	4.	
Samples Arrived within Hold Time:	ÆYes □No □N/A	5.	
Short Hold Time Analysis (<72hr):	□Yes ⊉Mo? □N/A	6.	
Rush Turn Around Time Requested:	□Yes ☑No □N/A	7.	
Sufficient Volume:	Dres □No □N/A	8.	
Correct Containers Used:	ŽÍÝes □No □N/A	9.	
-Pace Containers Used:	Yes ONo ON/A		
Containers Intact:	Yes □No □N/A	10.	
Filtered volume received for Dissolved tests	□Yes □No ÆNTĀ	11.	
Sample Labels match COC:	_☐Yes □No □N/A	12.	
-Includes date/time/ID/Analysis Matrix:	ω	1	
All containers needing preservation have been checked.	LEYES □No □N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	-ElYes □No □N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	□Yes 🔎	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	□Yes □No □N/A	14.	
Headspace in VOA Vials (>6mm):	□Yes □No □NA	15.	
Trip Blank Present:	□Yes □No □NA	16.	
Trip Blank Custody Seals Present	OYes ONO PATA	1	
Pace Trip Blank Lot # (if purchased):	_		
Client Notification/ Resolution:			Field Data Required? Y / N
Person Contacted:	Date/	ııme:	
Comments/ Resolution:			
		·	
			A 20 A
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)





December 18, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta. GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622267

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 22, 2019. 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.

This revised report replaces the report issued on 9/4/2019. The report has been revised to correct Metals RLs to correspond with contract. No other changes have been made to this report.

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

Sincerely,

Tyler Forney for Betsy McDaniel

tegh Pagar

betsy.mcdaniel@pacelabs.com

(770)734-4200

Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622267

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622267

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2622267001	PZ-31	Water	08/21/19 09:45	08/22/19 09:10	
2622267002	PZ-14	Water	08/21/19 11:40	08/22/19 09:10	
2622267003	PZ-23	Water	08/21/19 12:45	08/22/19 09:10	
2622267004	PZ-15	Water	08/21/19 14:10	08/22/19 09:10	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622267

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2622267001	PZ-31	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622267002	PZ-14	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622267003	PZ-23	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622267004	PZ-15	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1



Project: Plant Mitchell Pace Project No.: 2622267

Date: 12/18/2019 11:50 AM

Sample: PZ-31	Lab ID:	2622267001	Collecte	ed: 08/21/19	09:45	Received: 08/	22/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00056J	mg/L	0.0030	0.00027	1	08/23/19 14:12	08/26/19 19:28	7440-36-0	В
Arsenic	ND	mg/L	0.0050	0.00035	1	08/23/19 14:12	08/26/19 19:28	7440-38-2	
Barium	0.0070J	mg/L	0.010	0.00049	1	08/23/19 14:12	08/26/19 19:28	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:12	08/26/19 19:28	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:12	08/26/19 19:28	7440-43-9	
Chromium	0.0016J	mg/L	0.010	0.00039	1	08/23/19 14:12	08/26/19 19:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:12	08/26/19 19:28	7440-48-4	
Lead	0.00011J	mg/L	0.0050	0.000046	1	08/23/19 14:12	08/26/19 19:28	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:12	08/26/19 19:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:12	08/26/19 19:28	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:12	08/26/19 19:28	7782-49-2	
Thallium	0.000061J	mg/L	0.0010	0.000052	1	08/23/19 14:12	08/26/19 19:28	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 12:54	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 01:11	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622267

Date: 12/18/2019 11:50 AM

Sample: PZ-14	Lab ID:	2622267002	Collecte	ed: 08/21/19	11:40	Received: 08/	22/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: Ef	PA 3005A			
Antimony	0.00039J	mg/L	0.0030	0.00027	1	08/23/19 14:12	08/26/19 19:33	7440-36-0	В
Arsenic	ND	mg/L	0.0050	0.00035	1	08/23/19 14:12	08/26/19 19:33	7440-38-2	
Barium	0.017	mg/L	0.010	0.00049	1	08/23/19 14:12	08/26/19 19:33	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:12	08/26/19 19:33	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:12	08/26/19 19:33	7440-43-9	
Chromium	0.00073J	mg/L	0.010	0.00039	1	08/23/19 14:12	08/26/19 19:33	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:12	08/26/19 19:33	7440-48-4	
Lead	0.000064J	mg/L	0.0050	0.000046	1	08/23/19 14:12	08/26/19 19:33	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:12	08/26/19 19:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:12	08/26/19 19:33	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:12	08/26/19 19:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:12	08/26/19 19:33	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 12:10	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 01:33	16984-48-8	M1



Project: Plant Mitchell Pace Project No.: 2622267

Date: 12/18/2019 11:50 AM

Sample: PZ-23	Lab ID:	2622267003	Collecte	ed: 08/21/19	12:45	Received: 08/	22/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00055J	mg/L	0.0030	0.00027	1	08/23/19 14:12	08/26/19 19:56	7440-36-0	В
Arsenic	ND	mg/L	0.0050	0.00035	1	08/23/19 14:12	08/26/19 19:56	7440-38-2	
Barium	0.032	mg/L	0.010	0.00049	1	08/23/19 14:12	08/26/19 19:56	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:12	08/26/19 19:56	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:12	08/26/19 19:56	7440-43-9	
Chromium	0.0024J	mg/L	0.010	0.00039	1	08/23/19 14:12	08/28/19 15:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:12	08/28/19 15:15	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:12	08/26/19 19:56	7439-92-1	
Lithium	0.00090J	mg/L	0.030	0.00078	1	08/23/19 14:12	08/26/19 19:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:12	08/26/19 19:56	7439-98-7	
Selenium	0.0022J	mg/L	0.010	0.0013	1	08/23/19 14:12	08/26/19 19:56	7782-49-2	
Thallium	0.00016J	mg/L	0.0010	0.000052	1	08/23/19 14:12	08/26/19 19:56	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 12:56	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 01:56	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622267

Date: 12/18/2019 11:50 AM

Sample: PZ-15	Lab ID:	2622267004	Collecte	ed: 08/21/19	14:10	Received: 08/	22/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:12	08/26/19 20:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/23/19 14:12	08/26/19 20:02	7440-38-2	
Barium	0.050	mg/L	0.010	0.00049	1	08/23/19 14:12	08/26/19 20:02	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:12	08/26/19 20:02	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:12	08/26/19 20:02	7440-43-9	
Chromium	0.00048J	mg/L	0.010	0.00039	1	08/23/19 14:12	08/28/19 15:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:12	08/28/19 15:20	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:12	08/26/19 20:02	7439-92-1	
Lithium	0.0013J	mg/L	0.030	0.00078	1	08/23/19 14:12	08/26/19 20:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:12	08/26/19 20:02	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:12	08/26/19 20:02	7782-49-2	
Thallium	0.00022J	mg/L	0.0010	0.000052	1	08/23/19 14:12	08/26/19 20:02	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 12:58	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Fluoride	0.044J	mg/L	0.30	0.029	1		08/30/19 02:19	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622267

QC Batch: 34233 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Associated Lab Samples: 2622267001, 2622267002, 2622267003, 2622267004

METHOD BLANK: 154036 Matrix: Water
Associated Lab Samples: 2622267001, 2622267002, 2622267003, 2622267004

Blank Reporting

Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury mg/L ND 0.00050 0.00014 08/27/19 12:05

LABORATORY CONTROL SAMPLE: 154037

Date: 12/18/2019 11:50 AM

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154038 154039

MSD MS MSD 2622267002 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual ND 0.0025 0.0025 0.0025 101 75-125 20 Mercury mg/L 0.0026 102

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



Project: Plant Mitchell Pace Project No.: 2622267

Thallium

Date: 12/18/2019 11:50 AM

QC Batch: 34179 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2622267001, 2622267002, 2622267003, 2622267004

METHOD BLANK: 153793 Matrix: Water
Associated Lab Samples: 2622267001, 2622267002, 2622267003, 2622267004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	 mg/L	0.00075J	0.0030	0.00027	08/26/19 19:11	
Arsenic	mg/L	ND	0.0050	0.00035	08/26/19 19:11	
Barium	mg/L	ND	0.010	0.00049	08/26/19 19:11	
Beryllium	mg/L	ND	0.0030	0.000074	08/26/19 19:11	
Cadmium	mg/L	ND	0.0025	0.00011	08/26/19 19:11	
Chromium	mg/L	ND	0.010	0.00039	08/26/19 19:11	
Cobalt	mg/L	ND	0.0050	0.00030	08/26/19 19:11	
Lead	mg/L	ND	0.0050	0.000046	08/26/19 19:11	
Lithium	mg/L	ND	0.030	0.00078	08/26/19 19:11	
Molybdenum	mg/L	ND	0.010	0.00095	08/26/19 19:11	
Selenium	mg/L	ND	0.010	0.0013	08/26/19 19:11	
Thallium	mg/L	ND	0.0010	0.000052	08/26/19 19:11	

LABORATORY CONTROL SAMPLE:	153794					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.092	92	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	105	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.081	81	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.086	86	80-120	
Lithium	mg/L	0.1	0.10	105	80-120	
Molybdenum	mg/L	0.1	0.091	91	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	

0.1

mg/L

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1537	95		153796							
		2622267002	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	0.00039J	0.1	0.1	0.11	0.10	108	103	75-125	5	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20	
Barium	mg/L	0.017	0.1	0.1	0.13	0.12	108	101	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	

0.093

93

80-120

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



Project: Plant Mitchell Pace Project No.: 2622267

Date: 12/18/2019 11:50 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1537	95		153796							
Parameter	Units	2622267002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	0.00073J	0.1	0.1	0.10	0.10	99	100	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	0	20	
Lead	mg/L	0.000064J	0.1	0.1	0.095	0.097	94	97	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.097	101	97	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	98	75-125	3	20	

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



Project: Plant Mitchell Pace Project No.: 2622267

QC Batch: 34532 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2622267001, 2622267002, 2622267003, 2622267004

METHOD BLANK: 155480 Matrix: Water
Associated Lab Samples: 2622267001, 2622267002, 2622267003, 2622267004

Blank Reporting
Parameter Units Result Limit M

 Parameter
 Units
 Result
 Limit
 MDL
 Analyzed
 Qualifiers

 Fluoride
 mg/L
 ND
 0.30
 0.029
 08/29/19 22:10

LABORATORY CONTROL SAMPLE: 155481

Fluoride

Date: 12/18/2019 11:50 AM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Fluoride mg/L 10 9.4 94 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155482 155483

mg/L

MS MSD MSD 2622265001 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Fluoride ND 10 9.2 mg/L 10 9.3 93 92 90-110 0 15

 MATRIX SPIKE SAMPLE:
 155490
 Spike
 MS
 MS
 Rec

 Parameter
 Units
 Result
 Conc.
 Result
 % Rec
 Limits
 Qualifiers

ND

10

8.5

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

REPORT OF LABORATORY ANALYSIS

90-110 M1

85



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622267

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/18/2019 11:50 AM

- B Analyte was detected in the associated method blank.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622267

Date: 12/18/2019 11:50 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2622267001	PZ-31	EPA 3005A	34179	EPA 6020B	34192
2622267002	PZ-14	EPA 3005A	34179	EPA 6020B	34192
2622267003	PZ-23	EPA 3005A	34179	EPA 6020B	34192
2622267004	PZ-15	EPA 3005A	34179	EPA 6020B	34192
2622267001	PZ-31	EPA 7470A	34233	EPA 7470A	34310
2622267002	PZ-14	EPA 7470A	34233	EPA 7470A	34310
2622267003	PZ-23	EPA 7470A	34233	EPA 7470A	34310
2622267004	PZ-15	EPA 7470A	34233	EPA 7470A	34310
2622267001	PZ-31	EPA 300.0	34532		
2622267002	PZ-14	EPA 300.0	34532		
2622267003	PZ-23	EPA 300.0	34532		
2622267004	PZ-15	EPA 300.0	34532		

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

Section A		Section B		Sec	Section C									L	l				Г
Required	Client Information:	١٦		Invo	Invoice information:	ation:								2	Page:	_	ō	_	
Ardroce	Georgia Power - Coal Combustion Residuals	- 1		Alter	Altention: s	csinvoices(scsinvoices@southernco.com	moo				Γ				l			
200	2400 Maner Koad	Copy 10: Wood E&I		န္ပ	Company Name	;e													
		ı		Address:	.888							}			Room	Roomston Agency	700		
	Ciliali. jabraham@southemco.com	Purchase Order #: SCS10382775		Pace	Pace Quote:							H							Γ
Donne		Project Name: Plant Mitchell		Pace	Pace Project Manager.	anager:	betsy.mcdaniel@pacelabs.com,	miel@	acelat	S.com,					Stafe	State / Location	, ut	3	
prephasi		Project #: 6/22/60170		Pao	Pace Profile #:	333.6.2	1					_				g			
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- Metals list	*Metals list Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Ti	Haire Hours (1/Wo	00d 8/1/19	_	715	Ma	(a)	M	4 1	3	00		\$ \$	12				_	
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Sample Condition Upon Receipt

Pace Analytical	Client Name	: <u> </u>	A	ower	Project #	
Courier: ☐ Fed Ex ☐ Tracking #: 8/2	UPS USPS Clier	nt 🗆 Comm	nercial	Pace Other	WO# : 262	
Custody Seal on Cooler		☐ no	Seals	intact: yes [PM: BM	Due Date: 08/29/
		_		_	CLIENT: GAPowe	r-ccr
Packing Material: Be	ubble Wrap Bubble	Bags /		Other		
Thermometer Used	<u> </u>	Type of Ice	•		Samples on ice, cooling Date and Initials b	f person examining
Cooler Temperature Temp should be above freez	4, <u>2</u> ing to 6°C	Biological	lissue	is Frozen: Yes No Comments:	contents: <u>g</u> /	22/19 MZ
Chain of Custody Present	!:	-EYes □No	□N/A	1.		
Chain of Custody Filled O	out:	√21Yes □No	□N/A	2.		
Chain of Custody Relinqu	ished:	_DYes □No	□N/A	3.		
Sampler Name & Signatu	re on COC:	₽795 □No	DN/A	4.		
Samples Arrived within H	old Time:	ÆYes □No	DN/A	5.		
Short Hold Time Analys	is (<72hr):	☐Yes ☐Mo	5~~□N/A	6.	·········	
Rush Turn Around Time	Requested:	□Yes □No	5- □N/A	7.		
Sufficient Volume:		-EYês □No	□N/A	8.		
Correct Containers Used:		-ÐYes □No	o □N/A	9.		
-Pace Containers Use	d:	€ Yes □No	o □n/a			
Containers Intact:		-DYes □No	o □n/a	10.	· · · · · · · · · · · · · · · · · · ·	
Filtered volume received	for Dissolved tests	□Yes □No	O PENIA	11.		
Sample Labels match CC	DC:	-ElYes □No	o □n/a	12.		
-Includes date/time/ID	/Analysis Matrix:	ω	<u> </u>			
All containers needing preserv	ation have been checked.	₽Yey □No	o □N/A	13.		
All containers needing press compliance with EPA recom		-ÐYes □No	o 🗆N/A			
exceptions: VOA, coliform, TOO	C O&G WILDRO (water)	□Yes ☑⊀€	5—	initial when completed	Lot # of added preservative	
Samples checked for dec		☐Yes ☐No	o Dwa			A W
Headspace in VOA Vials		□Yes □Ne				
Trip Blank Present:	(>0/11/1).	☐Yes ☐Ne				-
Trip Blank Custody Seals	Procent	□Yes □N	-	L		
		C 165 CM	١٩٨٨			
Pace Trip Blank Lot # (if	purchaseu)					
Client Notification/ Res					Field Data Required?	Y / N
	:		Date/	Time:		
Comments/ Resolution	:					
				<u> </u>		
Project Manager Per	down				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)





December 18, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622269

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 22, 2019. 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.

This revised report replaces the report issued on 8/29/2019. The report has been revised to correct Metals RLs to correspond with contract. No other changes have been made to this report.

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

Sincerely,

Tyler Forney for Betsy McDaniel

tegh Pagar

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622269

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622269

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622269001	PZ-32	Water	08/20/19 15:03	08/22/19 09:10
2622269002	PZ-1D	Water	08/20/19 16:10	08/22/19 09:10



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622269

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2622269001	PZ-32	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622269002	PZ-1D	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1



Project: Plant Mitchell Pace Project No.: 2622269

Date: 12/18/2019 11:52 AM

Sample: PZ-32	Lab ID:	2622269001	Collecte	ed: 08/20/19	15:03	Received: 08/	22/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:12	08/26/19 20:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/23/19 14:12	08/26/19 20:19	7440-38-2	
Barium	0.016	mg/L	0.010	0.00049	1	08/23/19 14:12	08/26/19 20:19	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:12	08/26/19 20:19	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:12	08/26/19 20:19	7440-43-9	
Chromium	0.00044J	mg/L	0.010	0.00039	1	08/23/19 14:12	08/28/19 15:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:12	08/28/19 15:26	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:12	08/26/19 20:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:12	08/26/19 20:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:12	08/26/19 20:19	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:12	08/26/19 20:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:12	08/26/19 20:19	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 13:01	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 07:06	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622269

Date: 12/18/2019 11:52 AM

Sample: PZ-1D	Lab ID:	2622269002	Collecte	ed: 08/20/19	16:10	Received: 08/	22/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00074J	mg/L	0.0030	0.00027	1	08/23/19 14:12	08/26/19 20:25	7440-36-0	В
Arsenic	ND	mg/L	0.0050	0.00035	1	08/23/19 14:12	08/26/19 20:25	7440-38-2	
Barium	0.017	mg/L	0.010	0.00049	1	08/23/19 14:12	08/26/19 20:25	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:12	08/26/19 20:25	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:12	08/26/19 20:25	7440-43-9	
Chromium	0.0028J	mg/L	0.010	0.00039	1	08/23/19 14:12	08/26/19 20:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:12	08/26/19 20:25	7440-48-4	
Lead	0.00021J	mg/L	0.0050	0.000046	1	08/23/19 14:12	08/26/19 20:25	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:12	08/26/19 20:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:12	08/26/19 20:25	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:12	08/26/19 20:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:12	08/26/19 20:25	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 13:03	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 07:29	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622269

QC Batch: 34233 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Associated Lab Samples: 2622269001, 2622269002

METHOD BLANK: 154036 Matrix: Water

Associated Lab Samples: 2622269001, 2622269002

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Mercury mg/L ND 0.00050 0.00014 08/27/19 12:05

LABORATORY CONTROL SAMPLE: 154037

Date: 12/18/2019 11:52 AM

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154038 154039

MS MSD

MSD MSD 2622267002 Spike Spike MS MS % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual ND 0.0025 0.0025 0.0025 101 75-125 20 Mercury mg/L 0.0026 102

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



Project: Plant Mitchell Pace Project No.: 2622269

QC Batch: 34179 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2622269001, 2622269002

METHOD BLANK: 153793 Matrix: Water

Associated Lab Samples: 2622269001, 2622269002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00075J	0.0030	0.00027	08/26/19 19:11	
Arsenic	mg/L	ND	0.0050	0.00035	08/26/19 19:11	
Barium	mg/L	ND	0.010	0.00049	08/26/19 19:11	
Beryllium	mg/L	ND	0.0030	0.000074	08/26/19 19:11	
Cadmium	mg/L	ND	0.0025	0.00011	08/26/19 19:11	
Chromium	mg/L	ND	0.010	0.00039	08/26/19 19:11	
Cobalt	mg/L	ND	0.0050	0.00030	08/26/19 19:11	
_ead	mg/L	ND	0.0050	0.000046	08/26/19 19:11	
Lithium	mg/L	ND	0.030	0.00078	08/26/19 19:11	
Molybdenum	mg/L	ND	0.010	0.00095	08/26/19 19:11	
Selenium	mg/L	ND	0.010	0.0013	08/26/19 19:11	
Thallium	mg/L	ND	0.0010	0.000052	08/26/19 19:11	

LABORATORY CONTROL SAMPLE: 1537

Date: 12/18/2019 11:52 AM

LABORATORT CONTROL CAMILL	LL. 100704					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.092	92	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	105	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.081	81	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.086	86	80-120	
Lithium	mg/L	0.1	0.10	105	80-120	
Molybdenum	mg/L	0.1	0.091	91	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.093	93	80-120	

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1537		MOD	153796							
Parameter	Units	2622267002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00039J	0.1	0.1	0.11	0.10	108	103	75-125	 5	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20	
Barium	mg/L	0.017	0.1	0.1	0.13	0.12	108	101	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	

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



Project: Plant Mitchell Pace Project No.: 2622269

Date: 12/18/2019 11:52 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1537	95		153796							
Parameter	Units	2622267002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	0.00073J	0.1	0.1	0.10	0.10	99	100	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	0	20	
Lead	mg/L	0.000064J	0.1	0.1	0.095	0.097	94	97	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.097	101	97	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	98	75-125	3	20	

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



MATRIX SPIKE SAMPLE:

Date: 12/18/2019 11:52 AM

Fluoride

Parameter

mg/L

154821

Units

mg/L

QUALITY CONTROL DATA

Project: Plant Mitchell Pace Project No.: 2622269 QC Batch: 34413 Analysis Method: EPA 300.0 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions Associated Lab Samples: 2622269001, 2622269002 METHOD BLANK: 154817 Matrix: Water Associated Lab Samples: 2622269001, 2622269002 Blank Reporting Parameter Limit MDL Qualifiers Units Result Analyzed Fluoride ND 0.30 0.029 08/28/19 20:32 mg/L LABORATORY CONTROL SAMPLE: 154818 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Fluoride mg/L 10 9.5 95 90-110 MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154819 154820 MS MSD MSD 2622246001 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Fluoride ND 10

9.9

10

Spike

Conc.

9.8

MS

Result

9.7

99

MS

% Rec

98

97

90-110

% Rec

Limits

90-110

15

Qualifiers

10

2622246002

Result

ND

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622269

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/18/2019 11:52 AM

B Analyte was detected in the associated method blank.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622269

Date: 12/18/2019 11:52 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622269001	PZ-32	EPA 3005A	34179	EPA 6020B	34192
2622269002	PZ-1D	EPA 3005A	34179	EPA 6020B	34192
2622269001	PZ-32	EPA 7470A	34233	EPA 7470A	34310
2622269002	PZ-1D	EPA 7470A	34233	EPA 7470A	34310
2622269001	PZ-32	EPA 300.0	34413		
2622269002	PZ-1D	EPA 300.0	34413		

Pace Analytical

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

Section A Required	Client Information:	Section B Required Protect Information:	act bafe	armation:				o E	Section C	Section C	į										Ľ		-			-	F
Company	Georgia Power - Coal Combustion Residuals	Report To:	Joiu Abraham	raham				Ĭ	Attention	3	Signation.	6	ersinaniros@ecuthomos aco				ł	l	Γ			Page:	1	l	اة اة	_	٦
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	MATRIX	CODE			COLLE	LECTED		N		مَ	reserv	Preservatives		N/A	<u> </u>				_			ti setes					5.25
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-	PZ-32	4	24		,	8/20Pp 1503	1503	I	X	仱		\vdash	-		×	X	1		╄	上	F	+	_				_
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• Metals list	* Metals ist: Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, So, Ti	Tonio D	=======================================	enel House	/W00	Po	51/17/B		7115	$\left \cdot \right $	2	Ø	3	11	z	3		2	77	00	160			\vdash			
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Page 13 of					SAMPLER NAME AND SIGNATI PRINT Name of SAMPLER: SIGNATURE of SAMPLER	PLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER	ND SIGN	ER:	Day		1	Towar				TE Sign	DATE Signed: 8		P1/1			O ni 9MBT	Received on	(V/Y) Custody	Sealed Cooler (V/V)	Samples (V/V)	
14																											1

Sample Condition Upon Receipt



Client Name	S. GIA	OWER	Project #
Courier: Fed Ex UPS USPS Clie Tracking #: 812 9394593 Custody Seal on Cooler/Box Present: Vyes	30	al Pace Other	WO#: 2622269 PM: BM Due Date: 08/29/19
			CLIENT: GRPower-CCR
$ 22\overline{A}$	e Bags None		
Thermometer Used 85	Type of Ice: V		Samples on ice, cooling process has begun Date and Initials of person examining
Cooler Temperature 7.0 Temp should be above freezing to 6°C	Biological HS	ue is Frozen: Yes No Comments:	contents: 8 2 2 19 M
Chain of Custody Present:	∠ZYes □No □	N/A 1.	
Chain of Custody Filled Out:		N/A 2.	
Chain of Custody Relinquished:		N/A 3.	
Sampler Name & Signature on COC:		N/A 4.	
Samples Arrived within Hold Time:		N/A 5.	
Short Hold Time Analysis (<72hr):	□Yes □X6 □		
Rush Turn Around Time Requested:	□Yes □W6' □		
Sufficient Volume:		N/A 8.	
Correct Containers Used:	_	N/A 9.	
-Pace Containers Used:		N/A	
Containers Intact:	→ÐYes □No □	N/A 10.	
Filtered volume received for Dissolved tests	□Yes □No -ि	N/A 11.	
Sample Labels match COC:	-ElYes ONo, O	N/A 12.	
-Includes date/time/ID/Analysis Matrix:	ω		
All containers needing preservation have been checked.	□ ON BART	N/A 13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	_2Yes □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 ∠		
Headspace in VOA Vials (>6mm):	□Yes □No ←		
Trip Blank Present:	□Yes □No -E		
Trip Blank Custody Seals Present	□Yes □No Æ		
Pace Trip Blank Lot # (if purchased):	.,		
Client Notification/ Resolution: Person Contacted:	D	ate/Time:	Field Data Required? Y / N
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)





January 10, 2020

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622335

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2019. 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.

This revised report replaces the report issued on 9/3/2019. The report has been revised to correct Metals RLs to correspond with contract. No other changes have been made to this report.

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

Sincerely,

Kevin Herring for Betsy McDaniel

Kein Slern

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622335

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622335

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622335001	FB-01	Water	08/22/19 08:15	08/23/19 09:10
2622335002	PZ-33	Water	08/22/19 10:04	08/23/19 09:10
2622335003	Dup-02	Water	08/22/19 00:00	08/23/19 09:10
2622335004	PZ-19	Water	08/22/19 12:32	08/23/19 09:10
2622335005	Dup-01	Water	08/22/19 00:00	08/23/19 09:10



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622335

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2622335001	FB-01	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622335002	PZ-33	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622335003	Dup-02	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622335004	PZ-19	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622335005	Dup-01	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1



Project: Plant Mitchell Pace Project No.: 2622335

Date: 01/10/2020 09:52 AM

Sample: FB-01	Lab ID:	2622335001	Collecte	ed: 08/22/19	08:15	Received: 08/	23/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/27/19 11:50	08/27/19 16:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/27/19 11:50	08/27/19 16:57	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/27/19 11:50	08/27/19 16:57	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/27/19 11:50	08/27/19 16:57	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/27/19 11:50	08/27/19 16:57	7440-43-9	
Chromium	0.00050J	mg/L	0.010	0.00039	1	08/27/19 11:50	08/27/19 16:57	7440-47-3	В
Cobalt	ND	mg/L	0.0050	0.00030	1	08/27/19 11:50	08/27/19 16:57	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/27/19 11:50	08/27/19 16:57	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/27/19 11:50	08/27/19 16:57	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/27/19 11:50	08/27/19 16:57	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/27/19 11:50	08/27/19 16:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/27/19 11:50	08/27/19 16:57	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 13:55	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 16:13	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622335

Date: 01/10/2020 09:52 AM

Sample: PZ-33	Lab ID:	2622335002	Collecte	ed: 08/22/19	9 10:04	Received: 08/	23/19 09:10 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/27/19 11:50	08/27/19 17:03	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/27/19 11:50	08/27/19 17:03	7440-38-2	
Barium	0.064	mg/L	0.010	0.00049	1	08/27/19 11:50	08/27/19 17:03	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/27/19 11:50	08/27/19 17:03	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/27/19 11:50	08/27/19 17:03	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/27/19 11:50	08/27/19 17:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/27/19 11:50	08/27/19 17:03	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/27/19 11:50	08/27/19 17:03	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/27/19 11:50	08/27/19 17:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/27/19 11:50	08/27/19 17:03	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/27/19 11:50	08/27/19 17:03	7782-49-2	
Thallium	0.00017J	mg/L	0.0010	0.000052	1	08/27/19 11:50	08/27/19 17:03	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 13:58	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 16:35	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622335

Date: 01/10/2020 09:52 AM

Sample: Dup-02	Lab ID:	2622335003	Collecte	ed: 08/22/19	00:00	Received: 08/	23/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/27/19 11:50	08/27/19 17:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/27/19 11:50	08/27/19 17:08	7440-38-2	
Barium	0.062	mg/L	0.010	0.00049	1	08/27/19 11:50	08/27/19 17:08	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/27/19 11:50	08/27/19 17:08	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/27/19 11:50	08/27/19 17:08	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/27/19 11:50	08/27/19 17:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/27/19 11:50	08/27/19 17:08	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/27/19 11:50	08/27/19 17:08	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/27/19 11:50	08/27/19 17:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/27/19 11:50	08/27/19 17:08	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/27/19 11:50	08/27/19 17:08	7782-49-2	
Thallium	0.00017J	mg/L	0.0010	0.000052	1	08/27/19 11:50	08/27/19 17:08	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 14:00	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 16:58	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622335

Date: 01/10/2020 09:52 AM

Sample: PZ-19	Lab ID:	Collected: 08/22/19 12:32			Received: 08/23/19 09:10 Matrix: Water				
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/27/19 11:50	08/27/19 17:14	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/27/19 11:50	08/27/19 17:14	7440-38-2	
Barium	0.047	mg/L	0.010	0.00049	1	08/27/19 11:50	08/27/19 17:14	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/27/19 11:50	08/27/19 17:14	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/27/19 11:50	08/27/19 17:14	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/27/19 11:50	08/27/19 17:14	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/27/19 11:50	08/27/19 17:14	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/27/19 11:50	08/27/19 17:14	7439-92-1	
Lithium	0.012J	mg/L	0.030	0.00078	1	08/27/19 11:50	08/27/19 17:14	7439-93-2	
Molybdenum	0.0021J	mg/L	0.010	0.00095	1	08/27/19 11:50	08/27/19 17:14	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/27/19 11:50	08/27/19 17:14	7782-49-2	
Thallium	0.00055J	mg/L	0.0010	0.000052	1	08/27/19 11:50	08/27/19 17:14	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 14:02	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	0.10J	mg/L	0.30	0.029	1		08/30/19 17:21	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622335

Date: 01/10/2020 09:52 AM

Sample: Dup-01	Lab ID:	Collected: 08/22/19 00:00			Received: 08/	atrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/27/19 11:50	08/27/19 17:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/27/19 11:50	08/27/19 17:20	7440-38-2	
Barium	0.049	mg/L	0.010	0.00049	1	08/27/19 11:50	08/27/19 17:20	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/27/19 11:50	08/27/19 17:20	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/27/19 11:50	08/27/19 17:20	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/27/19 11:50	08/27/19 17:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/27/19 11:50	08/27/19 17:20	7440-48-4	
₋ead	ND	mg/L	0.0050	0.000046	1	08/27/19 11:50	08/27/19 17:20	7439-92-1	
_ithium	0.012J	mg/L	0.030	0.00078	1	08/27/19 11:50	08/27/19 17:20	7439-93-2	
Molybdenum	0.0022J	mg/L	0.010	0.00095	1	08/27/19 11:50	08/27/19 17:20	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/27/19 11:50	08/27/19 17:20	7782-49-2	
Γhallium	0.00058J	mg/L	0.0010	0.000052	1	08/27/19 11:50	08/27/19 17:20	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 14:09	7439-97-6	
800.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	0.079J	mg/L	0.30	0.029	1		08/30/19 17:43	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622335

QC Batch: 34265 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Associated Lab Samples: 2622335001, 2622335002, 2622335003, 2622335004, 2622335005

METHOD BLANK: 154112 Matrix: Water

Associated Lab Samples: 2622335001, 2622335002, 2622335003, 2622335004, 2622335005

Blank Reporting

 Parameter
 Units
 Result
 Limit
 MDL
 Analyzed
 Qualifiers

 Mercury
 mg/L
 ND
 0.00050
 0.00014
 08/27/19 13:41

LABORATORY CONTROL SAMPLE: 154113

Date: 01/10/2020 09:52 AM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Mercury mg/L 0.0025 0.0026 103 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154114 154115

MS MSD MSD 2622337002 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual ND 0.0025 0.0025 101 75-125 20 Mercury mg/L 0.0025 0.0025 100

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



Project: Plant Mitchell Pace Project No.: 2622335

 QC Batch:
 34320
 Analysis Method:
 EPA 6020B

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

 Associated Lab Samples:
 2622335001, 2622335002, 2622335003, 2622335004, 2622335005

METHOD BLANK: 154347 Matrix: Water

Associated Lab Samples: 2622335001, 2622335002, 2622335003, 2622335004, 2622335005

Davamatan	l laita	Blank	Reporting	MDI	A a l a -l	0	
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers	
Antimony	mg/L	ND	0.0030	0.00027	08/27/19 16:36		
Arsenic	mg/L	ND	0.0050	0.00035	08/27/19 16:36		
Barium	mg/L	ND	0.010	0.00049	08/27/19 16:36		
Beryllium	mg/L	ND	0.0030	0.000074	08/27/19 16:36		
Cadmium	mg/L	ND	0.0025	0.00011	08/27/19 16:36		
Chromium	mg/L	0.0012J	0.010	0.00039	08/27/19 16:36		
Cobalt	mg/L	ND	0.0050	0.00030	08/27/19 16:36		
Lead	mg/L	ND	0.0050	0.000046	08/27/19 16:36		
Lithium	mg/L	ND	0.030	0.00078	08/27/19 16:36		
Molybdenum	mg/L	ND	0.010	0.00095	08/27/19 16:36		
Selenium	mg/L	ND	0.010	0.0013	08/27/19 16:36		
Thallium	mg/L	ND	0.0010	0.000052	08/27/19 16:36		

LABORATORY CONTROL SAMPLE:	154348
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Date: 01/10/2020 09:52 AM

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.090	90	80-120	
Arsenic	mg/L	0.1	0.085	85	80-120	
Barium	mg/L	0.1	0.088	88	80-120	
Beryllium	mg/L	0.1	0.086	86	80-120	
Cadmium	mg/L	0.1	0.088	88	80-120	
Chromium	mg/L	0.1	0.088	88	80-120	
Cobalt	mg/L	0.1	0.086	86	80-120	
Lead	mg/L	0.1	0.086	86	80-120	
Lithium	mg/L	0.1	0.087	87	80-120	
Molybdenum	mg/L	0.1	0.089	89	80-120	
Selenium	mg/L	0.1	0.085	85	80-120	
Thallium	mg/L	0.1	0.087	87	80-120	

MATRIX SPIKE & MATRIX SF	PIKE DUPL	ICATE: 1543	49 MS Spike	MSD Spike	154350 MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	1	20	
Barium	mg/L	0.078	0.1	0.1	0.18	0.18	104	104	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.092	0.093	92	93	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	

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



Project: Plant Mitchell Pace Project No.: 2622335

Date: 01/10/2020 09:52 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1543		154350								
		2622337002	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2	20	
Lithium	mg/L	0.0025J	0.1	0.1	0.095	0.096	92	93	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20	
Thallium	mg/L	0.00018J	0.1	0.1	0.098	0.099	97	99	75-125	1	20	

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



Project: Plant Mitchell Pace Project No.: 2622335

QC Batch: 34533 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2622335001, 2622335002, 2622335003, 2622335004, 2622335005

METHOD BLANK: 155485 Matrix: Water

Associated Lab Samples: 2622335001, 2622335002, 2622335003, 2622335004, 2622335005

Blank Reporting

Parameter Units Result Limit MDL Analyzed Qualifiers

Fluoride mg/L ND 0.30 0.029 08/30/19 13:57

LABORATORY CONTROL SAMPLE: 155486

Date: 01/10/2020 09:52 AM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Fluoride mg/L 10 9.3 93 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155487 155488

MS MSD 2622319009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Fluoride ND 108 mg/L 10 10 10.8 10.7 107 90-110 15

MATRIX SPIKE SAMPLE: 155523

2622337002 Spike MS MS % Rec
Parameter Units Result Conc. Result % Rec Limits Qualifiers

Fluoride mg/L 0.11J 10 9.5 94 90-110

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622335

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 01/10/2020 09:52 AM

B Analyte was detected in the associated method blank.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622335

Date: 01/10/2020 09:52 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622335001	FB-01	EPA 3005A	34320	EPA 6020B	34344
2622335002	PZ-33	EPA 3005A	34320	EPA 6020B	34344
2622335003	Dup-02	EPA 3005A	34320	EPA 6020B	34344
2622335004	PZ-19	EPA 3005A	34320	EPA 6020B	34344
2622335005	Dup-01	EPA 3005A	34320	EPA 6020B	34344
2622335001	FB-01	EPA 7470A	34265	EPA 7470A	34311
2622335002	PZ-33	EPA 7470A	34265	EPA 7470A	34311
2622335003	Dup-02	EPA 7470A	34265	EPA 7470A	34311
2622335004	PZ-19	EPA 7470A	34265	EPA 7470A	34311
2622335005	Dup-01	EPA 7470A	34265	EPA 7470A	34311
2622335001	FB-01	EPA 300.0	34533		
2622335002	PZ-33	EPA 300.0	34533		
2622335003	Dup-02	EPA 300.0	34533		
2622335004	PZ-19	EPA 300.0	34533		
2622335005	Dup-01	EPA 300.0	34533		

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

-	Page: 1 Of		Bogudatory Against	1	State / Location	GA GAME CONTRACTOR CON		(N/Y) en	Residual Chlorin									WO#:2622335				THE SAMPE COUNTRY	0160		7 7 8 8 7		Wh In C	원 (사) (사) (원 (원 (원 (원 (원 (원 (원 (원 (원 (원 (원 (원 (원
					acelabs.com.	Reguested Analysis: Elitared IVM)	NNN N		Metals (Appende Fluoride Isslass muibeR	XXX	XXX	XXX	X X X					#0M				DIATION TO TO THE	1888 /	-			DATE Signed: ~/	277/8
į	manon; scsiooioes@southerron cam	H.			lanager: betsy modaniel@pacelabs.com.	333.6.2	Preservatives	SEOT	Wuglyses Other Methanol Necs203 HCI HNO3	X	<i>y</i>	×										Accempantation	Malman				el Howard	/ Jananay
Section C	Attention: session	12	Address:	Pace Quote:	Pace Project Manager:	February #		SS SS	A WAS TEWP A # OF CONTAINE! Unpreserved H2504	X h s180	(× +001		1232 HX 1									DATE TIME (8h2/19 1660	•		IPLER MAME AND SIGNATURE	SAMPLER: Ch.	D anse
	TOOL:			SCS10382775		07.00	COLLECTED	START END	DATE TIME DATE	spake	7 11 1		(4								Тапон	W/Wasd			SAMPLERNAME AN	PRINT Name of SAMPLER: SIGNATURE of SAMPLER	
Section B	Report To: Join Abraham	Copy To: Wood E&I		Purchase Order #: SC;	Project Name: Plant Mitchell	1,400 m. 61.4 m.	(Red of e	epco pgæ∧ ees)	\$ \$ £ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$) 	기사	予る	\ <u>0</u> 3⊦	アク								RELINGUISHED BY ATT	The War					
Allone before effects	Georgia Power - Coal Combustion Residuals	2480 Marner Road	Atlanta, GA 30339		Fax:	Standard	MATRIX	SAMPLEID	One Character per box. Wps (A-Z, 0-9 /, -) Cher Sample Ids must be unique Tissue	FR-01	PZ-33	Dup-02	PZ-19	DUP -01					a de la companya de l			Aborrovat coggistins	Metals list Hg, Sb, As, Ba, Bo, Cd, Cr, Co, Pb, U, Wo, So, Tl					
Section A	Company:	Address			Phone:	Notice of the last			# MƏTI	.	2	3	•	5	9	2	8.4	•	e	¥	:0:	P	• Metaks lis			F	Page 16	of 17

Sample Condition Upon Receipt

Client Name: 61 & Power Project # Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Due Date: 08/30/19 **Custody Seal on Cooler/Box Present:** yes ☐ no Seals intact: GRPouer-CCR CLIENT: ☐ Bubble Bags ☐ None Packing Material:

Bubble Wrap ☐ Other Type of Ice: Wef ☐ Samples on ice, cooling process has begun Thermometer Used person/examining Date and Initials,o Biological Tissue is Frozen: Yes No **Cooler Temperature** contents: Temp should be above freezing to 6°C Comments: DYES □No □N/A Chain of Custody Present: Chain of Custody Filled Out: PYes □No □n/A ☑Yes □No □N/A Chain of Custody Relinquished: ÆYes □No □N/A Sampler Name & Signature on COC: ₽Yes □No □N/A Samples Arrived within Hold Time: □Yes -□N/A Short Hold Time Analysis (<72hr): Rush Turn Around Time Requested: ☐Yes ☐No □n/A Sufficient Volume: --ETYés □No □N/A --ETYES □No □N/A |9. Correct Containers Used: -⊟Yes □No □N/A -Pace Containers Used: PYSS □No □N/A 10. Containers Intact: Filtered volume received for Dissolved tests □Yes □No →□M/A □Yes-ENo □N/A Sample Labels match COC: -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 J⊒Yes □No □N/A compliance with EPA recommendation. Lot # of added Initial when ☐Yes ☑No preservative completed exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) OYes ONo -□N/A 14. Samples checked for dechlorination: Headspace in VOA Vials (>6mm): ☐Yes ☐No DN/A 15. □Yes □No ÆMÃ Trip Blank Present: ☐Yes ☐No ☐N/A Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased): Y / N Field Data Required? Client Notification/ Resolution: Date/Time: Person Contacted: 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)

Project Manager Review:

Date:





December 18, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622337

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2019. 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.

This revised report replaces the report issued on 9/4/2019. The report has been revised to correct Metals RLs to correspond with contract. No other changes have been made to this report.

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

Sincerely,

Kevin Herring for

Kein Slern

Betsy McDaniel

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622337

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622337

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2622337001	PZ-7D	Water	08/22/19 09:25	08/23/19 09:10	
2622337002	PZ-17	Water	08/22/19 11:10	08/23/19 09:10	
2622337003	PZ-18	Water	08/22/19 13:50	08/23/19 09:10	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622337

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2622337001	PZ-7D	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622337002	PZ-17	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622337003	PZ-18	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1



ANALYTICAL RESULTS

Project: Plant Mitchell Pace Project No.: 2622337

Date: 12/18/2019 02:06 PM

Sample: PZ-7D	Lab ID:	2622337001	Collecte	ed: 08/22/19	9 09:25	Received: 08/	23/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/27/19 11:50	08/27/19 17:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/27/19 11:50	08/27/19 17:26	7440-38-2	
Barium	0.0067J	mg/L	0.010	0.00049	1	08/27/19 11:50	08/27/19 17:26	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/27/19 11:50	08/27/19 17:26	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/27/19 11:50	08/27/19 17:26	7440-43-9	
Chromium	0.0013J	mg/L	0.010	0.00039	1	08/27/19 11:50	08/27/19 17:26	7440-47-3	В
Cobalt	ND	mg/L	0.0050	0.00030	1	08/27/19 11:50	08/27/19 17:26	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/27/19 11:50	08/27/19 17:26	7439-92-1	
Lithium	0.0029J	mg/L	0.030	0.00078	1	08/27/19 11:50	08/27/19 17:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/27/19 11:50	08/27/19 17:26	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/27/19 11:50	08/27/19 17:26	7782-49-2	
Thallium	0.000086J	mg/L	0.0010	0.000052	1	08/27/19 11:50	08/27/19 17:26	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 14:12	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 18:06	16984-48-8	



ANALYTICAL RESULTS

Project: Plant Mitchell Pace Project No.: 2622337

Date: 12/18/2019 02:06 PM

Sample: PZ-17	Lab ID:	2622337002	Collecte	ed: 08/22/19	11:10	Received: 08/	23/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/27/19 11:50	08/27/19 17:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/27/19 11:50	08/27/19 17:31	7440-38-2	
Barium	0.078	mg/L	0.010	0.00049	1	08/27/19 11:50	08/27/19 17:31	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/27/19 11:50	08/27/19 17:31	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/27/19 11:50	08/27/19 17:31	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/27/19 11:50	08/27/19 17:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/27/19 11:50	08/27/19 17:31	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/27/19 11:50	08/27/19 17:31	7439-92-1	
Lithium	0.0025J	mg/L	0.030	0.00078	1	08/27/19 11:50	08/27/19 17:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/27/19 11:50	08/27/19 17:31	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/27/19 11:50	08/27/19 17:31	7782-49-2	
Thallium	0.00018J	mg/L	0.0010	0.000052	1	08/27/19 11:50	08/27/19 17:31	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 13:46	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	0.11J	mg/L	0.30	0.029	1		08/30/19 19:36	16984-48-8	



ANALYTICAL RESULTS

Project: Plant Mitchell Pace Project No.: 2622337

Date: 12/18/2019 02:06 PM

Sample: PZ-18	Lab ID:	2622337003	Collecte	ed: 08/22/19	13:50	Received: 08/	23/19 09:10 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00045J	mg/L	0.0030	0.00027	1	08/27/19 11:50	08/27/19 18:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/27/19 11:50	08/27/19 18:06	7440-38-2	
Barium	0.022	mg/L	0.010	0.00049	1	08/27/19 11:50	08/27/19 18:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/27/19 11:50	08/27/19 18:06	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/27/19 11:50	08/27/19 18:06	7440-43-9	
Chromium	0.00081J	mg/L	0.010	0.00039	1	08/27/19 11:50	08/27/19 18:06	7440-47-3	В
Cobalt	ND	mg/L	0.0050	0.00030	1	08/27/19 11:50	08/27/19 18:06	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/27/19 11:50	08/27/19 18:06	7439-92-1	
Lithium	0.0026J	mg/L	0.030	0.00078	1	08/27/19 11:50	08/27/19 18:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/27/19 11:50	08/27/19 18:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/27/19 11:50	08/27/19 18:06	7782-49-2	
Thallium	0.000070J	mg/L	0.0010	0.000052	1	08/27/19 11:50	08/27/19 18:06	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 14:14	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/30/19 19:59	16984-48-8	



Project: Plant Mitchell Pace Project No.: 2622337

QC Batch: 34265 Analysis Method: EPA 7470A

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

Associated Lab Samples: 2622337001, 2622337002, 2622337003

METHOD BLANK: 154112 Matrix: Water

Associated Lab Samples: 2622337001, 2622337002, 2622337003

Blank Reporting
Parameter Units Result Limit MDL

 Parameter
 Units
 Result
 Limit
 MDL
 Analyzed
 Qualifiers

 Mercury
 mg/L
 ND
 0.00050
 0.00014
 08/27/19 13:41

LABORATORY CONTROL SAMPLE: 154113

Date: 12/18/2019 02:06 PM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Mercury mg/L 0.0025 0.0026 103 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154114 154115

MSD MS MSD 2622337002 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual ND 0.0025 0.0025 0.0025 101 75-125 20 Mercury mg/L 0.0025 100

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



Project: Plant Mitchell Pace Project No.: 2622337

QC Batch: 34320 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2622337001, 2622337002, 2622337003

METHOD BLANK: 154347 Matrix: Water

Associated Lab Samples: 2622337001, 2622337002, 2622337003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND ND	0.0030	0.00027	08/27/19 16:36	
Arsenic	mg/L	ND	0.0050	0.00035	08/27/19 16:36	
Barium	mg/L	ND	0.010	0.00049	08/27/19 16:36	
Beryllium	mg/L	ND	0.0030	0.000074	08/27/19 16:36	
Cadmium	mg/L	ND	0.0025	0.00011	08/27/19 16:36	
Chromium	mg/L	0.0012J	0.010	0.00039	08/27/19 16:36	
Cobalt	mg/L	ND	0.0050	0.00030	08/27/19 16:36	
Lead	mg/L	ND	0.0050	0.000046	08/27/19 16:36	
Lithium	mg/L	ND	0.030	0.00078	08/27/19 16:36	
Molybdenum	mg/L	ND	0.010	0.00095	08/27/19 16:36	
Selenium	mg/L	ND	0.010	0.0013	08/27/19 16:36	
Thallium	mg/L	ND	0.0010	0.000052	08/27/19 16:36	

	LABORATORY	CONTROL	SAMPLE:	154348
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Date: 12/18/2019 02:06 PM

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.090	90	80-120	
Arsenic	mg/L	0.1	0.085	85	80-120	
Barium	mg/L	0.1	0.088	88	80-120	
Beryllium	mg/L	0.1	0.086	86	80-120	
Cadmium	mg/L	0.1	0.088	88	80-120	
Chromium	mg/L	0.1	0.088	88	80-120	
Cobalt	mg/L	0.1	0.086	86	80-120	
Lead	mg/L	0.1	0.086	86	80-120	
Lithium	mg/L	0.1	0.087	87	80-120	
Molybdenum	mg/L	0.1	0.089	89	80-120	
Selenium	mg/L	0.1	0.085	85	80-120	
Thallium	mg/L	0.1	0.087	87	80-120	

MATRIX SPIKE & MATRIX SP	PIKE DUPL	ICATE: 1543 2622337002	49 MS Spike	MSD Spike	154350 MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	1	20	
Barium	mg/L	0.078	0.1	0.1	0.18	0.18	104	104	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.092	0.093	92	93	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	

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



Project: Plant Mitchell Pace Project No.: 2622337

Date: 12/18/2019 02:06 PM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1543	49		154350							
Parameter	Units	2622337002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2	20	
Lithium	mg/L	0.0025J	0.1	0.1	0.095	0.096	92	93	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20	
Thallium	mg/L	0.00018J	0.1	0.1	0.098	0.099	97	99	75-125	1	20	

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



Project: Plant Mitchell Pace Project No.: 2622337

QC Batch: 34533 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2622337001, 2622337002, 2622337003

METHOD BLANK: 155485 Matrix: Water

Associated Lab Samples: 2622337001, 2622337002, 2622337003

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Fluoride mg/L ND 0.30 0.029 08/30/19 13:57

LABORATORY CONTROL SAMPLE: 155486

Fluoride

Date: 12/18/2019 02:06 PM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Fluoride mg/L 10 9.3 93 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155487 155488

mg/L

MS MSD MSD 2622319009 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Fluoride ND 10 108 mg/L 10 10.8 10.7 107 90-110 15

MATRIX SPIKE SAMPLE: 155523

2622337002 Spike MS MS % Rec

Parameter Units Result Conc. Result % Rec Limits Qualifiers

10

9.5

90-110

94

0.11J

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622337

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/18/2019 02:06 PM

B Analyte was detected in the associated method blank.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622337

Date: 12/18/2019 02:06 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2622337001	PZ-7D	EPA 3005A	34320	EPA 6020B	34344
2622337002	PZ-17	EPA 3005A	34320	EPA 6020B	34344
2622337003	PZ-18	EPA 3005A	34320	EPA 6020B	34344
2622337001	PZ-7D	EPA 7470A	34265	EPA 7470A	34311
2622337002	PZ-17	EPA 7470A	34265	EPA 7470A	34311
2622337003	PZ-18	EPA 7470A	34265	EPA 7470A	34311
2622337001	PZ-7D	EPA 300.0	34533		
2622337002	PZ-17	EPA 300.0	34533		
2622337003	PZ-18	EPA 300.0	34533		

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

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	PZ-7D		5		_	-	ম	1 X		×			×	×	×									
2	PZ-17+QC		シャ			Ξ	<u> </u>	× %		メ	_		×	×	X									
3	PZ-18		\sqrt{2}	\vdash		/ /350	S	X		×			X	Ŝ	メ					<u> </u>				
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Page 14				a l	PRINT N	PRINT Name of SAMPLER: SIGNATURE of SAMPLEA	MPLER		anja		١	OWARD		DATE:	DATE Signed:	6/10	2 /10			TEMP in C	Received on (V/V)	A/N) cooler cooler (N/A)	seldmeS	ntact (V/V)

Sample Condition Upon Receipt

Client Name: (2) A Power Project # <u>₩0#</u>: 2622337 Courier: Fed Ex UPS USPS Client Commercial Pace Other Due Date: 08/30/19 3945407 GAPower-CCR Custody Seal on Cooler/Box Present: _____ves CLIENT: ☐ no Seals intact: Bubble Bags None Other Packing Material:

Bubble Wrap Thermometer Used Type of Ice: Wet Blue None Samples on ice, cooling process has begun Date and Initials of person examining Biological Tissue is Frozen: Yes No **Cooler Temperature** contents: Temp should be above freezing to 6°C Comments: ØYes □No □n/A Chain of Custody Present: Chain of Custody Filled Out: ØYes □No □N/A -⊟Yes □No □N/A Chain of Custody Relinquished: □N/A - TYes □No Sampler Name & Signature on COC: ₽Yes □No □N/A Samples Arrived within Hold Time: Short Hold Time Analysis (<72hr): ☐Yes ┛₩б¹ □n/A ☐Yes ☐N/A Rush Turn Around Time Requested: ₽Yes □No □N/A Sufficient Volume: -ETYES □No □N/A **Correct Containers Used:** -Pace Containers Used: ∠∃Yes □No □N/A Containers Intact: ÆYes □No □N/A ☐Yes ☐No →☐N/A Filtered volume received for Dissolved tests 11. LDYes □No □n/A Sample Labels match COC: -Includes date/time/ID/Analysis All containers needing preservation have been checked. □N/A 13. -EYES □No All containers needing preservation are found to be in compliance with EPA recommendation. Lot # of added Initial when □Yes -□No preservative completed exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) ☐Yes ☐No ☐N/A 14. Samples checked for dechlorination: ☐Yes ☐No 15. Headspace in VOA Vials (>6mm): ☐Yes ☐No —☐N/A 116. Trip Blank Present: □Yes □No □□N/A Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased): Client Notification/ Resolution: Field Data Required? Y / N Person Contacted: Date/Time: 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)

Project Manager Review:

Date:





September 20, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622266

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 22, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622266

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

North Dakota Certification #: R-190

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622266

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622266001	EB-1	Water	08/21/19 08:30	08/22/19 09:10
2622266002	PZ-2D	Water	08/21/19 10:52	08/22/19 09:10
2622266003	PZ-16	Water	08/21/19 13:16	08/22/19 09:10
2622266004	PZ-25	Water	08/21/19 14:42	08/22/19 09:10



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622266

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622266001	EB-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622266002	PZ-2D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622266003	PZ-16	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622266004	PZ-25	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2622266

Sample: EB-1 PWS:	Lab ID: 26222660 Site ID:	O1 Collected: 08/21/19 08:30 Sample Type:	Received:	08/22/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.269 ± 0.217 (0.347) C:96% T:NA	pCi/L	09/05/19 08:00	13982-63-3	
Radium-228		0.559 ± 0.498 (1.03) C:81% T:82%	pCi/L	09/12/19 10:38	3 15262-20-1	
Total Radium	Total Radium Calculation	0.828 ± 0.715 (1.38)	pCi/L	09/17/19 14:1	5 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622266

Calculation

Sample: PZ-2D PWS:	Lab ID: 26222660 0 Site ID:	O2 Collected: 08/21/19 10:52 Sample Type:	Received:	08/22/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.521 ± 0.318 (0.491) C:98% T:NA	pCi/L	09/05/19 08:00	13982-63-3	
Radium-228		0.189 ± 0.409 (0.901) C:80% T:86%	pCi/L	09/12/19 10:38	3 15262-20-1	
Total Radium	Total Radium	0.710 ± 0.727 (1.39)	pCi/L	09/17/19 14:15	5 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622266

Sample: PZ-16 PWS:	Lab ID: 26222660 Site ID:	O03 Collected: 08/21/19 13:16 Sample Type:	Received:	08/22/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.453 ± 0.290 (0.442) C:95% T:NA	pCi/L	09/05/19 08:06	13982-63-3	
Radium-228	EPA 9320	-0.318 ± 0.391 (0.943) C:77% T:95%	pCi/L	09/12/19 10:38	3 15262-20-1	
Total Radium	Total Radium Calculation	0.453 ± 0.681 (1.39)	pCi/L	09/17/19 14:15	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622266

Calculation

Sample: PZ-25 Lab ID: 2622266004 Collected: 08/21/19 14:42 Received: 08/22/19 09:10 Matrix: Water PWS: Site ID: Sample Type: Method Act ± Unc (MDC) Carr Trac **Parameters** Units Analyzed CAS No. Qual EPA 9315 0.777 ± 0.373 (0.482) Radium-226 pCi/L 09/05/19 08:07 13982-63-3 C:89% T:NA $0.399 \pm 0.447 \quad (0.941)$ EPA 9320 Radium-228 pCi/L 09/12/19 11:16 15262-20-1 C:79% T:86% Total Radium **Total Radium** $1.18 \pm 0.820 \quad (1.42)$ pCi/L 09/17/19 14:15 7440-14-4



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622266

QC Batch: 359489 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium

Associated Lab Samples: 2622266001, 2622266002, 2622266003

METHOD BLANK: 1745578 Matrix: Water

Associated Lab Samples: 2622266001, 2622266002, 2622266003

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

 Radium-226
 0.402 ± 0.246 (0.327) C:100% T:NA
 pCi/L
 09/05/19 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.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622266

QC Batch: 358698 Analysis Method: EPA 9320

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

Associated Lab Samples: 2622266001, 2622266002, 2622266003, 2622266004

METHOD BLANK: 1741705 Matrix: Water

Associated Lab Samples: 2622266001, 2622266002, 2622266003, 2622266004

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

Radium-228 $0.944 \pm 0.396 \quad (0.631) \text{ C:81\% T:90\%}$ pCi/L $09/12/19 \quad 10:29$

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.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622266

QC Batch: 359490

Analysis Method:

EPA 9315

QC Batch Method: EPA 9315

Analysis Description:

9315 Total Radium

Associated Lab Samples:

2622266004

METHOD BLANK: 1745579

Matrix: Water

Associated Lab Samples:

2622266004

Parameter

Act ± Unc (MDC) Carr Trac

Units pCi/L Analyzed

Qualifiers

Radium-226

0.243 ± 0.244 (0.474) C:94% T:NA

09/05/19 08:07

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622266

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 09/20/2019 05:01 PM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622266

Date: 09/20/2019 05:01 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622266001	EB-1	EPA 9315	359489		•
2622266002	PZ-2D	EPA 9315	359489		
2622266003	PZ-16	EPA 9315	359489		
2622266004	PZ-25	EPA 9315	359490		
2622266001	EB-1	EPA 9320	358698		
2622266002	PZ-2D	EPA 9320	358698		
2622266003	PZ-16	EPA 9320	358698		
2622266004	PZ-25	EPA 9320	358698		
2622266001	EB-1	Total Radium Calculation	361774		
2622266002	PZ-2D	Total Radium Calculation	361774		
2622266003	PZ-16	Total Radium Calculation	361774		
2622266004	PZ-25	Total Radium Calculation	361774		

State / Location. Coolar ŏ peles Custod (N/A) Received on ð MO#:2622266 Residual Chlorine (Y/N) Page: Dui 9MET The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. 8 0 CHAIN-OF-CUSTODY / Analytical Request Document DATE Signed: 8/2.1 2022 Radium 226/228 betsy modaniel@pacelabs.com. X X ヌ ebitoul * (VI xibneqqA) sisteM 机顶 1891 698VIERA 40 Wage scsinvoices@southernco.com **JertiO** Methanol ROZSZBN HOBN 333.6.2 Pace Project Manager. Pace Profile #: 333.6 НСІ Invoice Information: Company Name: Address: Pace Quote: **EONH** H2SO4 Section C 715 圣 Unpreserved # OF CONTAINERS SANPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER SAMPLE TEMP AT COLLECTION 8/21/19 Dan. 1052 1316 1442 8/11/14/083(T ME 8 DATE will Homen // Wood COLLECTED TIME Project #: 6/12 160170 Purchase Order #: SCS10382775 START Plant Mitchell DATE Required Project Information: Report To: Joju Abraham Copy To: Wood E&I 0000 SAMPLE TYPE (G-GRAB C-COMP) WATRIX CODE (see valid codes to left) Project Name: Section B MATRIX Denisting Water Waste Wicker Waste Wicker Product SoutSoad Od Ari Chee Georgia Power - Coal Combustion Residuals Wetets list Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Ti One Character per box. (A.Z. 0-9 / , -) Sample Ids must be unique (404)506-7239 Fax: e Date: STANAARC SAMPLE ID PZ-25 91-26 PZ-2D Atlanta, GA 30339 jabraham@southemco.com 2480 Maner Road EB Required Client Information: Requested Due Date: ê 10 Page 14 of 15 Email: ILEM #

(MY)

(N/A)

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Sample Condition Upon Receipt

Face Analytical Client Name	: GIA	Power 1	Project #
Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Clie Tracking #: <u>\$12193945</u> 440	int Commercial		MO# : 2622266
Custody Seal on Cooler/Box Present: yes	no Seals	Intact: Ves T	
Packing Material: Bubble Wrap Bubble	Bags None	☐ Other	CLIENT: GAPower-CCR
Thermometer Used	Type of Ice: Wet		Samples on ice, cooling,process has begun
Cooler Temperature 4.5		is Frozen: Yes No	Date and Initials of person examining
Temp should be above freezing to 6°C		Comments:	contents: 8/24/9 MZ
Chain of Custody Present:	Yes ONO ON/A	1.	,
Chain of Custody Filled Out:	ØYes □No □N/A	2.	
Chain of Custody Relinquished:	ØYes □No □N/A	3.	
Sampler Name & Signature on COC:	ÆYes □No □N/A	4.	
Samples Arrived within Hold Time:	→ Yes □No □N/A	5.	
Short Hold Time Analysis (<72hr):	□Yes ☑NØ □N/A	6.	
Rush Turn Around Time Requested:	□Yes ☑N/A	7.	
Sufficient Volume:	JPres □No □N/A	8.	
Correct Containers Used:	∕ŪÝes □No □N/A	9.	
-Pace Containers Used:	Yes Ono On/A		are the second
Containers Intact:	✓ Yes □No □N/A	10.	
Filtered volume received for Dissolved tests	□Yes □No ÆMA	11.	
Sample Labels match COC:	_DYES □No □N/A	12.	
-Includes date/time/ID/Analysis Matrix:	W		
All containers needing preservation have been checked.	_BYS □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 □MA	1 16.	
Trip Blank Custody Seals Present	□Yes □No →□N/A	1	
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)



September 20, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622268

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 22, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622268

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622268

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2622268001	PZ-31	Water	08/21/19 09:45	08/22/19 09:10	
2622268002	PZ-14	Water	08/21/19 11:40	08/22/19 09:10	
2622268003	PZ-23	Water	08/21/19 12:45	08/22/19 09:10	
2622268004	PZ-15	Water	08/21/19 14:10	08/22/19 09:10	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622268

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622268001	PZ-31	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622268002	PZ-14	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622268003	PZ-23	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622268004	PZ-15	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2622268

Calculation

Sample: PZ-31 PWS:	Lab ID: 262226800 Site ID:	Collected: 08/21/19 09:45 Sample Type:	Received:	08/22/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.779 ± 0.387 (0.548) C:93% T:NA	pCi/L	09/05/19 08:08	13982-63-3	
Radium-228		0.423 ± 0.337 (0.669) C:81% T:95%	pCi/L	09/12/19 11:17	15262-20-1	
Total Radium	Total Radium	1.20 ± 0.724 (1.22)	pCi/L	09/17/19 14:18	3 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622268

Sample: PZ-14 PWS:	Lab ID: 2622268 Site ID:	O02 Collected: 08/21/19 11:40 Sample Type:	Received:	08/22/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.446 ± 0.271 (0.368) C:94% T:NA	pCi/L	09/05/19 08:18	13982-63-3	
Radium-228	EPA 9320	0.259 ± 0.352 (0.751) C:82% T:83%	pCi/L	09/12/19 11:18	3 15262-20-1	
Total Radium	Total Radium Calculation	0.705 ± 0.623 (1.12)	pCi/L	09/17/19 14:18	3 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622268

Total Radium

Sample: PZ-23 Lab ID: 2622268003 Collected: 08/21/19 12:45 Received: 08/22/19 09:10 Matrix: Water PWS: Site ID: Sample Type: Method Act ± Unc (MDC) Carr Trac **Parameters** Units Analyzed CAS No. Qual EPA 9315 $0.459 \pm 0.289 \quad (0.431)$ Radium-226 pCi/L 09/05/19 08:08 13982-63-3 C:89% T:NA EPA 9320 1.85 ± 0.703 (1.10) Radium-228 pCi/L 09/12/19 10:31 15262-20-1 C:56% T:90% Total Radium

pCi/L

09/17/19 14:18 7440-14-4

 $2.31 \pm 0.992 \quad (1.53)$

Calculation



Project: Plant Mitchell Pace Project No.: 2622268

Sample: PZ-15 Lab ID: 2622268004Collected: 08/21/19 14:10 Received: 08/22/19 09:10 Matrix: Water

PWS: Site ID: Sample Type:

Comments: • Upon receipt at the laboratory, 2.5 mls of nitric acid were added to one container to meet the sample preservation requirement of

pH <2 for radiological analyses. The sample was preserved <2 within the required 5 days of collection.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.608 ± 0.321 (0.402) C:91% T:NA	pCi/L	09/05/19 08:08	13982-63-3	
Radium-228	EPA 9320	1.25 ± 0.558 (0.971) C:80% T:85%	pCi/L	09/12/19 10:31	15262-20-1	
Total Radium	Total Radium Calculation	1.86 ± 0.879 (1.37)	pCi/L	09/17/19 14:18	7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622268

QC Batch: 358698 Analysis Method: EPA 9320

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

Associated Lab Samples: 2622268001, 2622268002, 2622268003, 2622268004

METHOD BLANK: 1741705 Matrix: Water

Associated Lab Samples: 2622268001, 2622268002, 2622268003, 2622268004

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

Radium-228 $0.944 \pm 0.396 \quad (0.631) \text{ C:81\% T:90\%}$ pCi/L $09/12/19 \quad 10:29$

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.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622268

QC Batch: 359490 Analysis Method: EPA 9315

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

Associated Lab Samples: 2622268001, 2622268002, 2622268003, 2622268004

METHOD BLANK: 1745579 Matrix: Water

Associated Lab Samples: 2622268001, 2622268002, 2622268003, 2622268004

Parameter $Act \pm Unc (MDC) Carr Trac$ Units Analyzed Qualifiers

Radium-226 0.243 \pm 0.244 (0.474) C:94% T:NA pCi/L 09/05/19 08:07

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622268

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 09/20/2019 05:01 PM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622268

Date: 09/20/2019 05:01 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2622268001	PZ-31	EPA 9315	359490		
2622268002	PZ-14	EPA 9315	359490		
2622268003	PZ-23	EPA 9315	359490		
2622268004	PZ-15	EPA 9315	359490		
2622268001	PZ-31	EPA 9320	358698		
2622268002	PZ-14	EPA 9320	358698		
2622268003	PZ-23	EPA 9320	358698		
2622268004	PZ-15	EPA 9320	358698		
2622268001	PZ-31	Total Radium Calculation	361776		
2622268002	PZ-14	Total Radium Calculation	361776		
2622268003	PZ-23	Total Radium Calculation	361776		
2622268004	PZ-15	Total Radium Calculation	361776		

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

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Sample Condition Upon Receipt

Client Name: Project # #:2622268 Courier:

Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Due Date: 09/20/19 Custody Seal on Cooler/Box Present: // yes ☐ no Seals intact: GAPower-CCR ☐ Bubble Bags ☐ None ☐ Other Packing Material: Bubble Wrap Type of Ice: Wet Blue None Samples on ice, cooling process has begun Thermometer Used Date and Initials of person examining Biological Tissue is Frozen: Yes No **Cooler Temperature** contents:_ Comments: Temp should be above freezing to 6°C -EYes □No □N/A Chain of Custody Present: ØYes □No □N/A Chain of Custody Filled Out: ☑Yes □No □N/A Chain of Custody Relinquished: ₽Yes □No □N/A Sampler Name & Signature on COC: ₽Yes □No □N/A Samples Arrived within Hold Time: ☐Yes ☐No ☐N/A Short Hold Time Analysis (<72hr): ☐Yes ☐N/A Rush Turn Around Time Requested: ÆTYes □No □N/A Sufficient Volume: -EYes □No □N/A 9. Correct Containers Used: € Yes □No □N/A -Pace Containers Used: -ElYes □No □N/A 10. Containers Intact: □Yes □No -□N/A Filtered volume received for Dissolved tests Yes □No □N/A Sample Labels match COC: W -Includes date/time/ID/Analysis All containers needing preservation have been checked. PYS □No □N/A All containers needing preservation are found to be in -EYes □No □N/A compliance with EPA recommendation. Lot # of added Initial when ☐Yes ☑No preservative completed exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) ☐Yes ☐No ☐N/A 14. Samples checked for dechlorination: □Yes □No ÆNA 15. Headspace in VOA Vials (>6mm):

16.

□Yes □No □NA

□Yes □No □NA

Trip Blank Present:

Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased):

Project Manager Review:

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)

Date:



September 20, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622270

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 22, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622270

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

North Dakota Certification #: R-190

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622270

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622270001	PZ-32	Water	08/20/19 15:03	08/22/19 09:10
2622270002	PZ-1D	Water	08/20/19 16:10	08/22/19 09:10



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622270

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622270001	PZ-32	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622270002	PZ-1D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2622270

Calculation

Sample: PZ-32 PWS:	Lab ID : 26222700 Site ID:	O1 Collected: 08/20/19 15:03 Sample Type:	Received:	08/22/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.307 ± 0.301 (0.578) C:73% T:NA	pCi/L	09/05/19 08:08	13982-63-3	
Radium-228		0.0268 ± 0.367 (0.841) C:79% T:93%	pCi/L	09/12/19 11:16	15262-20-1	
Total Radium	Total Radium	$0.334 \pm 0.668 (1.42)$	pCi/L	09/17/19 14:15	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622270

Sample: PZ-1D PWS:	Lab ID : 26222700 Site ID:	O2 Collected: 08/20/19 16:10 Sample Type:	Received:	08/22/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.417 ± 0.302 (0.499) C:83% T:NA	pCi/L	09/05/19 08:08	3 13982-63-3	
Radium-228		0.178 ± 0.317 (0.693) C:79% T:88%	pCi/L	09/12/19 11:17	7 15262-20-1	
Total Radium	Total Radium Calculation	$0.595 \pm 0.619 (1.19)$	pCi/L	09/17/19 14:1	5 7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622270

QC Batch: 358698

Analysis Method:

EPA 9320

QC Batch Method: EPA 9320

Analysis Description:

9320 Radium 228

Associated Lab Samples: 2622270001, 2622270002

METHOD BLANK: 1741705

Matrix: Water

Associated Lab Samples:

2622270001, 2622270002

Parameter

Act ± Unc (MDC) Carr Trac

Units pCi/L Analyzed

Qualifiers

Radium-228

0.944 ± 0.396 (0.631) C:81% T:90%

09/12/19 10:29

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.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622270

QC Batch:

359490

Analysis Method: Analysis Description: EPA 9315

QC Batch Method: EPA 9315

9315 Total Radium

Associated Lab Samples: METHOD BLANK: 1745579

2622270001, 2622270002

Matrix: Water

Associated Lab Samples:

2622270001, 2622270002

Parameter

Act ± Unc (MDC) Carr Trac

Units pCi/L Analyzed

Qualifiers

Radium-226

0.243 ± 0.244 (0.474) C:94% T:NA

09/05/19 08:07

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622270

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 09/20/2019 05:01 PM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622270

Date: 09/20/2019 05:01 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622270001	PZ-32	EPA 9315	359490		
2622270002	PZ-1D	EPA 9315	359490		
2622270001	PZ-32	EPA 9320	358698		
2622270002	PZ-1D	EPA 9320	358698		
2622270001	PZ-32	Total Radium Calculation	361774		
2622270002	PZ-1D	Total Radium Calculation	361774		

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

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Company	Georgia Power - Coal Combustion Residuals	Report To:	N Total	Joju Abraham				₹	Attention:	18	Sanvoic	os@sa	scsinvoices@southernco.com	8					Γ		j						٦.
Address	2480 Maner Road		Wood E&I	E&I				ਹ	cmpan	Š	_															-	
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Phone:	Fax	Project Name:	٦	Plant Mitchell	18			ا ته	ace Pro	Pace Project Manager.	mager.		betsy.mcdaniel@pacelabs.com,	aniel@	pacel	nos.cou	ار				War 1 12	3,	tate / L	State / Location	A 18.35	S. 6.72.	_
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Sample Condition Upon Receipt



Client Name	· GEFFO	weit	Project #
Courier: Fed Ex UPS USPS Clien Tracking #: 81219394543		Pace Other PM	O#: 2622270 BM Due Date: 09/20/19
Custody Seal on Cooler/Box Present: yes	no Seals i	ntact: yes CL	IENT: GAPouer-CCR
Packing Material: Dubble Wrap Dubble	Bags None [Other	<u> </u>
Thermometer Used 83	Type of Ice: Wet	Blue None	Samples on ice, cooling process has begun
Cooler Temperature <u>4.0</u>	Biological Tissue i	s Frozen: Yes No	Date and Initials of person examining contents: 6/2/4/9/4
Temp should be above freezing to 6°C		Comments:	
Chain of Custody Present:	JEYes □No □N/A	1.	
Chain of Custody Filled Out:	→ TYes □No □N/A	2.	
Chain of Custody Relinquished:	-EYes □No □N/A	3.	
Sampler Name & Signature on COC:	EYes Ono On/A	4.	
Samples Arrived within Hold Time:	PYES ONO ON/A	5	
Short Hold Time Analysis (<72hr):	□Yes □N/A □N/A	6.	
Rush Turn Around Time Requested:	□Yes □N6 □N/A	7.	
Sufficient Volume:	→BYes □No □N/A	8.	
Correct Containers Used:	☑Yes □No □N/A	9.	
-Pace Containers Used:	_Dres □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:	-ElYes □No, □N/A	12.	
-Includes date/time/ID/Analysis Matrix:	\mathcal{W}		
All containers needing preservation have been checked.	□NES □NO □N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	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 ₽NA	14.	
Headspace in VOA Vials (>6mm):	□Yes □No ,□M/A	15.	·
Trip Blank Present:	□Yes □No -□N/Ā	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:			
	<u> </u>		
		·	
	A		
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)



September 23, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622336

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622336

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

North Dakota Certification #: R-190

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622336

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2622336001	FB-01	Water	08/22/19 08:15	08/23/19 09:10	
2622336002	PZ-33	Water	08/22/19 10:04	08/23/19 09:10	
2622336003	Dup-02	Water	08/22/19 00:00	08/23/19 09:10	
2622336004	PZ-19	Water	08/22/19 12:32	08/23/19 09:10	
2622336005	Dup-01	Water	08/22/19 00:00	08/23/19 09:10	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622336

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622336001	FB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622336002	PZ-33	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622336003	Dup-02	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622336004	PZ-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622336005	Dup-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2622336

Calculation

Sample: FB-01 PWS:	Lab ID: 26223360 Site ID:	O1 Collected: 08/22/19 08:15 Sample Type:	Received:	08/23/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.461 ± 0.242 (0.330) C:81% T:NA	pCi/L	09/09/19 08:48	3 13982-63-3	
Radium-228		0.307 ± 0.433 (0.930) C:65% T:80%	pCi/L	09/19/19 12:09	9 15262-20-1	
Total Radium		0.768 ± 0.675 (1.26)	pCi/L	09/20/19 12:23	3 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622336

Sample: PZ-33 Lab ID: 2622336002 Collected: 08/22/19 10:04 Received: 08/23/19 09:10 Matrix: Water

PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.407 ± 0.226 (0.309) C:81% T:NA	pCi/L	09/09/19 08:48	13982-63-3	
Radium-228	EPA 9320	0.106 ± 0.446 (1.01) C:65% T:80%	pCi/L	09/19/19 12:09	15262-20-1	
Total Radium	Total Radium Calculation	$0.513 \pm 0.672 (1.32)$	pCi/L	09/20/19 12:23	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622336

Sample: Dup-02 PWS:	Lab ID: 26223360 Site ID:	O3 Collected: 08/22/19 00:00 Sample Type:	Received:	08/23/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.623 ± 0.283 (0.360) C:81% T:NA	pCi/L	09/09/19 08:48	13982-63-3	
Radium-228		0.284 ± 0.359 (0.763) C:69% T:88%	pCi/L	09/19/19 12:09	15262-20-1	
Total Radium	Total Radium Calculation	0.907 ± 0.642 (1.12)	pCi/L	09/20/19 12:23	3 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622336

Sample: PZ-19 PWS:	Lab ID: 26223360 Site ID:	Collected: 08/22/19 12:32 Sample Type:	Received:	08/23/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.422 ± 0.221 (0.295) C:86% T:NA	pCi/L	09/09/19 08:52	13982-63-3	
Radium-228	EPA 9320	0.945 ± 0.480 (0.842) C:69% T:80%	pCi/L	09/19/19 12:09	15262-20-1	
Total Radium	Total Radium Calculation	1.37 ± 0.701 (1.14)	pCi/L	09/20/19 12:23	3 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2622336

Sample: Dup-01 PWS:	Lab ID: 26223360 Site ID:	O5 Collected: 08/22/19 00:00 Sample Type:	Received:	08/23/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.632 ± 0.297 (0.408) C:79% T:NA	pCi/L	09/09/19 08:49	13982-63-3	
Radium-228		0.922 ± 0.463 (0.817) C:71% T:82%	pCi/L	09/19/19 12:09	15262-20-1	
Total Radium	Total Radium Calculation	1.55 ± 0.760 (1.23)	pCi/L	09/20/19 12:23	3 7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622336

QC Batch: 358895 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Associated Lab Samples: 2622336001, 2622336002, 2622336003, 2622336004, 2622336005

METHOD BLANK: 1742554 Matrix: Water

Associated Lab Samples: 2622336001, 2622336002, 2622336003, 2622336004, 2622336005

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

Radium-228 0.167 \pm 0.291 (0.635) C:73% T:86% pCi/L 09/19/19 12:11

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622336

QC Batch: 359801 Analysis Method: EPA 9315

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

Associated Lab Samples: 2622336001, 2622336002, 2622336003, 2622336004, 2622336005

METHOD BLANK: 1746802 Matrix: Water

Associated Lab Samples: 2622336001, 2622336002, 2622336003, 2622336004, 2622336005

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

Radium-226 $0.563 \pm 0.229 \quad (0.205) \text{ C:97\% T:NA}$ pCi/L $09/09/19 \quad 09:06$

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.



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622336

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 09/23/2019 04:45 PM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622336

Date: 09/23/2019 04:45 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2622336001	FB-01	EPA 9315	359801		
2622336002	PZ-33	EPA 9315	359801		
2622336003	Dup-02	EPA 9315	359801		
2622336004	PZ-19	EPA 9315	359801		
2622336005	Dup-01	EPA 9315	359801		
2622336001	FB-01	EPA 9320	358895		
2622336002	PZ-33	EPA 9320	358895		
2622336003	Dup-02	EPA 9320	358895		
2622336004	PZ-19	EPA 9320	358895		
2622336005	Dup-01	EPA 9320	358895		
2622336001	FB-01	Total Radium Calculation	362430		
2622336002	PZ-33	Total Radium Calculation	362430		
2622336003	Dup-02	Total Radium Calculation	362430		
622336004	PZ-19	Total Radium Calculation	362430		
2622336005	Dup-01	Total Radium Calculation	362430		

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

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Sample Condition Upon Receipt

Face Analytical Client Name	: GIA Por	2212	Project #
Courier: ☑ Fed Ex □ UPS □ USPS □ Clie Tracking #: <u>구-%9 % 5 47 1</u> 9 5 9	·		WO#: 2622336 PM: BM Due Date: 09/23/1
Custody Seal on Cooler/Box Present:	no Sealsi	ntact: yes [CLIENT: GAPower-CCR
Packing Material: Bubble Wrap Bubble	e Bags None	Other	<u> </u>
Thermometer Used 85_	Type of Ice: Wet	Blue None [Samples on ice, cooling,process has begun
Cooler Temperature Temp should be above freezing to 6°C	Biological Tissue i	s Frozen: Yes No Comments:	Date and Initials of person/examining contents: 8/2-3/19 MR
Chain of Custody Present:	TES ONO ON/A	1.	
Chain of Custody Filled Out:	□rés □No □N/A	2	
Chain of Custody Relinquished:	DYes □No □N/A	3.	
Sampler Name & Signature on COC:	Yes □No □N/A	4.	
Samples Arrived within Hold Time:	→ Pres □No □N/A	5.	
Short Hold Time Analysis (<72hr):	□Yes -□N6" □N/A	6.	
Rush Turn Around Time Requested:	□Yes □N/A	7.	
Sufficient Volume:	→ TYes □No □N/A	8.	
Correct Containers Used:	EYES □No □N/A	9.	
-Pace Containers Used:	→BYes □No □N/A		
Containers Intact:	Tes Ono On/A	10.	
Filtered volume received for Dissolved tests	□Yes □No □ □N/A	11.	
Sample Labels match COC:	No □N/A	12.	
-Includes date/time/ID/Analysis Matrix:	ω	·	
All containers needing preservation have been checked.	- Tres ONO ON/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	Tes □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 -□NIA	14.	
Headspace in VOA Vials (>6mm):	□Yes □No □N/A		
Trip Blank Present:	□Yes □No ÆN/Ā		
Trip Blank Custody Seals Present	□Yes □No ŪN/A		
Pace Trip Blank Lot # (if purchased):			
			Field Data Required? Y / N
Client Notification/ Resolution:	Date	/Time:	Tiolo Bala Toquito
Person Contacted:		<u> </u>	
Comments/ Resolution:			
			-
		•	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)

Project Manager Review:



September 23, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2622338

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2622338

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2622338

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2622338001	PZ-7D	Water	08/22/19 09:25	08/23/19 09:10	
2622338002	PZ-17	Water	08/22/19 11:10	08/23/19 09:10	
2622338003	PZ-18	Water	08/22/19 13:50	08/23/19 09:10	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2622338

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622338001	PZ-7D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622338002	PZ-17	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622338003	PZ-18	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622338

Calculation

Sample: PZ-7D PWS:	Lab ID: 26223380 Site ID:	O1 Collected: 08/22/19 09:25 Sample Type:	Received:	08/23/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.304 ± 0.185 (0.267) C:87% T:NA	pCi/L	09/09/19 08:52	13982-63-3	
Radium-228		0.368 ± 0.374 (0.774) C:72% T:86%	pCi/L	09/19/19 12:10	15262-20-1	
Total Radium		0.672 ± 0.559 (1.04)	pCi/L	09/20/19 12:23	3 7440-14-4	



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622338

Sample: PZ-17 Lab ID: 2622338002 Collected: 08/22/19 11:10 Received: 08/23/19 09:10 Matrix: Water

PWS:	Site ID:	Sample Type:		00,20,10 00110	a	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.452 ± 0.264 (0.428) C:86% T:NA	pCi/L	09/09/19 08:52	13982-63-3	
Radium-228	EPA 9320	0.525 ± 0.473 (0.966) C:71% T:78%	pCi/L	09/19/19 12:10	15262-20-1	
Total Radium	Total Radium Calculation	0.977 ± 0.737 (1.39)	pCi/L	09/20/19 12:23	3 7440-14-4	



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622338

Sample: PZ-18 PWS:	Lab ID: 26223380 Site ID:	OO3 Collected: 08/22/19 13:50 Sample Type:	Received:	08/23/19 09:10	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.288 ± 0.194 (0.300) C:84% T:NA	pCi/L	09/09/19 08:53	3 13982-63-3	
Radium-228		0.465 ± 0.426 (0.867) C:72% T:77%	pCi/L	09/19/19 12:10	0 15262-20-1	
Total Radium	Total Radium Calculation	0.753 ± 0.620 (1.17)	pCi/L	09/20/19 12:23	3 7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622338

QC Batch: 358895 Analysis Method: EPA 9320

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

Associated Lab Samples: 2622338001, 2622338002, 2622338003

METHOD BLANK: 1742554 Matrix: Water

Associated Lab Samples: 2622338001, 2622338002, 2622338003

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

Radium-228 0.167 \pm 0.291 (0.635) C:73% T:86% pCi/L 09/19/19 12:11

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2622338

QC Batch: 359801 Analysis Method: EPA 9315

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

Associated Lab Samples: 2622338001, 2622338002, 2622338003

METHOD BLANK: 1746802 Matrix: Water

Associated Lab Samples: 2622338001, 2622338002, 2622338003

Parameter Act \pm Unc (MDC) Carr Trac Units Analyzed Qualifiers

Radium-226 0.563 \pm 0.229 (0.205) C:97% T:NA pCi/L 09/09/19 09:06

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.



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2622338

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 09/23/2019 04:45 PM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2622338

Date: 09/23/2019 04:45 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622338001	PZ-7D	EPA 9315	359801		
2622338002	PZ-17	EPA 9315	359801		
2622338003	PZ-18	EPA 9315	359801		
2622338001	PZ-7D	EPA 9320	358895		
2622338002	PZ-17	EPA 9320	358895		
2622338003	PZ-18	EPA 9320	358895		
2622338001	PZ-7D	Total Radium Calculation	362430		
2622338002	PZ-17	Total Radium Calculation	362430		
2622338003	PZ-18	Total Radium Calculation	362430		

CHAIN-OF-CUSTODY / Analytical Request Document

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

(N/A) peru See. Rogidatory Agency Contact SAMPLE CONDITIONS (N/A) Sealed Cooler ö State / Location Custod (N/A) JO#: 2622338 ð Received on Residual Chlorine (Y/N) TEMP In C 21/404/62 TIME Requested Analysis Filtered (Y/N) LOATE 2622338 $\overrightarrow{\infty}$ DATE Signed: Lalman X X X X Redium 226/228 betsy.modaniel@pacelabs.com ACCEPTED BY I AFFILIATION ₹ epucni-* (VI xibneqqA) sisteM 2 Analyses Test . NX Attention: scsinvoices@southernco.com Company Name: Howard Nethanol Preservatives Nessoa HOPN Pace Profile #: 333.6.2 Pace Quote: Pace Project Manager: ЮН Invoice Information: Janie **EONH** 4520¢ 0091 E E 文と Address; Unpreserved SAMPLER NAME AND SIGNATURE J # OF CONTAINERS PRINT Name of SAMPLER: 8/22/P SIGNATURE of SAMPLER. SAMPLE TEMP AT COLLECTION DATE 8/12/m 0925 2 = 1350 TIME 2 DATE and Harry Wood COLLECTED RELINQUISHED BY ! AFFILIATION Project Name: Plant Mitchell Project #: 6/2/2/60170 TIME Purchase Order #: SCS10382775 START DATE Required Project Information: Report To: Joju Abraham Wood E& 6 SAMPLE TYPE (G-GRAB C-COMP) 9 31-31 MATRIX CODE (see valid codes to left) Copy To: Section B MATRIX
Drinking Water
Water
Water
Water
Water
Product
SociScod
Orl
Wipe
Aur
Christee jia Power - Coal Combustion Residuals **ひ** Ba. Be. Cd. Cr. Co. Pb. U. Mo. ADDITIONAL COMMENTS PZ-17+ Ore Character per box. (A-Z, 0-9 /, -) Sarpple (ds must be unique 1 **SAMPLE ID** j southernoo.com Georgia Power - Co 2480 Maner Road Allanta, GA 30339 pZ Metals list: Hg, Sb, As Email: jabraham@ Phone: (404) Requested Due Date े (क् 6 10 7 8 3 9 ۲ : -ဖ 2 # WBTI Page 12 of 13

Sample Condition Upon Receipt

Face Analytical Client Name	: GIA PO	wer P	roject #
Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Clie Tracking #: <u>8 2 9394</u> 3407	7		WO#: 2622338 PM: BM Due Date: 09/23/19
Custody Seal on Cooler/Box Present: yes	no Seals i	ntact: yes [CLIENT: GAPower-CCR
Packing Material: Bubble Wrap Bubble	e Bags None	Other	·
Thermometer Used <u>83</u>	Type of Ice: Wet	Blue None	Samples on ice, cooling process has begun
Cooler Temperature 2 '0 Temp should be above freezing to 6°C	Biological Tissue i	s Frozen: Yes No Comments:	Date and Initials/of person examining contents: 8/29/19 Mg
Chain of Custody Present:	Yes ONO ON/A	1.	
Chain of Custody Filled Out:	_EYes □No □N/A	2	
Chain of Custody Relinquished:	→BYES □No □N/A	3.	
Sampler Name & Signature on COC:	Yes ONO ON/A	4.	
Samples Arrived within Hold Time:	_⊒Yes □No □N/A	5	
Short Hold Time Analysis (<72hr):	□Yes □N/O □N/A	6.	
Rush Turn Around Time Requested:	□Yes □N/A □N/A	7	
Sufficient Volume:	₽763 □No □N/A	8.	
Correct Containers Used:	-ElYes □No □N/A	9.	
-Pace Containers Used:	ÆYes □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 ONo ON/A	12.	
-Includes date/time/ID/Analysis Matrix:	W		
All containers needing preservation have been checked.	_⊟Yes □No □N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	⊟res □No □N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	□Yes -□N6	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 <u>□N</u> #	†	·
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)

AUGUST 2019 FIELD SAMPLING DATA

Date: 2019-08-20 16:07:25

Pumping Information:

Project Information:

Pump Information:

Operator NameEver GuillenPump Model/TypeQEDCompany NameWoodTubing TypeLDPEProject NamePlant Mitchell CCR Phase IITubing Diameter.25 inSite NamePZ-1DTubing Length81.7

Site Name PZ-1D 0° 0' 0" Longitude 0° 0' 0" Sonde SN 601534

Turbidity Make/Model Hach 2100Q Pump placement from TOC 76.7 ft

Well Information:

PZ-1D Final Pumping Rate Well ID 200 mL/min Total System Volume Well diameter 2 in 0.6788166 L Calculated Sample Rate Well Total Depth 81.71 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water Total Volume Pumped 53.92 ft 11 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond mS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1%	+/- 0.1%	+/- 5%	+/- 5%		+/- 0.2%	+/- 10%
Last 5	15:44:02	2146.26	22.17	7.76	0.24	2.26	56.96	3.92	76.94
Last 5	15:49:02	2446.26	22.68	7.79	0.23	2.23	56.96	3.79	76.02
Last 5	15:54:02	2746.26	23.30	7.82	0.23	1.53	56.96	3.74	75.04
Last 5	15:59:02	3046.26	23.33	7.86	0.24	1.41	56.96	3.86	75.96
Last 5	16:04:02	3346.26	22.89	7.87	0.24	1.56	56.96	4.00	76.06
Variance 0			0.62	0.03	0.00			-0.05	-0.98
Variance 1			0.03	0.04	0.00			0.12	0.92
Variance 2			-0.43	0.01	0.00			0.14	0.10

Notes

Sampled @ 1610

Date: 2019-08-21 09:21:24

Pump Information:

Project Information:
Operator Name Daniel Howard

Operator NameDaniel HowardPump Model/TypeQED Mocro BladderCompany NameWood E&I STubing TypeLDPEProject NamePlant Mitchell CCR Phase IITubing Diameter.17 inSite NamePZ-2DTubing Length81 ft

Latitude 0° 0° 0"

Longitude 0° 0° 0"

Sonde SN 478733

Turbidity Make/Model Hach 2100Q Pump placement from TOC 76 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID PZ-2D 0 mL/min Well diameter 2 in Total System Volume 0.5515373 L Calculated Sample Rate Well Total Depth 80.96 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water **Total Volume Pumped** 0 L 37.15 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	09:00:19	600.03	21.41	8.57	118.04	5.09	37.44	3.24	111.34
Last 5	09:05:19	900.03	21.30	8.63	124.01	4.46	37.44	3.22	122.29
Last 5	09:10:19	1200.02	21.47	8.66	129.31	3.59	37.44	3.17	125.90
Last 5	09:15:19	1500.02	21.58	8.67	133.88	3.00	37.44	3.11	128.80
Last 5	09:20:19	1799.88	21.36	8.68	136.68	3.27	37.44	3.08	126.70
Variance 0			0.17	0.03	5.31			-0.06	3.61
Variance 1			0.11	0.01	4.56			-0.06	2.91
Variance 2			-0.22	0.01	2.80			-0.03	-2.11

Notes

Date: 2019-08-21 09:54:24

Project Information:

Operator Name

Company Name

Proiect Name

Daniel Howard Wood E&I S

Plant Mitchell CCR Phase II

Site Name PZ-2D
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 478733
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Micro Bladder

76 ft

Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 81 ft

Pump placement from TOC

Well Information:

Well IDPZ-2DWell diameter2 inWell Total Depth80.96 ftScreen Length10 ftDepth to Water37.15 ft

Pumping Information:
Final Pumping Rate 200 mL/min
Total System Volume 0.5515373 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in

Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	09:30:45	300.03	21.61	8.74	141.14	2.51	37.44	3.01	127.80
Last 5	09:35:45	600.02	21.30	8.73	143.83	3.27	37.44	2.99	125.79
Last 5	09:40:45	900.02	21.36	8.76	143.61	2.72	37.44	2.97	124.56
Last 5	09:45:45	1200.02	21.49	8.77	146.35	3.23	37.44	2.96	124.66
Last 5	09:50:45	1500.02	21.45	8.76	147.78	2.90	37.44	2.95	125.23
Variance 0			0.06	0.04	-0.22			-0.01	-1.24
Variance 1			0.14	0.01	2.74			-0.01	0.11
Variance 2			-0.05	-0.00	1.43			-0.01	0.57

Notes

PZ-2D sample time 1052

Date: 2019-08-22 09:24:27

Pumping Information:

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood E&IS	Tubing Type	LDPE
Project Name	Plant Mitchell CCR Phase II	Tubing Diameter	.25 in
Site Name	PZ 7D	Tubing Length	60.37 ft
Latitude	00 0' 0"	-	
Longitude	00 0' 0"		
Sonde SN	601534		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	55.37 ft

Well Information:

Final Pumping Rate Total System Volume Calculated Sample Rate Well ID PZ 7D 200 mL/min Well diameter 2 in 1.062735 L Well Total Depth 60.37 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water 35.34 ft Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	09:02:22	900.03	21.60	7.38	552.14	1.61	35.17	0.34	53.80
Last 5	09:07:22	1199.90	21.68	7.35	552.24	1.38	35.17	0.35	53.88
Last 5	09:12:22	1499.91	21.85	7.34	552.07	1.19	35.17	0.36	53.70
Last 5	09:17:22	1799.90	21.81	7.32	551.54	1.06	35.17	0.35	53.72
Last 5	09:22:22	2099.90	21.76	7.31	552.49	0.95	35.17	0.33	53.42
Variance 0			0.17	-0.02	-0.17			0.00	-0.18
Variance 1			-0.04	-0.01	-0.53			-0.01	0.03
Variance 2			-0.05	-0.01	0.95			-0.02	-0.30

Notes

Sampled @ 0925

Date: 2019-08-21 11:37:49

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood E&IS	Tubing Type	LDPE
Project Name	Plant Mitchell CCR Phase II	Tubing Diameter	.25 in
Site Name	PZ 14	Tubing Length	53.20 ft
Latitude	00 0, 0,		
Longitude	00 0' 0"		
Sonde SN	601534		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	48.20 ft
Well Information:		Pumping Information:	
Well ID	PZ 14	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.9935253 L
M U.T I.B	E0 00 ()		000

Well diameter 2 in Total System Volume 0.9935253
Well Total Depth 53.20 ft Calculated Sample Rate 300 sec
Screen Length 10 ft Stabilization Drawdown 0 in
Depth to Water 45.58 ft Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	11:14:32	1849.03	22.58	7.34	488.25	0.87	45.64	4.04	76.34
Last 5	11:19:32	2149.02	22.75	7.33	488.75	1.01	45.64	3.81	75.69
Last 5	11:24:32	2449.03	23.10	7.31	490.23	0.64	45.64	3.72	75.60
Last 5	11:29:33	2750.02	22.93	7.32	489.19	0.84	45.64	3.67	75.20
Last 5	11:34:33	3050.02	22.84	7.31	488.97	0.74	45.64	3.64	75.25
Variance 0			0.35	-0.02	1.47			-0.09	-0.09
Variance 1			-0.17	0.01	-1.04			-0.05	-0.39
Variance 2			-0.09	-0.00	-0.22			-0.03	0.05

Notes

Sampled @ 1140

Date: 2019-08-21 14:09:44

Project Information: Operator Name Company Name Project Name Site Name Latitude Longitude Sonde SN	Ever Guillen Wood E&IS Plant Mitchell CCR Phase II PZ 15 0° 0' 0" 0° 0' 0" 601534	Pump Information: Pump Model/Type Tubing Type Tubing Diameter Tubing Length	QED LDPE .25 in 83.22 ft
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	78.22 ft
Well Information: Well ID Well diameter Well Total Depth Screen Length Depth to Water	PZ 15 2 in 83.22 ft 10 ft 32.88 ft	Pumping Information: Final Pumping Rate Total System Volume Calculated Sample Rate Stabilization Drawdown Total Volume Pumped	200 mL/min 1.2833 L 300 sec 0 in 7 L

Low-Flow S	ampling Stabiliz	zation Summary	1						
	Time	Elapsed	Temp C	рН	SpCond µS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	า		+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	13:46:24	899.90	26.62	7.51	510.60	2.66	33.78	0.19	-39.82
Last 5	13:51:24	1199.90	26.31	7.51	509.00	1.90	33.78	0.18	-38.27
Last 5	13:56:24	1499.89	26.13	7.51	511.39	1.52	33.78	0.19	-37.22
Last 5	14:01:24	1799.90	25.93	7.50	513.31	1.44	33.78	0.19	-37.81
Last 5	14:06:24	2099.95	26.00	7.51	509.87	1.63	33.78	0.19	-41.24
Variance 0			-0.18	0.00	2.39			0.01	1.05
Variance 1			-0.20	-0.01	1.92			0.00	-0.59
Variance 2			0.07	0.01	-3.43			-0.00	-3.43

Notes

Sampled @ 1410

Date: 2019-08-21 12:18:55

Project Information:

Operator Name Daniel Howard Company Name Wood E&I S

Project Name Plant Mitchell CCR Phase II Site Name PZ-16

Latitude 0° 0′ 0″ Longitude 0° 0′ 0″ Sonde SN 478733

Turbidity Make/Model Hach 2100Q

Pump Information:
Pump Model/Type

Pump Model/Type QED Micro Bladder

Tubing TypeLDPETubing Diameter.25 inTubing Length53.2 ft

Pump placement from TOC 48.2 ft

Well Information:

Well IDPZ-16Well diameter2 inWell Total Depth53.19 ftScreen Length10 ftDepth to Water36.81 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.9935253 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.12 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	11:55:40	600.03	23.66	7.21	484.34	2.77	36.93	1.33	172.09
Last 5	12:00:40	900.02	23.60	7.22	483.01	2.95	36.93	1.32	173.20
Last 5	12:05:40	1200.02	23.86	7.22	482.74	1.79	36.93	1.30	172.35
Last 5	12:10:40	1499.86	23.69	7.23	481.99	1.07	36.93	1.30	170.69
Last 5	12:15:40	1799.86	23.53	7.23	480.56	0.54	36.93	1.30	170.29
Variance 0			0.27	0.00	-0.26			-0.02	-0.85
Variance 1			-0.18	0.00	-0.75			-0.01	-1.65
Variance 2			-0.16	0.00	-1.43			0.01	-0.40

Notes

PZ-16 sample time 1316

Date: 2019-08-22 11:05:47

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood E&IS	Tubing Type	LDPE
Project Name	Plant Mitchell CCR Phase II	Tubing Diameter	.25 in
Site Name	PZ 17	Tubing Length	62.70 ft
Latitude	00 0' 0"		
Longitude	00 0' 0"		
Sonde SN	601534		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	57.70 ft

Well Information: Well ID PZ 17

Well diameter 2 in 62.70 ft Well Total Depth Screen Length 10 ft Depth to Water 34.82 ft

Pumping Information: Final Pumping Rate Total System Volume Calculated Sample Rate

1.085226 L 300 sec Stabilization Drawdown 0 in Total Volume Pumped 9 L

200 mL/min

Low-Flow Sampling	Stabilization Summary
Time	Elapsed

	Time	Elapsed	Temp C	рН	SpCond µS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	10:43:10	1500.03	22.85	7.25	593.71	7.12	34.92	0.12	-45.00
Last 5	10:48:10	1800.03	22.98	7.24	592.00	5.82	34.92	0.12	-43.07
Last 5	10:53:10	2100.03	23.06	7.24	593.68	5.39	34.92	0.13	-43.22
Last 5	10:58:11	2401.03	23.01	7.24	592.75	3.06	34.92	0.13	-42.63
Last 5	11:03:11	2701.03	22.97	7.24	592.18	1.77	34.92	0.13	-42.49
Variance 0			0.08	-0.01	1.68			0.01	-0.15
Variance 1			-0.05	0.00	-0.93			0.00	0.60
Variance 2			-0.04	0.00	-0.57			0.00	0.14

Notes

Sampled @ 1110

Date: 2019-08-22 13:46:14

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood E&IS	Tubing Type	LDPE
Project Name	Plant Mitchell CCR Phase II	Tubing Diameter	.25 in
Site Name	PZ 18	Tubing Length	63.18 ft
Latitude	00 0' 0"		
Longitude	00 0' 0"		
Sonde SN	601534		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	58.18 ft

Well Information:		Pumping Information:	
Well ID	PZ 18	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	1.08986 L
Well Total Depth	63.18 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	32.19 ft	Total Volume Pumped	9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	13:22:50	1501.91	26.83	7.02	629.50	8.69	32.39	0.21	11.92
Last 5	13:27:50	1801.91	27.29	7.02	626.61	4.26	32.39	0.19	11.46
Last 5	13:32:50	2101.91	26.54	7.03	622.87	1.84	32.39	0.18	12.97
Last 5	13:37:50	2401.91	26.95	7.02	627.59	0.92	32.39	0.18	11.17
Last 5	13:42:50	2701.91	26.55	7.02	623.33	1.12	32.39	0.19	13.66
Variance 0			-0.75	0.01	-3.74			-0.01	1.51
Variance 1			0.41	-0.01	4.73			0.00	-1.80
Variance 2			-0.40	-0.00	-4.27			0.00	2.49

Notes

Sampled @ 1350

Date: 2019-08-22 11:35:46

Project Information:
Operator Name Daniel Howard

Operator Name
Company Name
Project Name
Daniel Howard
Wood E&I S
Plant Mitchell CCR Phase II

Site Name PZ-19
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 478733
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Micro Bladder

Tubing TypeLDPETubing Diameter.25 inTubing Length62.6 ft

Pump placement from TOC 57.6 ft

Well Information:

Well IDPZ-19Well diameter2 inWell Total Depth62.63 ftScreen Length10 ftDepth to Water34.52 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 1.084261 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.09 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	11:10:10	599.87	23.98	6.73	856.60	2.04	34.61	0.46	62.44
Last 5	11:15:10	899.87	24.09	6.73	856.07	1.59	34.61	0.45	61.58
Last 5	11:20:10	1199.87	24.10	6.73	851.00	1.72	34.61	0.44	61.00
Last 5	11:25:10	1499.87	24.05	6.73	848.11	1.21	34.61	0.43	59.98
Last 5	11:30:10	1799.87	24.00	6.73	848.17	1.10	34.61	0.42	58.40
Variance 0			0.01	-0.00	-5.07			-0.01	-0.58
Variance 1			-0.05	0.01	-2.90			-0.01	-1.02
Variance 2			-0.05	-0.00	0.07			-0.01	-1.59

Notes

PZ-19 sample time 1232. DUP-01 collected.

Date: 2019-08-21 12:44:54

Project Information: Pump Information: Operator Name Ever Guillen Pump Model/Type QED Company Name Wood E&IS Tubing Type **LDPE** Plant Mitchell CCR Phase II Tubing Diameter .25 in Project Name **Tubing Length** 63.60 ft

Site Name PZ 23
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 601534

Turbidity Make/Model Hach 2100Q Pump placement from TOC 58.60 ft

Well Information: Pumping Information:

Well ID PZ **23** Final Pumping Rate 200 mL/min Well diameter 2 in Total System Volume 1.093914 L Calculated Sample Rate Well Total Depth 63.60 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water 5 L 52.84 ft **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	12:20:50	300.10	23.33	7.14	671.82	0.94	52.61	4.34	84.68
Last 5	12:25:50	600.02	23.33	7.11	674.32	0.61	52.61	4.36	84.22
Last 5	12:30:50	900.02	23.27	7.08	673.80	0.62	52.61	4.40	84.27
Last 5	12:35:50	1200.02	23.44	7.07	671.30	0.58	52.61	4.37	84.49
Last 5	12:40:50	1499.88	23.14	7.08	669.41	0.56	52.61	4.38	84.28
Variance 0			-0.06	-0.02	-0.52			0.03	0.05
Variance 1			0.17	-0.01	-2.49			-0.02	0.22
Variance 2			-0.31	0.00	-1.89			0.00	-0.20

Notes

Sampled @ 1245 (PZ 23)

Date: 2019-08-21 13:43:32

Pump Information:

Pump Model/Type

Tubing Diameter

Pump placement from TOC

Tubing Length

Tubing Type

QED Micro Bladder

LDPE

.25 in

63.2 ft

58.2 ft

Project Information:

Operator Name Daniel Howard
Company Name Wood E&I S

Project Name Plant Mitchell CCR Phase II

Site Name PZ-25
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 478733

Turbidity Make/Model Hach 2100Q

Well Information: Pumping Information:

Final Pumping Rate 200 mL/min Well ID PZ-25 Well diameter 2 in Total System Volume 1.090053 L Calculated Sample Rate Well Total Depth 63.19 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0.48 in Depth to Water 32.89 ft **Total Volume Pumped** 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:20:26	600.03	23.09	7.10	499.49	0.52	33.37	0.76	-111.01
Last 5	13:25:26	900.03	22.88	7.09	498.30	0.52	33.37	0.51	-120.16
Last 5	13:30:26	1200.03	22.74	7.09	498.93	0.25	33.37	0.43	-123.81
Last 5	13:35:26	1500.03	22.71	7.09	499.76	0.67	33.37	0.37	-126.37
Last 5	13:40:26	1800.02	22.87	7.09	500.00	0.32	33.37	0.38	-125.21
Variance 0			-0.14	-0.00	0.63			-0.09	-3.66
Variance 1			-0.03	0.00	0.83			-0.06	-2.56
Variance 2			0.16	-0.01	0.25			0.00	1.16

Notes

PZ-25 sample time 1442

Date: 2019-08-21 09:46:28

Pump Information: Project Information: Operator Name Pump Model/Type Ever Guillen QED Company Name Tubing Type Wood E&IS LDPE Project Name Plant Mitchell CCR Phase II Tubing Diameter .25 in Tubing Length 61.6 ft

Site Name PZ 31
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 601534
Turbidity Make/Model Hach 2100Q

Pump placement from TOC 56.6 ft

Well Information: Pumping Information:

Well ID PZ 31 Final Pumping Rate 200 mL/min Well diameter 2 in Total System Volume 1.074608 L Calculated Sample Rate Well Total Depth 61.60 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water 40.73 ft **Total Volume Pumped** 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	09:22:56	300.17	21.30	7.39	427.88	1.28	41.73	4.79	90.60
Last 5	09:27:56	600.03	21.21	7.42	428.20	0.76	41.73	4.82	82.71
Last 5	09:32:56	900.02	21.15	7.43	428.17	0.78	41.73	4.82	82.84
Last 5	09:37:56	1200.03	21.14	7.44	427.98	0.69	41.73	4.79	79.76
Last 5	09:42:56	1499.90	21.21	7.44	428.30	0.77	41.73	4.78	77.48
Variance 0			-0.06	0.01	-0.03			-0.00	0.12
Variance 1			-0.01	0.01	-0.19			-0.02	-3.07
Variance 2			0.07	-0.00	0.32			-0.02	-2.29

Notes

Sampled @ 0945

Date: 2019-08-20 14:06:00

Pump Information:

QED Micro Bladder

Project Information:

Operator Name Daniel Howard Pump Model/Type

Company NameWood E&I STubing TypeLDPEProject NamePlant Mitchell CCR Phase IITubing Diameter.25 inSite NamePZ-32Tubing Length65.3 ft

Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 478733

Turbidity Make/Model Hach 2100Q Pump placement from TOC 60.3 ft

Well Information: Pumping Information:

Final Pumping Rate 200 mL/min Well ID PZ-32 Well diameter 2 in Total System Volume 1.110323 L Calculated Sample Rate Well Total Depth 65.3 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water 7 L 39.64 ft **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	13:42:31	900.02	20.55	7.35	340.22	2.78	39.62	1.01	109.56
Last 5	13:47:31	1200.02	20.56	7.35	339.60	2.32	39.62	0.83	110.29
Last 5	13:52:31	1500.02	20.58	7.36	339.22	1.35	39.62	0.80	108.14
Last 5	13:57:31	1800.03	20.56	7.36	338.67	0.83	39.62	0.79	106.95
Last 5	14:02:31	2100.02	20.65	7.36	339.05	1.10	39.62	0.78	106.31
Variance 0			0.02	0.00	-0.38			-0.03	-2.15
Variance 1			-0.02	0.00	-0.55			-0.01	-1.19
Variance 2			0.09	0.00	0.38			-0.02	-0.63

Notes

PZ-32 sample time 1503

Date: 2019-08-22 09:08:58

Project Information:		Pump Information:	
Operator Name Company Name Project Name Site Name Latitude Longitude	Daniel Howard Wood E&I S Plant Mitchell CCR Phase II PZ-33 0° 0' 0" 0° 0' 0"	Pump Model/Type Tubing Type Tubing Diameter Tubing Length	QED Micro Bladder LDPE .25 in 73.6 ft
Sonde SN Turbidity Make/Model	478733 Hach 2100Q	Pump placement from TOC	68.6 ft
, ,			
Well Information:		Pumping Information:	
Well ID Well diameter	PZ-33 2 in	Final Pumping Rate Total System Volume	200 mL/min 1.190441 L
Well Total Depth	73.6 ft	Calculated Sample Rate	300 sec
Screen Length Depth to Water	10 ft 51.23 ft	Stabilization Drawdown Total Volume Pumped	0.02 in 6 L
Deptil to water	31.23 IL	rotar volume Fumped	O L

Low-Flow Sa	mpling Stabiliz	ation Summary	1						
	Time	Elapsed	Temp C	рН	SpCond µS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	08:42:16	600.03	22.83	6.89	656.72	0.42	51.24	0.68	60.34
Last 5	08:47:16	900.03	22.88	6.90	659.53	0.29	51.24	0.57	63.46
Last 5	08:52:16	1200.03	23.01	6.92	658.54	0.35	51.24	0.49	63.44
Last 5	08:57:16	1500.03	22.76	6.94	657.52	0.91	51.25	0.46	62.50
Last 5	09:02:16	1800.02	22.61	6.94	661.91	1.76	51.25	0.45	61.23
Variance 0			0.13	0.02	-0.99			-0.08	-0.03
Variance 1			-0.25	0.01	-1.03			-0.03	-0.93
Variance 2			-0.15	0.01	4.40			-0.01	-1.27

Notes

PZ-33 sample time 1004. DUP-02 collected.

2020 Annual Groundwater	Monitoring and Corrective Action Report
	Georgia Power Company - Plant Mitchell

SEPTEMBER-OCTOBER 2019 LABORATORY DATA

Well ID	Sample Date	Purge Volume (liter)	Time Elapsed	DTW (feet, TOC)	Drawdown (feet)	Temperature (C)	pH (su)	Specific Conductance (uS/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)
PZ-1D	10/1/2019	8.0	2400	55.86	0	22.3	7.5	250.5	0.8	3.9	71.3
PZ-2D	10/2/2019	7.0	2100	39.42	0.01	20.2	9.0	132.8	3.2	2.6	97.4
PZ-7D	10/3/2019	5.0	1500	37.15	0	21.7	6.9	612.8	0.6	0.3	58.8
PZ-14	10/2/2019	13.0	3900	46.72	0	22.6	7.0	524.5	0.5	4.1	63.9
PZ-15	10/2/2019	7.0	2100	34.87	0.02	24.2	7.2	531.4	1.2	0.2	-67.6
PZ-16	10/2/2019	6.0	1801	38.13	0	21.7	7.2	472.9	0.6	1.1	63.4
PZ-17	10/2/2019	7.0	2100	36.65	0	22.0	7.0	651.5	0.2	0.2	-66.7
PZ-18	10/3/2019	6.0	1800	33.97	0	22.2	6.8	682.3	0.5	0.2	-2.2
PZ-19	10/3/2019	6.0	1800	35.91	0.01	23.6	6.9	721.1	0.6	0.2	25.3
PZ-23	9/10/2019	7.0	2101	52.54	0	22.2	6.8	740.6	0.3	4.3	92.9
PZ-25	10/2/2019	6.0	1800	34.66	0.01	23.1	7.2	466.5	0.3	0.1	-93.5
PZ-31	10/2/2019	6.0	2400	42.56	0	21.1	7.1	458.9	0.5	4.9	63.1
PZ-32	10/1/2019	6.0	1800	41.57	0	20.9	7.4	321.5	0.2	0.5	70.9
PZ-33	10/3/2019	7.0	2100	52.54	0.02	21.9	7.0	618.2	0.2	0.3	20.0





December 19, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623917

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for Betsy McDaniel

Kein Slury

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623917

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623917

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623917001	PZ-14+QC	Water	10/02/19 12:30	10/03/19 09:30
2623917002	PZ-25	Water	10/02/19 13:15	10/03/19 09:30
2623917003	Dup-02	Water	10/02/19 00:00	10/03/19 09:30
2623917004	PZ-15	Water	10/02/19 15:23	10/03/19 09:30



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623917

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2623917001	PZ-14+QC	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623917002	PZ-25	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623917003	Dup-02	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623917004	PZ-15	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3



Project: Plant Mitchell Pace Project No.: 2623917

Date: 12/19/2019 11:15 AM

Sample: PZ-14+QC	Lab ID:	2623917001	Collecte	ed: 10/02/19	12:30	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 19:10	7440-36-0	
Arsenic	0.00083J	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 19:10	7440-38-2	
Barium	0.017	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 19:10	7440-39-3	
Boron	0.021J	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 19:10	7440-42-8	
Calcium	103	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 19:16	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 19:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 19:10	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 19:10	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 19:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 19:10	7439-98-7	
Selenium	0.0015J	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 19:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 19:10	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	312	mg/L	10.0	10.0	1		10/08/19 21:36		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	5.4	mg/L	1.0	0.024	1		10/09/19 17:05	16887-00-6	
Fluoride	0.056J	mg/L	0.30	0.029	1		10/09/19 17:05	16984-48-8	
Sulfate	6.2	mg/L	1.0	0.017	1		10/09/19 17:05	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623917

Date: 12/19/2019 11:15 AM

Sample: PZ-25	Lab ID:	2623917002	Collecte	ed: 10/02/19	13:15	Received: 10/	03/19 09:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 19:22	7440-36-0	
Arsenic	0.00063J	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 19:22	7440-38-2	
Barium	0.11	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 19:22	7440-39-3	
Boron	0.21	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 19:22	7440-42-8	
Calcium	92.3	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 19:27	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 19:22	7440-47-3	
Cobalt	0.0017J	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 19:22	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 19:22	7439-92-1	
Lithium	0.0074J	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 19:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 19:22	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 19:22	7782-49-2	
Thallium	0.00024J	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 19:22	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	312	mg/L	10.0	10.0	1		10/09/19 20:06		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	2.6	mg/L	1.0	0.024	1		10/09/19 17:27	16887-00-6	
Fluoride	0.16J	mg/L	0.30	0.029	1		10/09/19 17:27	16984-48-8	
Sulfate	43.0	mg/L	1.0	0.017	1		10/09/19 17:27	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623917

Date: 12/19/2019 11:15 AM

Sample: Dup-02	Lab ID:	2623917003	Collecte	ed: 10/02/19	00:00	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 19:33	7440-36-0	
Arsenic	0.00045J	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 19:33	7440-38-2	
Barium	0.12	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 19:33	7440-39-3	
Boron	0.21	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 19:33	7440-42-8	
Calcium	93.2	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 19:39	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 19:33	7440-47-3	
Cobalt	0.0017J	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 19:33	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 19:33	7439-92-1	
Lithium	0.0078J	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 19:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 19:33	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 19:33	7782-49-2	
Thallium	0.00024J	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 19:33	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	315	mg/L	10.0	10.0	1		10/09/19 20:06		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	2.6	mg/L	1.0	0.024	1		10/09/19 17:48	16887-00-6	
Fluoride	0.17J	mg/L	0.30	0.029	1		10/09/19 17:48	16984-48-8	
Sulfate	42.9	mg/L	1.0	0.017	1		10/09/19 17:48	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623917

Date: 12/19/2019 11:15 AM

Sample: PZ-15	Lab ID:	2623917004	Collecte	ed: 10/02/19	15:23	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 19:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 19:56	7440-38-2	
Barium	0.049	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 19:56	7440-39-3	
Boron	0.17	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 19:56	7440-42-8	
Calcium	101	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 20:02	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 19:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 19:56	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 19:56	7439-92-1	
Lithium	0.0013J	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 19:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 19:56	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 19:56	7782-49-2	
Thallium	0.00016J	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 19:56	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	355	mg/L	10.0	10.0	1		10/09/19 20:06		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	8.0	mg/L	1.0	0.024	1		10/09/19 18:09	16887-00-6	
Fluoride	0.075J	mg/L	0.30	0.029	1		10/09/19 18:09	16984-48-8	
Sulfate	83.0	mg/L	5.0	0.085	5		10/10/19 13:47	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623917

QC Batch: 36528 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2623917001, 2623917002, 2623917003, 2623917004

METHOD BLANK: 165101 Matrix: Water
Associated Lab Samples: 2623917001, 2623917002, 2623917003, 2623917004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	10/08/19 17:42	
Arsenic	mg/L	ND	0.0050	0.00035	10/08/19 17:42	
Barium	mg/L	ND	0.010	0.00049	10/08/19 17:42	
Boron	mg/L	ND	0.040	0.0049	10/08/19 17:42	
Calcium	mg/L	ND	0.10	0.011	10/08/19 17:42	
Chromium	mg/L	ND	0.010	0.00039	10/08/19 17:42	
Cobalt	mg/L	ND	0.0050	0.00030	10/08/19 17:42	
Lead	mg/L	ND	0.0050	0.000046	10/08/19 17:42	
Lithium	mg/L	ND	0.030	0.00078	10/08/19 17:42	
Molybdenum	mg/L	ND	0.010	0.00095	10/08/19 17:42	
Selenium	mg/L	ND	0.010	0.0013	10/08/19 17:42	
Thallium	mg/L	ND	0.0010	0.000052	10/08/19 17:42	

LABORATORY CONTROL SAMPLE: 165102	LABORATORY	CONTROL	SAMPLE:	165102
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Date: 12/19/2019 11:15 AM

EMBORMATORY CONTINUE OF WILL	LL. 100102					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.1	109	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX S	SPIKE DUPL	ICATE: 1651	165104									
_		2623873013	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Arsenic	mg/L	0.00071J	0.1	0.1	0.095	0.10	94	100	75-125	6	20	
Barium	mg/L	0.071	0.1	0.1	0.17	0.17	94	101	75-125	4	20	
Boron	mg/L	0.018J	1	1	0.99	1.0	97	102	75-125	5	20	
Calcium	mg/L	37.2	1	1	35.7	37.8	-144	63	75-125	6	20	M6

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



Project: Plant Mitchell Pace Project No.: 2623917

Date: 12/19/2019 11:15 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1651	03		165104							
Parameter	Units	2623873013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.091	0.097	91	97	75-125	6	20	
Cobalt	mg/L	0.00041J	0.1	0.1	0.093	0.098	93	97	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	5	20	
Lithium	mg/L	0.018J	0.1	0.1	0.12	0.12	100	103	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.095	0.10	95	103	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.099	93	98	75-125	5	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	

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



Project: Plant Mitchell Pace Project No.: 2623917

QC Batch: 36680 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623917001

LABORATORY CONTROL SAMPLE: 165650

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 398 100 84-108

SAMPLE DUPLICATE: 165651

2623876009 Dup Max RPD RPD Parameter Units Result Qualifiers Result **Total Dissolved Solids** 25.0 25.0 0 10 mg/L

SAMPLE DUPLICATE: 165652

Date: 12/19/2019 11:15 AM

2623879002 Dup Max Result RPD RPD Qualifiers Parameter Units Result 103 **Total Dissolved Solids** mg/L 98.0 5 10

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



Project: Plant Mitchell Pace Project No.: 2623917

QC Batch: 36765 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623917002, 2623917003, 2623917004

LABORATORY CONTROL SAMPLE: 166031

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 409 102 84-108

SAMPLE DUPLICATE: 166032

2623917002 Dup Max RPD RPD Parameter Units Qualifiers Result Result **Total Dissolved Solids** 312 305 2 10 mg/L

SAMPLE DUPLICATE: 166033

Date: 12/19/2019 11:15 AM

2623927002 Dup Max Result RPD RPD Qualifiers Parameter Units Result 84.0 10 D6 **Total Dissolved Solids** mg/L 95.0 12

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



Project: Plant Mitchell Pace Project No.: 2623917

Date: 12/19/2019 11:15 AM

QC Batch: 36695 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2623917001, 2623917002, 2623917003, 2623917004

METHOD BLANK: 165707 Matrix: Water
Associated Lab Samples: 2623917001, 2623917002, 2623917003, 2623917004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.030J	1.0	0.024	10/09/19 15:19	
Fluoride	mg/L	ND	0.30	0.029	10/09/19 15:19	
Sulfate	mg/L	ND	1.0	0.017	10/09/19 15:19	

LABORATORY CONTROL SAMPLE:	165708					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.7	107	90-110	
Sulfate	mg/L	10	10.5	105	90-110	

MATRIX SPIKE & MATRIX SF	PIKE DUPL	ICATE: 1657		165710								
			MS	MSD								
		2623903001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	118	10	10	91.0	91.1	-269	-269	90-110	0	15	
Fluoride	mg/L	1.1	10	10	11.2	11.2	101	101	90-110	0	15	
Sulfate	mg/L	47.3	10	10	52.5	52.5	52	53	90-110	0	15	

MATRIX SPIKE SAMPLE:	165711						
Parameter	Units	2623921001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	4.3	10	14.4	101	90-110	_
Fluoride	mg/L	0.057J	10	10.7	106	90-110	
Sulfate	mg/L	1.6	10	11.9	104	90-110	

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623917

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/19/2019 11:15 AM

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

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623917

Date: 12/19/2019 11:15 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
 2623917001	PZ-14+QC	EPA 3005A	36528	EPA 6020B	36530
2623917002	PZ-25	EPA 3005A	36528	EPA 6020B	36530
2623917003	Dup-02	EPA 3005A	36528	EPA 6020B	36530
2623917004	PZ-15	EPA 3005A	36528	EPA 6020B	36530
2623917001	PZ-14+QC	SM 2540C	36680		
2623917002	PZ-25	SM 2540C	36765		
2623917003	Dup-02	SM 2540C	36765		
2623917004	PZ-15	SM 2540C	36765		
2623917001	PZ-14+QC	EPA 300.0	36695		
2623917002	PZ-25	EPA 300.0	36695		
2623917003	Dup-02	EPA 300.0	36695		
2623917004	PZ-15	EPA 300.0	36695		

CHAIN-OF-CUSTODY / Analytical Request Document

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

Samples Intact (V/V) (N/A) Cooler ð Custod SELECTION State / Location (N/A) Received on Residual Chlorina (Y/N) MO#: 262391 Page: TEMP IN C 60 0/02/10 DATE Signod: 10/2 2623917 ACCEPTED OF LAFFLANTON MON XXX 3 メ × LDS' CI' E' 204 betsy.modaniel@pacelabs.com App. III & App. IV Metals 2 scsinvoices@southernco.com Radium 226/228 NA TeeT seavland Haile form Howard Methanol Na2S2O3 Preservatives Pace Quote:
Pace Project Manager: b HOBN НСІ Section C Invoice Information: EONH Company Name: فالمن HSZO4 10/2/19 1800 マ Address: X Devreserved SAMPLERYAME AND BRONATURE T Ŧ # OF CONTAINERS SIGNATURE of SAMPLER: PRINT Name of SAMPLER: 900 SAMPLE TEMP AT COLLECTION **E23** अध 1021/14/1230 TIME 8 DATE COLLECTED W/Wood TIME Purchase Order #: SCS10382775
Project Name: Plant Mitchell CCR
Project #: 6 12 2 1601 START OATE Required Project Information: Jane VATONE Joju Abraham Wood PLC マクシ O SAMPLE TYPE (G-GRAB C-COMP) MATRIX CODE (see valid codes to laft) Section B Report To: MATRIX
Drinking Water
Water
Water
Water
Product
SoutSond
Out
Wipe
Air
Coher
Tissue 0 Georgia Power - Coal Combustion Residuals + PZ-25 Dup-02 One Character per box. (A-2, 0-9 /, -). Sample Ids must be unique コー Atlanta, GA 30339 jabraham@southernco.com SAMPLE ID PZ 2480 Maner Road (404)506-7239 Required Cilent Information: **Se**. Requested Due Date: 3.4.6. e E # MaTI

Page 16 of 17

Sample Condition Upon Receipt Client Name: GLA Prwert Project # Courier: Fed Ex UPS USPS Client Commercial Pace Other Tracking #: 8/2/93945429 WO#: 2623917 Due Date: 10/10/19 Seals intact: yes CLIENT: GAPower-CCR Packing Material: Bubble Wrap Bubble Bags None Other Thermometer Used Type of Ice: Wet Blue None Samples on ice, cooling process has begun Date and Initials of person/examining Biological Tissue is Frozen: Yes Cooler Temperature Temp should be above freezing to 6°C Comments: Chain of Custody Present: ₽Yes □No □N/A 1. Chain of Custody Filled Out: PYS ONO □N/A 2. Chain of Custody Relinquished: DYes □No □N/A 3. Sampler Name & Signature on COC: Jayes □No □N/A Samples Arrived within Hold Time: Yes ONo Short Hold Time Analysis (<72hr): ☐Yes ☐N/A 6. Rush Turn Around Time Requested: □Yes ☑No □N/A Sufficient Volume: -EYes □No □N/A Correct Containers Used: _□Yes □No □N/A 9. -Pace Containers Used: Pres ONo □N/A Containers Intact: ₽Yes □No □N/A 10. □Yes □No □N/A 11. Filtered volume received for Dissolved tests THES DNO. Sample Labels match COC: □N/A 12. -Includes date/time/ID/Analysis All containers needing preservation have been checked. - TYES UNO □N/A 13. All containers needing preservation are found to be in <□res □no □n/A compliance with EPA recommendation. Initial when Lot # of added ☐Yes ☑No exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) completed preservative Samples checked for dechlorination: ☐Yes ☐No -ÐN/Ā 114. □Yes □No ,□N/A 15. Headspace in VOA Vials (>6mm): Trip Blank Present: □Yes □No □NA 116. Trip Blank Custody Seals Present. ☐Yes ☐No -□MTA Pace Trip Blank Lot # (if purchased): Client Notification/ Resolution: Field Data Required? Y / Person Contacted: Date/Time: 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)

Project Manager Review:

Date:





December 19, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 11, 2019. 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.

This report replaces the report issued on September 19, 2019. This report was revised to correct the Fluoride reporting limit as 0.3 mg/L in accordance with GPC contract specifications. No other changes have been made to this report

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

Sincerely,

Kevin Herring for Betsy McDaniel

Kein Slury

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

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

Virginia Certification #: 460204

Pace Analytical Services Asheville

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

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

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





SAMPLE SUMMARY

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622942001	EB-01	Water	09/10/19 08:10	09/11/19 09:00
2622942002	PZ-23	Water	09/10/19 09:47	09/11/19 09:00



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622942001	EB-01	EPA 6020B	CSW	12	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622942002	PZ-23	EPA 6020B	CSW	12	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A



Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Date: 12/19/2019 11:17 AM

Sample: EB-01	Lab ID:	2622942001	Collecte	ed: 09/10/19	08:10	Received: 09/	11/19 09:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	09/12/19 14:21	09/16/19 19:26	7440-36-0	
Arsenic	0.00058J	mg/L	0.0050	0.00035	1	09/12/19 14:21	09/16/19 19:26	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	09/12/19 14:21	09/16/19 19:26	7440-39-3	
Boron	ND	mg/L	0.040	0.0049	1	09/12/19 14:21	09/16/19 19:26	7440-42-8	
Calcium	ND	mg/L	0.10	0.011	1	09/12/19 14:21	09/16/19 19:26	7440-70-2	
Chromium	0.00053J	mg/L	0.010	0.00039	1	09/12/19 14:21	09/16/19 19:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/12/19 14:21	09/16/19 19:26	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	09/12/19 14:21	09/16/19 19:26	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	09/12/19 14:21	09/16/19 19:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	09/12/19 14:21	09/16/19 19:26	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	09/12/19 14:21	09/16/19 19:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	09/12/19 14:21	09/16/19 19:26	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/16/19 13:00		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
Chloride	ND	mg/L	1.0	0.60	1		09/14/19 15:12	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/14/19 15:12	16984-48-8	
Sulfate	0.64J	mg/L	1.0	0.50	1		09/14/19 15:12	14808-79-8	



Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Date: 12/19/2019 11:17 AM

Sample: PZ-23	Lab ID:	2622942002	Collecte	ed: 09/10/19	09:47	Received: 09/	11/19 09:00 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	09/12/19 14:21	09/16/19 19:31	7440-36-0	
Arsenic	0.00036J	mg/L	0.0050	0.00035	1	09/12/19 14:21	09/16/19 19:31	7440-38-2	
Barium	0.029	mg/L	0.010	0.00049	1	09/12/19 14:21	09/16/19 19:31	7440-39-3	
Boron	0.15	mg/L	0.040	0.0049	1	09/12/19 14:21	09/16/19 19:31	7440-42-8	
Calcium	137	mg/L	5.0	0.55	50	09/12/19 14:21	09/16/19 19:37	7440-70-2	
Chromium	0.0044J	mg/L	0.010	0.00039	1	09/12/19 14:21	09/16/19 19:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/12/19 14:21	09/16/19 19:31	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	09/12/19 14:21	09/16/19 19:31	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	09/12/19 14:21	09/16/19 19:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	09/12/19 14:21	09/16/19 19:31	7439-98-7	
Selenium	0.0018J	mg/L	0.010	0.0013	1	09/12/19 14:21	09/16/19 19:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	09/12/19 14:21	09/16/19 19:31	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	420	mg/L	10.0	10.0	1		09/16/19 13:00		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0 Rev 2	2.1 1993					
Chloride	3.8	mg/L	1.0	0.60	1		09/14/19 15:27	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/14/19 15:27	16984-48-8	
Sulfate	45.1	mg/L	1.0	0.50	1		09/14/19 15:27	14808-79-8	



Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Lithium

Selenium

Thallium

Molybdenum

Date: 12/19/2019 11:17 AM

QC Batch: 35185 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

mg/L

mg/L

mg/L

mg/L

Associated Lab Samples: 2622942001, 2622942002

METHOD BLANK: 158382 Matrix: Water

Associated Lab Samples: 2622942001, 2622942002

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/16/19 17:20	
Arsenic	mg/L	ND	0.0050	0.00035	09/16/19 17:20	
Barium	mg/L	ND	0.010	0.00049	09/16/19 17:20	
Boron	mg/L	ND	0.040	0.0049	09/16/19 17:20	
Calcium	mg/L	ND	0.10	0.011	09/16/19 17:20	
Chromium	mg/L	ND	0.010	0.00039	09/16/19 17:20	
Cobalt	mg/L	ND	0.0050	0.00030	09/16/19 17:20	
Lead	mg/L	ND	0.0050	0.000046	09/16/19 17:20	
Lithium	mg/L	ND	0.030	0.00078	09/16/19 17:20	
Molybdenum	mg/L	ND	0.010	0.00095	09/16/19 17:20	
Selenium	mg/L	ND	0.010	0.0013	09/16/19 17:20	
Thallium	mg/L	ND	0.0010	0.000052	09/16/19 17:20	

LABORATORY CONTROL SAMPLE:	158383					
Devenuetos	l laita	Spike	LCS	LCS	% Rec	O I:f:
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	0.96	96	80-120	
Calcium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.097	97	80-120	

0.1

0.1

0.1

0.1

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1583	84		158385							
Parameter	Units	2622907001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00079J	0.1	0.1	0.097	0.10	97	99	75-125	2	20	
Arsenic	mg/L	0.00043J	0.1	0.1	0.098	0.099	97	99	75-125	2	20	
Barium	mg/L	0.015	0.1	0.1	0.11	0.11	96	98	75-125	2	20	
Boron	mg/L	ND	1	1	0.95	0.98	95	98	75-125	4	20	
Calcium	mg/L	11.3	1	1	12.5	12.5	121	115	75-125	0	20	

0.098

0.098

0.095

0.098

80-120

80-120

80-120

80-120

98

98

95

98

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



Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Date: 12/19/2019 11:17 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1583	84 MS	MSD	158385							
		2622907001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.096	0.10	95	100	75-125	5	20	
Molybdenum	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.098	94	98	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20	

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



Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

QC Batch: 35360 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2622942001, 2622942002

LABORATORY CONTROL SAMPLE: 159298

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Total Dissolved Solids 700 200 100 84 108

Total Dissolved Solids mg/L 400 399 100 84-108

SAMPLE DUPLICATE: 159299

Date: 12/19/2019 11:17 AM

2622885003 Dup Max RPD RPD Parameter Units Result Qualifiers Result **Total Dissolved Solids** 2560 2560 0 10 mg/L

SAMPLE DUPLICATE: 159300

Parameter Units Result Result RPD ARPD Qualifiers
Total Dissolved Solids mg/L ND ND 10

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



Project: Plant Mitchell Ash Ponds

Pace Project No.:

2622942

QC Batch: 497758

58 Analysis Method:

EPA 300.0 Rev 2.1 1993

QC Batch Method:

EPA 300.0 Rev 2.1 1993

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2622942001, 2622942002

METHOD BLANK: 2680201

Matrix: Water

Associated Lab Samples:

Date: 12/19/2019 11:17 AM

2622942001, 2622942002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/14/19 11:57	
Fluoride	mg/L	ND	0.10	0.050	09/14/19 11:57	
Sulfate	mg/L	ND	1.0	0.50	09/14/19 11:57	

LABORATORY CONTROL SAMPLE:	2680202					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	50	47.5	95	90-110	
Fluoride	mg/L	2.5	2.3	92	90-110	
Sulfate	mg/L	50	47.1	94	90-110	

MATRIX SPIKE & MATRIX SP	PIKE DUPL	ICATE: 2680	203		2680204							
			MS	MSD								
		2622846001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	150	50	50	193	192	84	83	90-110	0	10	M1
Fluoride	mg/L	1.1	2.5	2.5	3.3	3.3	88	88	90-110	0	10	M1
Sulfate	mg/L	9.4	50	50	55.8	55.0	93	91	90-110	1	10	

MATRIX SPIKE & MATRIX SP	IKE DUPI	LICATE: 2680	205		2680206							
			MS	MSD								
		92444906011	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	1.5	50	50	54.8	52.1	106	101	90-110	5	10	
Fluoride	mg/L	0.055J	2.5	2.5	2.7	2.6	105	101	90-110	4	10	
Sulfate	mg/L	0.59J	50	50	52.5	50.2	104	99	90-110	4	10	

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



QUALIFIERS

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

M1

PASI-A Pace Analytical Services - Asheville
PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

Date: 12/19/2019 11:17 AM

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



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622942

Date: 12/19/2019 11:17 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622942001	EB-01	EPA 3005A	35185	EPA 6020B	35214
2622942002	PZ-23	EPA 3005A	35185	EPA 6020B	35214
2622942001	EB-01	SM 2540C	35360		
2622942002	PZ-23	SM 2540C	35360		
2622942001	EB-01	EPA 300.0 Rev 2.1 1993	497758		
2622942002	PZ-23	EPA 300.0 Rev 2.1 1993	497758		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

(N/A) Intact Samples Sealed Cooler (Y/N) SAMPLE CONDITIONS ö Custody Regulatory Agency State / Location (N/A) JO#: 2622942 GA Received on Residual Chlorine (Y/N) Page: TEMP in C 000 TIME ted Analysis Filtered (Y/N) DATE Signed: 9/10/19 PATE 2622942 2 TDS, CI, F, SO4 betsy.mcdaniel@pacelabs.com, 2 ACCEPTED BY / AFFILIATION App. III & App. IV Metals Attention: scsinvoices@southernco.com Radium 226/228 N/A Analyses Test Howard House Other Methanol Preservatives Na2S2O3 HOBN 333.1.2 Pace Project Manager, HCI invoice Information: Daniel SIGNATURE of SAMPLER: коин × Company Name Pace Profile #: 1745 H2SO4 Pace Quote: TIME Unpreserved 7 T SAMPLER NAME AND SIGNATURE # OF CONTAINERS PRINT Name of SAMPLER: SAMPLE TEMP AT COLLECTION 6/10/16 DATE 0180 Florit TIME 460 Ap/6 END Horal Wood DATE COLLECTED RELINQUISHED BY / AFFILIATION TIME Purchase Order #: SCS10382775 Project Name: Plant Mitchell CCR START DATE Required Project Information: Report To: Joju Abraham Wood PLC Suns G 9 SAMPLE TYPE (G=GRAB C=COMP) MATRIX CODE (see valid codes to left) 31-31-Copy To: Section B Project #: motels only: Sb, As Cr.Co Rad: um 226+228 MATRIX
Drinking Water
Water
Water
Waste Water
Product
Soil/Solid
Oil
Wipe
War
An H * For App III analyses : B, Ca, CI Georgia Power - Coal Combustion Residuals standard One Character per box. (A-Z, 0-91, .-) Sample Ids must be unique ADDITIONAL COMMENTS Atlanta, GA 30339 SAMPLE ID PZ-2 EB-0 2480 Maner Road (404)506-7239 Required Client Information: L. Mo. Se. Requested Due Date: company. Page 13 of 13 Address 11 12 9 7 9 œ 6 ITEM #





December 19, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623919

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for Betsy McDaniel

Kein Slury

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623919

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623919

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623919001	PZ-1D	Water	10/01/19 16:30	10/03/19 09:30
2623919002	PZ-32	Water	10/01/19 16:10	10/03/19 09:30
2623919003	EB-01	Water	10/02/19 09:15	10/03/19 09:30
2623919004	PZ-2D	Water	10/02/19 10:38	10/03/19 09:30



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623919

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2623919001	PZ-1D	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623919002	PZ-32	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623919003	EB-01	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623919004	PZ-2D	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3



Project: Plant Mitchell Pace Project No.: 2623919

Date: 12/19/2019 11:21 AM

Sample: PZ-1D	Lab ID:	2623919001	Collecte	ed: 10/01/19	16:30	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00076J	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 20:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 20:08	7440-38-2	
Barium	0.016	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 20:08	7440-39-3	
Boron	0.0064J	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 20:08	7440-42-8	
Calcium	46.8	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 20:13	7440-70-2	
Chromium	0.0022J	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 20:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 20:08	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 20:08	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 20:08	7439-93-2	
Molybdenum	0.0010J	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 20:08	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 20:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 20:08	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	146	mg/L	10.0	10.0	1		10/08/19 21:35		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	3.6	mg/L	1.0	0.024	1		10/09/19 18:31	16887-00-6	
Fluoride	0.062J	mg/L	0.30	0.029	1		10/09/19 18:31	16984-48-8	
Sulfate	2.8	mg/L	1.0	0.017	1		10/09/19 18:31	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623919

Date: 12/19/2019 11:21 AM

Sample: PZ-32	Lab ID:	2623919002	Collecte	ed: 10/01/19	16:10	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 20:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 20:19	7440-38-2	
Barium	0.015	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 20:19	7440-39-3	
Boron	0.011J	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 20:19	7440-42-8	
Calcium	64.3	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 20:25	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 20:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 20:19	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 20:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 20:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 20:19	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 20:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 20:19	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 25	540C						
Total Dissolved Solids	187	mg/L	10.0	10.0	1		10/08/19 21:35		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	3.1	mg/L	1.0	0.024	1		10/09/19 18:52	16887-00-6	
Fluoride	0.042J	mg/L	0.30	0.029	1		10/09/19 18:52	16984-48-8	
Sulfate	2.2	mg/L	1.0	0.017	1		10/09/19 18:52	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623919

Date: 12/19/2019 11:21 AM

Sample: EB-01	Lab ID:	2623919003	Collecte	ed: 10/02/19	09:15	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 20:30	7440-36-0	
Arsenic	0.0013J	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 20:30	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 20:30	7440-39-3	
Boron	ND	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 20:30	7440-42-8	
Calcium	0.018J	mg/L	0.10	0.011	1	10/05/19 16:23	10/08/19 20:30	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 20:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 20:30	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 20:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 20:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 20:30	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 20:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 20:30	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/09/19 20:07		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	0.036J	mg/L	1.0	0.024	1		10/09/19 19:13	16887-00-6	В
Fluoride	ND	mg/L	0.30	0.029	1		10/09/19 19:13	16984-48-8	
Sulfate	0.059J	mg/L	1.0	0.017	1		10/09/19 19:13	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623919

Date: 12/19/2019 11:21 AM

Sample: PZ-2D	Lab ID:	2623919004	Collecte	ed: 10/02/19	10:38	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00042J	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 20:36	7440-36-0	
Arsenic	0.0022J	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 20:36	7440-38-2	
Barium	0.0046J	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 20:36	7440-39-3	
Boron	0.011J	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 20:36	7440-42-8	
Calcium	21.0	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 20:42	7440-70-2	
Chromium	0.0049J	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 20:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 20:36	7440-48-4	
Lead	0.000047J	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 20:36	7439-92-1	
Lithium	0.0016J	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 20:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 20:36	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 20:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 20:36	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	95.0	mg/L	10.0	10.0	1		10/09/19 20:07		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	2.7	mg/L	1.0	0.024	1		10/10/19 06:42	16887-00-6	
Fluoride	0.11J	mg/L	0.30	0.029	1		10/10/19 06:42	16984-48-8	
Sulfate	4.1	mg/L	1.0	0.017	1		10/10/19 06:42	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623919

Selenium

Thallium

Date: 12/19/2019 11:21 AM

QC Batch: 36528 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2623919001, 2623919002, 2623919003, 2623919004

METHOD BLANK: 165101 Matrix: Water
Associated Lab Samples: 2623919001, 2623919002, 2623919003, 2623919004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	 mg/L	ND	0.0030	0.00027	10/08/19 17:42	
Arsenic	mg/L	ND	0.0050	0.00035	10/08/19 17:42	
Barium	mg/L	ND	0.010	0.00049	10/08/19 17:42	
Boron	mg/L	ND	0.040	0.0049	10/08/19 17:42	
Calcium	mg/L	ND	0.10	0.011	10/08/19 17:42	
Chromium	mg/L	ND	0.010	0.00039	10/08/19 17:42	
Cobalt	mg/L	ND	0.0050	0.00030	10/08/19 17:42	
Lead	mg/L	ND	0.0050	0.000046	10/08/19 17:42	
Lithium	mg/L	ND	0.030	0.00078	10/08/19 17:42	
Molybdenum	mg/L	ND	0.010	0.00095	10/08/19 17:42	
Selenium	mg/L	ND	0.010	0.0013	10/08/19 17:42	
Thallium	mg/L	ND	0.0010	0.000052	10/08/19 17:42	

LABORATORY CONTROL SAMPLE:	165102					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.1	109	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	

0.1

0.1

mg/L

mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 165103				165104 MSD								
Parameter	Units	2623873013 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Arsenic	mg/L	0.00071J	0.1	0.1	0.095	0.10	94	100	75-125	6	20	
Barium	mg/L	0.071	0.1	0.1	0.17	0.17	94	101	75-125	4	20	
Boron	mg/L	0.018J	1	1	0.99	1.0	97	102	75-125	5	20	
Calcium	mg/L	37.2	1	1	35.7	37.8	-144	63	75-125	6	20	M6

0.10

0.098

102

98

80-120

80-120

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



Project: Plant Mitchell Pace Project No.: 2623919

Date: 12/19/2019 11:21 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1651	03		165104							
Parameter	Units	2623873013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.091	0.097	91	97	75-125	6	20	
Cobalt	mg/L	0.00041J	0.1	0.1	0.093	0.098	93	97	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	5	20	
Lithium	mg/L	0.018J	0.1	0.1	0.12	0.12	100	103	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.095	0.10	95	103	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.099	93	98	75-125	5	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	

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



Project: Plant Mitchell Pace Project No.: 2623919

QC Batch: 36680 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623919001, 2623919002

LABORATORY CONTROL SAMPLE: 165650

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 398 100 84-108

SAMPLE DUPLICATE: 165651

2623876009 Dup Max RPD RPD Parameter Units Result Qualifiers Result **Total Dissolved Solids** 25.0 25.0 0 10 mg/L

SAMPLE DUPLICATE: 165652

Date: 12/19/2019 11:21 AM

2623879002 Dup Max Result RPD RPD Qualifiers Parameter Units Result 103 **Total Dissolved Solids** mg/L 98.0 5 10

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



Project: Plant Mitchell Pace Project No.: 2623919

QC Batch: 36765 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623919003, 2623919004

LABORATORY CONTROL SAMPLE: 166031

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 409 102 84-108

SAMPLE DUPLICATE: 166032

2623917002 Dup Max RPD RPD Parameter Units Qualifiers Result Result **Total Dissolved Solids** 312 305 2 10 mg/L

SAMPLE DUPLICATE: 166033

Date: 12/19/2019 11:21 AM

2623927002 Dup Max Result RPD RPD Qualifiers Parameter Units Result 84.0 10 D6 **Total Dissolved Solids** mg/L 95.0 12

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



Project: Plant Mitchell Pace Project No.: 2623919

Date: 12/19/2019 11:21 AM

QC Batch: 36695 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2623919001, 2623919002, 2623919003, 2623919004

METHOD BLANK: 165707 Matrix: Water
Associated Lab Samples: 2623919001, 2623919002, 2623919003, 2623919004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.030J	1.0	0.024	10/09/19 15:19	
Fluoride	mg/L	ND	0.30	0.029	10/09/19 15:19	
Sulfate	mg/L	ND	1.0	0.017	10/09/19 15:19	

LABORATORY CONTROL SAMPLE:	165708					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.7	107	90-110	
Sulfate	mg/L	10	10.5	105	90-110	

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 1657	09		165710							
			MS	MSD								
		2623903001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	118	10	10	91.0	91.1	-269	-269	90-110	0	15	
Fluoride	mg/L	1.1	10	10	11.2	11.2	101	101	90-110	0	15	
Sulfate	mg/L	47.3	10	10	52.5	52.5	52	53	90-110	0	15	

MATRIX SPIKE SAMPLE:	165711						
Parameter	Units	2623921001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	4.3	10	14.4	101	90-110	_
Fluoride	mg/L	0.057J	10	10.7	106	90-110	
Sulfate	mg/L	1.6	10	11.9	104	90-110	

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623919

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/19/2019 11:21 AM

- B Analyte was detected in the associated method blank.
- D6 The precision between the sample and sample duplicate exceeded laboratory control limits.
- M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623919

Date: 12/19/2019 11:21 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623919001	PZ-1D	EPA 3005A	36528	EPA 6020B	36530
2623919002	PZ-32	EPA 3005A	36528	EPA 6020B	36530
2623919003	EB-01	EPA 3005A	36528	EPA 6020B	36530
2623919004	PZ-2D	EPA 3005A	36528	EPA 6020B	36530
2623919001	PZ-1D	SM 2540C	36680		
2623919002	PZ-32	SM 2540C	36680		
2623919003	EB-01	SM 2540C	36765		
2623919004	PZ-2D	SM 2540C	36765		
2623919001	PZ-1D	EPA 300.0	36695		
2623919002	PZ-32	EPA 300.0	36695		
2623919003	EB-01	EPA 300.0	36695		
2623919004	PZ-2D	EPA 300.0	36695		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

(N/A) SAMPLE CONDITIONS Sea State / Location (P.Conston & Gra Samples Intact (N/A) ŏ TelcoD Regulatory Agency pelge Custod (N/A) Received on WO#:2623919 Residual Chlorine (YM) Page: TEMP in C EXTINE ... 90 は一個ない。 Requested Analysis Filtored (Y/N) 0/20/07 6/ - alfo DATE Signed: 10/ 2623919 EPTED BYAAFFILATION TDS, CI, F, SO4 betsy.mcdaniel@pacelabs.com X 2 PAPP. III & App. IV Metals 1 Altention: scsinvoices@southernco.com 2 8SS/3SS mulbsA Manyses Test N/A Towar Other lonsrijeM Preservatives Nazszob 333.1.2 HOBN Address:
Pace Quote:
Pace Project Manager:
Pace Profits # 333.1.2 HCI Section C Invoice Information: Vane メ Company Name: **EONH** X HS2O¢ SAMPLER NAME AND SIGNATURE TIME 1800 Unpreserved 첫 SIGNATURE of SAMPLER: 7 4 * OF CONTAINERS PRINT Name of SAMPLER: SAMPLE TEMP AT COLLECTION POMTE 16/2/19 2160 HE 30 0191 Hys 42/A 1038 19/14/1630 TIME 욺 DATE RELINOUSHED BY | AFFILATION FOR COLLECTED /Wood Project Name: Plant Mitchell CCR Project #: 6122160170 TIME Purchase Order #. SCS10382775 START DATE Achiel Harry Required Project Information: Joju Abraham Wood PLC S <u>৩</u> SAMPLE TYPE (G-GRAB C-COMP) S S ᅶ 3H31-MATRIX CODE (see valid codes to left) Section B Copy To: MATRIX
Ubraing Water
Water
Water
Water
Water
Souts
Souts
Od
Od
Wipe
Air
Other ADOTTOWAL COUNDING Georgia Power - Coal Combustion Residuals Phone: (404)506-7239 Fax: Requested Due Date: 5 Tan ard (A-Z, 0-9 / . -) Sample Ids must be unique Allanta, GA 30339 jabraham@southernco.com Z-2D One Character per box. PZ-32 SAMPLE ID 7-1 B-01 2480 Maner Road metals; Sh Required Client Information: 2 lΩ se Company Address .3 8 6 1 2 Email .7 • 9 9 ILEM # ю Page 16 of 17

	San	thie C	onu	ШОП	Opon Recei	pι	•
Pace Analytical (Client Name:	6	IA	- /	Dowere		Project #
Courier: Fed Ex UPS Tracking #: 8/2/90	<u>394</u> 54,	18					WO#: 2623919 PM: BM Due Date: 10/1
Custody Seal on Cooler/Box P	~	∐ n	_		intact: yes	l l	CLIENT: GAPower-CCR
Packing Material: Bubble \	Wrap Bubble				_		_
Thermometer Used	85				Blue None	L	Samples on ice, cooling process has begun Date and Initials of person examining
Cooler Temperature Temp should be above freezing to 6	0.2 rc	Biolog	ical T	issue	is Frozen: Yes Comments:	No	contents: 10/0/3/19 mg
Chain of Custody Present:		Yes	□No	□n/a	1.		
Chain of Custody Filled Out:		Pes	□No	□n/a	2.		
Chain of Custody Relinquished:		_ Prés	□No	□N/A	3.		
Sampler Name & Signature on (OOC:	□ Yes	□No	□N/A	4.		
Samples Arrived within Hold Tin	ne:	TES	□No	□N/A	5.		
Short Hold Time Analysis (<72	2hr):	□Yes	⊉ No	ON/A	6.		
Rush Turn Around Time Requ	rested:	□Yes	EINO	□N/A	7.		
Sufficient Volume:		-ElYes	□No	□n/a	8.		
Correct Containers Used:		TYes	□No	□n/a	9.		
-Pace Containers Used:		-EIYes	□No	□n/a		-	
Containers Intact:		−UYes	□No	□n/a	10.		
Filtered volume received for Dis	solved tests	□Yes	□No	_DN/A	11.		
Sample Labels match COC:		_□¥ es	DNو	□n/a	12.		
-Includes date/time/ID/Analy	sis Matrix:	-	4				
All containers needing preservation ha	ave been checked.	-⊟Yes	□No	□n/A	13.		
All containers needing preservation compliance with EPA recommendate		-ElYes	□No	□n/a			
exceptions: VOA, coliform, TOC, O&G,	WI-DRO (water)	□Yes	-EINO		Initial when completed		Lot # of added preservative
Samples checked for dechloring		□Yes	□No	, ENTA			
Headspace in VOA Vials (>6m				ÐNÆ	-		
Trip Blank Present:				N/A			
Trip Blank Custody Seals Prese	ent			_DN/A	<u>.</u> i		
Pace Trip Blank Lot # (if purcha							
		-					
Client Notification/ Resolution				D - 4 - 4	 :		Field Data Required? Y / N
Person Contacted:	· · · · · · · · · · · · · · · · · · ·			_ Date/	Time:		
Comments/ Resolution:					<u> </u>		
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)





December 19, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623953

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 04, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for Betsy McDaniel

Kein Slury

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623953

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623953

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623953001	PZ-18+QC	Water	10/03/19 09:40	10/04/19 09:05
2623953002	PZ-7D	Water	10/03/19 11:10	10/04/19 09:05



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623953

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2623953001	PZ-18+QC	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623953002	PZ-7D	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3



Project: Plant Mitchell Pace Project No.: 2623953

Date: 12/19/2019 11:25 AM

Sample: PZ-18+QC	Lab ID:	2623953001	Collecte	ed: 10/03/19	09:40	Received: 10/	04/19 09:05 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 21:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 21:45	7440-38-2	
Barium	0.025	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 21:45	7440-39-3	
Boron	0.35	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 21:45	7440-42-8	
Calcium	139	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 21:51	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 21:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 21:45	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 21:45	7439-92-1	
Lithium	0.0027J	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 21:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 21:45	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 21:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 21:45	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	464	mg/L	10.0	10.0	1		10/10/19 13:33		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	7.0	mg/L	1.0	0.024	1		10/10/19 09:11	16887-00-6	
Fluoride	0.043J	mg/L	0.30	0.029	1		10/10/19 09:11	16984-48-8	
Sulfate	95.8	mg/L	10.0	0.17	10		10/10/19 16:45	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623953

Date: 12/19/2019 11:25 AM

Sample: PZ-7D	Lab ID:	2623953002	Collecte	ed: 10/03/19	11:10	Received: 10/	04/19 09:05 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00029J	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 22:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 22:08	7440-38-2	
Barium	0.0070J	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 22:08	7440-39-3	
Boron	0.24	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 22:08	7440-42-8	
Calcium	127	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 22:14	7440-70-2	
Chromium	0.00040J	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 22:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 22:08	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 22:08	7439-92-1	
Lithium	0.0032J	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 22:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 22:08	7439-98-7	
Selenium	0.0017J	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 22:08	7782-49-2	
Thallium	0.000078J	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 22:08	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	405	mg/L	10.0	10.0	1		10/10/19 13:33		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	5.9	mg/L	1.0	0.024	1		10/10/19 09:33	16887-00-6	
Fluoride	0.041J	mg/L	0.30	0.029	1		10/10/19 09:33	16984-48-8	
Sulfate	59.6	mg/L	2.0	0.034	2		10/10/19 17:08	14808-79-8	

Qualifiers



QUALITY CONTROL DATA

Project: Plant Mitchell Pace Project No.: 2623953

Date: 12/19/2019 11:25 AM

QC Batch: 36528 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2623953001, 2623953002

METHOD BLANK: 165101 Matrix: Water

Associated Lab Samples: 2623953001, 2623953002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	10/08/19 17:42	
Arsenic	mg/L	ND	0.0050	0.00035	10/08/19 17:42	
Barium	mg/L	ND	0.010	0.00049	10/08/19 17:42	
Boron	mg/L	ND	0.040	0.0049	10/08/19 17:42	
Calcium	mg/L	ND	0.10	0.011	10/08/19 17:42	
Chromium	mg/L	ND	0.010	0.00039	10/08/19 17:42	
Cobalt	mg/L	ND	0.0050	0.00030	10/08/19 17:42	
Lead	mg/L	ND	0.0050	0.000046	10/08/19 17:42	
Lithium	mg/L	ND	0.030	0.00078	10/08/19 17:42	
Molybdenum	mg/L	ND	0.010	0.00095	10/08/19 17:42	
Selenium	mg/L	ND	0.010	0.0013	10/08/19 17:42	
Thallium	mg/L	ND	0.0010	0.000052	10/08/19 17:42	

Parameter Units Conc.	Result	% Rec	Limits
	Dogult	0/ D	1 (44)
Spike	LCS	LCS	% Rec
LABORATORY CONTROL SAMPLE: 165102			

Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.1	109	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1651	03		165104							
		2623873013	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Arsenic	mg/L	0.00071J	0.1	0.1	0.095	0.10	94	100	75-125	6	20	
Barium	mg/L	0.071	0.1	0.1	0.17	0.17	94	101	75-125	4	20	
Boron	mg/L	0.018J	1	1	0.99	1.0	97	102	75-125	5	20	
Calcium	ma/L	37.2	1	1	35.7	37.8	-144	63	75-125	6	20	M6

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



Project: Plant Mitchell Pace Project No.: 2623953

Date: 12/19/2019 11:25 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1651	03		165104							
Parameter	Units	2623873013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.091	0.097	91	97	75-125	6	20	
Cobalt	mg/L	0.00041J	0.1	0.1	0.093	0.098	93	97	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	5	20	
Lithium	mg/L	0.018J	0.1	0.1	0.12	0.12	100	103	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.095	0.10	95	103	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.099	93	98	75-125	5	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	

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



Project: Plant Mitchell Pace Project No.: 2623953

QC Batch: 36798 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623953001, 2623953002

LABORATORY CONTROL SAMPLE: 166239

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 403 101 84-108

SAMPLE DUPLICATE: 166240

2623927003 Dup Max RPD RPD Parameter Units Result Qualifiers Result **Total Dissolved Solids** 86.0 90.0 5 10 mg/L

SAMPLE DUPLICATE: 166241

Date: 12/19/2019 11:25 AM

2623981001 Dup Max Result RPD RPD Qualifiers Parameter Units Result 311 **Total Dissolved Solids** mg/L 321 3 10

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



Project: Plant Mitchell Pace Project No.: 2623953

Date: 12/19/2019 11:25 AM

QC Batch: 36695 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2623953001, 2623953002

METHOD BLANK: 165707 Matrix: Water

Associated Lab Samples: 2623953001, 2623953002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.030J	1.0	0.024	10/09/19 15:19	
Fluoride	mg/L	ND	0.30	0.029	10/09/19 15:19	
Sulfate	mg/L	ND	1.0	0.017	10/09/19 15:19	

LABORATORY CONTROL SAMPLE:	165708					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.7	107	90-110	
Sulfate	mg/L	10	10.5	105	90-110	

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 1657	09		165710							
			MS	MSD								
		2623903001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	118	10	10	91.0	91.1	-269	-269	90-110	0	15	
Fluoride	mg/L	1.1	10	10	11.2	11.2	101	101	90-110	0	15	
Sulfate	mg/L	47.3	10	10	52.5	52.5	52	53	90-110	0	15	

MATRIX SPIKE SAMPLE:	165711						
Parameter	Units	2623921001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	4.3	10	14.4	101	90-110	_
Fluoride	mg/L	0.057J	10	10.7	106	90-110	
Sulfate	mg/L	1.6	10	11.9	104	90-110	

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623953

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/19/2019 11:25 AM

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623953

Date: 12/19/2019 11:25 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623953001	PZ-18+QC	EPA 3005A	36528	EPA 6020B	36530
2623953002	PZ-7D	EPA 3005A	36528	EPA 6020B	36530
2623953001	PZ-18+QC	SM 2540C	36798		
2623953002	PZ-7D	SM 2540C	36798		
2623953001	PZ-18+QC	EPA 300.0	36695		
2623953002	PZ-7D	EPA 300.0	36695		

CHAIN-OF-CUSTODY / Analytical Request Document

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

SAMPLE CONDITIONS Samples Intect (YV) as State / Location , 524-5469, 846 (NVA) ŏ Custod) Sealed Cooler Regulatory Agency : .. (N/A) GA. по бекезаЯ MO#:2623953 Residual Chlorina (Y/V) Dig 9MBT 060 THE Requested Analysis Filtered (Y/N) 6 = / をなりま Fairots DATE Signed: 10 2623953 ACCEPTED BY AFFILATION CONTRACTOR MINON <u>></u> betsy.mcdanial@pacelabs.com, TD\$, CI, F, SO4 sisieM VI .qqA & III .qqA Altention: scsinvoices@southernco.com ₹ Radium 226/228 :N/A : Analyses Test Other HOWAR lonsriteM Preservatives Ne2S2O3 STATES OF Pace Quote:
Pace Project Manager: t HOBN IOH Section C Invoice Information: **EONH** anie Company Name SAMPLER NAME AND SIGNATURE POSZH THE 1630 DevissarqnU × 7 2 # OF CONTAINERS PRINT Name of SAMPLER: SAMPLE TEMP AT COLLECTION 10/3/19 SIGNATURE of SAMPLERS DATE 0450 PHED TIME 0111/6/15/0 옯 DATE RELINGUISHED BY AFFILLATION TO COLLECTED Beriel How X/Wood Purchase Order # SCS10382775
Project Name: Plant Mitchell CCR
Project #: 6/22/60/70 START DATE Required Project Information: Joju Abraham Copy To: Wood PLC Ö (GEGRAB CECOMP) **BAYT BIAMAR** 31-31-MATRIX CODE (see valid codes to left) Section B MATRIX
Dinhing Water
Water
Water
Wester Witter
Soutsoud
Go
Waye
Waye
Col
Myse
Col
Tissue Abbitroval Coulebring (1978) Company: Georgia Power - Coal Contrustion Residuals $\check{\mathbf{G}}$ + (A-Z, 0-9 / , -) Sample Ids must be unique iabraham@southernco.com One Character per box. SAMPLE ID Requested Due Date: Standar **6**0 ı 2480 Maner Road (404)506-7239 Required Client Information: Nd ؏ no III metals . 6 .0 3. 3. 2 . Email: Phone: • - 8 • 10 N # MBTI Page 13 of 14

Sample Condition Upon Receipt Client Name: Project # WO#:2623953 Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Due Date: 10/11/19 Custody Seal on Cooler/Box Present: yes ☐ no Seals intact: yes [CLIENT: GAPower-CCR Packing Material:

Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other Thermometer Used Type of Ice: Wet Blue None Samples on ice, cooling process has begun Date and initials of person examining Biological Tissue is Frozen: Yes Cooler Temperature contents: / Temp should be above freezing to 6°C Comments: Chain of Custody Present: DY65 □No □N/A Chain of Custody Filled Out: □Yes □No □N/A Chain of Custody Relinquished: DYes □No □N/A Sampler Name & Signature on COC: Pres □No □N/A Samples Arrived within Hold Time: ₽Yes □No □N/A Short Hold Time Analysis (<72hr): □Yes ₽No □n/A Rush Turn Around Time Requested: □Yes ☑NO □N/A Sufficient Volume: --ElYes □No □N/A Correct Containers Used: -ElYes □No □N/A -Pace Containers Used: PYES □No □N/A Containers Intact: -EYes □No □N/A l10. Filtered volume received for Dissolved tests ☐Yes ☐No EN/A l11. Sample Labels match COC: PYES □NO. □N/A 12. -Includes date/time/ID/Analysis Matrix: All containers needing preservation have been checked. →DYes □No □N/A l13. All containers needing preservation are found to be in Yes DNo DN/A compliance with EPA recommendation. Initial when Lot # of added exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) completed 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 ☑NA 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:

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)

Project Manager Review:

Date:





December 19, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623921

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for Betsy McDaniel

Kein Slury

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623921

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623921

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2623921001	PZ-31	Water	10/02/19 10:25	10/03/19 09:30	
2623921002	PZ-16	Water	10/02/19 13:55	10/03/19 09:30	
2623921003	PZ-17	Water	10/02/19 15:30	10/03/19 09:30	
2623921004	Dup-01	Water	10/02/19 00:00	10/03/19 09:30	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623921

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2623921001	PZ-31	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623921002	PZ-16	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623921003	PZ-17	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623921004	Dup-01	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3



Project: Plant Mitchell Pace Project No.: 2623921

Date: 12/19/2019 11:19 AM

Sample: PZ-31	Lab ID:	2623921001	Collecte	ed: 10/02/19	10:25	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 20:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 20:59	7440-38-2	
Barium	0.0067J	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 20:59	7440-39-3	
Boron	0.0084J	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 20:59	7440-42-8	
Calcium	95.5	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 21:05	7440-70-2	
Chromium	0.00043J	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 20:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 20:59	7440-48-4	
Lead	0.000081J	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 20:59	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 20:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 20:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 20:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 20:59	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	263	mg/L	10.0	10.0	1		10/09/19 20:07		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	4.3	mg/L	1.0	0.024	1		10/10/19 07:04	16887-00-6	
Fluoride	0.057J	mg/L	0.30	0.029	1		10/10/19 07:04	16984-48-8	
Sulfate	1.6	mg/L	1.0	0.017	1		10/10/19 07:04	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623921

Date: 12/19/2019 11:19 AM

Sample: PZ-16	Lab ID:	2623921002	Collecte	ed: 10/02/19	13:55	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 21:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 21:11	7440-38-2	
Barium	0.038	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 21:11	7440-39-3	
Boron	0.19	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 21:11	7440-42-8	
Calcium	89.1	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 21:16	7440-70-2	
Chromium	0.00044J	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 21:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 21:11	7440-48-4	
Lead	0.000081J	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 21:11	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 21:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 21:11	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 21:11	7782-49-2	
Thallium	0.000053J	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 21:11	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	284	mg/L	10.0	10.0	1		10/09/19 20:07		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	7.7	mg/L	1.0	0.024	1		10/10/19 07:46	16887-00-6	
Fluoride	0.053J	mg/L	0.30	0.029	1		10/10/19 07:46	16984-48-8	
Sulfate	48.5	mg/L	1.0	0.017	1		10/10/19 07:46	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623921

Date: 12/19/2019 11:19 AM

Sample: PZ-17	Lab ID:	2623921003	Collecte	ed: 10/02/19	15:30	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 21:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 21:22	7440-38-2	
Barium	0.074	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 21:22	7440-39-3	
Boron	0.28	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 21:22	7440-42-8	
Calcium	115	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 21:28	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 21:22	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 21:22	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 21:22	7439-92-1	
Lithium	0.0024J	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 21:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 21:22	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 21:22	7782-49-2	
Thallium	0.00016J	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 21:22	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	415	mg/L	10.0	10.0	1		10/09/19 20:07		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	7.9	mg/L	1.0	0.024	1		10/10/19 08:08	16887-00-6	
Fluoride	0.063J	mg/L	0.30	0.029	1		10/10/19 08:08	16984-48-8	
Sulfate	104	mg/L	5.0	0.085	5		10/10/19 18:15	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623921

Date: 12/19/2019 11:19 AM

Sample: Dup-01	Lab ID:	2623921004	Collecte	ed: 10/02/19	00:00	Received: 10/	03/19 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 21:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 21:33	7440-38-2	
Barium	0.083	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 21:33	7440-39-3	
Boron	0.30	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 21:33	7440-42-8	
Calcium	125	mg/L	5.0	0.55	50	10/05/19 16:23	10/08/19 21:39	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 21:33	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 21:33	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 21:33	7439-92-1	
Lithium	0.0026J	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 21:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 21:33	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 21:33	7782-49-2	
Thallium	0.00017J	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 21:33	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	418	mg/L	10.0	10.0	1		10/09/19 20:07		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	7.8	mg/L	1.0	0.024	1		10/10/19 08:29	16887-00-6	
Fluoride	0.063J	mg/L	0.30	0.029	1		10/10/19 08:29	16984-48-8	
Sulfate	102	mg/L	5.0	0.085	5		10/10/19 14:31	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623921

Thallium

Date: 12/19/2019 11:19 AM

QC Batch: 36528 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2623921001, 2623921002, 2623921003, 2623921004

METHOD BLANK: 165101 Matrix: Water
Associated Lab Samples: 2623921001, 2623921002, 2623921003, 2623921004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	 mg/L	ND	0.0030	0.00027	10/08/19 17:42	
Arsenic	mg/L	ND	0.0050	0.00035	10/08/19 17:42	
Barium	mg/L	ND	0.010	0.00049	10/08/19 17:42	
Boron	mg/L	ND	0.040	0.0049	10/08/19 17:42	
Calcium	mg/L	ND	0.10	0.011	10/08/19 17:42	
Chromium	mg/L	ND	0.010	0.00039	10/08/19 17:42	
Cobalt	mg/L	ND	0.0050	0.00030	10/08/19 17:42	
Lead	mg/L	ND	0.0050	0.000046	10/08/19 17:42	
Lithium	mg/L	ND	0.030	0.00078	10/08/19 17:42	
Molybdenum	mg/L	ND	0.010	0.00095	10/08/19 17:42	
Selenium	mg/L	ND	0.010	0.0013	10/08/19 17:42	
Thallium	mg/L	ND	0.0010	0.000052	10/08/19 17:42	

LABORATORY CONTROL SAMPLE:	165102					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.1	109	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	

0.1

mg/L

MATRIX SPIKE & MATRIX S	SPIKE DUPL	ICATE: 1651	03 MS	MSD	165104							
_		2623873013	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Arsenic	mg/L	0.00071J	0.1	0.1	0.095	0.10	94	100	75-125	6	20	
Barium	mg/L	0.071	0.1	0.1	0.17	0.17	94	101	75-125	4	20	
Boron	mg/L	0.018J	1	1	0.99	1.0	97	102	75-125	5	20	
Calcium	mg/L	37.2	1	1	35.7	37.8	-144	63	75-125	6	20	M6

0.098

98

80-120

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



Project: Plant Mitchell Pace Project No.: 2623921

Date: 12/19/2019 11:19 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1651			165104							
Parameter	Units	2623873013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.091	0.097	91	97	75-125	6	20	
Cobalt	mg/L	0.00041J	0.1	0.1	0.093	0.098	93	97	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	5	20	
Lithium	mg/L	0.018J	0.1	0.1	0.12	0.12	100	103	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.095	0.10	95	103	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.099	93	98	75-125	5	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	

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



Project: Plant Mitchell Pace Project No.: 2623921

QC Batch: 36765 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623921001, 2623921002, 2623921003, 2623921004

LABORATORY CONTROL SAMPLE: 166031

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 409 102 84-108

SAMPLE DUPLICATE: 166032

2623917002 Dup Max RPD RPD Units Qualifiers Parameter Result Result **Total Dissolved Solids** 312 305 2 10 mg/L

SAMPLE DUPLICATE: 166033

Date: 12/19/2019 11:19 AM

2623927002 Dup Max Result RPD RPD Qualifiers Parameter Units Result mg/L **Total Dissolved Solids** 84.0 95.0 12 10 D6

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



Project: Plant Mitchell Pace Project No.: 2623921

Date: 12/19/2019 11:19 AM

QC Batch: 36695 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2623921001, 2623921002, 2623921003, 2623921004

METHOD BLANK: 165707 Matrix: Water
Associated Lab Samples: 2623921001, 2623921002, 2623921003, 2623921004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.030J	1.0	0.024	10/09/19 15:19	
Fluoride	mg/L	ND	0.30	0.029	10/09/19 15:19	
Sulfate	mg/L	ND	1.0	0.017	10/09/19 15:19	

LABORATORY CONTROL SAMPLE:	165708					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.7	107	90-110	
Sulfate	mg/L	10	10.5	105	90-110	

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 1657	09		165710							
			MS	MSD								
		2623903001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	118	10	10	91.0	91.1	-269	-269	90-110	0	15	
Fluoride	mg/L	1.1	10	10	11.2	11.2	101	101	90-110	0	15	
Sulfate	mg/L	47.3	10	10	52.5	52.5	52	53	90-110	0	15	

MATRIX SPIKE SAMPLE:	165711						
Parameter	Units	2623921001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	4.3	10	14.4	101	90-110	
Fluoride	mg/L	0.057J	10	10.7	106	90-110	
Sulfate	mg/L	1.6	10	11.9	104	90-110	

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623921

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/19/2019 11:19 AM

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

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623921

Date: 12/19/2019 11:19 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
 2623921001	PZ-31	EPA 3005A	36528	EPA 6020B	36530
2623921002	PZ-16	EPA 3005A	36528	EPA 6020B	36530
2623921003	PZ-17	EPA 3005A	36528	EPA 6020B	36530
2623921004	Dup-01	EPA 3005A	36528	EPA 6020B	36530
2623921001	PZ-31	SM 2540C	36765		
2623921002	PZ-16	SM 2540C	36765		
2623921003	PZ-17	SM 2540C	36765		
2623921004	Dup-01	SM 2540C	36765		
2623921001	PZ-31	EPA 300.0	36695		
2623921002	PZ-16	EPA 300.0	36695		
2623921003	PZ-17	EPA 300.0	36695		
2623921004	Dup-01	EPA 300.0	36695		

CHAIN-OF-CUSTODY / Analytical Request Document

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

C'SS, BAMPLE CONDITIONS (N/A) Samples Atack atternation / Location - standards & (N/A) Sealed Cooler ŏ Regulatory Agency poisu (N/A) B Received on Residual Chlorine (Y/N) MO#:2623921 Page: D ri GMBT 60 Requested Analysis Filtered (Y/N 02/19 を 100mm 1 Sayo. DATE Signed: 10 / 2 / 101/VANV ACCEPTED BY JATHUATION betsy.mcdanist@pacelabs.com, TDS, CI, F, SO4 <u>ই</u> eleteM VI .qqA & III .qqA Altention: scsinvoices@southernco.com Radium 226/228 N/A * Analyses Test 🦥 lonariteM Howard Na2S2O3 Preservatives HOSN Pace Project Manager: Pace Profile #: 333.1 НСІ Section C Invoice Information; 又 EONH × Company Name: SAMPLER WAME AND SIGNATURE Address: Pace Quote: HS2O4 - Title 200 DevieserquU メガ 7 # OF CONTAINERS SIGNATURE OF SAMPLER: PRINT Name of SAMPLER. NOITOBLE TEMP AT COLLECTION OATE 10/2/119 44/19/1025 4/19/530 TIME 104/19/1355 J 2 Ph/1/01 DATE PERSONALISHED BY / AFFILATION ES COLLECTED David Hora 9/ Wood 6 1221 60170 TIME Purchase Order #: SCS10382775 START DATE Required Project Information: Report To: Joju Abraham Copy To: Wood PLC 0000 12 12 12 12 (G=68AB C=COMP) SAMPLE TYPE MATRIX CODE (see valid codes to left) Project Name: Project #: Section B MATRIX
Dirixing Water
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Oil
Water
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Ari
Tissue ADDITIONAL COURTING Georgia Power - Coal Combustion Residuals 2480 Maner Road One Character per box. (A-Z, 0-9 /, .) Sample Ids must be unique Atlanta, GA 30339 jabraham@southernco.com Phone: (404)506-7239 Fax. Requested Due Date: 5+cm. As. r. A. SAMPLE ID 0-dh(PZ-1-5-2d PZ-11 Required Client Information: Ino III metals 50 27 - F 6 57 .00 \$11.00 \$11.00 12 . 6 # MBTI

Page 15 of 16

Sample Condition Upon Receipt Client Name: GA Powere Project # WO#:2623921 Courler: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Tracking #: 8/21 9394 6079 Due Date: 10/10/19 Custody Seal on Cooler/Box Present: yes Seals intact: CLIENT: GAPower-CCR ☐ Bubble Bags ☐ None ☐ Other Packing Material: Bubble Wrap Type of Ice: Wel Blue None Thermometer Used ☐ Samples on ice, cooling process has begun Date and Initials of person examining Biological Tissue is Frozen: Yes **Cooler Temperature** contents: 10 Temp should be above freezing to 6°C Comments: √Yes □No Chain of Custody Present: □N/A ₽Yes '□No Chain of Custody Filled Out: □N/A Yes ONo □N/A Chain of Custody Relinquished: 3. Sampler Name & Signature on COC: ₽Yes □No □N/A Samples Arrived within Hold Time: □N/A Short Hold Time Analysis (<72hr): ☐Yes ☐Norm☐N/A Rush Turn Around Time Requested: □Yes ₽No □N/A Sufficient Volume: ₽Yes' □No □N/A →ElYes □No □n/A Correct Containers Used: -EIYes □No -Pace Containers Used: □N/A Containers Intact: -- EYes □No □N/A Filtered volume received for Dissolved tests □Yes □No →□NA 11. ☐Yes □No Sample Labels match COC: □N/A 12. -Includes date/time/ID/Analysis All containers needing preservation have been checked. -BYES □No □N/A 13. All containers needing preservation are found to be in _□Yee-□No □N/A compliance with EPA recommendation. Initial when Lot # of added ☐Yes -☐No exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) completed 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 Trip Blank Custody Seals Present □Yes □No J□N/A Pace Trip Blank Lot # (if purchased): Client Notification/ Resolution: Field Data Required? Y / Person Contacted: Date/Time: 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)

Project Manager Review:

Date:





December 19, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623955

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 04, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for Betsy McDaniel betsy mcdaniel@nace

Kein Slury

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC





CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623955

Pace Analytical Services Atlanta

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

North Carolina Certification #: 381 South Carolina Certification #: 98011001 Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623955

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2623955001	FB-01	Water	10/03/19 08:10	10/04/19 09:05	
2623955002	EB-02	Water	10/03/19 08:25	10/04/19 09:05	
2623955003	PZ-33	Water	10/03/19 09:50	10/04/19 09:05	
2623955004	PZ-19	Water	10/03/19 12:00	10/04/19 09:05	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623955

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2623955001	FB-01	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623955002	EB-02	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623955003	PZ-33	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2623955004	PZ-19	EPA 6020B	CSW	12
		SM 2540C	ALW	1
		EPA 300.0	MWB	3



Project: Plant Mitchell Pace Project No.: 2623955

Date: 12/19/2019 11:23 AM

Sample: FB-01	Lab ID:	2623955001	Collecte	ed: 10/03/19	08:10	Received: 10/	04/19 09:05 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 22:25	7440-36-0	
Arsenic	0.00072J	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 22:25	7440-38-2	
Barium	0.0023J	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 22:25	7440-39-3	
Boron	ND	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 22:25	7440-42-8	
Calcium	ND	mg/L	0.10	0.011	1	10/05/19 16:23	10/08/19 22:25	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 22:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 22:25	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 22:25	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 22:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 22:25	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 22:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 22:25	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/10/19 13:33		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	0.033J	mg/L	1.0	0.024	1		10/10/19 09:54	16887-00-6	В
Fluoride	ND	mg/L	0.30	0.029	1		10/10/19 09:54	16984-48-8	
Sulfate	ND	mg/L	1.0	0.017	1		10/10/19 09:54	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623955

Date: 12/19/2019 11:23 AM

Sample: EB-02	Lab ID:	2623955002	Collecte	ed: 10/03/19	08:25	Received: 10/	04/19 09:05 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/05/19 16:23	10/08/19 22:31	7440-36-0	
Arsenic	0.0011J	mg/L	0.0050	0.00035	1	10/05/19 16:23	10/08/19 22:31	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/05/19 16:23	10/08/19 22:31	7440-39-3	
Boron	ND	mg/L	0.040	0.0049	1	10/05/19 16:23	10/08/19 22:31	7440-42-8	
Calcium	ND	mg/L	0.10	0.011	1	10/05/19 16:23	10/08/19 22:31	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/05/19 16:23	10/08/19 22:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/05/19 16:23	10/08/19 22:31	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/05/19 16:23	10/08/19 22:31	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/05/19 16:23	10/08/19 22:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/05/19 16:23	10/08/19 22:31	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/05/19 16:23	10/08/19 22:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/05/19 16:23	10/08/19 22:31	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/10/19 13:33		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	0.034J	mg/L	1.0	0.024	1		10/10/19 11:40	16887-00-6	В
Fluoride	ND	mg/L	0.30	0.029	1		10/10/19 11:40	16984-48-8	
Sulfate	ND	mg/L	1.0	0.017	1		10/10/19 11:40	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623955

Date: 12/19/2019 11:23 AM

Sample: PZ-33	Lab ID:	2623955003	Collecte	ed: 10/03/19	9 09:50	Received: 10/	04/19 09:05 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/09/19 16:23	10/10/19 18:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/09/19 16:23	10/10/19 18:18	7440-38-2	
Barium	0.057	mg/L	0.010	0.00049	1	10/09/19 16:23	10/10/19 18:18	7440-39-3	
Boron	0.36	mg/L	0.040	0.0049	1	10/09/19 16:23	10/10/19 18:18	7440-42-8	
Calcium	110	mg/L	5.0	0.55	50	10/09/19 16:23	10/10/19 18:23	7440-70-2	M6
Chromium	ND	mg/L	0.010	0.00039	1	10/09/19 16:23	10/10/19 18:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/09/19 16:23	10/10/19 18:18	7440-48-4	
Lead	0.000047J	mg/L	0.0050	0.000046	1	10/09/19 16:23	10/10/19 18:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/09/19 16:23	10/10/19 18:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/09/19 16:23	10/10/19 18:18	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/09/19 16:23	10/10/19 18:18	7782-49-2	
Thallium	0.00018J	mg/L	0.0010	0.000052	1	10/09/19 16:23	10/10/19 18:18	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	414	mg/L	10.0	10.0	1		10/10/19 13:33		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	4.1	mg/L	1.0	0.024	1		10/10/19 12:02	16887-00-6	
Fluoride	0.060J	mg/L	0.30	0.029	1		10/10/19 12:02	16984-48-8	
Sulfate	72.1	mg/L	5.0	0.085	5		10/10/19 17:30	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623955

Date: 12/19/2019 11:23 AM

Sample: PZ-19	Lab ID:	2623955004	Collecte	ed: 10/03/19	12:00	Received: 10/	04/19 09:05 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL .	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00044J	mg/L	0.0030	0.00027	1	10/09/19 16:23	10/10/19 19:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/09/19 16:23	10/10/19 19:09	7440-38-2	
Barium	0.057	mg/L	0.010	0.00049	1	10/09/19 16:23	10/10/19 19:09	7440-39-3	
Boron	0.52	mg/L	0.040	0.0049	1	10/09/19 16:23	10/10/19 19:09	7440-42-8	
Calcium	125	mg/L	5.0	0.55	50	10/09/19 16:23	10/10/19 19:15	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/09/19 16:23	10/10/19 19:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/09/19 16:23	10/10/19 19:09	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/09/19 16:23	10/10/19 19:09	7439-92-1	
Lithium	0.016J	mg/L	0.030	0.00078	1	10/09/19 16:23	10/10/19 19:09	7439-93-2	
Molybdenum	0.0024J	mg/L	0.010	0.00095	1	10/09/19 16:23	10/10/19 19:09	7439-98-7	
Selenium	0.0034J	mg/L	0.010	0.0013	1	10/09/19 16:23	10/10/19 19:09	7782-49-2	
Thallium	0.00071J	mg/L	0.0010	0.000052	1	10/09/19 16:23	10/10/19 19:09	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	485	mg/L	10.0	10.0	1		10/10/19 13:33		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Chloride	5.6	mg/L	1.0	0.024	1		10/10/19 12:23	16887-00-6	
Fluoride	0.084J	mg/L	0.30	0.029	1		10/10/19 12:23	16984-48-8	
Sulfate	84.9	mg/L	5.0	0.085	5		10/10/19 17:53	14808-79-8	



Project: Plant Mitchell Pace Project No.: 2623955

Thallium

Date: 12/19/2019 11:23 AM

QC Batch: 36528 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2623955001, 2623955002

METHOD BLANK: 165101 Matrix: Water

Associated Lab Samples: 2623955001, 2623955002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	10/08/19 17:42	
Arsenic	mg/L	ND	0.0050	0.00035	10/08/19 17:42	
Barium	mg/L	ND	0.010	0.00049	10/08/19 17:42	
Boron	mg/L	ND	0.040	0.0049	10/08/19 17:42	
Calcium	mg/L	ND	0.10	0.011	10/08/19 17:42	
Chromium	mg/L	ND	0.010	0.00039	10/08/19 17:42	
Cobalt	mg/L	ND	0.0050	0.00030	10/08/19 17:42	
Lead	mg/L	ND	0.0050	0.000046	10/08/19 17:42	
Lithium	mg/L	ND	0.030	0.00078	10/08/19 17:42	
Molybdenum	mg/L	ND	0.010	0.00095	10/08/19 17:42	
Selenium	mg/L	ND	0.010	0.0013	10/08/19 17:42	
Thallium	mg/L	ND	0.0010	0.000052	10/08/19 17:42	

LABORATORY CONTROL SAMPLE:	165102					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.1	109	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	

0.1

mg/L

MATRIX SPIKE & MATRIX S	SPIKE DUPL	ICATE: 1651	MSD	165104								
_		2623873013	MS Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Arsenic	mg/L	0.00071J	0.1	0.1	0.095	0.10	94	100	75-125	6	20	
Barium	mg/L	0.071	0.1	0.1	0.17	0.17	94	101	75-125	4	20	
Boron	mg/L	0.018J	1	1	0.99	1.0	97	102	75-125	5	20	
Calcium	mg/L	37.2	1	1	35.7	37.8	-144	63	75-125	6	20	M6

0.098

98

80-120

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



Project: Plant Mitchell Pace Project No.: 2623955

Date: 12/19/2019 11:23 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1651	03		165104							
Parameter	Units	2623873013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.091	0.097	91	97	75-125	6	20	
Cobalt	mg/L	0.00041J	0.1	0.1	0.093	0.098	93	97	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	5	20	
Lithium	mg/L	0.018J	0.1	0.1	0.12	0.12	100	103	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.095	0.10	95	103	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.099	93	98	75-125	5	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	

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



Project: Plant Mitchell Pace Project No.: 2623955

Thallium

Date: 12/19/2019 11:23 AM

QC Batch: 36735 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2623955003, 2623955004

METHOD BLANK: 165916 Matrix: Water

Associated Lab Samples: 2623955003, 2623955004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	 mg/L	ND ND	0.0030	0.00027	10/10/19 18:06	
Arsenic	mg/L	0.00036J	0.0050	0.00035	10/10/19 18:06	
Barium	mg/L	ND	0.010	0.00049	10/10/19 18:06	
Boron	mg/L	ND	0.040	0.0049	10/10/19 18:06	
Calcium	mg/L	ND	0.10	0.011	10/10/19 18:06	
Chromium	mg/L	0.00050J	0.010	0.00039	10/10/19 18:06	
Cobalt	mg/L	ND	0.0050	0.00030	10/10/19 18:06	
Lead	mg/L	ND	0.0050	0.000046	10/10/19 18:06	
Lithium	mg/L	ND	0.030	0.00078	10/10/19 18:06	
Molybdenum	mg/L	ND	0.010	0.00095	10/10/19 18:06	
Selenium	mg/L	ND	0.010	0.0013	10/10/19 18:06	
Thallium	mg/L	ND	0.0010	0.000052	10/10/19 18:06	

LABORATORY CONTROL SAMPLE:	165917					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	1.0	101	80-120	
Calcium	mg/L	1	1.0	104	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Lithium	mg/L	0.1	0.10	105	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	

0.1

mg/L

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1659	-		165919							
Parameter	Units	2623955003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	105	101	 75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Barium	mg/L	0.057	0.1	0.1	0.17	0.17	117	114	75-125	2	20	
Boron	mg/L	0.36	1	1	1.3	1.3	94	94	75-125	0	20	
Calcium	mg/L	110	1	1	114	109	387	-44	75-125	4	20	M6

0.097

97

80-120

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



Project: Plant Mitchell Pace Project No.: 2623955

Date: 12/19/2019 11:23 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1659	18		165919							
Parameter	Units	2623955003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125	4	20	
Lead	mg/L	0.000047J	0.1	0.1	0.094	0.089	94	89	75-125	6	20	
Lithium	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	107	104	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125	2	20	
Thallium	mg/L	0.00018J	0.1	0.1	0.095	0.091	94	91	75-125	4	20	

SAMPLE DUPLICATE: 165920						
		92448261001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Antimony	mg/L	3.6J ug/L	ND		20	
Arsenic	mg/L	51.7 ug/L	0.046J		20	
Barium	mg/L	191 ug/L	0.20	4	20	
Boron	mg/L	404 ug/L	0.42	3	20	
Calcium	mg/L	1460000 ug/L	1490	2	20	
Chromium	mg/L	4.3J ug/L	0.0046J		20	
Cobalt	mg/L	52.8 ug/L	0.058	10	20	
Lead	mg/L	0.92J ug/L	0.00084J		20	
Lithium	mg/L	33.9J ug/L	0.034J		20	
Molybdenum	mg/L	ND	ND		20	
Selenium	mg/L	ND	ND		20	
Thallium	mg/L	0.64J ug/L	0.00065J		20	

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



Project: Plant Mitchell Pace Project No.: 2623955

QC Batch: 36798 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623955001, 2623955002, 2623955003, 2623955004

LABORATORY CONTROL SAMPLE: 166239

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 403 101 84-108

SAMPLE DUPLICATE: 166240

2623927003 Dup Max RPD RPD Units Qualifiers Parameter Result Result **Total Dissolved Solids** 86.0 90.0 5 10 mg/L

SAMPLE DUPLICATE: 166241

Date: 12/19/2019 11:23 AM

2623981001 Dup Max Result RPD RPD Qualifiers Parameter Units Result mg/L 311 **Total Dissolved Solids** 321 3 10

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



Project: Plant Mitchell Pace Project No.: 2623955

Date: 12/19/2019 11:23 AM

QC Batch: 36695 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2623955001, 2623955002, 2623955003, 2623955004

METHOD BLANK: 165707 Matrix: Water
Associated Lab Samples: 2623955001, 2623955002, 2623955003, 2623955004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.030J	1.0	0.024	10/09/19 15:19	
Fluoride	mg/L	ND	0.30	0.029	10/09/19 15:19	
Sulfate	mg/L	ND	1.0	0.017	10/09/19 15:19	

LABORATORY CONTROL SAMPLE:	165708					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.7	107	90-110	
Sulfate	mg/L	10	10.5	105	90-110	

MATRIX SPIKE & MATRIX SI	PIKE DUPL	ICATE: 1657	09		165710							
		2623903001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	118	10	10	91.0	91.1	-269	-269	90-110	0	15	
Fluoride	mg/L	1.1	10	10	11.2	11.2	101	101	90-110	0	15	
Sulfate	mg/L	47.3	10	10	52.5	52.5	52	53	90-110	0	15	

MATRIX SPIKE SAMPLE:	165711						
Parameter	Units	2623921001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	4.3	10	14.4	101	90-110	_
Fluoride	mg/L	0.057J	10	10.7	106	90-110	
Sulfate	mg/L	1.6	10	11.9	104	90-110	

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



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623955

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/19/2019 11:23 AM

- B Analyte was detected in the associated method blank.
- M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623955

Date: 12/19/2019 11:23 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623955001	FB-01	EPA 3005A	36528	EPA 6020B	36530
2623955002	EB-02	EPA 3005A	36528	EPA 6020B	36530
2623955003	PZ-33	EPA 3005A	36735	EPA 6020B	36742
2623955004	PZ-19	EPA 3005A	36735	EPA 6020B	36742
2623955001	FB-01	SM 2540C	36798		
2623955002	EB-02	SM 2540C	36798		
2623955003	PZ-33	SM 2540C	36798		
2623955004	PZ-19	SM 2540C	36798		
2623955001	FB-01	EPA 300.0	36695		
2623955002	EB-02	EPA 300.0	36695		
2623955003	PZ-33	EPA 300.0	36695		
2623955004	PZ-19	EPA 300.0	36695		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

(N/A) SAMPLE CONDITIONS Semples ntact Regulatory Agency (N/A) Cooler ŏ Custody State / Location (N/A) 8 no bevieceя Residual Chlorina (Y/N) TEMP in C MO#:2623955 THE 000 を表がなる。 Requested Analysis Filtered (Y/N) DATE Signod: 10/3/19 man tolotha S DATE CANDERTED BY AFFILIATION CONTRACTOR 2623939 XXXX × betsy mcdaniel@pacelabs.com 1D2' Cl' E' 204 Z atsteM VI .qqA & III .qqA Attention: scsinvoices@southernco.com 8SS/8SS mulbeA N/A - JeoT eesylanA HOWAS **TBrIIO** tonenteM Ne2S203 Preservatives Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 333.1.2 HOPN 333.1.2 HCI Section C Invoice Information: × × EONH Company Name: POSZH THE 1630 SAMPLER NAME AND SIGNATURE Unpreserved 7 7 # OF CONTAINERS SIGNATURE OF SAMPLER PRINT Name of SAMPLER: DATE NOITOBLE TEMP AT COLLECTION P1/8/01 2580 10/3/14/0810 0950 1200 TIME RELINCUISHED BY / AFFILM TON DATE Mood COLLECTED TME. Purchase Order #: SCS10382775 Project Name: Plant Mitchell CCR START DATE Required Project Information: Joju Abraham Report To: Joyu Abraha Copy To: Wood PLC <u>0</u> -15 -15 AMPLE TYPE (G-GRAB C-COMP) Section B MATRIX
Dirixang Water
Wasse Wasse
Wasse Water
Product
Sociosodd
Od
Wipe
Mipa
Air
Coher
Tissue A ADDITIONAL CONMENTS Georgia Power - Coal Combustion Residuals 2480 Maner Road One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique jabraham@southernco.com Requested Due Date: Standard SAMPLE ID DO II metals: Sb, As E8-02 PZ-33 PZ-19 FB-0 Allanta, GA 30339 (404)506-7239 Required Client Information: DO III metals! 2 3-9 8 6 7 2 9 7 # MBTI Page 17 of 18

Sample Condition Upon Receipt Project # Client Name: WO#: 2623955 Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Due Date: 10/11/19 CLIENT: GAPower-CCR Seals intact: yes Custody Seal on Cooler/Box Present: yes no □ Other Packing Material: Bubble Wrap Bubble Bags None Samples on ice, cooling paperss has begun Type of ice: Wet Blue None Thermometer Used Date and initials of person examining Biological Tissue is Frozen: Yes contents: / 1 **Cooler Temperature** Comments: Temp should be above freezing to 6°C DYES DNO □N/A Chain of Custody Present: □N/A 2. □¥e\$ □No Chain of Custody Filled Out: □N/A 3. Chain of Custody Relinquished: __Yes □No Pres □No □N/A 4. Sampler Name & Signature on COC: ₽Yes □No □N/A Samples Arrived within Hold Time: ☐Yes ÆNo □N/A Short Hold Time Analysis (<72hr): ☐Yes ☑No □N/A Rush Turn Around Time Requested: --ElYes □No □N/A Sufficient Volume: .d⊒Yes ∐No UN/A Correct Containers Used: -Pace Containers Used: ☐Yes □No □N/A -EYes □No □N/A 110. Containers Intact: ☐Yes ☐No **DNA** 11. Filtered volume received for Dissolved tests DYES □No. □N/A 12. Sample Labels match COC: U -Includes date/time/ID/Analysis Matrix: All containers needing preservation have been checked. All containers needing preservation are found to be in Yes ONO ON/A compliance with EPA recommendation. Initial when _ot # of added □Yes-EINo preservative exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) completed ☐Yes ☐No ☐M/A 14. Samples checked for dechlorination: ☐Yes ☐No ☐MA 15. Headspace in VOA Vials (>6mm): □Yes □No □NA 16. Trip Blank Present: □Yes □No □N/A Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased): Field Data Required? Y / N **Client Notification/ Resolution:** Date/Time: Person Contacted: Comments/ Resolution:

Project Manager Review: Date:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR

Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)





October 09, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 11, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Missouri Certification #: 235

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Texas/TNI Certification #: T104704188-17-3

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



SAMPLE SUMMARY

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622943001	EB-01	Water	09/10/19 08:10	09/11/19 09:00
2622943002	PZ-23	Water	09/10/19 09:47	09/11/19 09:00



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622943001	EB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622943002	PZ-23	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

Sample: EB-01 Lab ID: 2622943001 Collected: 09/10/19 08:10 Received: 09/11/19 09:00 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.259 \pm 0.246 \quad (0.468)$ Radium-226 pCi/L 09/20/19 08:53 13982-63-3 C:94% T:NA EPA 9320 0.276 ± 0.437 (0.947) 09/20/19 11:45 15262-20-1 Radium-228 pCi/L C:71% T:84% Total Radium **Total Radium** 0.535 ± 0.683 (1.42) pCi/L 10/01/19 15:28 7440-14-4 Calculation



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

Sample: PZ-23 Lab ID: 2622943002 Collected: 09/10/19 09:47 Received: 09/11/19 09:00 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 0.575 ± 0.295 (0.302) Radium-226 pCi/L 09/20/19 08:54 13982-63-3 C:89% T:NA EPA 9320 -0.163 ± 0.417 (0.979) Radium-228 pCi/L 09/20/19 11:45 15262-20-1 C:74% T:87% Total Radium **Total Radium** 0.575 ± 0.712 (1.28) pCi/L 10/01/19 15:28 7440-14-4 Calculation



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

QC Batch: 361438 Analysis Method: EPA 9315

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

Associated Lab Samples: 2622943001, 2622943002

METHOD BLANK: 1754425 Matrix: Water

Associated Lab Samples: 2622943001, 2622943002

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

 Radium-226
 0.337 ± 0.242 (0.380) C:91% T:NA
 pCi/L
 09/20/19 07:12

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.



QUALITY CONTROL - RADIOCHEMISTRY

EPA 9320

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

QC Batch: 361439 Analysis Method:

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

Associated Lab Samples: 2622943001, 2622943002

METHOD BLANK: 1754427 Matrix: Water

Associated Lab Samples: 2622943001, 2622943002

Parameter $Act \pm Unc (MDC) Carr Trac$ Units Analyzed Qualifiers

Radium-228 $0.462 \pm 0.419 \quad (0.854) \text{ C:}67\% \text{ T:}85\%$ pCi/L 09/20/19 11:52

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



QUALIFIERS

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 10/09/2019 11:00 AM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Ash Ponds

Pace Project No.: 2622943

Date: 10/09/2019 11:00 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622943001	EB-01	EPA 9315	361438		
2622943002	PZ-23	EPA 9315	361438		
2622943001	EB-01	EPA 9320	361439		
2622943002	PZ-23	EPA 9320	361439		
2622943001	EB-01	Total Radium Calculation	364083		
2622943002	PZ-23	Total Radium Calculation	364083		

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

Section B quired Project Information: py To: Wood PLC Compass National CRR Py To: Wood PLC Compass National CRR Py To: Wood PLC Compass National CRR WW W W W W W W W W W W W W W W W W W	on:	voices@southernco.com		Regulatory Agency		1.	AND COMMENSAGE		Preservatives \$ N N N	承 序 zlesoM 系	HCI Na2S203 Methanol Other Analysee T Redium 226/228 App. III & App. IV TDS, CI, F, 504	XXX	XXX			C P OCC 3C - #011	C+67707 - #OM	2622943	ACCEPTED BY AFFILIATION PATE TIME SAMPLE CONDITIONS	Malmon of 11/19 0900		
Total Day To: Wood PLC CCOE CCOE WW. W. W. W. W. W. W. W. W. W. W. W. W.	0	Attention	Company Name:	Address:	Pace Quote:	Pace Project Mana				COLLECTION	A OF CONTAINERS OF CONTAINERS Unpreserved	7	1 1						機	3HL1 6/10/15		
TI See See See See See See See See See Se	tion B puired Project Information:	ort To Iou Abraham			*		ect #;	_	dWO:	e valid codes	S) 39VT 3JYMAR D) 34VT 3JYMAR DATE DATE 9	9		1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S				RELINQUISHED BY LAFFILLATION	Daniel Homes Wood			
SAMPLE ID One Characte per box. (404)506-7239 Fax. (404)506-7239 Fax. (404)506-7239 Sample Ids must be unique EB-0 PZ-23 ADDITIONAL COMMENTS ADDITIONAL COMMENTS	Client Information:	Garria Douar - Coal Combustion Basiduals	2480 Maner Road		- Carr	06-7239 Fax	standerd			Drinking Water Waste Waste Waste Water Product Soul/Soul	Oil Wipe Aur Aur Other Tissue	EB-01	-7						ADDITIONAL COMMENTS	III analyses: B, Ca, Ci	TDS +1. 1. <1. A. V. C.	

Sample Condition Upon Receipt

Courier: Fed Ex UPS USPS Clie	ent Commercial	☐ Pace Other	WO# 2622943
Tracking #:			PM: BM Due Date: 10/09/1
Custody Seal on Cooler/Box Present: // yes	no Seals	intact: yes	CLIENT: GAPower-CCR
Packing Material: Bubble Wrap Bubble	e Bags None [Other	
Thermometer Used 8.3	Type of Ice: Wet	Blue None	Samples on ice, cooling process has begun Date and Initials of person examining
Cooler Temperature / 2 Temp should be above freezing to 6°C	Biological Tissue	s Frozen: Yes No Comments:	contents: 9/1/19 mg
Chain of Custody Present:	. □Yes □No □N/A	1.	
Chain of Custody Filled Out:	Yes ONO ON/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:	DYES ONO ON/A	8.	
Correct Containers Used:	→EYes □No □N/A	9.	
-Pace Containers Used:	. ₽Yes □No □N/A		
Containers Intact:	Yes ONO ON/A	10.	
Filtered volume received for Dissolved tests	□Yes □No -□N/A	11.	
Sample Labels match COC:	No DN/A	12.	-
-Includes date/time/ID/Analysis Matrix:	ω_{-}		
All containers needing preservation have been checked.	-BYes □No □N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	Pres ONO ON/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	1 6.	
Trip Blank Custody Seals Present	□Yes □No □N/A		
Pace Trip Blank Lot # (if purchased):			
Client Notification/ Resolution: Person Contacted: Comments/ Resolution:	Date/	Time:	Field Data Required? Y / N
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)





November 04, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623918

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623918

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623918

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623918001	PZ-14+QC	Water	10/02/19 12:30	10/03/19 09:30
2623918002	PZ-25	Water	10/02/19 13:15	10/03/19 09:30
2623918003	Dup-02	Water	10/02/19 00:00	10/03/19 09:30
2623918004	PZ-15	Water	10/02/19 15:23	10/03/19 09:30



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623918

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623918001	PZ-14+QC	EPA 9315	LAL	1	PASI-PA
	EPA 9320	VAL	1	PASI-PA	
	Total Radium Calculation	CMC	1	PASI-PA	
2623918002 PZ-25	EPA 9315	LAL	1	PASI-PA	
	EPA 9320	VAL	1	PASI-PA	
		Total Radium Calculation	CMC	1	PASI-PA
2623918003 Dup-02	EPA 9315	LAL	1	PASI-PA	
	EPA 9320	VAL	1	PASI-PA	
		Total Radium Calculation	CMC	1	PASI-PA
2623918004 PZ-15	EPA 9315	LAL	1	PASI-PA	
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2623918

Sample: PZ-14+QC PWS:	Lab ID: 26239180 Site ID:	O1 Collected: 10/02/19 12:30 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.281 ± 0.213 (0.319) C:96% T:NA	pCi/L	10/25/19 08:34	13982-63-3	
Radium-228		0.574 ± 0.430 (0.848) C:75% T:82%	pCi/L	10/29/19 15:27	15262-20-1	
Total Radium	Total Radium Calculation	0.915 ± 1.05 (2.22)	pCi/L	10/30/19 16:01	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623918

Sample: PZ-25 PWS:	Lab ID: 2623918 Site ID:	O02 Collected: 10/02/19 13:15 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.802 ± 0.411 (0.597) C:89% T:NA	pCi/L	10/25/19 09:5	1 13982-63-3	
Radium-228	EPA 9320	0.674 ± 0.426 (0.805) C:74% T:86%	pCi/L	10/29/19 15:2	7 15262-20-1	
Total Radium	Total Radium Calculation	1.48 ± 0.837 (1.40)	pCi/L	10/30/19 16:0	1 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623918

Sample: Dup-02 PWS:	Lab ID: 2623918 Site ID:	O03 Collected: 10/02/19 00:00 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.554 ± 0.327 (0.462) C:87% T:NA	pCi/L	10/25/19 08:34	13982-63-3	
Radium-228	EPA 9320	0.423 ± 0.441 (0.917) C:70% T:83%	pCi/L	10/29/19 15:27	7 15262-20-1	
Total Radium	Total Radium Calculation	0.977 ± 0.768 (1.38)	pCi/L	10/30/19 16:0 ⁻	1 7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623918

Sample: PZ-15 PWS:	Lab ID: 26239180 Site ID:	Collected: 10/02/19 15:23 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.517 ± 0.298 (0.396) C:91% T:NA	pCi/L	10/25/19 08:34	13982-63-3	
Radium-228	EPA 9320	0.484 ± 0.508 (1.06) C:70% T:81%	pCi/L	10/29/19 15:27	7 15262-20-1	
Total Radium	Total Radium Calculation	$1.00 \pm 0.806 (1.46)$	pCi/L	10/30/19 16:01	7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623918

QC Batch: 366498 Analysis Method: EPA 9315

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

Associated Lab Samples: 2623918001, 2623918002, 2623918003, 2623918004

METHOD BLANK: 1777737 Matrix: Water

Associated Lab Samples: 2623918001, 2623918002, 2623918003, 2623918004

Parameter Act \pm Unc (MDC) Carr Trac Units Analyzed Qualifiers

Radium-226 $0.599 \pm 0.309 \quad (0.395) \text{ C:98\% T:NA}$ pCi/L $10/25/19 \quad 09:42$

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623918

QC Batch: 366499 Analysis Method: EPA 9320

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

Associated Lab Samples: 2623918001, 2623918002, 2623918003, 2623918004

METHOD BLANK: 1777739 Matrix: Water

Associated Lab Samples: 2623918001, 2623918002, 2623918003, 2623918004

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

Radium-228 0.720 \pm 0.387 (0.688) C:72% T:87% pCi/L 10/29/19 12:24

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.



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623918

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 11/04/2019 10:40 AM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623918

Date: 11/04/2019 10:40 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2623918001	PZ-14+QC	EPA 9315	366498		
2623918002	PZ-25	EPA 9315	366498		
2623918003	Dup-02	EPA 9315	366498		
2623918004	PZ-15	EPA 9315	366498		
2623918001	PZ-14+QC	EPA 9320	366499		
2623918002	PZ-25	EPA 9320	366499		
2623918003	Dup-02	EPA 9320	366499		
2623918004	PZ-15	EPA 9320	366499		
2623918001	PZ-14+QC	Total Radium Calculation	368618		
2623918002	PZ-25	Total Radium Calculation	368618		
2623918003	Dup-02	Total Radium Calculation	368618		
2623918004	PZ-15	Total Radium Calculation	368618		

Samples Samples (WW) (N/A) Coolar ŏ Delse Custod Regulatory Agency (N/J) по беуівсея MO#:2623918 Residual Chlorine (Y/N) TEMP in C CHAIN-OF-CUSTODY / Analytical Request Document
The phain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. 00 0/0/2/10 DATE Signed: 10/2/19 2623918 1000 X X X XXX TDS, CI, F, SO4 betsy.mcdaniel@pacelabs.com 2 eleteM VI .qqA & III .qqA Section C Involce Information: Attention: scsinvolces@southemco.com Redium 226/226 , 189T sesylenA 🖔 N/A Howard lonerteM EOZSZEN Pace Quote:
Pace Project Manager: t HOBN нсі ЕОИН Company Name: 1 POSZH 1800 Address: X K bevieserqnU ७ # OF CONTAINERS SIGNATURE OF SAMPLER: of SAMPLER: SAMPLE TEMP AT COLLECTION 10/2/19 1230 BK 1523 TIME ç 10/5/E SAMPLER NAMP DATE COLLECTED ZWood Project Name: Plant Mitchell CCR Project #: 6 122160176 TIME SCS10382775 START Regulred Project Information: Report To: Joju Abraham Copy To: Wood PLC DATE More O ののの SAMPLE TYPE (G-GRAB C-COMP) Purchase Order #: MATRIX CODE (see valid codes to left) Section B **ට** ව Georgia Power - Coal Combustion Residuals + SAMPLE ID
One Character per box.
(A-2, 0-8 f.,-)
Sample (45 must be unique Phone: (404)506-7239 Fax: Requested Due Date: 5 Fax Lar **Dup-02** PZ-14 712 PZ-25 Atlanta, GA 30339 abraham@southemco.com 70 2460 Maner Road Required Client Information: Company: Georgia Power Address: 2480 Maner Ro metals Se 9 6 9 €.6 Email Page 13 of 14 3 ITEM #

	Sail	ilbie conditi	on opon Rece		
Pace Analytical	Client Name:	GLA	Prwere	Project #	
Courier: Pred Ex UPS Tracking #: 8/2/9 Custody Seal on Cooler/Box	394542	-9	al Pace Othe	PM: BM Due	Date: 10/31/19
			•	CLIENT: GAPouer-CC	•
Packing Material: Bubble					
Thermometer Used	83	Type of Ice: y	Vet Blue None	Samples on ice, cooling proce	
Cooler Temperature	0.5	Biological Tiss	sue is Frozen: Yes	No Date and Initials of personal Contents: 10/0/3	
Temp should be above freezing to	6°C		Comments:		
Chain of Custody Present:		_EYES □No □	N/A 1.		
Chain of Custody Filled Out:		JEYFS □No □	N/A 2.		
Chain of Custody Relinquished		DYES ONO O	N/A 3.		
Sampler Name & Signature or	COC:	_☐Yes □No □	N/A 4.		
Samples Arrived within Hold T		→ OYes □No □	N/A 5.		
Short Hold Time Analysis (<		□Yes □No □	N/A 6.		
Rush Turn Around Time Red	-	□Yes ☑No □	N/A 7.		
Sufficient Volume:		TYes DNo D	N/A 8.		
Correct Containers Used:	•	No [N/A 9.		
-Pace Containers Used:		EYES ONO	IN/A		
Containers Intact:		₽Yes □No □			
Filtered volume received for D	issolved tests	□Yes □No □			
Sample Labels match COC:		Yes []No. [***
-Includes date/time/ID/Ana	ilvsis Matrix:	ω			
All containers needing preservation		-⊟Yes □No □	IN/A 13.		
All containers needing preservation		-□Yes □No □			
exceptions: VOA, coliform, TOC, O&		□Yes □No	initial when completed	Lot # of added preservative	
Samples checked for dechlori	nation:	□Yes □No -E	M/Ā 14.		
Headspace in VOA Vials (>6		□Yes □No ₽	HV/A 15.		
Trip Blank Present:		□Yes □No 🗜	HN/A 16.		
Trip Blank Custody Seals Pre	sent.	□Yes □No -	⊒ N/A		
Pace Trip Blank Lot # (if purc	hased):				
Client Notification/ Resolut	lon:			Field Data Required?	Y / N
Person Contacted:			ate/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)





November 04, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623920

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623920

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623920

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623920001	PZ-1D	Water	10/01/19 16:30	10/03/19 09:30
2623920002	PZ-32	Water	10/01/19 16:10	10/03/19 09:30
2623920003	EB-01	Water	10/02/19 09:15	10/03/19 09:30
2623920004	PZ-2D	Water	10/02/19 10:38	10/03/19 09:30



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623920

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623920001	PZ-1D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623920002	PZ-32	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623920003	EB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623920004	PZ-2D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2623920

Sample: PZ-1D PWS:	Lab ID: 26239200 Site ID:	O01 Collected: 10/01/19 16:30 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.443 ± 0.307 (0.534) C:95% T:NA	pCi/L	10/18/19 07:54	13982-63-3	
Radium-228	EPA 9320	0.510 ± 0.403 (0.804) C:74% T:90%	pCi/L	10/23/19 12:59	15262-20-1	
Total Radium	Total Radium Calculation	0.953 ± 0.710 (1.34)	pCi/L	10/30/19 16:01	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623920

Sample: PZ-32 PWS:	Lab ID: 26239200 Site ID:	O02 Collected: 10/01/19 16:10 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.501 ± 0.308 (0.498) C:96% T:NA	pCi/L	10/18/19 07:54	13982-63-3	
Radium-228	EPA 9320	0.506 ± 0.429 (0.863) C:63% T:90%	pCi/L	10/23/19 12:35	5 15262-20-1	
Total Radium	Total Radium Calculation	1.01 ± 0.737 (1.36)	pCi/L	10/30/19 16:01	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623920

Sample: EB-01 PWS:	Lab ID: 2623920 Site ID:	O03 Collected: 10/02/19 09:15 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.231 ± 0.210 (0.387) C:98% T:NA	pCi/L	10/18/19 07:54	13982-63-3	
Radium-228	EPA 9320	0.260 ± 0.394 (0.851) C:72% T:89%	pCi/L	10/23/19 12:35	5 15262-20-1	
Total Radium	Total Radium Calculation	0.491 ± 0.604 (1.24)	pCi/L	10/30/19 16:01	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623920

Sample: PZ-2D PWS:	Lab ID: 2623920 0 Site ID:	O04 Collected: 10/02/19 10:38 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.362 ± 0.253 (0.398) C:92% T:NA	pCi/L	10/18/19 07:53	13982-63-3	
Radium-228	EPA 9320	0.350 ± 0.553 (1.20) C:55% T:80%	pCi/L	10/23/19 12:36	5 15262-20-1	
Total Radium	Total Radium Calculation	0.712 ± 0.806 (1.60)	pCi/L	10/30/19 16:01	1 7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623920

QC Batch: 366031 Analysis Method: EPA 9320

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

Associated Lab Samples: 2623920001, 2623920002, 2623920003, 2623920004

METHOD BLANK: 1775592 Matrix: Water

Associated Lab Samples: 2623920001, 2623920002, 2623920003, 2623920004

Parameter $Act \pm Unc (MDC) Carr Trac$ Units Analyzed Qualifiers

Radium-228 0.000680 ± 0.296 (0.693) C:76% T:86% pCi/L 10/23/19 12:34

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.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623920

QC Batch: 366030 Analysis Method: EPA 9315

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

Associated Lab Samples: 2623920001, 2623920002, 2623920003, 2623920004

METHOD BLANK: 1775591 Matrix: Water

Associated Lab Samples: 2623920001, 2623920002, 2623920003, 2623920004

Parameter Act \pm Unc (MDC) Carr Trac Units Analyzed Qualifiers

Radium-226 0.592 \pm 0.321 (0.466) C:93% T:NA pCi/L 10/18/19 07:54

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.



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623920

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 11/04/2019 10:40 AM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623920

Date: 11/04/2019 10:40 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623920001	PZ-1D	EPA 9315	366030		
2623920002	PZ-32	EPA 9315	366030		
2623920003	EB-01	EPA 9315	366030		
2623920004	PZ-2D	EPA 9315	366030		
2623920001	PZ-1D	EPA 9320	366031		
2623920002	PZ-32	EPA 9320	366031		
2623920003	EB-01	EPA 9320	366031		
2623920004	PZ-2D	EPA 9320	366031		
2623920001	PZ-1D	Total Radium Calculation	368618		
2623920002	PZ-32	Total Radium Calculation	368618		
2623920003	EB-01	Total Radium Calculation	368618		
2623920004	PZ-2D	Total Radium Calculation	368618		

SAMPLE CONDITIONS (MY) Samples Regulatory Agency 1 - 2002 11 (N/A) Coolar ŏ Sealed Custod State / Location (N/A) MO#: 2623920 no bevisceR Residual Chlorina (Y/N) Page: TEMP IN C CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. STATE OF 50 SAMPLER NAME AND SIGNATURE VALVE OF THE PROPERTY OF THE PROPER Requested Analysis Filtered (Y/N) 10/2/10 DATE Signod: 10/2/19 Some S 2623920 AFFILATION (2) X X X TDS, CI, F, SO4 betsy.mcdaniel@pacetabs.com X X 2 App. III & App. IV Metals scsinvoices@southernco.com 2 Radium 226/228 set seavienA N/A HOWAR ACCEPTED BY Jorhor SIGNATURE OF SAMPLER: Methanol COZSZON HOSN 333.1.2 Pace Project Manager. Pace Profile # 333. ЮН Invoice Information: Jane \times HINO3 Company Name TIME **FOSZH** ace Quote: Section C 1800 DevreserqnU 구 주 × × T 4 # OF CONTAINERS SAMPLE TEMP AT COLLECTION SOME 18 of SAMPLER: 16/2/19 5160,00 0191 Path 14 Alp 1038 TIME MM 1630 S S DATE COLLECTE /Wood RELANGUISHED BY JAFFILATION OF PRINT NA Purchase Order #: SCS10382775
Project Name: Plant Mitchell CCR 걸 START Hamel Harry Required Project Information: DATE Report To: Joju Abraham Wood PLC (GegRAB CecoMP) **34YT 3J9MA2** V 9 2 3 3 b <u>a-</u> 3<u>}</u>-MATRIX CODE (see valid codes to left) Section B Copy To: 29.8 g g g g g g g MATRIX
Dimbang Water
Vaste Water
Vaste Water
Vaste Water
Vaste Water
Vaste Water
Product
SourSoud
Oil
Wipe
An
Other
Tissue ADDITIONAL COMMENTS Georgia Power - Coal Combustion Residuals Phone (404)506-7239 Fax
Requested Due Date: STAN ACO (A-Z, 0-9 /, -) Sample Ids must be unique iabraham@southernco.com Z-3D One Character per box. SAMPLE ID PZ-32 P2-17 EB-01 2480 Maner Road Allanta, GA 30339 Citent Information: actels. 50 Address 8 6 40 12 Email m 1 ø TEM # ю Page 13 of 14

Sample Condition Upon Receipt Client Name: GIA Powere Project # WO#: 2623920 Courier: Fed Ex UPS USPS Client Commercial Pace Other Tracking #: 8/2/9/394 54/8 Due Date: 10/31/19 Seals intact: CLIENT: GAPower-CCR Packing Material: Bubble Wrap Bubble Bags None O Other ☐ Samples on ice, cooling process has begun Type of Ice: Wet Blue None Thermometer Used Date and Initials of person examining Biological Tissue is Frozen: Yes contents: 10/0(3/19 **Cooler Temperature** Comments: Temp should be above freezing to 6°C - Yes □No □N/A 1. Chain of Custody Present: PYes □No □N/A 2. Chain of Custody Filled Out: Pres □No □N/A 3. Chain of Custody Relinquished: JAYES □NO □N/A 4. Sampler Name & Signature on COC: - ETES □No □N/A 5. Samples Arrived within Hold Time: ☐Yes ☐N6 ☐N/A 6. Short Hold Time Analysis (<72hr): □Yes -EINo □N/A 7. Rush Turn Around Time Requested: -EYES □No □N/A 8. Sufficient Volume: TYES ONO ONA 9. Correct Containers Used: - Yes □No □N/A -Pace Containers Used: TYes No NA 10. Containers Intact: □Yes □No □NTA Filtered volume received for Dissolved tests □¥es □No □N/A 12. Sample Labels match COC: -Includes date/time/ID/Analysis All containers needing preservation have been checked. -Elves DNo □N/A 13. All containers needing preservation are found to be in -EYES ONO ON/A ompliance with FPA recommendation Initial when Lot # of added ☐Yes -巳No preservative completed exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) □Yes □No □N/A 14. Samples checked for dechlorination: □Yes □No ĐNA 15. Headspace in VOA Vials (>6mm): □Yes □No □MA 16. Trip Blank Present: ☐Yes ☐No ☑NA Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased): Y / N Field Data Required? Client Notification/ Resolution: Date/Time: Person Contacted: Comments/ Resolution: Date: **Project Manager Review:**

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)





November 04, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623922

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623922

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

North Dakota Certification #: R-190

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623922

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
2623922001	PZ-31	Water	10/02/19 10:25	10/03/19 09:30	
2623922002	PZ-16	Water	10/02/19 13:55	10/03/19 09:30	
2623922003	PZ-17	Water	10/02/19 15:30	10/03/19 09:30	
2623922004	Dup-01	Water	10/02/19 00:00	10/03/19 09:30	



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623922

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623922001	PZ-31	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623922002	PZ-16	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623922003	PZ-17	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623922004	Dup-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2623922

Sample: PZ-31 PWS:	Lab ID : 26239220 Site ID:	O01 Collected: 10/02/19 10:25 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.0883 ± 0.144 (0.313) C:95% T:NA	pCi/L	10/18/19 08:18	13982-63-3	
Radium-228		-0.163 ± 0.563 (1.32) C:54% T:96%	pCi/L	10/23/19 12:46	5 15262-20-1	
Total Radium	Total Radium Calculation	$0.0883 \pm 0.707 (1.63)$	pCi/L	11/01/19 10:40	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623922

Sample: PZ-16 PWS:	Lab ID: 26239220 Site ID:	OO2 Collected: 10/02/19 13:55 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.440 ± 0.294 (0.467) C:80% T:NA	pCi/L	10/18/19 08:19	9 13982-63-3	
Radium-228		0.210 ± 0.756 (1.71) C:54% T:82%	pCi/L	10/23/19 15:59	9 15262-20-1	
Total Radium	Total Radium Calculation	0.650 ± 1.05 (2.18)	pCi/L	11/01/19 10:40	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623922

Sample: PZ-17 PWS:	Lab ID: 26239220 Site ID:	Collected: 10/02/19 15:30 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.513 ± 0.297 (0.435) C:89% T:NA	pCi/L	10/18/19 08:19	13982-63-3	
Radium-228	EPA 9320	0.826 ± 0.691 (1.39) C:69% T:78%	pCi/L	10/23/19 15:59	15262-20-1	
Total Radium	Total Radium Calculation	1.34 ± 0.988 (1.83)	pCi/L	11/01/19 10:40	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623922

Sample: Dup-01 PWS:	Lab ID: 26239220 Site ID:	O4 Collected: 10/02/19 00:00 Sample Type:	Received:	10/03/19 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.637 ± 0.360 (0.563) C:93% T:NA	pCi/L	10/18/19 09:17	7 13982-63-3	
Radium-228		0.531 ± 0.576 (1.20) C:68% T:82%	pCi/L	10/23/19 16:00	0 15262-20-1	
Total Radium	Total Radium Calculation	1.17 ± 0.936 (1.76)	pCi/L	11/01/19 10:40	7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623922

QC Batch: 366031 Analysis Method: EPA 9320

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

Associated Lab Samples: 2623922001, 2623922002, 2623922003, 2623922004

METHOD BLANK: 1775592 Matrix: Water

Associated Lab Samples: 2623922001, 2623922002, 2623922003, 2623922004

Parameter Act \pm Unc (MDC) Carr Trac Units Analyzed Qualifiers

Radium-228 0.000680 ± 0.296 (0.693) C:76% T:86% pCi/L 10/23/19 12:34

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.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623922

QC Batch: 366030 Analysis Method: EPA 9315

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

Associated Lab Samples: 2623922001, 2623922002, 2623922003, 2623922004

METHOD BLANK: 1775591 Matrix: Water

Associated Lab Samples: 2623922001, 2623922002, 2623922003, 2623922004

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

Radium-226 0.592 \pm 0.321 (0.466) C:93% T:NA pCi/L 10/18/19 07:54

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.



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623922

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 11/04/2019 10:39 AM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623922

Date: 11/04/2019 10:39 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2623922001	PZ-31	EPA 9315	366030		
2623922002	PZ-16	EPA 9315	366030		
2623922003	PZ-17	EPA 9315	366030		
2623922004	Dup-01	EPA 9315	366030		
2623922001	PZ-31	EPA 9320	366031		
2623922002	PZ-16	EPA 9320	366031		
2623922003	PZ-17	EPA 9320	366031		
2623922004	Dup-01	EPA 9320	366031		
2623922001	PZ-31	Total Radium Calculation	368952		
2623922002	PZ-16	Total Radium Calculation	368952		
2623922003	PZ-17	Total Radium Calculation	368952		
2623922004	Dup-01	Total Radium Calculation	368952		

SAMPLE CONDITIONS (N/A) pelui State / Location of the state of the Samples (N/A) Regulatory Agency ****** Q Sealed Cooler ŏ poisno (N/A) MO#:2623922 Received on 8 Residual Chlorina (YM) TEMP in C CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fleids must be completed accurately. Acouption of Aprilances of the Same SAMPLER NAME AND SIGNATURE Requested Analysis Filtored (Y/N) DATE Signed: 10/2/19 XXX XXX TDS, CI, F, SO4 betsy.mcdanial@pacelabs.com <u>ই</u> eleteM VI .qqA & III .qqA utention: scsinvoices@southernco.com N/A 74 JeeT seavisnA 💡 大き lonsitioM Howerd Na2S2O3 HOSN 333.1.2 Pace Quote:
Pace Project Manager:
Pace Profile #: 333.1 ЮН Section C Invoice information: EONH Company Name: Take +OSZH THE TANK 200 T X 4 Unpreserved ₹ OF CONTAINERS Ŧ PATE 19 of SAMPLER. SIGNATURE of SAMPLER: SAMPLE TEMP AT COLLECTION 10/2/119 4 19 530 10/2/19/1025 14 P 1355 TAR 8 PH 1/0/ DAE / Wood A TREMOUSHED BY AFFILM TOWNER PRINT Na TIME Plant Mitchell CCR 6 122 Purchase Order # SCS10382775
Project Name Pan Mitchell CCR
Project #: 6/22/6/17 START DATE Required Project Information: Report To: Joju Abraham Copy To: Wood PLC ののののののでは、大門内内の (GegRAS CecoMP) BAYT BIAMAS MATRIX CODE (see valid codes to left) Section B 29 <u>28 78 98 98</u> 95 MATRIX Chinking Water University Water Waste Water Froduct Soutsoad Od Mit Ait Chines Tassue Georgia Power - Coal Combustion Residuals ADDITIONAL COLLECTS (A-Z, 0-9 / , -) Sample Ids must be unique Allente, GA 30339 abraham@southernco.com Fax One Character per box. SAMPLE ID Requested Dus Date: 5 + Control 0-ch PZ-1. PZ-1 ,-Zd 2480 Maner Road (404)506-7239 Required Client Information: metals: Company Address -58 c-. 6 Section 10 **10 1** 7 3 Email ေ Page 13 of 14 # MBTI

Sample Condition Upon Receipt Client Name: GA Powere Project # WO#: 2623922 Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Due Date: 10/31/19 CLIENT: GAPower-CCR Seals intact: Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other Type of Ice: Wel Blue None Thermometer Used ☐ Samples on ice, cooling process has begun Date and Initials of person examining Biological Tissue is Frozen: Yes Cooler Temperature contents: / 0 Temp should be above freezing to 6°C Comments: ØYes □No □N/A Chain of Custody Present: √Yes □No □N/A Chain of Custody Filled Out: Yes ONO ON/A 3. Chain of Custody Relinquished: Pes ONo ON/A Sampler Name & Signature on COC: Samples Arrived within Hold Time: --EYes □No □N/A ☐Yes ☐N/A Short Hold Time Analysis (<72hr): Rush Turn Around Time Requested: □Yes -BNO □N/A Sufficient Volume: PYES □No □N/A -EYes ONO ON/A 9. Correct Containers Used: -Pace Containers Used: -ÆIYes □No □N/A Containers Intact: —☐Yes □No □N/A 10. Filtered volume received for Dissolved tests □Yes □No -ÐN/Ā 11. Tes ONO ON/A 12. Sample Labels match COC: Includes date/time/ID/Analysis All containers needing preservation have been checked. -EYES DNo DN/A 13. All containers needing preservation are found to be in _DYee-□No □N/A compliance with EPA recommendation. Initial when Lot # of added ☐Yes - ☐No exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) completed preservative ☐Yes ☐No ☐N/A 14. Samples checked for dechlorination: Headspace in VOA Vials (>6mm): ☐Yes ☐No ☐N/A 15. Trip Blank Present: ☐Yes ☐No ─☐N/A Trip Blank Custody Seals Present □Yes □No JON/A Pace Trip Blank Lot # (if purchased): Client Notification/ Resolution: Field Data Required? Person Contacted: Date/Time: 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)

Project Manager Review:

Date:





November 04, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623954

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 04, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623954

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

North Dakota Certification #: R-190

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623954

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623954001	PZ-18+QC	Water	10/03/19 09:40	10/04/19 09:05
2623954002	PZ-7D	Water	10/03/19 11:10	10/04/19 09:05



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623954

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623954001	PZ-18+QC	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623954002	PZ-7D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2623954

Sample: PZ-18+QC PWS:	Lab ID: 26239540 Site ID:	O01 Collected: 10/03/19 09:40 Sample Type:	Received:	10/04/19 09:05	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.508 ± 0.297 (0.343) C:85% T:NA	pCi/L	10/25/19 08:34	13982-63-3	
Radium-228	EPA 9320	1.56 ± 0.614 (0.971) C:71% T:78%	pCi/L	10/29/19 15:27	15262-20-1	
Total Radium	Total Radium Calculation	2.07 ± 0.911 (1.31)	pCi/L	11/01/19 10:40	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623954

Sample: PZ-7D PWS:	Lab ID: 26239540 Site ID:	O02 Collected: 10/03/19 11:10 Sample Type:	Received:	10/04/19 09:05	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.654 ± 0.329 (0.402) C:89% T:NA	pCi/L	10/25/19 09:00	13982-63-3	
Radium-228	EPA 9320	0.711 ± 0.444 (0.841) C:74% T:86%	pCi/L	10/29/19 15:27	7 15262-20-1	
Total Radium	Total Radium Calculation	1.37 ± 0.773 (1.24)	pCi/L	11/01/19 14:40	7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623954

000.1

QC Batch: 366498

Analysis Method:

EPA 9315

QC Batch Method: EPA 9315

Analysis Description:

9315 Total Radium

Associated Lab Samples: 2623954001, 2623954002

METHOD BLANK: 1777737

Matrix: Water

Associated Lab Samples:

2623954001, 2623954002

Parameter

Act ± Unc (MDC) Carr Trac

Units

Analyzed

Qualifiers

Radium-226

0.599 ± 0.309 (0.395) C:98% T:NA

pCi/L 10/25/19 09:42

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623954

QC Batch: 366499 Analysis Method: EPA 9320

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

Associated Lab Samples: 2623954001, 2623954002

METHOD BLANK: 1777739 Matrix: Water

Associated Lab Samples: 2623954001, 2623954002

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

Radium-228 $0.720 \pm 0.387 \quad (0.688) \text{ C:}72\% \text{ T:}87\%$ pCi/L $10/29/19 \; 12:24$

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.



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623954

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 11/04/2019 10:39 AM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623954

Date: 11/04/2019 10:39 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2623954001	PZ-18+QC	EPA 9315	366498		
2623954002	PZ-7D	EPA 9315	366498		
2623954001	PZ-18+QC	EPA 9320	366499		
2623954002	PZ-7D	EPA 9320	366499		
2623954001	PZ-18+QC	Total Radium Calculation	368952		
2623954002	PZ-7D	Total Radium Calculation	369016		

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

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ş	Required Client Information:	Required Project Information:			Involce		:uo								Page .	_	č	_	
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Sample Condition Upon Receipt Client Name: Project # WO#: 2623954 Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Due Date: 11/01/19 Seals intact: yes Custody Seal on Cooler/Box Present: yes CLIENT: GAPouer-CCR ☐ no ☐ Bubble Bags ☐ None ☐ Other Packing Material: Bubble Wrap Samples on ice, cooling process has begun Blue None Type of Ice: Wel Thermometer Used Date and initials of person examining Biological Tissue is Frozen: Yes **Cooler Temperature** contents:_ Comments: Temp should be above freezing to 6°C DYES DNO □N/A Chain of Custody Present: □N/A □Xes □No Chain of Custody Filled Out: ___Yes □No □N/A 13. Chain of Custody Relinquished: Pres □No □N/A Sampler Name & Signature on COC: ₽7es □No □N/A Samples Arrived within Hold Time: ☐Yes ☐No ☐N/A **l**6. Short Hold Time Analysis (<72hr): ☐Yes ☑No □N/A 7 Rush Turn Around Time Requested: .-□Yes □No □N/A 8. Sufficient Volume: Correct Containers Used: DYES □No □N/A -Pace Containers Used: -ETYes □No □N/A 10. Containers Intact: □Yes □No ENIA 11. Filtered volume received for Dissolved tests THES DNO. □N/A 12. Sample Labels match COC: Ù -Includes date/time/ID/Analysis Matrix: All containers needing preservation have been checked. -DYes □No □N/A All containers needing preservation are found to be in Yes UNo □N/A compliance with EPA recommendation. Lot # of added Initial when ☐Yes→☐No preservative completed exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) Samples checked for dechlorination: ☐Yes ☐No ☐M/A 14. ☐Yes ☐No ☐N/A 15. Headspace in VOA Vials (>6mm): ☐Yes ☐No ☑N/A Trip Blank Present: □Yes □No □N/A Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased): Y / N Field Data Required? **Client Notification/ Resolution:** Date/Time: Person Contacted: 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)

Project Manager Review:

Date:





November 04, 2019

Joju Abraham Georgia Power - Coal Combustion Residuals 2480 Maner Road Atlanta, GA 30339

RE: Project: Plant Mitchell

Pace Project No.: 2623956

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 04, 2019. 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,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw Rebecca Thornton, Pace Analytical Atlanta Greg Wrenn, Wood PLC



(770)734-4200



CERTIFICATIONS

Project: Plant Mitchell Pace Project No.: 2623956

Pennsylvania Certification IDs

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

ANAB DOD-ELAP Rad Accreditation #: L2417

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

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706

Ohio EPA Rad Approval: #41249 Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

North Dakota Certification #: R-190

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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



SAMPLE SUMMARY

Project: Plant Mitchell Pace Project No.: 2623956

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623956001	FB-01	Water	10/03/19 08:10	10/04/19 09:05
2623956002	EB-02	Water	10/03/19 08:25	10/04/19 09:05
2623956003	PZ-33	Water	10/03/19 09:50	10/04/19 09:05
2623956004	PZ-19	Water	10/03/19 12:00	10/04/19 09:05



SAMPLE ANALYTE COUNT

Project: Plant Mitchell Pace Project No.: 2623956

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623956001	FB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623956002	EB-02	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623956003	PZ-33	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2623956004	PZ-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Mitchell Pace Project No.: 2623956

Sample: FB-01 PWS:	Lab ID: 2623956 0 Site ID:	O01 Collected: 10/03/19 08:10 Sample Type:	Received:	10/04/19 09:05	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.341 ± 0.244 (0.410) C:98% T:NA	pCi/L	10/18/19 08:02	13982-63-3	
Radium-228	EPA 9320	0.397 ± 0.420 (0.868) C:54% T:91%	pCi/L	10/23/19 13:10	15262-20-1	
Total Radium	Total Radium Calculation	0.738 ± 0.664 (1.28)	pCi/L	10/30/19 16:01	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623956

Sample: EB-02 PWS:	Lab ID: 26239560 Site ID:	O02 Collected: 10/03/19 08:25 Sample Type:	Received:	10/04/19 09:05	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.362 ± 0.261 (0.439) C:95% T:NA	pCi/L	10/18/19 07:53	13982-63-3	
Radium-228	EPA 9320	-0.0922 ± 0.336 (0.806) C:64% T:95%	pCi/L	10/23/19 12:56	5 15262-20-1	
Total Radium	Total Radium Calculation	0.362 ± 0.597 (1.25)	pCi/L	10/30/19 16:01	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623956

Sample: PZ-33 PWS:	Lab ID: 26239560 Site ID:	Collected: 10/03/19 09:50 Sample Type:	Received:	10/04/19 09:05	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	0.548 ± 0.359 (0.621) C:85% T:NA	pCi/L	10/18/19 07:53	13982-63-3	
Radium-228	EPA 9320	1.07 ± 0.656 (1.26) C:59% T:87%	pCi/L	10/23/19 12:46	5 15262-20-1	
Total Radium	Total Radium Calculation	1.62 ± 1.02 (1.88)	pCi/L	11/01/19 10:40	7440-14-4	



Project: Plant Mitchell Pace Project No.: 2623956

Sample: PZ-19 PWS:	Lab ID: 26239560 Site ID:	Collected: 10/03/19 12:00 Sample Type:	Received:	10/04/19 09:05	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	1.12 ± 0.426 (0.349) C:84% T:NA	pCi/L	10/18/19 08:18	13982-63-3	
Radium-228		0.780 ± 0.564 (1.12) C:60% T:86%	pCi/L	10/23/19 12:46	5 15262-20-1	
Total Radium	Total Radium Calculation	$1.90 \pm 0.990 (1.47)$	pCi/L	11/01/19 10:40	7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623956

QC Batch: 366031 Analysis Method: EPA 9320

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

Associated Lab Samples: 2623956001, 2623956002, 2623956003, 2623956004

METHOD BLANK: 1775592 Matrix: Water

Associated Lab Samples: 2623956001, 2623956002, 2623956003, 2623956004

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

Radium-228 0.000680 \pm 0.296 (0.693) C:76% T:86% pCi/L 10/23/19 12:34

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.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Mitchell Pace Project No.: 2623956

QC Batch: 366030 Analysis Method: EPA 9315

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

Associated Lab Samples: 2623956001, 2623956002, 2623956003, 2623956004

METHOD BLANK: 1775591 Matrix: Water

Associated Lab Samples: 2623956001, 2623956002, 2623956003, 2623956004

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

Radium-226 0.592 \pm 0.321 (0.466) C:93% T:NA pCi/L 10/18/19 07:54

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.



QUALIFIERS

Project: Plant Mitchell Pace Project No.: 2623956

DEFINITIONS

- DF Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
- ND Not Detected at or above adjusted reporting limit.
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL Adjusted Method Detection Limit.
- PQL Practical Quantitation Limit.
- RL Reporting Limit The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
- S Surrogate
- 1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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.

LABORATORIES

Date: 11/04/2019 10:39 AM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Mitchell Pace Project No.: 2623956

Date: 11/04/2019 10:39 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623956001	FB-01	EPA 9315	366030		
2623956002	EB-02	EPA 9315	366030		
2623956003	PZ-33	EPA 9315	366030		
2623956004	PZ-19	EPA 9315	366030		
2623956001	FB-01	EPA 9320	366031		
2623956002	EB-02	EPA 9320	366031		
2623956003	PZ-33	EPA 9320	366031		
2623956004	PZ-19	EPA 9320	366031		
2623956001	FB-01	Total Radium Calculation	368618		
2623956002	EB-02	Total Radium Calculation	368618		
2623956003	PZ-33	Total Radium Calculation	368952		
2623956004	PZ-19	Total Radium Calculation	368952		

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

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Sample Condition Upon Receipt Client Name: Project # WO#: 2623956 Courier: Fed Ex UPS USPS Client Commercial Pace Other Due Date: 11/01/19 Custody Seal on Cooler/Box Present: yes Seals intact: yes ☐ no CLIENT: GAPower-CCR Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other Samples on ice, cooling process has begun Type of Ice: Wet Blue None Thermometer Used Date and initials of person examining Biological Tissue is Frozen: Yes **Cooler Temperature** contents: / Temp should be above freezing to 6°C Comments: DYES DNO □N/A 1. Chain of Custody Present: □N/A 2 _ Xes □No Chain of Custody Filled Out: __Yes □No □N/A **3**. Chain of Custody Relinquished: □N/A Sampler Name & Signature on COC: ₽Yes □No □N/A Samples Arrived within Hold Time: □Yes →□No □N/A 6. Short Hold Time Analysis (<72hr): □N/A □Yes ☑No Rush Turn Around Time Requested: -EYes □No Sufficient Volume: □N/A Correct Containers Used: PYES □No □N/A -Pace Containers Used: -EIYes □No □N/A 10. Containers Intact: □Yes □No ENIA 11. Filtered volume received for Dissolved tests □Yes □No. Sample Labels match COC: □N/A 12. Ù -Includes date/time/ID/Analysis Matrix: All containers needing preservation have been checked. -DYes □No □N/A 13. All containers needing preservation are found to be in Yes □No □N/A compliance with EPA recommendation. Lot # of added Initial when □Yes-ENo completed preservative exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) ☐Yes ☐No ☐H/A Samples checked for dechlorination: Headspace in VOA Vials (>6mm): ☐Yes ☐No ☐H/A 15. Trip Blank Present: □Yes □No □MA Trip Blank Custody Seals Present □Yes □No →□N/A Pace Trip Blank Lot # (if purchased): Y / N Client Notification/ Resolution: Field Data Required? Date/Time: Person Contacted: 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)

Project Manager Review:

Date:

2020 Annual Groundwate	r Monitoring and Corrective Action Report Georgia Power Company – Plant Mitchell

SEPTEMBER-OCTOBER 2019 FIELD SAMPLING DATA

Date: 2019-10-01 16:29:08

Operator Name Ever Guillem Company Name Wood Project Name Plant Mitchell Site Name PZ-1D 00 0' 0" Latitude 00 0' 0" Longitude Sonde SN 601534 Turbidity Make/Model N/A

Pump Information:

Pump Model/TypeQEDTubing TypePETubing Diameter.17 inTubing Length55.86 ft

Pump placement from TOC 55.86 ft

Well Information:

Well IDPZ-1DWell diameter2 inWell Total Depth81.71 ftScreen Length10 ftDepth to Water55.86 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.7293268 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	16:04:09	1200.02	22.61	7.36	242.53	1.37	55.97	3.67	75.39
Last 5	16:09:09	1500.03	22.35	7.41	245.00	1.24	55.97	3.73	76.91
Last 5	16:14:09	1800.02	22.26	7.45	248.00	1.06	55.97	3.80	75.49
Last 5	16:19:09	2100.02	22.17	7.47	249.34	0.91	55.97	3.89	73.56
Last 5	16:24:09	2400.02	22.30	7.50	250.52	0.82	55.97	3.93	71.31
Variance 0			-0.09	0.04	3.01			0.07	-1.42
Variance 1			-0.09	0.02	1.33			0.09	-1.93
Variance 2			0.13	0.03	1.18			0.04	-2.25

Notes

PZ-1D Sampled at 1630

Date: 2019-10-02 10:42:04

Project Information:

Operator Name Daniel Howard Company Name Wood E&I S

Project Name Plant Mitchell CCR Phase II
Site Name PZ-2D
Latitude 0° 0' 0"

 Longitude
 0° 0' 0"

 Sonde SN
 369555

Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder Pump

76 ft

Tubing TypeHDPETubing Diameter0.17 inTubing Length81 ft

Pump placement from TOC

Well Information: Pumping Information:

Well IDPZ-2DWell diameter2 inWell Total Depth81.01 ftScreen Length10 ftDepth to Water39.42 ft

Final Pumping Rate 200 mL/min
Total System Volume 0.8415373 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.16 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	า		+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	10:16:51	900.02	20.40	8.86	121.36	4.44	39.58	2.50	89.12
Last 5	10:21:51	1200.02	20.33	8.89	126.08	3.23	39.58	2.55	91.78
Last 5	10:26:51	1500.02	20.29	8.93	130.28	2.88	39.58	2.57	99.79
Last 5	10:31:51	1800.02	20.23	8.94	132.68	2.34	39.58	2.58	103.53
Last 5	10:36:51	2100.02	20.16	8.97	132.84	3.19	39.58	2.57	97.44
Variance 0			-0.04	0.03	4.20			0.01	8.01
Variance 1			-0.06	0.01	2.39			0.01	3.75
Variance 2			-0.07	0.03	0.16			-0.01	-6.09

Notes

PZ-2D sample time 1038

Date: 2019-10-03 11:09:42

Pumping Information:

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood E&IS	Tubing Type	HDPE
Project Name	Plant Mitchell CCR Phase II	Tubing Diameter	.25 in
Site Name	PZ-7D	Tubing Length	50.37 ft
Latitude	00 0' 0"	-	
Longitude	00 0' 0"		
Sonde SN	601534		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	55.37 ft

Well Information:

Final Pumping Rate Well ID PZ-7D 200 mL/min Total System Volume
Calculated Sample Rate
Stabilization Drawdown Well diameter 2 in 0.966208 L Well Total Depth 60.37 ft 300 sec Screen Length Depth to Water 10 ft 0 in 37.15 ft Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	10:45:49	300.03	21.90	6.91	611.18	3.34	37.55	0.40	47.14
Last 5	10:50:49	600.03	21.72	6.87	613.78	2.42	37.55	0.29	53.70
Last 5	10:55:49	900.03	21.76	6.86	614.80	1.03	37.55	0.29	55.52
Last 5	11:00:49	1200.03	21.72	6.85	613.66	0.86	37.55	0.28	56.95
Last 5	11:05:49	1500.03	21.72	6.85	612.82	0.64	37.55	0.27	58.76
Variance 0			0.04	-0.01	1.01			-0.00	1.82
Variance 1			-0.04	-0.01	-1.13			-0.01	1.43
Variance 2			-0.00	0.00	-0.84			-0.01	1.81

Notes

Sampled at 1110

Date: 2019-10-02 12:32:49

Project Information: Operator Name Company Name Project Name Site Name Latitude Longitude Sonde SN Turbidity Make/Model	Ever Guillen Wood E&IS Plant Mitchell CCR Phase II PZ-14 0° 0' 0" 0° 0' 0" 601534 HACH 2100Q	Pump Information: Pump Model/Type Tubing Type Tubing Diameter Tubing Length Pump placement from TOC	QED HDPE .25 in 43.20 ft
Well Information:	TIACIT 2 TOOQ	Pumping Information:	30.2011

Final Pumping Rate
Total System Volume
Calculated Sample Rate
Stabilization Drawdown Well ID PZ-14 200 mL/min Well diameter 2 in 0.896998 L Well Total Depth 53.20 ft 300 sec Screen Length Depth to Water 10 ft 0 in 46.72 ft Total Volume Pumped 13 L

Low-Flow Sar	mpling Stabiliz	ation Summary							
	Time	Elapsed	Temp C	рН	SpCond µS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	12:07:07	2700.02	22.51	6.96	525.15	0.38	42.83	4.22	64.80
Last 5	12:12:07	3000.02	22.64	6.96	525.62	0.32	42.83	4.16	64.72
Last 5	12:17:07	3300.03	22.45	6.96	525.17	0.68	42.83	4.11	64.20
Last 5	12:22:07	3600.02	22.49	6.96	525.43	0.66	42.83	4.08	64.33
Last 5	12:27:07	3900.02	22.57	6.96	524.50	0.53	42.83	4.05	63.93
Variance 0			-0.19	0.01	-0.45			-0.05	-0.52
Variance 1			0.04	-0.00	0.26			-0.03	0.13
Variance 2			0.08	0.00	-0.93			-0.03	-0.40

Notes

Sampled at 1230

Date: 2019-10-02 15:24:42

Project Information:

Operator Name Daniel Howard Company Name Wood E&I S

Project Name Plant Mitchell CCR Phase II
Site Name PZ-15
Latitude PZ-0 0° 0' 0"

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 369555

Turbidity Make (Made) Hash 31

Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder Pump

78.22 ft

Tubing TypeHDPETubing Diameter0.25 inTubing Length83.2 ft

Pump placement from TOC

Pumping Information: Well Information: Final Pumping Rate 200 mL/min Well ID PZ-15 Well diameter 2 in Total System Volume 1.283107 L Calculated Sample Rate Well Total Depth 83.22 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0.21 in Depth to Water 34.87 ft **Total Volume Pumped** 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	15:01:28	900.03	24.93	7.26	535.29	2.15	35.08	0.27	-76.83
Last 5	15:06:28	1200.03	24.85	7.24	536.54	2.02	35.08	0.22	-67.03
Last 5	15:11:28	1500.02	24.41	7.23	534.97	1.35	35.08	0.20	-61.33
Last 5	15:16:28	1800.02	24.51	7.23	533.28	1.30	35.09	0.19	-64.25
Last 5	15:21:28	2100.02	24.23	7.22	531.44	1.24	35.08	0.18	-67.60
Variance 0			-0.45	-0.01	-1.57			-0.02	5.70
Variance 1			0.10	-0.00	-1.69			-0.01	-2.92
Variance 2			-0.28	-0.00	-1.85			-0.01	-3.35

Notes

PZ-15 sample time 1523

Date: 2019-10-02 13:52:33

Project Information: Operator Name Company Name Project Name Site Name Latitude Longitude Sonde SN	Ever Guillen Wood E&IS Plant Mitchell CCR Phase II PZ-16 0° 0' 0" 0° 0' 0" 601534	Pump Information: Pump Model/Type Tubing Type Tubing Diameter Tubing Length	QED HDPE .25 in 43.19 ft
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	48.19 ft
Well Information: Well ID Well diameter Well Total Depth Screen Length Depth to Water	PZ-16 2 in 53.19 ft 10 ft 38.13 ft	Pumping Information: Final Pumping Rate Total System Volume Calculated Sample Rate Stabilization Drawdown Total Volume Pumped	200 mL/min 0.8969014 L 300 sec 0 in 6 L

Low-Flow Sa	ampling Stabiliz	ation Summary	1						
	Time	Elapsed	Temp C	рН	SpCond μS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:24:48	300.03	21.87	7.25	468.89	1.27	38.43	1.09	64.88
Last 5	13:29:48	600.03	21.81	7.24	469.80	1.36	38.43	1.06	64.81
Last 5	13:34:48	900.02	21.85	7.24	472.28	0.47	38.43	1.06	64.39
Last 5	13:39:48	1200.02	21.82	7.22	472.32	0.46	38.43	1.06	64.39
Last 5	13:49:49	1801.02	21.70	7.22	472.91	0.58	38.43	1.05	63.41
Variance 0			0.04	-0.00	2.48			0.00	-0.43
Variance 1			-0.03	-0.01	0.04			0.00	0.00
Variance 2			-0.12	-0.00	0.59			-0.02	-0.97

Notes

Sampled at 1355

Date: 2019-10-02 15:27:29

Project Information: Operator Name Company Name Project Name Site Name Latitude Longitude Sonde SN	Ever Guillen Wood E&IS Plant Mitchell CCR Phase II PZ-17 0° 0' 0" 0° 0' 0" 601534	Pump Information: Pump Model/Type Tubing Type Tubing Diameter Tubing Length	QED HDPE .25 in 52.70 ft
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	57.70 ft
Well Information:		Pumping Information:	

well information:		Pumping information:	
Well ID	PZ-17	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.988699 L
Well Total Depth	62.70 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	36.65 ft	Total Volume Pumped	7 L

Low-Flow Sa	mpling Stabiliz	ation Summary	1						
	Time	Elapsed	Temp C	рН	SpCond µS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	15:04:16	900.03	22.55	6.99	650.52	0.54	36.92	0.16	-74.49
Last 5	15:09:16	1200.03	22.13	7.00	649.41	0.47	36.92	0.16	-73.94
Last 5	15:14:16	1500.03	22.12	6.99	650.83	0.30	36.92	0.16	-68.79
Last 5	15:19:16	1800.03	21.99	6.99	649.93	0.27	37.92	0.16	-67.34
Last 5	15:24:16	2100.03	22.02	6.99	651.49	0.24	36.92	0.16	-66.74
Variance 0			-0.00	-0.01	1.42			0.00	5.15
Variance 1			-0.14	0.00	-0.90			-0.00	1.45
Variance 2			0.04	0.00	1.56			0.00	0.60

Notes: Sampled at 1530 Also collected DUP-01 Grab Samples

Date: 2019-10-03 09:39:03

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood E&IS	Tubing Type	HDPE
Project Name	Plant Mitchell CCR Phase II	Tubing Diameter	.25 in
Site Name	PZ-18	Tubing Length	53.18 ft
Latitude	00 0' 0"		
Longitude	00 0' 0"		
Sonde SN	601534		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	58.18 ft
Well Information:		Pumping Information:	
Well ID	PZ-18	Final Pumping Rate	200 mL/min
14. II I' .	<u> </u>	T	

Well IDPZ-18Final Pumping Rate200 mL/minWell diameter2 inTotal System Volume0.9933323 LWell Total Depth63.18 ftCalculated Sample Rate300 secScreen Length10 ftStabilization Drawdown0 inDepth to Water33.97 ftTotal Volume Pumped6 L

Low-Fl	low Sampling Stabiliz	zation Summary	/						
	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabili:	zation		+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:15:02	600.03	22.08	6.71	682.49	0.96	34.33	0.16	-12.33
Last 5	09:20:02	900.03	22.09	6.75	682.44	1.23	34.33	0.16	-8.22
Last 5	09:25:02	1200.03	22.11	6.77	682.66	0.93	34.33	0.16	-5.20
Last 5	09:30:02	1500.03	22.20	6.78	682.31	0.72	34.33	0.16	-3.48
Lact 5	00.32.03	1800 03	22 10	6 78	682 20	0.53	3/1 33	0.16	-2 21

6.78 682.29 -2.21 Last 5 09:35:02 1800.03 22.19 0.5334.33 0.16 Variance 0 0.01 0.02 0.22 0.00 3.02 Variance 1 0.10 0.01 -0.35 0.00 1.73 Variance 2 -0.01 0.01 -0.02 -0.00 1.26

Notes

Sampled at 0940

Date: 2019-10-03 12:02:19

Pump Information:

Pump Model/Type

Tubing Diameter

Tubing Length

Tubing Type

Project Information:

Operator Name Daniel Howard Company Name Wood E&I S

Project Name Plant Mitchell CCR Phase II Site Name PZ-19 00 0' 0" Latitude

00 0' 0" Longitude Sonde SN 369555

Turbidity Make/Model Hach 2100Q

Pump placement from TOC 57.63 ft

QED Bladder Pump

HDPE

0.25 in

62.6 ft

Well Information:

Well ID PZ-19 Well diameter 2 in Well Total Depth 62.63 ft Screen Length 10 ft Depth to Water 35.91 ft

Pumping Information:

Final Pumping Rate 200 mL/min Total System Volume 1.084261 L Calculated Sample Rate 300 sec Stabilization Drawdown 0.09 in **Total Volume Pumped** 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	1		+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	11:38:47	600.03	23.68	6.99	716.38	1.32	35.99	0.38	10.73
Last 5	11:43:47	900.03	23.55	6.96	715.55	0.60	36.00	0.32	19.24
Last 5	11:48:47	1200.03	23.62	6.95	714.82	0.89	36.00	0.26	22.56
Last 5	11:53:47	1500.03	23.63	6.94	717.51	0.41	36.00	0.24	24.37
Last 5	11:58:47	1800.03	23.60	6.93	721.14	0.59	36.00	0.22	25.34
Variance 0			0.07	-0.01	-0.73			-0.06	3.31
Variance 1			0.01	-0.01	2.69			-0.02	1.82
Variance 2			-0.03	-0.01	3.63			-0.02	0.97

Notes

PZ-19 sample time 1200

Date: 2019-09-10 09:48:44

Project Information:

Operator Name Daniel Howard Company Name Wood E&I S

Project Name Plant Mitchell CCR Phase II
Site Name PZ-23
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369323

Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Micropurge

Tubing TypeHDPETubing Diameter.17 inTubing Length63.6 ft

Pump placement from TOC

Well Information: Pumping Information:

Well ID PZ-23
Well diameter 2 in
Well Total Depth 63.6 ft
Screen Length 10 ft
Depth to Water 52.54 ft

Final Pumping Rate
Total System Volume
Calculated Sample Rate
Stabilization Drawdown
Total Volume Pumped

200 mL/min 0.7638736 L 300 sec 0.04 in 7 L

58.6 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.5	+/- 10
Last 5	09:25:07	901.02	22.06	6.78	743.90	0.30	53.14	4.31	57.20
Last 5	09:30:07	1201.02	22.08	6.78	743.03	0.32	53.14	4.31	61.67
Last 5	09:35:07	1501.02	22.07	6.78	742.02	0.38	53.15	4.29	69.39
Last 5	09:40:07	1801.02	22.15	6.78	741.09	0.41	53.16	4.31	78.58
Last 5	09:45:07	2101.02	22.24	6.78	740.63	0.26	53.16	4.29	92.90
Variance 0			-0.01	-0.00	-1.01			-0.01	7.72
Variance 1			80.0	0.00	-0.93			0.02	9.19
Variance 2			0.09	0.00	-0.46			-0.02	14.32

Notes

PZ-23 sample time 0947

Date: 2019-10-02 13:19:09

Project Information:

Operator Name Daniel Howard Company Name Wood E&I S

Project Name Plant Mitchell CCR Phase II
Site Name PZ-25
Latitude 0° 0' 0"

Longitude 0° 0′ 0″

Sonde SN 369555

Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED Bladder Pump

Tubing TypeHDPETubing Diameter0.25 inTubing Length53.2 ft

Pump placement from TOC 48.19 ft

Well Information:

Well IDPZ-25Well diameter2 inWell Total Depth53.19 ftScreen Length10 ftDepth to Water34.66 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.9935253 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.13 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	12:53:37	599.93	23.28	7.30	463.93	1.02	34.79	0.16	-86.42
Last 5	12:58:37	899.93	23.23	7.25	462.57	0.41	34.79	0.15	-90.49
Last 5	13:03:37	1199.93	23.23	7.23	464.56	0.34	34.79	0.14	-92.35
Last 5	13:08:37	1499.93	23.14	7.21	464.67	0.33	34.79	0.14	-93.12
Last 5	13:13:37	1799.93	23.06	7.20	466.53	0.31	34.79	0.14	-93.52
Variance 0			-0.00	-0.03	1.99			-0.01	-1.86
Variance 1			-0.09	-0.01	0.11			-0.00	-0.77
Variance 2			-0.08	-0.01	1.86			-0.00	-0.39

Notes

PZ-25 sample time 1315. Also collected DUP-02

Date: 2019-10-02 10:34:42

QED

51.60 ft

Pump Information: Project Information: Operator Name Pump Model/Type Ever Guillen Company Name Tubing Type **HDPE** Wood E&IS .25 in

Project Name Plant Mitchell CCR Phase II Tubing Diameter Tubing Length Site Name PZ-31 00 0' 0" Latitude

00 0' 0" Longitude Sonde SN 601534

Turbidity Make/Model **HACH 2100Q** Pump placement from TOC 66.60 ft

Pumping Information: Well Information:

Well ID PZ-31 Final Pumping Rate 200 mL/min Well diameter 2 in Total System Volume 0.9780809 L Calculated Sample Rate Well Total Depth 61.60 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water 42.56 ft **Total Volume Pumped** 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	10:11:50	1200.03	20.38	7.04	459.62	0.67	42.72	4.64	63.67
Last 5	10:16:50	1500.03	20.43	7.05	460.35	0.54	42.72	4.66	63.56
Last 5	10:21:50	1800.03	20.47	7.06	459.04	0.51	42.72	4.67	63.64
Last 5	10:26:50	2100.02	20.48	7.08	458.99			4.88	62.85
Last 5	10:31:50	2400.02	21.12	7.09	458.93			4.90	63.05
Variance 0			0.04	0.01	-1.31			0.01	0.08
Variance 1			0.00	0.02	-0.06			0.21	-0.80
Variance 2			0.65	0.01	-0.05			0.02	0.20

Notes

Sampled at 1025

Date: 2019-10-01 16:14:12

Tubing Type

Pump Information:

Pump Model/Type

Tubing Diameter

Tubing Length

Project Information:

Operator Name Daniel Howard Company Name Wood E&I S

Project Name Plant Mitchell CCR Phase II Site Name PZ-32

00 0' 0" Latitude 00 0' 0" Longitude Sonde SN 369555 Turbidity Make/Model

Hach 2100Q

Pump placement from TOC

Well Information:

Well ID PZ-32 Well diameter 2 in Well Total Depth 65.30 ft Screen Length 10 ft Depth to Water 41.57 ft

Pumping Information:

Final Pumping Rate 200 mL/min Total System Volume 1.110323 L Calculated Sample Rate 300 sec Stabilization Drawdown 0.04 in **Total Volume Pumped** 6 L

QED Bladder Pump

HDPE

0.25 in

65.3 ft

60.3 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	15:49:55	600.03	21.04	7.40	322.62	0.60	41.61	0.67	77.30
Last 5	15:54:55	900.02	20.97	7.41	322.23	0.64	41.61	0.61	74.94
Last 5	15:59:55	1200.03	20.96	7.42	321.71	0.32	41.61	0.57	73.32
Last 5	16:04:55	1500.03	20.95	7.42	321.55	0.24	41.61	0.54	74.18
Last 5	16:09:56	1800.61	20.90	7.43	321.47	0.20	41.61	0.53	70.92
Variance 0			-0.01	0.01	-0.52			-0.04	-1.62
Variance 1			-0.00	0.00	-0.15			-0.03	0.85
Variance 2			-0.05	0.01	-0.09			-0.01	-3.25

Notes

PZ-32 sample time 1610

Date: 2019-10-03 09:52:28

Pump Information:

QED Bladder Pump

HDPE

0.25 in

73.6 ft

Project Information:
Operator Name
Daniel Howard

Operator Name
Company Name
Pump Model/Type
Tubing Type
Project Name
Plant Mitchell CCR Phase II
Site Name
PZ-33
Tubing Diameter
Tubing Length

Site Name PZ-33
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369555

Turbidity Make/Model Hach 2100Q Pump placement from TOC 68.6 ft

Well Information: Pumping Information:

Final Pumping Rate 200 mL/min Well ID PZ-33 Well diameter 2 in Total System Volume 1.190441 L Calculated Sample Rate Well Total Depth 73.6 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0.25 in Depth to Water 52.54 ft **Total Volume Pumped** 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:29:03	900.03	21.76	7.02	614.97	0.21	52.79	0.49	1.27
Last 5	09:34:03	1200.03	21.83	7.01	617.34	0.24	52.79	0.38	9.26
Last 5	09:39:03	1500.03	21.81	7.01	617.67	0.24	52.79	0.32	14.08
Last 5	09:44:03	1800.03	21.84	7.01	618.28	0.14	52.79	0.29	17.32
Last 5	09:49:03	2100.03	21.89	7.01	618.19	0.20	52.79	0.28	19.96
Variance 0			-0.01	-0.00	0.33			-0.06	4.82
Variance 1			0.03	-0.00	0.61			-0.03	3.24
Variance 2			0.04	-0.00	-0.09			-0.01	2.65

Notes

PZ-33 sample time 0950.

MARCH 2020 LABORATORY DATA

Well ID	Sample Date	Purge Volume (liter)	Time Elapsed	DTW (feet, TOC)	Drawdown (feet)	Temperature (C)	pH (su)	Specific Conductance (uS/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)
PZ-1D	3/24/2020	8.0	2401	40.84	0	23.5	7.8	246.3	1.4	3.5	86.4
PZ-2D	3/24/2020	11.0	3300	22.64	0	19.9	8.6	157.1	1.6	3.1	76.7
PZ-7D	3/26/2020	9.0	3000	26.97	0	20.3	7.1	597.0	0.6	0.4	61.2
PZ-14	3/25/2020	8.0	2400	36.18	0	22.3	7.0	503.6	0.3	4.1	100.0
PZ-15	3/26/2020	6.0	1801	25.21	0	23.4	7.1	539.1	2.7	0.2	-9.2
PZ-16	3/26/2020	6.0	1800	27.27	0	21.2	7.1	467.8	0.5	1.2	198.1
PZ-17	3/25/2020	6.0	1800	25.21	0	22.3	6.9	657.9	0.7	0.2	-10.0
PZ-18	3/26/2020	10.0	3017	23.30	0	22.2	7.0	683.6	0.9	0.2	21.6
PZ-19	3/26/2020	6.0	2112	24.16	0	22.4	6.7	815.2	0.6	0.2	106.0
PZ-23A	3/25/2020	9.0	2700	40.11	0	22.4	6.8	719.9	3.7	3.3	94.8
PZ-25	3/25/2020	6.0	1840	22.41	0	22.4	7.0	477.8	0.5	0.1	-35.7
PZ-31	3/25/2020	6.0	1801	27.63	0	20.2	7.1	461.7	0.8	4.6	97.2
PZ-32	3/25/2020	6.0	1800	25.02	0	19.1	7.2	318.7	0.6	0.5	87.4
PZ-33	3/26/2020	10.0	3000	41.83	0	21.9	7.0	614.7	0.2	0.2	63.0





May 11, 2020

Michelle Barker Wood E&I Solutions, Inc. 1075 Big Shanty Road Suite 100 Kennesaw, GA 30144

RE: Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Dear Michelle Barker:

Enclosed are the analytical results for sample(s) received by the laboratory between March 26, 2020 and March 27, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services Asheville
- Pace Analytical Services Atlanta, GA
- Pace Analytical Services Greensburg

Revision 1 - This report replaces the April 21, 2020 report. This project was revised on May 11, 2020 to reflect the reanalyzed results for sample 2630449003/EB-01 as per client request. (Greensburg, PA)

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com

Kein Slury

(704)875-9092

HORIZON Database Administrator

Enclosures

CC: Joju Abraham, Georgia Power - Coal Combustion Residuals

Greg Wrenn, Wood PLC

Kristen Jurinko
Lauren Petty, Southern Company Services, Inc.
Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw



(770)734-4200



CERTIFICATIONS

Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

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

Virginia Certification #: 460204

Pace Analytical Services Pennsylvania

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

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

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

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Florida: Cert E871149 SEKS WET

Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification
Iowa Certification #: 391

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

KY WW Permit #: KY0000221 Louisiana DHH/TNI Certification #: LA180012

Louisiana DEQ/TNI Certification #: 4086 Maine Certification #: 2017020

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1

New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888

North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868

West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

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

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804 Florida/NELAP Certification #: E87648 Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

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



SAMPLE SUMMARY

Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630449001	PZ-1D	Water	03/24/20 15:30	03/26/20 09:30
2630449002	PZ-2D	Water	03/24/20 16:22	03/26/20 09:30
2630449003	EB-01	Water	03/24/20 12:55	03/26/20 09:30
2630449004	FB-01	Water	03/25/20 09:20	03/26/20 09:30
2630449005	PZ-31	Water	03/25/20 10:20	03/26/20 09:30
2630449006	PZ-14	Water	03/25/20 13:40	03/26/20 09:30
2630449007	PZ-23A	Water	03/25/20 16:05	03/26/20 09:30
2630449008	PZ-17	Water	03/25/20 15:11	03/26/20 09:30
2630449009	PZ-25	Water	03/25/20 13:33	03/26/20 09:30
2630449010	PZ-32	Water	03/25/20 11:05	03/26/20 09:30
2630449011	PZ-7D	Water	03/26/20 09:55	03/27/20 08:55
2630449012	PZ-18	Water	03/26/20 12:10	03/27/20 08:55
2630449013	PZ-33	Water	03/26/20 14:55	03/27/20 08:55
2630449014	DUP-01	Water	03/26/20 00:00	03/27/20 08:55
2630449015	PZ-15	Water	03/26/20 11:12	03/27/20 08:55
2630449016	PZ-16	Water	03/26/20 09:38	03/27/20 08:55
2630449017	PZ-19	Water	03/26/20 14:00	03/27/20 08:55
2630449018	DUP-02	Water	03/26/20 00:00	03/27/20 08:55



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630449001	PZ-1D	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630449002	PZ-2D	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449003	EB-01	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630449004	FB-01	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449005	PZ-31	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630449006	PZ-14	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA

REPORT OF LABORATORY ANALYSIS



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449007	PZ-23A	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449008	PZ-17	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449009	PZ-25	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449010	PZ-32	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	VHB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630449011	PZ-7D	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	TC1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449012	PZ-18	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	TC1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449013	PZ-33	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	TC1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449014	DUP-01	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	TC1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449015	PZ-15	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	TC1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
630449016	PZ-16	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	TC1	1	PASI-GA

REPORT OF LABORATORY ANALYSIS



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
	•	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630449017	PZ-19	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	TC1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2630449018	DUP-02	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	11	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		SM 2540C	TC1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville PASI-GA = Pace Analytical Services - Atlanta, GA PASI-PA = Pace Analytical Services - Greensburg



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
630449001	PZ-1D					
	Field pH	7.79	Std. Units		03/30/20 09:46	
PA 6010D	Calcium	48.0	mg/L	0.50	03/31/20 20:38	
PA 6020B	Antimony	0.00055J	mg/L	0.0030	04/02/20 19:30	
EPA 6020B	Barium	0.015	mg/L	0.010	04/02/20 19:30	
EPA 6020B	Boron	0.013J	mg/L	0.040	04/02/20 19:30	
PA 6020B	Chromium	0.0036J	mg/L	0.010		
EPA 6020B	Lead	0.000062J	mg/L	0.0050	04/02/20 19:30	
EPA 6020B	Molybdenum	0.0010J	mg/L	0.010		
EPA 9315	Radium-226	0.219 ±	pCi/L		04/06/20 20:26	
	radiam 220	0.178	P0#2		0 1/00/20 20:20	
		(0.321)				
		C:87% T:NA				
PA 9320	Radium-228	2.01 ±	pCi/L		04/15/20 16:06	
		0.737				
		(1.08)				
		C:67% T:85%				
otal Radium Calculation	Total Radium	2.23 ±	pCi/L		04/16/20 14:14	
otal Nadidili Galculation	Total Radiani	0.915	poi/L		04/10/20 14:14	
		(1.40)				
M 2540C	Total Dissolved Solids	228	mg/L	10.0	03/30/20 12:54	
PA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	04/03/20 01:29	
PA 300.0 Rev 2.1 1993	Sulfate	3.0	mg/L	1.0	04/03/20 01:29	
30449002	PZ-2D		g . =		- 11 - 12 - 13 - 13 - 13 - 13 - 13 - 13	
330443002	Field pH	8.57	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	26.5	mg/L	0.50		
PA 6020B	Antimony	0.00037J	mg/L	0.0030	04/02/20 19:47	
	Barium	0.000373 0.0046J	•			
PA 6020B			mg/L	0.010		
PA 6020B	Boron	0.015J	mg/L	0.040		
PA 6020B	Chromium	0.0047J	mg/L	0.010	04/02/20 19:47	
PA 6020B	Lithium	0.0019J	mg/L	0.030		
PA 9315	Radium-226	0.192 ±	pCi/L		04/06/20 20:26	
		0.128 (0.211)				
		C:84% T:NA				
PA 9320	Radium-228	0.706 ±	pCi/L		04/15/20 16:06	
1713020	radiam 220	0.471	PONE		04/10/20 10:00	
		(0.902)				
		C:68%				
		T:87%				
otal Radium Calculation	Total Radium	0.898 ±	pCi/L		04/16/20 14:14	
		0.599				
M 2540C	Total Dissalved Solids	(1.11)	ma/l	10.0	02/20/20 12:55	
M 2540C	Total Dissolved Solids	123	mg/L		03/30/20 12:55	
PA 300.0 Rev 2.1 1993	Chloride	2.2	mg/L		04/03/20 01:44	
PA 300.0 Rev 2.1 1993	Fluoride	0.051J	mg/L	0.30	04/03/20 01:44	
PA 300.0 Rev 2.1 1993	Sulfate	3.1	mg/L	1.0	04/03/20 01:44	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630449003	EB-01					
EPA 9315	Radium-226	0.0382 ±	pCi/L		04/07/20 08:07	
		0.176				
		(0.452) C:71% T:NA				
EPA 9320	Radium-228	0.519 ±	pCi/L		05/08/20 11:33	
		0.408				
		(0.810) C:79%				
		T:80%				
Total Radium Calculation	Total Radium	0.557 ±	pCi/L		05/08/20 15:14	
		0.584 (1.26)				
SM 2540C	Total Dissolved Solids	213	mg/L	10.0	03/30/20 12:55	
2630449004	FB-01					
EPA 9315	Radium-226	0.197 ±	pCi/L		04/07/20 08:03	
		0.233 (0.480)				
		C:73% T:NA				
EPA 9320	Radium-228	$0.665 \pm$	pCi/L		04/15/20 16:06	
		0.520				
		(1.04) C:68%				
		T:83%				
Total Radium Calculation	Total Radium	0.862 ±	pCi/L		04/16/20 14:14	
		0.753 (1.52)				
SM 2540C	Total Dissolved Solids	163	mg/L	10.0	03/30/20 12:59	
2630449005	PZ-31					
	Field pH	7.15	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	95.8	mg/L	0.50	03/31/20 18:56	
EPA 6020B	Barium	0.0082J	mg/L	0.010	04/02/20 20:04	
EPA 6020B	Boron	0.011J	mg/L	0.040		
EPA 6020B	Chromium	0.0013J	mg/L	0.010		
EPA 9315	Radium-226	0.380 ± 0.243	pCi/L		04/07/20 08:03	
		(0.370)				
		C:83% T:NA				
EPA 9320	Radium-228	1.41 ± 0.557	pCi/L		04/15/20 16:07	
		(0.868)				
		C:71%				
Tatal Dadium Calculation	Total Dadium	T:86%	~ C:/I		04/40/00 44-44	
Total Radium Calculation	Total Radium	1.79 ± 0.800	pCi/L		04/16/20 14:14	
		(1.24)				
SM 2540C	Total Dissolved Solids	278	mg/L		04/01/20 15:00	
EPA 300.0 Rev 2.1 1993	Chloride	3.0	mg/L		04/03/20 02:27	
EPA 300.0 Rev 2.1 1993	Sulfate	1.5	mg/L	1.0	04/03/20 02:27	
2630449006	PZ-14					
-DD	Field pH	7.02	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	105	mg/L	0.50	03/31/20 19:00	

REPORT OF LABORATORY ANALYSIS



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Method Parameters Result Units Report Limit Analyzed	o Sample ID	Client Sample ID					
EPA 6020B Barium 0.021 mg/L 0.010 04/02/20 20:10 EPA 6020B Boron 0.027J mg/L 0.040 04/02/20 20:10 EPA 9315 Radium-226 0.115 ± co.155 (0.319) pC/L 0.40/02/20 20:10 EPA 9316 Radium-228 0.579 ± co.155 (0.319) pC/JL 04/16/20 15:54 EPA 9320 Radium-228 0.579 ± co.415 (0.812) pC/JL 04/16/20 15:54 Total Radium Calculation Total Radium 0.694 ± co.16 (0.812) pC/JL 04/17/20 10:48 SM 2540C Total Dissolved Solids 330 mg/L 10.0 04/01/20 15:01 04/01/20 15:01 EPA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 2630449007 PZ-23A Field pH 6.84 Std. Units 03/30/20 02:42 EPA 6010D Calcium 157 mg/L 0.50 04/02/20 02:65 EPA 6020B Barium 0.048 mg/L 0.010 04/02/20 02:16 EPA 6020B Barium 0.048 mg/L 0.010 04/02/20 02:16 EPA 6020B Chionium 0.07 mg/L 0.000 04/02/20 02	thod	Parameters	Result	Units	Report Limit	Analyzed	Qualifier
EPA 6020B Boron 0.027J mg/L 0.040 04/02/20 20:10 EPA 6020B Chromium 0.0013J mg/L 0.010 04/02/20 20:10 EPA 6020B Chromium 0.0013J mg/L 0.010 04/02/20 20:10 0.155	0449006	PZ-14					
EPA 6020B Chromium 0.0013.1 mg/L 0.010 04/02/20 20:10 0.115 ± 0.115 pCi/L 04/07/20 08:03 0.155 0.155 0.155 pCi/L 04/07/20 08:03 0.155 0.157 0.15	A 6020B	Barium	0.021	mg/L	0.010	04/02/20 20:10	
EPA 9315 Radium-226 0.115 process (0.319) control (0.319) cont	A 6020B	Boron	0.027J	mg/L	0.040	04/02/20 20:10	
FA 9315 Radium-226 0.115 ± 0.115 0.319 0.115 0.319 0.115 0.319 0.115 0.319 0.115 0.319 0.115 0.115 0.319 0.115 0.319 0.115 0.1	A 6020B	Chromium	0.0013J	-	0.010	04/02/20 20:10	
Cas Cas	A 9315	Radium-226	0.115 ±			04/07/20 08:03	
C:83% TNA				•			
PA 9320							
0.415 (0.812) 0.415 (0.812) 0.278% (0.812) 7.84% 7.84% 0.694 ± D.570 (1.13) pCi/L 0.4/17/20 10:48 M 2540C Total Dissolved Solids 330 mg/L 10.0 04/01/20 15:01 PA 300.0 Rev 2.1 1993 Chloride 4.2 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 330449007 PZ-23A Field pH 6.84 Std. Units 0.9730/20 09:46 PA 6010D Calcium 157 mg/L 0.50 04/02/20 13:12 Ng/L PA 6020B Barium 0.048 mg/L 0.010 04/02/20 20:16 Ng/L PA 6020B Barium 0.048 mg/L 0.010 04/02/20 20:16 Ng/L PA 6020B Chromium 0.012 mg/L 0.010 04/02/20 20:16 Ng/L PA 6020B Cobalt 0.00015 mg/L 0.000 04/02/20 20:16 Ng/L PA 6020B Cobalt 0.00015 mg/L 0.005 04/02/20 20:16 Ng/L PA 6020B Lithium 0.0011 mg/L 0.030 04/02/20 20:16 Ng/L PA 6020B Molybdenum 0.0011 mg/L 0.010 04/02/20 20:16 Ng/L PA 6020B Molybdenum <t< td=""><td>4.0000</td><td>D II 000</td><td></td><td>0:"</td><td></td><td>04/40/00 45 54</td><td></td></t<>	4.0000	D II 000		0:"		04/40/00 45 54	
total Radium Calculation	A 9320	Radium-228		pCi/L		04/16/20 15:54	
C:78% T384% otal Radium Calculation Total Radium O.694 ± pCi/L 0.570 (1.13) 0.694 ± pCi/L 0.570 (1.13) 0.4/17/20 10:48 (0.570 (1.13) M 2540C Total Dissolved Solids 330 mg/L 10.0 04/01/20 15:01 0.4/01/20 15:01 PA 300.0 Rev 2.1 1993 Chloride 4.2 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 330449007 PZ-23A Field pH 6.84 Std. Units 0.04 04/02/20 20:16 0.4/02/20 13:12 Mg/L 0.10 04/02/20 20:16 PA 6020B Barium 0.048 mg/L 0.010 04/02/20 20:16 0.04 04/02/20 20:16 0.04 04/02/20 20:16 PA 6020B Boron 0.19 mg/L 0.040 04/02/20 20:16 0.04 04/02/20 20:16 0.04 04/02/20 20:16 PA 6020B Chromium 0.0012J mg/L 0.0050 04/02/20 20:16 0.0050 04/02/20 20:16 0.0050 04/02/20 20:16 PA 6020B Lead 0.00015J mg/L 0.0050 04/02/20 20:16 0.0050 04/02/20 20:16 0.0050 04/02/20 20:16 PA 6020B Lead 0.00015J mg/L 0.005 04/02/20 20:16 0.0050 04/02/20 20:16 0.0050 04/02/20 20:16 PA 6020B Selenium 0.0015J mg/L 0.010 04/02/20 20:16 0.0050 04/02/20 20:16 0.0050 04/02/20 20:16 PA 6020B Thallium 0.0015J mg/L 0.010 04/02/20 20:16 0.0050 04/02/20 20:16							
tal Radium Calculation							
0.570							
M 2540C	al Radium Calculation	Total Radium		pCi/L		04/17/20 10:48	
M 2540C Total Dissolved Solids 330 mg/L 10.0 04/01/20 15:01 PA 300.0 Rev 2.1 1993 Chloride 4.2 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 6020B FA 602							
PA 300.0 Rev 2.1 1993 Chloride 4.2 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Sulfate 11.9 mg/L 1.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Fluoride 4.2 mg/L 10.0 04/03/20 02:42 PA 300.0 Rev 2.1 1993 Fluoride 4.2 mg/L 10.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 47.0							
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Field pH 6.84 Std. Units 03/30/20 09:46 PA 6010D Calcium 157 mg/L 0.50 04/02/20 13:12 MPA 6020B Barium 0.048 mg/L 0.010 04/02/20 20:16 PA 6020B Boron 0.19 mg/L 0.040 04/02/20 20:16 PA 6020B Chromium 0.0012J mg/L 0.004 04/02/20 20:16 PA 6020B Chromium 0.0012J mg/L 0.005 04/02/20 20:16 PA 6020B Cobalt 0.00030J mg/L 0.005 04/02/20 20:16 PA 6020B Lead 0.00015J mg/L 0.005 04/02/20 20:16 PA 6020B Lithum 0.0011J mg/L 0.005 04/02/20 20:16 PA 6020B Molybdenum 0.0011J mg/L 0.003 04/02/20 20:16 PA 6020B Selenium 0.0011J mg/L 0.010 04/02/20 20:16 PA 6020B Selenium 0.0011J mg/L 0.010 04/02/20 20:16 PA 6020B Selenium 0.0030J mg/L 0.010 04/02/20 20:16 PA 6020B Selenium 0.0030J mg/L 0.010 04/02/20 20:16 PA 6020B Radium-226 0.436 ± 0.268 (0.404) C:78% T:NA PA 9320 Radium-226 0.486 ± 0.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± pCi/L 0.0010 04/02/20 20:16 O.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± pCi/L 0.0010 04/02/20 20:16 O.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± pCi/L 0.0010 04/02/20 20:16 O.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± pCi/L 0.0010 04/02/20 20:16 O.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± pCi/L 0.0010 04/02/20 20:16 O.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± pCi/L 0.0010 04/02/20 20:16 O.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± pCi/L 0.0010 04/02/20 20:16 O.268 (0.404) C:78% T:NA PA 9320 Rev 2:1 1993 Chloride 6.4 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2:1 1993 Fluoride 0.066J mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2:1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 S30449008 PZ-17	A 300.0 Rev 2.1 1993	Sulfate	11.9	mg/L	1.0	04/03/20 02:42	
PA 6010D	0449007	PZ-23A					
PA 6020B Barium 0.048 mg/L 0.010 04/02/20 20:16 PA 6020B Boron 0.19 mg/L 0.040 04/02/20 20:16 PA 6020B Chromium 0.0012J mg/L 0.010 04/02/20 20:16 PA 6020B Cobalt 0.00015J mg/L 0.0050 04/02/20 20:16 PA 6020B Lead 0.00015J mg/L 0.0050 04/02/20 20:16 PA 6020B Lithium 0.0011J mg/L 0.030 04/02/20 20:16 PA 6020B Molybdenum 0.0011J mg/L 0.010 04/02/20 20:16 PA 6020B Selenium 0.00015J mg/L 0.010 04/02/20 20:16 PA 6020B Thallium 0.00015J mg/L 0.010 04/02/20 20:16 PA 6020B Thallium 0.0015J mg/L 0.010 04/02/20 20:16 PA 6020B Thallium 0.0015J mg/L 0.0010 04/02/20 20:16 PA 6020B Thallium 0.0015J mg/L 0.0010 04/07		Field pH	6.84	Std. Units		03/30/20 09:46	
PA 6020B Boron 0.19 mg/L 0.040 04/02/20 20:16 PA 6020B Chromium 0.0012J mg/L 0.010 04/02/20 20:16 PA 6020B Cobalt 0.00030J mg/L 0.0050 04/02/20 20:16 PA 6020B Lead 0.00015J mg/L 0.0050 04/02/20 20:16 PA 6020B Lithium 0.0011J mg/L 0.030 04/02/20 20:16 PA 6020B Lithium 0.0011J mg/L 0.030 04/02/20 20:16 PA 6020B Molybdenum 0.0011J mg/L 0.010 04/02/20 20:16 PA 6020B Selenium 0.0030J mg/L 0.010 04/02/20 20:16 PA 6020B Thallium 0.0030J mg/L 0.010 04/02/20 20:16 PA 6020B Thallium 0.00015J mg/L 0.001 04/02/20 20:16 PA 9315 PA 3015 PA 3016 PA 9315 PA 3016 PA 9320 PA 3016 PA 9320 PA 300.0 Rev 2.1 1993 Chloride 6.4 mg/L 10.0 04/17/20 10:48 PA 300.0 Rev 2.1 1993 Fluoride 0.066J mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 47.0 mg/L 47.0 Mg/L 47.0 Mg/L 47.0 Mg/L 47.0 Mg/L 4	A 6010D	Calcium	157	mg/L	0.50	04/02/20 13:12	M1
PA 6020B	A 6020B	Barium	0.048	mg/L	0.010	04/02/20 20:16	
PA 6020B	A 6020B	Boron	0.19	mg/L	0.040	04/02/20 20:16	
PA 6020B Lead 0.00015J mg/L 0.0050 04/02/20 20:16 PA 6020B Lithium 0.0011J mg/L 0.030 04/02/20 20:16 PA 6020B Molybdenum 0.0011J mg/L 0.010 04/02/20 20:16 PA 6020B Selenium 0.0030J mg/L 0.010 04/02/20 20:16 PA 6020B Thallium 0.0015J mg/L 0.0010 04/02/20 20:16 PA 9315 Radium-226 0.436 ± 0.268 (0.404) pCi/L 0.407/20 08:04 PA 9320 Radium-228 0.953 ± 0.461 (0.799) pCi/L 04/16/20 15:54 Otal Radium Calculation Total Radium 1.39 ± 0.729 (1.20) pCi/L 04/17/20 10:48 M 2540C Total Dissolved Solids 454 mg/L mg/L 10.0 04/01/20 15:02 PA 300.0 Rev 2.1 1993 Chloride 6.4 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Fluoride 0.066J mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56	A 6020B	Chromium	0.0012J	mg/L	0.010	04/02/20 20:16	
PA 6020B Lead 0.00015J mg/L 0.0050 04/02/20 20:16 PA 6020B Lithium 0.0011J mg/L 0.030 04/02/20 20:16 PA 6020B Molybdenum 0.0011J mg/L 0.010 04/02/20 20:16 PA 6020B Selenium 0.0030J mg/L 0.010 04/02/20 20:16 PA 6020B Thallium 0.00015J mg/L 0.0010 04/02/20 20:16 PA 9315 Radium-226 0.436 ± 0.268 (0.404) pCi/L 0.407/20 08:04 PA 9320 Radium-228 0.953 ± 0.461 (0.799) pCi/L 04/16/20 15:54 Otal Radium Calculation Total Radium 1.39 ± 0.729 (1.20) pCi/L 04/17/20 10:48 Otal Radium Calculation Total Dissolved Solids 454 mg/L mg/L 04/01/20 15:02 PA 300.0 Rev 2.1 1993 Chloride 6.4 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Fluoride 0.066J mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56	A 6020B	Cobalt	0.00030J	mg/L	0.0050	04/02/20 20:16	
EPA 6020B Lithium 0.0011J mg/L 0.030 04/02/20 20:16 EPA 6020B Molybdenum 0.0011J mg/L 0.010 04/02/20 20:16 EPA 6020B Selenium 0.0030J mg/L 0.010 04/02/20 20:16 EPA 6020B Selenium 0.0030J mg/L 0.010 04/02/20 20:16 EPA 6020B Thallium 0.00015J mg/L 0.0010 04/02/20 20:16 EPA 9315 Radium-226 0.436 ± pCi/L 0.268 (0.404) C:78% T:NA 0.268 (0.404) C:78% T:NA 0.461 (0.799) C:78% T:NA 0.461 (0.799) C:78% T:82% 0.453 ± pCi/L 0.4/17/20 10:48 (0.799) C:78% T:82% T:82% T	A 6020B	Lead	0.00015J	mg/L	0.0050	04/02/20 20:16	
PA 6020B Molybdenum 0.0011J mg/L 0.010 04/02/20 20:16 PA 6020B Selenium 0.0030J mg/L 0.010 04/02/20 20:16 PA 6020B Thallium 0.00015J mg/L 0.0010 04/02/20 20:16 PA 9315 Radium-226 0.436 ± pCi/L 0.4049	A 6020B	Lithium	0.0011J	-	0.030	04/02/20 20:16	
PA 6020B Selenium	A 6020B	Molybdenum	0.0011J	mg/L	0.010	04/02/20 20:16	
PA 6020B Thallium 0.00015J mg/L 0.0010 04/02/20 20:16 PA 9315 Radium-226 0.436 ± 0.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± 0.461 (0.799) C:78% T:NA Otal Radium Calculation Total Radium 1.39 ± 0.729 (1.20) M 2540C Total Dissolved Solids 454 mg/L 10.0 04/01/20 15:02 PA 300.0 Rev 2.1 1993 Pluoride 0.066J mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 S30449008 PZ-17	A 6020B	-	0.0030J	•	0.010	04/02/20 20:16	
PA 9315 Radium-226 0.436 ± 0.268 (0.404) C:78% T:NA PA 9320 Radium-228 Radium-228 0.953 ± 0.461 (0.799) C:78% T:82% otal Radium Calculation Total Radium 1.39 ± 0.729 (1.20) M 2540C Total Dissolved Solids A54 mg/L PA 300.0 Rev 2.1 1993 Chloride A30.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 Sulfate PCi/L 04/17/20 15:54 04/17/20 10:48 0.729 (1.20) M 2540C PA 300.0 Rev 2.1 1993 Chloride A54 mg/L A64 mg/L A65 A70 mg/L				-	0.0010		
0.268 (0.404) C:78% T:NA PA 9320 Radium-228 0.953 ± 0.461 (0.799) C:78% T:82% otal Radium Calculation Total Radium 1.39 ± 0.729 (1.20) M 2540C Total Dissolved Solids 454 mg/L 10.0 04/01/20 15:02 PA 300.0 Rev 2.1 1993 Chloride 6.4 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 330449008 PZ-17				-			
C:78% T:NA PA 9320 Radium-228 Radium-228 0.953 ± 0.461 (0.799) C:78% T:82% Otal Radium Calculation Total Radium 1.39 ± 0.729 (1.20) M 2540C Total Dissolved Solids PA 300.0 Rev 2.1 1993 Chloride PA 300.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 Sulfate PZ-17 C:78% T:NA 0.953 ± pCi/L 0.4/17/20 15:54 04/16/20 15:54 04/17/20 10:48 0.729 (1.20) M 2540C Total Dissolved Solids 454 Mg/L 10.0 04/01/20 15:02 PA 300.0 Rev 2.1 1993 Fluoride 0.066J Mg/L 0.30 04/03/20 02:56 RA 300.0 Rev 2.1 1993 Sulfate 47.0 Mg/L 1.0 04/03/20 02:56				F = " =			
PA 9320 Radium-228 0.953 ± 0.461 (0.799) C:78% T:82% otal Radium Calculation Total Radium Total Dissolved Solids PA 300.0 Rev 2.1 1993 PA 300.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 PA 300.0 Rev 2.1 1993 Sulfate PCi/L 0.4/17/20 15:54 PCi/L 0.4/17/20 10:48 0.729 (1.20) M 2540C Total Dissolved Solids 454 Mg/L 10.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Fluoride 0.066J Mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 Mg/L 1.0 04/03/20 02:56 PZ-17							
0.461 (0.799) C:78% T:82% otal Radium Calculation Total Radium 1.39 ± pCi/L 04/17/20 10:48 0.729 (1.20)							
(0.799) C:78% T:82% otal Radium Calculation Total Radium Total Dissolved Solids PA 300.0 Rev 2.1 1993 PA 300.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 Sulfate PA 300.0 Rev 2.1 1993 Fluoride Total Dissolved Solids Total	A 9320	Radium-228		pCi/L		04/16/20 15:54	
C:78% T:82% otal Radium Calculation Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Dissolved Solids A 54 mg/L PA 300.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 Fluoride PA 300.0 Rev 2.1 1993 Fluoride Total Dissolved Solids Total Dissolve							
T:82% otal Radium Calculation Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium Total Radium T:82% 0.729 (1.20) Total Dissolved Solids Total Dissolved Solids Total Dissolved Solids Total Dissolved Solids Total Dissolved Solids Total Dissolved Solids Total Dissolved Solids Total Dissolved Solids Total Radium T:82% T:82% Total Radium Tissolved Total Radium Tissolved Tissolved Total Dissolved Solids Total Radium Tissolved Tiss							
Stal Radium Calculation Total Radium 1.39 ± 0.729 (1.20) pCi/L 0.47/20 10:48 M 2540C Total Dissolved Solids 454 mg/L 10.0 04/01/20 15:02 PA 300.0 Rev 2.1 1993 Chloride 6.4 mg/L 1.0 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Fluoride 0.066J mg/L 0.30 04/03/20 02:56 PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 330449008 PZ-17							
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PA 300.0 Rev 2.1 1993 Sulfate 47.0 mg/L 1.0 04/03/20 02:56 330449008 PZ-17				-			
330449008 PZ-17				-			
	A 300.0 Rev 2.1 1993	Sulfate	47.0	mg/L	1.0	04/03/20 02:56	
	0449008	PZ-17					
Field pH 6.93 Std. Units 03/30/20 09:46		Field pH	6.93	Std. Units		03/30/20 09:46	
PA 6010D Calcium 121 mg/L 0.50 04/02/20 13:27	A 6010D				0.50		
EPA 6020B Antimony 0.00094J mg/L 0.0030 04/02/20 20:22				-			

REPORT OF LABORATORY ANALYSIS



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630449008	PZ-17					
EPA 6020B	Barium	0.077	mg/L	0.010	04/02/20 20:22	
EPA 6020B	Boron	0.33	mg/L	0.040	04/02/20 20:22	
EPA 6020B	Cobalt	0.00032J	mg/L	0.0050	04/02/20 20:22	
EPA 6020B	Lithium	0.0030J	mg/L	0.030	04/02/20 20:22	
EPA 6020B	Thallium	0.00020J	mg/L	0.0010		
EPA 9315	Radium-226	0.343 ± 0.239 (0.388)	pCi/L		04/07/20 08:04	
		C:78% T:NÁ				
EPA 9320	Radium-228	0.0423 ± 0.318 (0.731) C:79%	pCi/L		04/16/20 15:54	
		T:86%				
Total Radium Calculation	Total Radium	0.385 ± 0.557 (1.12)	pCi/L		04/17/20 10:48	
SM 2540C	Total Dissolved Solids	408	mg/L	10.0	04/01/20 15:02	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	04/03/20 03:11	
EPA 300.0 Rev 2.1 1993	Sulfate	92.4	mg/L	1.0	04/03/20 03:11	
630449009	PZ-25					
	Field pH	7.01	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	97.5	mg/L	0.50	04/02/20 13:51	
EPA 6020B	Barium	0.11	mg/L	0.010	04/02/20 20:27	
EPA 6020B	Boron	0.21	mg/L	0.040	04/02/20 20:27	
EPA 6020B	Cobalt	0.0018J	mg/L	0.0050	04/02/20 20:27	
EPA 6020B	Lithium	0.0066J	mg/L	0.030	04/02/20 20:27	
EPA 6020B	Thallium	0.00037J	mg/L	0.0010	04/02/20 20:27	
EPA 9315	Radium-226	0.559 ± 0.349 (0.574)	pCi/L	0.0010	04/07/20 08:04	
		C:65% T:NÁ				
EPA 9320	Radium-228	0.351 ± 0.385 (0.806) C:78% T:85%	pCi/L		04/16/20 15:54	
Total Radium Calculation	Total Radium	0.910 ± 0.734 (1.38)	pCi/L		04/17/20 10:48	
SM 2540C	Total Dissolved Solids	280	mg/L	10.0	04/01/20 15:03	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	04/03/20 03:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.13J	mg/L	0.30	04/03/20 03:54	
PA 300.0 Rev 2.1 1993	Sulfate	39.1	mg/L		04/03/20 03:54	
630449010	PZ-32					
	Field pH	7.23	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	66.6	mg/L	0.50	04/02/20 13:54	
EPA 6020B	Barium	0.015	mg/L	0.010	04/02/20 20:33	
EPA 6020B	Boron	0.016J	mg/L	0.040	04/02/20 20:33	
EPA 6020B	Chromium	0.00086J	mg/L	0.010	04/02/20 20:33	

REPORT OF LABORATORY ANALYSIS



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab Sample ID	Client Sample ID					
Method	Parameters	Result _	Units	Report Limit	Analyzed	Qualifiers
630449010	PZ-32					
EPA 9315	Radium-226	0.0513 ± 0.134 (0.327) C:86% T:NA	pCi/L		04/07/20 08:04	
EPA 9320	Radium-228	0.282 ± 0.347 (0.736) C:81% T:90%	pCi/L		04/16/20 15:54	
Total Radium Calculation	Total Radium	0.333 ± 0.481 (1.06)	pCi/L		04/17/20 10:48	
SM 2540C	Total Dissolved Solids	178	mg/L	10.0	04/01/20 15:04	
EPA 300.0 Rev 2.1 1993	Chloride	2.2	mg/L	1.0	04/03/20 04:38	
PA 300.0 Rev 2.1 1993	Sulfate	1.9	mg/L	1.0	04/03/20 04:38	
630449011	PZ-7D					
	Field pH	7.12	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	122	mg/L	0.50	04/02/20 16:50	
PA 6020B	Antimony	0.00042J	mg/L	0.0030	04/02/20 20:58	
PA 6020B	Barium	0.0072J	mg/L	0.010	04/02/20 20:58	
PA 6020B	Boron	0.24	mg/L	0.040	04/02/20 20:58	
PA 6020B	Chromium	0.0016J	mg/L	0.010	04/02/20 20:58	
PA 6020B	Lithium	0.0031J	mg/L	0.030	04/02/20 20:58	
PA 6020B	Thallium	0.000085J	mg/L	0.0010	04/02/20 20:58	
EPA 9315	Radium-226	0.0945 ± 0.177 (0.404)	pCi/L		04/08/20 07:57	
EPA 9320	Radium-228	C:90% T:NA 0.335 ± 0.354 (0.739) C:80% T:85%	pCi/L		04/20/20 15:23	
Total Radium Calculation	Total Radium	0.430 ± 0.531 (1.14)	pCi/L		04/21/20 08:48	
SM 2540C	Total Dissolved Solids	332	mg/L	10.0	04/02/20 15:00	
EPA 300.0 Rev 2.1 1993	Chloride	4.8	mg/L	1.0	04/03/20 05:21	
EPA 300.0 Rev 2.1 1993	Sulfate	57.1	mg/L	1.0	04/03/20 05:21	
630449012	PZ-18					
	Field pH	7.01	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	138	mg/L	0.50	04/02/20 16:53	
PA 6020B	Antimony	0.0018J	mg/L	0.0030	04/02/20 21:21	
PA 6020B	Barium	0.023	mg/L	0.010	04/02/20 21:21	
PA 6020B	Boron	0.36	mg/L	0.040		
PA 6020B	Chromium	0.00056J	mg/L	0.010	04/02/20 21:21	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	04/02/20 21:21	
EPA 6020B	Thallium	0.000071J	mg/L	0.0010		

REPORT OF LABORATORY ANALYSIS



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab Sample ID Method	Client Sample ID Parameters	Result	l leite	Report Limit	Analyzed	Qualifiers
	- Parameters		Units	- Report Limit	Analyzeu	Qualifiers
2630449012	PZ-18					
EPA 9315	Radium-226	0.306 ± 0.131 (0.183)	pCi/L		04/07/20 18:21	
EPA 9320	Radium-228	C:85% T:NÁ 0.743 ± 0.452 (0.848) C:76%	pCi/L		04/20/20 15:23	
Total Radium Calculation	Total Radium	T:76% 1.05 ± 0.583 (1.03)	pCi/L		04/21/20 08:48	
SM 2540C	Total Dissolved Solids	415	mg/L	10.0	04/02/20 15:00	
EPA 300.0 Rev 2.1 1993	Chloride	5.7	mg/L	1.0	04/03/20 05:36	
EPA 300.0 Rev 2.1 1993	Sulfate	91.0	mg/L	1.0	04/03/20 05:36	
2630449013	PZ-33					
	Field pH	7.00	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	122	mg/L	0.50	04/02/20 16:57	
EPA 6020B	Barium	0.057	mg/L	0.010	04/02/20 21:38	
EPA 6020B	Boron	0.38	mg/L	0.040	04/02/20 21:38	
EPA 6020B	Thallium	0.00015J	mg/L	0.0010	04/02/20 21:38	
EPA 9315	Radium-226	0.428 ± 0.153 (0.192) C:81% T:NA	pCi/L		04/07/20 18:22	
EPA 9320	Radium-228	0.0451 ± 0.399 (0.918) C:71% T:74%	pCi/L		04/20/20 15:23	
Total Radium Calculation	Total Radium	0.473 ± 0.552 (1.11)	pCi/L		04/21/20 08:48	
SM 2540C	Total Dissolved Solids	336	mg/L	10.0	04/02/20 15:00	
EPA 300.0 Rev 2.1 1993	Chloride	2.9	mg/L	1.0	04/03/20 05:50	
EPA 300.0 Rev 2.1 1993	Sulfate	66.6	mg/L	1.0	04/03/20 05:50	
630449014	DUP-01					
EPA 6010D	Calcium	125	mg/L	0.50	04/02/20 17:00	
EPA 6020B	Antimony	0.00065J	mg/L	0.0030	04/02/20 21:44	
EPA 6020B	Barium	0.0075J	mg/L		04/02/20 21:44	
EPA 6020B	Boron	0.25	mg/L	0.040		
EPA 6020B	Chromium	0.0019J	mg/L	0.010	04/02/20 21:44	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	04/02/20 21:44	
EPA 6020B	Thallium	0.000085J	mg/L	0.0010	04/02/20 21:44	
EPA 9315	Radium-226	0.159 ± 0.0936 (0.142) C:85% T:NA	pCi/L		04/07/20 18:24	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630449014	DUP-01					
EPA 9320	Radium-228	0.435 ± 0.359 (0.725) C:75% T:96%	pCi/L		04/20/20 15:23	
Total Radium Calculation	Total Radium	0.594 ± 0.453 (0.867)	pCi/L		04/21/20 08:48	
SM 2540C	Total Dissolved Solids	333	mg/L	10.0	04/02/20 15:00	
EPA 300.0 Rev 2.1 1993	Chloride	4.8	mg/L	1.0	04/03/20 06:05	
EPA 300.0 Rev 2.1 1993	Sulfate	57.8	mg/L	1.0	04/03/20 06:05	
2630449015	PZ-15					
	Field pH	7.08	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	103	mg/L	0.50	04/02/20 17:04	
EPA 6020B	Barium	0.048	mg/L	0.010	04/02/20 21:50	
EPA 6020B	Boron	0.21	mg/L	0.040	04/02/20 21:50	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	04/02/20 21:50	
EPA 6020B	Thallium	0.00014J	mg/L	0.0010	04/02/20 21:50	
EPA 9315	Radium-226	0.438 ± 0.295 (0.477) C:89% T:NA	pCi/L		04/08/20 07:57	
EPA 9320	Radium-228	0.425 ± 0.409 (0.843) C:75% T:79%	pCi/L		04/20/20 15:23	
Total Radium Calculation	Total Radium	0.863 ± 0.704 (1.32)	pCi/L		04/21/20 08:48	
SM 2540C	Total Dissolved Solids	330	mg/L	10.0	04/02/20 15:00	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	04/03/20 06:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.056J	mg/L	0.30	04/03/20 06:20	
EPA 300.0 Rev 2.1 1993	Sulfate	83.6	mg/L	1.0	04/03/20 06:20	
630449016	PZ-16					
	Field pH	7.12	Std. Units		03/30/20 09:46	
EPA 6010D	Calcium	89.8	mg/L	0.50	04/02/20 17:07	
EPA 6020B	Barium	0.034	mg/L	0.010	04/02/20 21:55	
EPA 6020B	Boron	0.19	mg/L	0.040	04/02/20 21:55	
EPA 6020B	Chromium	0.0013J	mg/L	0.010	04/02/20 21:55	
EPA 9315	Radium-226	0.0910 ± 0.163 (0.365) C:91% T:NA	pCi/L		04/08/20 07:56	
EPA 9320	Radium-228	0.431 ± 0.421 (0.867) C:76% T:75%	pCi/L		04/20/20 15:23	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
630449016	PZ-16					
otal Radium Calculation	Total Radium	0.522 ± 0.584 (1.23)	pCi/L		04/21/20 08:48	
SM 2540C	Total Dissolved Solids	286	mg/L	10.0	04/02/20 15:00	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	04/03/20 06:35	
PA 300.0 Rev 2.1 1993	Sulfate	43.5	mg/L	1.0	04/03/20 06:35	
630449017	PZ-19					
	Field pH	6.70	Std. Units		03/30/20 09:46	
PA 6010D	Calcium	158	mg/L	0.50	04/02/20 17:18	
EPA 6020B	Barium	0.052	mg/L	0.010	04/02/20 22:01	
EPA 6020B	Boron	0.60	mg/L	0.040	04/02/20 22:01	
EPA 6020B	Chromium	0.00073J	mg/L	0.010	04/02/20 22:01	
EPA 6020B	Lithium	0.013J	mg/L	0.030	04/02/20 22:01	
EPA 6020B	Molybdenum	0.0021J	mg/L	0.010	04/02/20 22:01	
EPA 6020B	Selenium	0.0016J	mg/L	0.010	04/02/20 22:01	
EPA 6020B	Thallium	0.00068J	mg/L	0.0010	04/02/20 22:01	
EPA 9315	Radium-226	0.765 ±	pCi/L	0.0010	04/08/20 07:56	
11 A 9010	Naulum-220	0.424 (0.675) C:85% T:NA	POIL		04/00/20 07:50	
PA 9320	Radium-228	0.891 ± 0.478 (0.862) C:72% T:79%	pCi/L		04/20/20 15:23	
otal Radium Calculation	Total Radium	1.66 ± 0.902 (1.54)	pCi/L		04/21/20 08:48	
SM 2540C	Total Dissolved Solids	440	mg/L	10.0	04/02/20 15:00	
PA 300.0 Rev 2.1 1993	Chloride	5.4	mg/L	1.0	04/03/20 06:49	
PA 300.0 Rev 2.1 1993	Fluoride	0.077J	mg/L	0.30	04/03/20 06:49	
PA 300.0 Rev 2.1 1993	Sulfate	84.9	mg/L	1.0	04/03/20 06:49	
630449018	DUP-02					
EPA 6010D	Calcium	155	mg/L	0.50	04/02/20 17:21	
PA 6020B	Barium	0.052	mg/L	0.010	04/02/20 22:07	
PA 6020B	Boron	0.61	mg/L	0.040	04/02/20 22:07	
PA 6020B	Lithium	0.013J	mg/L	0.030	04/02/20 22:07	
PA 6020B	Molybdenum	0.0020J	mg/L	0.010	04/02/20 22:07	
PA 6020B	Selenium	0.0017J	mg/L	0.010	04/02/20 22:07	
PA 6020B	Thallium	0.00068J	mg/L		04/02/20 22:07	
PA 9315	Radium-226	0.883 ± 0.387 (0.385) C:85% T:NA	pCi/L	5,500,10	04/08/20 07:56	
EPA 9320	Radium-228	0.743 ± 0.428 (0.794) C:72% T:93%	pCi/L		04/20/20 15:23	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2630449018	DUP-02					
Total Radium Calculation	Total Radium	1.63 ± 0.815 (1.18)	pCi/L		04/21/20 08:48	
SM 2540C	Total Dissolved Solids	` 512	mg/L	10.0	04/02/20 15:00	
EPA 300.0 Rev 2.1 1993	Chloride	5.3	mg/L	1.0	04/03/20 07:04	
EPA 300.0 Rev 2.1 1993	Fluoride	0.075J	mg/L	0.30	04/03/20 07:04	
EPA 300.0 Rev 2.1 1993	Sulfate	83.9	mg/L	1.0	04/03/20 07:04	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-1D	Lab ID:	2630449001	Collecte	ed: 03/24/20	15:30	Received: 03/	26/20 09:30 Ma	atrix: Water	
Comments: • One container rece	eived empty. Clier	nt notified. Cl	lient advised	to analyze a	at low v	olume.			
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Service	s - Atlanta, (GA					
Field pH	7.79	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Anal	ytical Service	s - Atlanta, (GΑ					
Calcium	48.0	mg/L	0.50	0.14	1	03/30/20 21:21	03/31/20 20:38	7440-70-2	
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: E	PA 3005A			
	Pace Anal	ytical Service	s - Atlanta, (GA					
Antimony	0.00055J	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 19:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 19:30	7440-38-2	
Barium	0.015	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 19:30	7440-39-3	
Boron	0.013J	mg/L	0.040	0.0049	1	03/31/20 21:03	04/02/20 19:30	7440-42-8	
Chromium	0.0036J	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 19:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 19:30	7440-48-4	
Lead	0.000062J	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 19:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 19:30	7439-93-2	
Molybdenum	0.0010J	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 19:30	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 19:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 19:30	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM	2540C						
	Pace Anal	ytical Service	s - Atlanta, (GΑ					
Total Dissolved Solids	228	mg/L	10.0	10.0	1		03/30/20 12:54		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Service	s - Asheville						
Chloride	2.8	mg/L	1.0	0.60	1		04/03/20 01:29	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 01:29	16984-48-8	
Sulfate	3.0	mg/L	1.0	0.50	1		04/03/20 01:29	14808-79-8	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-2D	Lab ID:	2630449002	Collecte	ed: 03/24/20	16:22	Received: 03/	26/20 09:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
- arameters						- Troparcu	- Analyzed		
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	s - Atlanta, (GA					
Field pH	8.57	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services	s - Atlanta, (ЭA					
Calcium	26.5	mg/L	0.50	0.14	1	03/30/20 21:21	03/31/20 20:41	7440-70-2	
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
		ytical Services							
Antimony	0.00037J	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 19:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 19:47	7440-38-2	
Barium	0.0046J	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 19:47	7440-39-3	
Boron	0.015J	mg/L	0.040	0.0049	1	03/31/20 21:03	04/02/20 19:47	7440-42-8	
Chromium	0.0047J	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 19:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 19:47	7440-48-4	
_ead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 19:47	7439-92-1	
_ithium	0.0019J	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 19:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 19:47	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 19:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 19:47	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2540C						
	Pace Anal	ytical Services	s - Atlanta, (GΑ					
Total Dissolved Solids	123	mg/L	10.0	10.0	1		03/30/20 12:55		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Services	s - Asheville						
Chloride	2.2	mg/L	1.0	0.60	1		04/03/20 01:44	16887-00-6	
Fluoride	0.051J	mg/L	0.30	0.050	1		04/03/20 01:44	16984-48-8	
Sulfate	3.1	mg/L	1.0	0.50	1		04/03/20 01:44	14808-79-8	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: EB-01	Lab ID:	2630449003	Collecte	ed: 03/24/20	12:55	Received: 03/	26/20 09:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D MET ICP	•	Method: EPA (hod: Ef	PA 3010A			
Calcium	ND	mg/L	0.50	0.14	1	03/30/20 21:21	03/31/20 20:55	7440-70-2	
6020B MET ICPMS	-	Method: EPA (hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 19:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 19:53	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 19:53	7440-39-3	
Boron	ND	mg/L	0.040	0.0049	1	03/31/20 21:03	04/02/20 19:53	7440-42-8	
Chromium	ND	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 19:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 19:53	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 19:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 19:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 19:53	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 19:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 19:53	7440-28-0	
2540C Total Dissolved Solids	,	Method: SM 2 ytical Services		ЭΑ					
Total Dissolved Solids	213	mg/L	10.0	10.0	1		03/30/20 12:55		
300.0 IC Anions 28 Days	•	Method: EPA:							
Chloride	ND	mg/L	1.0	0.60	1		04/03/20 01:58	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1			16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		04/03/20 01:58		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: FB-01	Lab ID:	2630449004	Collecte	ed: 03/25/20	09:20	Received: 03/	/26/20 09:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D MET ICP	•	Method: EPA ytical Services			hod: El	PA 3010A			
Calcium	ND	mg/L	0.50	0.14	1	03/30/20 21:31	03/31/20 18:53	7440-70-2	
6020B MET ICPMS	-	Method: EPA ytical Services			hod: El	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 19:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 19:59	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 19:59	7440-39-3	
Boron	ND	mg/L	0.040	0.0049	1	03/31/20 21:03	04/02/20 19:59	7440-42-8	
Chromium	ND	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 19:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 19:59	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 19:59	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 19:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 19:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 19:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 19:59	7440-28-0	
2540C Total Dissolved Solids	•	Method: SM 2		2.4					
	Pace Anai	ytical Services	s - Atlanta, C	эА					
Total Dissolved Solids	163	mg/L	10.0	10.0	1		03/30/20 12:59		
300.0 IC Anions 28 Days	•	Method: EPA ytical Services							
Chloride	ND	mg/L	1.0	0.60	1		04/03/20 02:13	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 02:13		
Sulfate	ND	mg/L	1.0	0.50	1		04/03/20 02:13		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-31	Lab ID:	2630449005	Collecte	ed: 03/25/20	0 10:20	Received: 03/	26/20 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical I	Method:							
	Pace Analy	tical Services	s - Atlanta, (GΑ					
Field pH	7.15	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical I	Method: EPA	6010D Pre	paration Met	thod: E	PA 3010A			
	Pace Analy	tical Services	s - Atlanta, (3A					
Calcium	95.8	mg/L	0.50	0.14	1	03/30/20 21:31	03/31/20 18:56	7440-70-2	
6020B MET ICPMS	Analytical I	Method: EPA	6020B Pre	paration Met	hod: El	PA 3005A			
	Pace Analy	tical Services	s - Atlanta, (3A					
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 20:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 20:04		
Barium	0.0082J	mg/L	0.010	0.00049	1	03/31/20 21:03			
Boron	0.011J	mg/L	0.040	0.0049	1	03/31/20 21:03			
Chromium	0.0013J	mg/L	0.010	0.00039	1	03/31/20 21:03			
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 20:04	7440-48-4	
_ead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 20:04	7439-92-1	
ithium	ND	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 20:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 20:04	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 20:04	7782-49-2	
Γhallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 20:04	7440-28-0	
2540C Total Dissolved Solids	Analytical I	Method: SM 2	2540C						
	Pace Analy	tical Services	s - Atlanta, (3A					
Total Dissolved Solids	278	mg/L	10.0	10.0	1		04/01/20 15:00		
300.0 IC Anions 28 Days	Analytical I	Method: EPA	300.0 Rev 2	2.1 1993					
•	Pace Analy	tical Services	s - Asheville						
Chloride	3.0	mg/L	1.0	0.60	1		04/03/20 02:27	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 02:27		
Sulfate	1.5	mg/L	1.0	0.50	1		04/03/20 02:27		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-14	Lab ID:	2630449006	Collecte	ed: 03/25/20	13:40	Received: 03/	26/20 09:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
- arameters						- Troparcu	- Analyzed		
Field Data	Analytical	Method:							
	Pace Anal	ytical Service	s - Atlanta, (GΑ					
Field pH	7.02	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical	Method: EPA	6010D Pre	paration Me	thod: Ef	PA 3010A			
	Pace Anal	ytical Service	s - Atlanta, (3A					
Calcium	105	mg/L	0.50	0.14	1	03/30/20 21:31	03/31/20 19:00	7440-70-2	
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
		ytical Service							
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 20:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 20:10	7440-38-2	
Barium	0.021	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 20:10	7440-39-3	
Boron	0.027J	mg/L	0.040	0.0049	1	03/31/20 21:03	04/02/20 20:10	7440-42-8	
Chromium	0.0013J	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 20:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 20:10	7440-48-4	
_ead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 20:10	7439-92-1	
_ithium	ND	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 20:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 20:10	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 20:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 20:10	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2540C						
	Pace Anal	ytical Service	s - Atlanta, (GΑ					
Total Dissolved Solids	330	mg/L	10.0	10.0	1		04/01/20 15:01		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Service	s - Asheville						
Chloride	4.2	mg/L	1.0	0.60	1		04/03/20 02:42	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 02:42	16984-48-8	
Sulfate	11.9	mg/L	1.0	0.50	1		04/03/20 02:42	14808-79-8	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-23A	Lab ID:	2630449007	Collecte	ed: 03/25/20	16:05	Received: 03/	26/20 09:30 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Dranarad	Analyzad	CAS No.	Qua
Parameters	- Results -	Units			DF	Prepared	Analyzed	CAS NO.	– Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	s - Atlanta, (GΑ					
Field pH	6.84	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: Ef	PA 3010A			
	Pace Anal	ytical Services	s - Atlanta, (ЭA					
Calcium	157	mg/L	0.50	0.14	1	03/31/20 20:57	04/02/20 13:12	7440-70-2	M1
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Anal	ytical Services	s - Atlanta, (ЭA					
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 20:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 20:16	7440-38-2	
Barium	0.048	mg/L	0.010	0.00049	1	03/31/20 21:03	04/02/20 20:16	7440-39-3	
Boron	0.19	mg/L	0.040	0.0049	1	03/31/20 21:03	04/02/20 20:16	7440-42-8	
Chromium	0.0012J	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 20:16	7440-47-3	
Cobalt	0.00030J	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 20:16	7440-48-4	
_ead	0.00015J	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 20:16	7439-92-1	
_ithium	0.0011J	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 20:16	7439-93-2	
Molybdenum	0.0011J	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 20:16	7439-98-7	
Selenium	0.0030J	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 20:16	7782-49-2	
Thallium	0.00015J	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 20:16	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2540C						
	Pace Anal	ytical Services	s - Atlanta, (GΑ					
Total Dissolved Solids	454	mg/L	10.0	10.0	1		04/01/20 15:02		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Services	s - Asheville						
Chloride	6.4	mg/L	1.0	0.60	1		04/03/20 02:56	16887-00-6	
Fluoride	0.066J	mg/L	0.30	0.050	1		04/03/20 02:56	16984-48-8	
Sulfate	47.0	mg/L	1.0	0.50	1		04/03/20 02:56	14808-79-8	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-17	Lab ID:	2630449008	Collecte	ed: 03/25/20	15:11	Received: 03/	26/20 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical I	Method:							
	Pace Analy	ytical Services	s - Atlanta, (GΑ					
Field pH	6.93	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical I	Method: EPA	6010D Pre	paration Met	hod: E	PA 3010A			
	Pace Analy	ytical Services	s - Atlanta, (GΑ					
Calcium	121	mg/L	0.50	0.14	1	03/31/20 20:57	04/02/20 13:27	7440-70-2	
6020B MET ICPMS	Analytical I	Method: EPA	6020B Pre	paration Met	hod: El	PA 3005A			
	Pace Analy	ytical Services	s - Atlanta, (GA					
Antimony	0.00094J	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 20:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 20:22		
Barium	0.077	mg/L	0.010	0.00049	1	03/31/20 21:03			
Boron	0.33	mg/L	0.040	0.0049	1	03/31/20 21:03			
Chromium	ND	mg/L	0.010	0.00039	1	03/31/20 21:03			
Cobalt	0.00032J	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 20:22	7440-48-4	
₋ead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 20:22	7439-92-1	
ithium	0.0030J	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 20:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 20:22	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 20:22	7782-49-2	
Γhallium	0.00020J	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 20:22	7440-28-0	
2540C Total Dissolved Solids	Analytical I	Method: SM 2	2540C						
	Pace Analy	ytical Services	s - Atlanta, (ЭA					
Total Dissolved Solids	408	mg/L	10.0	10.0	1		04/01/20 15:02		
300.0 IC Anions 28 Days	Analytical I	Method: EPA	300.0 Rev 2	2.1 1993					
·	Pace Analy	ytical Services	s - Asheville						
Chloride	6.1	mg/L	1.0	0.60	1		04/03/20 03:11	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 03:11		
Sulfate	92.4	mg/L	1.0	0.50	1		04/03/20 03:11		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-25	Lab ID:	2630449009	Collecte	ed: 03/25/20	13:33	Received: 03/	26/20 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical I	Method:							
	Pace Analy	ytical Services	s - Atlanta, (GΑ					
Field pH	7.01	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical I	Method: EPA	6010D Pre	paration Met	hod: Ef	PA 3010A			
	Pace Analy	ytical Services	s - Atlanta, 0	3A					
Calcium	97.5	mg/L	0.50	0.14	1	03/31/20 20:57	04/02/20 13:51	7440-70-2	
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Analy	ytical Services	s - Atlanta, (GA					
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 20:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 20:27	7440-38-2	
Barium	0.11	mg/L	0.010	0.00049	1	03/31/20 21:03			
Boron	0.21	mg/L	0.040	0.0049	1	03/31/20 21:03	04/02/20 20:27	7440-42-8	
Chromium	ND	mg/L	0.010	0.00039	1	03/31/20 21:03	04/02/20 20:27	7440-47-3	
Cobalt	0.0018J	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 20:27	7440-48-4	
₋ead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 20:27	7439-92-1	
_ithium	0.0066J	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 20:27	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 20:27	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 20:27	7782-49-2	
Γhallium	0.00037J	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 20:27	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
	Pace Analy	ytical Services	s - Atlanta, (3A					
Total Dissolved Solids	280	mg/L	10.0	10.0	1		04/01/20 15:03		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
•	•	ytical Services							
Chloride	1.6	mg/L	1.0	0.60	1		04/03/20 03:54	16887-00-6	
Fluoride	0.13J	mg/L	0.30	0.050	1		04/03/20 03:54	16984-48-8	
Sulfate	39.1	mg/L	1.0	0.50	1		04/03/20 03:54	14808-79-8	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-32	Lab ID:	2630449010	Collecte	ed: 03/25/20	11:05	Received: 03/	26/20 09:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Analy	ytical Service	s - Atlanta, (GΑ					
Field pH	7.23	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: E	PA 3010A			
	Pace Analy	ytical Service	s - Atlanta, (ЭA					
Calcium	66.6	mg/L	0.50	0.14	1	03/31/20 20:57	04/02/20 13:54	7440-70-2	
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: El	PA 3005A			
	Pace Analy	ytical Service	s - Atlanta, (ЭA					
Antimony	ND	mg/L	0.0030	0.00027	1	03/31/20 21:03	04/02/20 20:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/31/20 21:03	04/02/20 20:33		
Barium	0.015	mg/L	0.010	0.00049	1	03/31/20 21:03			
Boron	0.016J	mg/L	0.040	0.0049	1	03/31/20 21:03			
Chromium	0.00086J	mg/L	0.010	0.00039	1	03/31/20 21:03			
Cobalt	ND	mg/L	0.0050	0.00030	1	03/31/20 21:03	04/02/20 20:33	7440-48-4	
₋ead	ND	mg/L	0.0050	0.000046	1	03/31/20 21:03	04/02/20 20:33	7439-92-1	
ithium	ND	mg/L	0.030	0.00078	1	03/31/20 21:03	04/02/20 20:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	03/31/20 21:03	04/02/20 20:33	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	03/31/20 21:03	04/02/20 20:33	7782-49-2	
Γhallium	ND	mg/L	0.0010	0.000052	1	03/31/20 21:03	04/02/20 20:33	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2540C						
	Pace Analy	ytical Service	s - Atlanta, (ЭA					
Total Dissolved Solids	178	mg/L	10.0	10.0	1		04/01/20 15:04		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
•	Pace Anal	ytical Service	s - Asheville						
Chloride	2.2	mg/L	1.0	0.60	1		04/03/20 04:38	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 04:38		
Sulfate	1.9	mg/L	1.0	0.50	1		04/03/20 04:38		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-7D	Lab ID:	2630449011	Collecte	ed: 03/26/20	09:55	Received: 03/	27/20 08:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical I	Method:							
	Pace Analy	tical Services	s - Atlanta, (€A					
Field pH	7.12	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical I	Method: EPA	6010D Pre	paration Met	hod: Ef	PA 3010A			
	Pace Analy	tical Services	s - Atlanta, (SA					
Calcium	122	mg/L	0.50	0.14	1	04/01/20 15:36	04/02/20 16:50	7440-70-2	
6020B MET ICPMS	Analytical I	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
	•	tical Services							
Antimony	0.00042J	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 20:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00027	1	04/01/20 15:40	04/02/20 20:58		
Barium	0.0072J	mg/L	0.010	0.00049	1	04/01/20 15:40	04/02/20 20:58		
Boron	0.24	mg/L	0.040	0.0049	1	04/01/20 15:40			
Chromium	0.0016J	mg/L	0.010	0.00039	1	04/01/20 15:40			
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40	04/02/20 20:58		
_ead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40	04/02/20 20:58		
_ithium	0.0031J	mg/L	0.030	0.00078	1	04/01/20 15:40	04/02/20 20:58		
Molybdenum	ND	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 20:58		
Selenium	ND	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 20:58		
Γhallium	0.000085J	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 20:58	7440-28-0	
2540C Total Dissolved Solids	Analytical I	Method: SM 2	540C						
	Pace Analy	tical Services	s - Atlanta, 0	S A					
Total Dissolved Solids	332	mg/L	10.0	10.0	1		04/02/20 15:00		
300.0 IC Anions 28 Days	Analytical I	Method: EPA	300.0 Rev 2	2.1 1993					
· · ·	•	tical Services							
Chloride	4.8	mg/L	1.0	0.60	1		04/03/20 05:21	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 05:21		
Sulfate	57.1	mg/L	1.0	0.50	1		04/03/20 05:21		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-18	Lab ID:	2630449012		ed: 03/26/20	12:10	Received: 03/	27/20 08:55 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical Pace Analy	Method: ytical Services	- Atlanta, (G A					
Field pH	7.01	Std. Units			1		03/30/20 09:46		
6010D MET ICP		Method: EPA (ytical Services			hod: EF	PA 3010A			
Calcium	138	mg/L	0.50	0.14	1	04/01/20 15:36	04/02/20 16:53	7440-70-2	
6020B MET ICPMS	•	Method: EPA (ytical Services			hod: EF	PA 3005A			
Antimony	0.0018J	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 21:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/01/20 15:40	04/02/20 21:21	7440-38-2	
Barium	0.023	mg/L	0.010	0.00049	1	04/01/20 15:40	04/02/20 21:21	7440-39-3	
Boron	0.36	mg/L	0.040	0.0049	1	04/01/20 15:40	04/02/20 21:21	7440-42-8	
Chromium	0.00056J	mg/L	0.010	0.00039	1	04/01/20 15:40	04/02/20 21:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40	04/02/20 21:21	7440-48-4	
∟ead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40	04/02/20 21:21	7439-92-1	
_ithium	0.0027J	mg/L	0.030	0.00078	1	04/01/20 15:40	04/02/20 21:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 21:21	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 21:21	7782-49-2	
Γhallium	0.000071J	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 21:21	7440-28-0	
2540C Total Dissolved Solids	Analytical I	Method: SM 2	540C						
	Pace Analy	tical Services	- Atlanta, C	SA					
Total Dissolved Solids	415	mg/L	10.0	10.0	1		04/02/20 15:00		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Analy	tical Services	- Asheville						
Chloride	5.7	mg/L	1.0	0.60	1		04/03/20 05:36	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 05:36		
Sulfate	91.0	mg/L	1.0	0.50	1		04/03/20 05:36	14808-79-8	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-33	Lab ID:	2630449013	Collecte	ed: 03/26/20	14:55	Received: 03/	27/20 08:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical I	Method:							
	Pace Analy	tical Services	s - Atlanta, (GΑ					
Field pH	7.00	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical I	Method: EPA	6010D Pre	paration Met	thod: E	PA 3010A			
	Pace Analy	tical Services	s - Atlanta, (3A					
Calcium	122	mg/L	0.50	0.14	1	04/01/20 15:36	04/02/20 16:57	7440-70-2	
6020B MET ICPMS	Analytical I	Method: EPA	6020B Pre	paration Met	hod: E	PA 3005A			
	Pace Analy	tical Services	s - Atlanta, (3A					
Antimony	ND	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 21:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/01/20 15:40	04/02/20 21:38		
Barium	0.057	mg/L	0.010	0.00049	1	04/01/20 15:40			
Boron	0.38	mg/L	0.040	0.0049	1	04/01/20 15:40			
Chromium	ND	mg/L	0.010	0.00039	1	04/01/20 15:40			
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40	04/02/20 21:38	7440-48-4	
_ead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40	04/02/20 21:38	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	04/01/20 15:40	04/02/20 21:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 21:38	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 21:38	7782-49-2	
Γhallium	0.00015J	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 21:38	7440-28-0	
2540C Total Dissolved Solids	Analytical I	Method: SM 2	540C						
	Pace Analy	tical Services	s - Atlanta, (3A					
Total Dissolved Solids	336	mg/L	10.0	10.0	1		04/02/20 15:00		
300.0 IC Anions 28 Days	Analytical I	Method: EPA	300.0 Rev 2	2.1 1993					
•	Pace Analy	tical Services	s - Asheville						
Chloride	2.9	mg/L	1.0	0.60	1		04/03/20 05:50	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 05:50		
Sulfate	66.6	mg/L	1.0	0.50	1		04/03/20 05:50		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: DUP-01	Lab ID:	2630449014	Collecte	ed: 03/26/20	00:00	Received: 03/	27/20 08:55 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D MET ICP	•	Method: EPA 6		•	hod: Ef	PA 3010A			
	Pace Anal	ytical Services	- Atlanta, (3A					
Calcium	125	mg/L	0.50	0.14	1	04/01/20 15:36	04/02/20 17:00	7440-70-2	
6020B MET ICPMS	-	Method: EPA 6			hod: EF	PA 3005A			
Antimony	0.00065J	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 21:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00027	1	04/01/20 15:40	04/02/20 21:44		
Barium	0.0075J	mg/L	0.010	0.00049	1	04/01/20 15:40	04/02/20 21:44		
Boron	0.25	mg/L	0.040	0.0049	1	04/01/20 15:40	04/02/20 21:44		
Chromium	0.0019J	mg/L	0.010	0.00039	1	04/01/20 15:40			
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40		-	
Lead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40			
Lithium	0.0032J	mg/L	0.030	0.00078	1	04/01/20 15:40			
Molybdenum	ND	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 21:44	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 21:44	7782-49-2	
Thallium	0.000085J	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 21:44	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
	Pace Anal	ytical Services	- Atlanta, 0	ЭΑ					
Total Dissolved Solids	333	mg/L	10.0	10.0	1		04/02/20 15:00		
300.0 IC Anions 28 Days	•	Method: EPA 3							
Chloride	4.8	mg/L	1.0	0.60	1		04/03/20 06:05	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 06:05	16984-48-8	
Sulfate	57.8	mg/L	1.0	0.50	1		04/03/20 06:05		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-15	Lab ID:	2630449015	Collecte	ed: 03/26/20	11:12	Received: 03/	27/20 08:55 M	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical	Method:							
	Pace Anal	ytical Services	s - Atlanta, (GΑ					
Field pH	7.08	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	s - Atlanta, (GΑ					
Calcium	103	mg/L	0.50	0.14	1	04/01/20 15:36	04/02/20 17:04	7440-70-2	
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Anal	ytical Services	s - Atlanta, (GΑ					
Antimony	ND	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 21:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/01/20 15:40	04/02/20 21:50		
Barium	0.048	mg/L	0.010	0.00049	1	04/01/20 15:40	04/02/20 21:50	7440-39-3	
Boron	0.21	mg/L	0.040	0.0049	1	04/01/20 15:40	04/02/20 21:50	7440-42-8	
Chromium	ND	mg/L	0.010	0.00039	1	04/01/20 15:40	04/02/20 21:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40	04/02/20 21:50	7440-48-4	
_ead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40	04/02/20 21:50	7439-92-1	
_ithium	0.0014J	mg/L	0.030	0.00078	1	04/01/20 15:40	04/02/20 21:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 21:50	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 21:50	7782-49-2	
Thallium	0.00014J	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 21:50	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2540C						
	Pace Anal	ytical Services	s - Atlanta, (GΑ					
Total Dissolved Solids	330	mg/L	10.0	10.0	1		04/02/20 15:00		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Services	s - Asheville						
Chloride	7.0	mg/L	1.0	0.60	1		04/03/20 06:20	16887-00-6	
Fluoride	0.056J	mg/L	0.30	0.050	1		04/03/20 06:20		
Sulfate	83.6	mg/L	1.0	0.50	1		04/03/20 06:20		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-16	Lab ID:	2630449016	Collecte	ed: 03/26/20	0 09:38	Received: 03/	27/20 08:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical I	Method:							
	Pace Analy	tical Services	s - Atlanta, C	GΑ					
Field pH	7.12	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical I	Method: EPA	6010D Pre	paration Met	hod: Ef	PA 3010A			
	Pace Analy	tical Services	s - Atlanta, C	3A					
Calcium	89.8	mg/L	0.50	0.14	1	04/01/20 15:36	04/02/20 17:07	7440-70-2	
6020B MET ICPMS	Analytical I	Method: EPA	6020B Prej	paration Met	hod: EF	PA 3005A			
	Pace Analy	tical Services	s - Atlanta, C	GA					
Antimony	ND	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 21:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/01/20 15:40	04/02/20 21:55	7440-38-2	
Barium	0.034	mg/L	0.010	0.00049	1	04/01/20 15:40	04/02/20 21:55	7440-39-3	
Boron	0.19	mg/L	0.040	0.0049	1	04/01/20 15:40	04/02/20 21:55	7440-42-8	
Chromium	0.0013J	mg/L	0.010	0.00039	1	04/01/20 15:40	04/02/20 21:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40	04/02/20 21:55	7440-48-4	
₋ead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40	04/02/20 21:55	7439-92-1	
_ithium	ND	mg/L	0.030	0.00078	1	04/01/20 15:40	04/02/20 21:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 21:55	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 21:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 21:55	7440-28-0	
2540C Total Dissolved Solids	Analytical I	Method: SM 2	540C						
	Pace Analy	tical Services	s - Atlanta, C	3A					
Total Dissolved Solids	286	mg/L	10.0	10.0	1		04/02/20 15:00		
300.0 IC Anions 28 Days	Analytical I	Method: EPA	300.0 Rev 2	2.1 1993					
•	Pace Analy	tical Services	s - Asheville						
Chloride	7.0	mg/L	1.0	0.60	1		04/03/20 06:35	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		04/03/20 06:35		
Sulfate	43.5	mg/L	1.0	0.50	1		04/03/20 06:35		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: PZ-19	Lab ID:	2630449017	Collecte	ed: 03/26/20	14:00	Received: 03/	27/20 08:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
Field Data	Analytical I	Method:							
	Pace Analy	ytical Services	s - Atlanta, 0	GΑ					
Field pH	6.70	Std. Units			1		03/30/20 09:46		
6010D MET ICP	Analytical I	Method: EPA	6010D Pre	paration Met	hod: Ef	PA 3010A			
	Pace Analy	ytical Services	s - Atlanta, 0	3A					
Calcium	158	mg/L	0.50	0.14	1	04/01/20 15:36	04/02/20 17:18	7440-70-2	
6020B MET ICPMS	Analytical I	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
	Pace Analy	ytical Services	s - Atlanta, C	GA					
Antimony	ND	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 22:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/01/20 15:40	04/02/20 22:01	7440-38-2	
Barium	0.052	mg/L	0.010	0.00049	1	04/01/20 15:40	04/02/20 22:01	7440-39-3	
Boron	0.60	mg/L	0.040	0.0049	1	04/01/20 15:40	04/02/20 22:01	7440-42-8	
Chromium	0.00073J	mg/L	0.010	0.00039	1	04/01/20 15:40	04/02/20 22:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40	04/02/20 22:01	7440-48-4	
_ead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40	04/02/20 22:01	7439-92-1	
Lithium	0.013J	mg/L	0.030	0.00078	1	04/01/20 15:40	04/02/20 22:01	7439-93-2	
Molybdenum	0.0021J	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 22:01	7439-98-7	
Selenium	0.0016J	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 22:01	7782-49-2	
Thallium	0.00068J	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 22:01	7440-28-0	
2540C Total Dissolved Solids	Analytical I	Method: SM 2	540C						
	Pace Analy	ytical Services	s - Atlanta, 0	3A					
Total Dissolved Solids	440	mg/L	10.0	10.0	1		04/02/20 15:00		
300.0 IC Anions 28 Days	Analytical I	Method: EPA	300.0 Rev 2	2.1 1993					
•	Pace Analy	ytical Services	s - Asheville						
Chloride	5.4	mg/L	1.0	0.60	1		04/03/20 06:49	16887-00-6	
Fluoride	0.077J	mg/L	0.30	0.050	1		04/03/20 06:49	16984-48-8	
Sulfate	84.9	mg/L	1.0	0.50	1		04/03/20 06:49	14808-79-8	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Sample: DUP-02	Lab ID:	2630449018	Collecte	ed: 03/26/20	00:00	Received: 03/	27/20 08:55 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6010D MET ICP	Analytical	Method: EPA	6010D Pre	paration Met	hod: El	PA 3010A			
	Pace Anal	ytical Service	s - Atlanta, 0	3A					
Calcium	155	mg/L	0.50	0.14	1	04/01/20 15:36	04/02/20 17:21	7440-70-2	
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: Ef	PA 3005A			
	Pace Anal	ytical Service	s - Atlanta, (€A					
Antimony	ND	mg/L	0.0030	0.00027	1	04/01/20 15:40	04/02/20 22:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	04/01/20 15:40	04/02/20 22:07	7440-38-2	
Barium	0.052	mg/L	0.010	0.00049	1	04/01/20 15:40	04/02/20 22:07	7440-39-3	
Boron	0.61	mg/L	0.040	0.0049	1	04/01/20 15:40	04/02/20 22:07	7440-42-8	
Chromium	ND	mg/L	0.010	0.00039	1	04/01/20 15:40	04/02/20 22:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	04/01/20 15:40	04/02/20 22:07	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	04/01/20 15:40	04/02/20 22:07	7439-92-1	
Lithium	0.013J	mg/L	0.030	0.00078	1	04/01/20 15:40	04/02/20 22:07	7439-93-2	
Molybdenum	0.0020J	mg/L	0.010	0.00095	1	04/01/20 15:40	04/02/20 22:07	7439-98-7	
Selenium	0.0017J	mg/L	0.010	0.0013	1	04/01/20 15:40	04/02/20 22:07	7782-49-2	
Thallium	0.00068J	mg/L	0.0010	0.000052	1	04/01/20 15:40	04/02/20 22:07	7440-28-0	
2540C Total Dissolved Solids	Analytical	Method: SM	2540C						
	Pace Anal	ytical Service	s - Atlanta, 0	GA					
Total Dissolved Solids	512	mg/L	10.0	10.0	1		04/02/20 15:00		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0 Rev 2	2.1 1993					
	Pace Anal	ytical Service	s - Asheville						
Chloride	5.3	mg/L	1.0	0.60	1		04/03/20 07:04	16887-00-6	
Fluoride	0.075J	mg/L	0.30	0.050	1		04/03/20 07:04	16984-48-8	
Sulfate	83.9	mg/L	1.0	0.50	1		04/03/20 07:04	14808-79-8	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

QC Batch: 45066 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630449004, 2630449005, 2630449006

METHOD BLANK: 207564 Matrix: Water

Associated Lab Samples: 2630449004, 2630449005, 2630449006

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Calcium mg/L ND 0.50 0.14 03/31/20 16:27

LABORATORY CONTROL SAMPLE: 207565

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Calcium mg/L 1.1 106 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207566 207567

MSD MS 2630414002 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits 69.5 20 M1 Calcium mg/L 68.0 67.6 149 -41 75-125 3

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

QC Batch: 45067 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630449001, 2630449002, 2630449003

METHOD BLANK: 207568 Matrix: Water

Associated Lab Samples: 2630449001, 2630449002, 2630449003

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Calcium mg/L ND 0.50 0.14 04/03/20 16:58

LABORATORY CONTROL SAMPLE: 207569

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Calcium mg/L 1.0 104 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207570 207571

MS MSD 2630417001 Spike Spike

2630417001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Conc. Limits 20 M1 Calcium mg/L 81.2 81.9 81.9 68 67 75-125

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

QC Batch: 45121 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630449007, 2630449008, 2630449009, 2630449010

METHOD BLANK: 207982 Matrix: Water
Associated Lab Samples: 2630449007, 2630449008, 2630449009, 2630449010

Blank Reporting

Parameter Units Result Limit MDL Analyzed Qualifiers

Calcium mg/L ND 0.50 0.14 04/02/20 13:05

LABORATORY CONTROL SAMPLE: 207983

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Calcium mg/L 1.1 108 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 207984 207985

MSD MS 2630449007 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Conc. Limits 20 M1 Calcium mg/L 157 158 157 93 15 75-125

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

QC Batch: 45172 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

METHOD BLANK: 208108 Matrix: Water

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Calcium mg/L ND 0.50 0.14 04/02/20 16:01

LABORATORY CONTROL SAMPLE: 208109

Spike LCS LCS % Rec Conc. % Rec Limits Qualifiers Parameter Units Result Calcium 1.0 101 80-120 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 208110 208111

MS MSD

2630435022 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result **RPD** RPD Qual Result Conc. % Rec % Rec Limits 107 20 M1 Calcium mg/L 110 108 372 91 75-125 3

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

QC Batch: 45112 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005, 2630449006, 2630449007, 2630449008,

2630449009, 2630449010

METHOD BLANK: 207955 Matrix: Water

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005, 2630449006, 2630449007, 2630449008,

2630449009, 2630449010

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	04/02/20 18:39	
Arsenic	mg/L	ND	0.0050	0.00035	04/02/20 18:39	
Barium	mg/L	ND	0.010	0.00049	04/02/20 18:39	
Boron	mg/L	ND	0.040	0.0049	04/02/20 18:39	
Chromium	mg/L	ND	0.010	0.00039	04/02/20 18:39	
Cobalt	mg/L	ND	0.0050	0.00030	04/02/20 18:39	
Lead	mg/L	ND	0.0050	0.000046	04/02/20 18:39	
Lithium	mg/L	ND	0.030	0.00078	04/02/20 18:39	
Molybdenum	mg/L	ND	0.010	0.00095	04/02/20 18:39	
Selenium	mg/L	ND	0.010	0.0013	04/02/20 18:39	
Thallium	mg/L	ND	0.0010	0.000052	04/02/20 18:39	

LABORATORY CONTROL SAMPLE:	207956					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.1	105	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SF	PIKE DUPL	ICATE: 2079	57		207958							
		2630435012	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	0.00031J	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Arsenic	mg/L	0.00070J	0.1	0.1	0.10	0.10	99	101	75-125	1	20	
Barium	mg/L	0.033	0.1	0.1	0.14	0.13	102	99	75-125	2	20	
Boron	mg/L	2.4	1	1	3.4	3.4	97	102	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	107	102	75-125	4	20	

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

MATRIX SPIKE & MATRIX S	PIKE DUPLI	CATE: 2079 2630435012	57 MS Spike	MSD Spike	207958 MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cobalt	mg/L	0.0016J	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Lead	mg/L	0.000075J	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Lithium	mg/L	0.016J	0.1	0.1	0.12	0.12	101	103	75-125	2	20	
Molybdenum	mg/L	0.0015J	0.1	0.1	0.11	0.11	105	104	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	99	100	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	0	20	

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

QC Batch: 45171 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

METHOD BLANK: 208104 Matrix: Water

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	04/02/20 20:29	
Arsenic	mg/L	ND	0.0050	0.00035	04/02/20 20:29	
Barium	mg/L	ND	0.010	0.00049	04/02/20 20:29	
Boron	mg/L	ND	0.040	0.0049	04/02/20 20:29	
Chromium	mg/L	ND	0.010	0.00039	04/02/20 20:29	
Cobalt	mg/L	ND	0.0050	0.00030	04/02/20 20:29	
Lead	mg/L	ND	0.0050	0.000046	04/02/20 20:29	
Lithium	mg/L	ND	0.030	0.00078	04/02/20 20:29	
Molybdenum	mg/L	ND	0.010	0.00095	04/02/20 20:29	
Selenium	mg/L	ND	0.010	0.0013	04/02/20 20:29	
Thallium	mg/L	ND	0.0010	0.000052	04/02/20 20:29	

LABORATORY CONTROL SAMPLE:	208105					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.0	101	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.093	93	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX S	06 MS	MSD	208107									
		2630449011	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	0.00042J	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Barium	mg/L	0.0072J	0.1	0.1	0.11	0.11	101	101	75-125	0	20	
Boron	mg/L	0.24	1	1	1.2	1.2	94	97	75-125	3	20	
Chromium	mg/L	0.0016J	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 2081	06		208107							
_		2630449011	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Lead	mg/L	ND	0.1	0.1	0.094	0.094	94	93	75-125	0	20	
Lithium	mg/L	0.0031J	0.1	0.1	0.10	0.10	98	97	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.097	95	96	75-125	2	20	
Thallium	mg/L	0.000085J	0.1	0.1	0.094	0.095	94	95	75-125	1	20	

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 45027 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004

LABORATORY CONTROL SAMPLE: 207416

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 414 104 84-108

SAMPLE DUPLICATE: 207417

2630435008 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 113 10 D6 **Total Dissolved Solids** mg/L 82.0 32

SAMPLE DUPLICATE: 207427

Date: 05/11/2020 04:17 PM

2630435009 Dup Max Parameter RPD RPD Units Result Qualifiers Result Total Dissolved Solids 839 851 10 mg/L 1

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 45160 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

> Laboratory: Pace Analytical Services - Atlanta, GA

2630449005, 2630449006, 2630449007, 2630449008, 2630449009, 2630449010 Associated Lab Samples:

LABORATORY CONTROL SAMPLE: 208030

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 371 93 84-108

SAMPLE DUPLICATE: 208031

2630449005 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 278 2 **Total Dissolved Solids** mg/L 272 10

SAMPLE DUPLICATE: 208032

Date: 05/11/2020 04:17 PM

2630472002 Dup Max Parameter RPD RPD Units Result Result

Qualifiers Total Dissolved Solids 281 277 10 mg/L 1

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 45207 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Atlanta, GA

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

LABORATORY CONTROL SAMPLE: 208287

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 341 85 84-108

SAMPLE DUPLICATE: 208288

2630482003 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 79.0 10 D6 **Total Dissolved Solids** mg/L 57.0 32

SAMPLE DUPLICATE: 208289

Date: 05/11/2020 04:17 PM

2630472006 Dup Max Parameter RPD RPD Units Result Qualifiers Result Total Dissolved Solids 69.0 80.0 10 D6 mg/L 15

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

QC Batch: 533972 Analysis Method: EPA 300.0 Rev 2.1 1993

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

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005, 2630449006, 2630449007, 2630449008,

2630449009, 2630449010

METHOD BLANK: 2849817 Matrix: Water

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005, 2630449006, 2630449007, 2630449008,

2630449009, 2630449010

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	04/02/20 23:19	
Fluoride	mg/L	ND	0.10	0.050	04/02/20 23:19	
Sulfate	mg/L	ND	1.0	0.50	04/02/20 23:19	

LABORATORY CONTROL SAMPLE:	2849818					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	50	47.7	95	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	47.8	96	90-110	

MATRIX SPIKE & MATRIX SF		2849820										
			MS	MSD								
		2630435024	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	5.4	50	50	56.3	57.7	102	105	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	106	108	90-110	2	10	
Sulfate	mg/L	ND	50	50	51.2	52.1	102	104	90-110	2	10	

MATRIX SPIKE & MATRIX SP		2849822										
			MS	MSD					_			
		2630449009	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	1.6	50	50	54.0	53.9	105	105	90-110	0	10	
Fluoride	mg/L	0.13J	2.5	2.5	2.8	2.8	107	107	90-110	0	10	
Sulfate	mg/L	39.1	50	50	89.7	89.4	101	101	90-110	0	10	

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

QC Batch: 533985 Analysis Method: EPA 300.0 Rev 2.1 1993

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

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

METHOD BLANK: 2849882 Matrix: Water

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND ND	1.0	0.60	04/02/20 23:48	
Fluoride	mg/L	ND	0.10	0.050	04/02/20 23:48	
Sulfate	mg/L	ND	1.0	0.50	04/02/20 23:48	

LABORATORY CONTROL SAMPLE:	2849883					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	49.7	99	90-110	

MATRIX SPIKE & MATRIX SP		2849885										
		2630472001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Danamatan	11-21-		- 1		_	_	_	_		000		01
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	20.4	50	50	75.6	76.0	110	111	90-110	1	10	M1
Fluoride	mg/L	0.098J	2.5	2.5	2.7	2.8	104	106	90-110	2	10	
Sulfate	mg/L	85.9	50	50	138	138	103	104	90-110	0	10	

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 2849		2849887								
			MS	MSD								
		2630471007	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	0.73J	50	50	58.0	58.4	114	115	90-110	1	10	M1
Fluoride	mg/L	0.082J	2.5	2.5	2.8	2.8	109	109	90-110	0	10	
Sulfate	mg/L	176	50	50	227	231	102	109	90-110	2	10	

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-1D Lab ID: 2630449001 Collected: 03/24/20 15:30 Received: 03/26/20 09:30 Matrix: Water

PWS: Site ID: Sample Type:

Comments: • One container received empty. Client notified. Client advised to analyze at low volume.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg		•		
Radium-226	EPA 9315	0.219 ± 0.178 (0.321) C:87% T:NA	pCi/L	04/06/20 20:26	13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 9320	2.01 ± 0.737 (1.08) C:67% T:85%	pCi/L	04/15/20 16:06	15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	2.23 ± 0.915 (1.40)	pCi/L	04/16/20 14:14	7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-2D PWS:	Lab ID: 26304490 Site ID:	O2 Collected: 03/24/20 16:22 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg				
Radium-226		0.192 ± 0.128 (0.211) C:84% T:NA	pCi/L	04/06/20 20:26	3 13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228		0.706 ± 0.471 (0.902) C:68% T:87%	pCi/L	04/15/20 16:06	5 15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	0.898 ± 0.599 (1.11)	pCi/L	04/16/20 14:14	7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: EB-01 PWS:	Lab ID: 26304490 Site ID:	O3 Collected: 03/24/20 12:55 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg			_	
Radium-226		0.0382 ± 0.176 (0.452) C:71% T:NA	pCi/L	04/07/20 08:07	13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228		0.519 ± 0.408 (0.810) C:79% T:80%	pCi/L	05/08/20 11:33	15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	0.557 ± 0.584 (1.26)	pCi/L	05/08/20 15:14	7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: FB-01 PWS:	Lab ID: 26304490 Site ID:	Od4 Collected: 03/25/20 09:20 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg				
Radium-226	EPA 9315	0.197 ± 0.233 (0.480) C:73% T:NA	pCi/L	04/07/20 08:03	13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228	EPA 9320	0.665 ± 0.520 (1.04) C:68% T:83%	pCi/L	04/15/20 16:06	5 15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	0.862 ± 0.753 (1.52)	pCi/L	04/16/20 14:14	7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-31 PWS:	Lab ID: 26304490 Site ID:	05 Collected: 03/25/20 10:20 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg				
Radium-226		0.380 ± 0.243 (0.370) C:83% T:NA	pCi/L	04/07/20 08:03	3 13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228	EPA 9320	1.41 ± 0.557 (0.868) C:71% T:86%	pCi/L	04/15/20 16:07	7 15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	1.79 ± 0.800 (1.24)	pCi/L	04/16/20 14:14	7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-14 PWS:	Lab ID: 26304490 Site ID:	O6 Collected: 03/25/20 13:40 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg				
Radium-226		0.115 ± 0.155 (0.319) C:83% T:NA	pCi/L	04/07/20 08:03	3 13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228		0.579 ± 0.415 (0.812) C:78% T:84%	pCi/L	04/16/20 15:54	1 15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	0.694 ± 0.570 (1.13)	pCi/L	04/17/20 10:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-23A PWS:	Lab ID: 2630449 Site ID:	O007 Collected: 03/25/20 16:05 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	rvices - Greensburg				
Radium-226	EPA 9315	0.436 ± 0.268 (0.404) C:78% T:NA	pCi/L	04/07/20 08:04	13982-63-3	
	Pace Analytical Ser	rvices - Greensburg				
Radium-228	EPA 9320	0.953 ± 0.461 (0.799) C:78% T:82%	pCi/L	04/16/20 15:54	1 15262-20-1	
	Pace Analytical Ser	rvices - Greensburg				
Total Radium	Total Radium Calculation	1.39 ± 0.729 (1.20)	pCi/L	04/17/20 10:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-17 PWS:	Lab ID: 26304490 Site ID:	O8 Collected: 03/25/20 15:11 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg				
Radium-226		0.343 ± 0.239 (0.388) C:78% T:NA	pCi/L	04/07/20 08:04	13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228		0.0423 ± 0.318 (0.731) C:79% T:86%	pCi/L	04/16/20 15:54	1 15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	0.385 ± 0.557 (1.12)	pCi/L	04/17/20 10:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-25 PWS:	Lab ID: 26304490 Site ID:	O9 Collected: 03/25/20 13:33 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg				
Radium-226		0.559 ± 0.349 (0.574) C:65% T:NA	pCi/L	04/07/20 08:04	13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228		0.351 ± 0.385 (0.806) C:78% T:85%	pCi/L	04/16/20 15:54	15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	0.910 ± 0.734 (1.38)	pCi/L	04/17/20 10:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-32 PWS:	Lab ID: 26304490 Site ID:	Collected: 03/25/20 11:05 Sample Type:	Received:	03/26/20 09:30	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg				
Radium-226		0.0513 ± 0.134 (0.327) C:86% T:NA	pCi/L	04/07/20 08:04	13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228		0.282 ± 0.347 (0.736) C:81% T:90%	pCi/L	04/16/20 15:54	15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	0.333 ± 0.481 (1.06)	pCi/L	04/17/20 10:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-7D PWS:	Lab ID: 26304490 Site ID:	O11 Collected: 03/26/20 09:55 Sample Type:	Received:	03/27/20 08:55	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	vices - Greensburg				
Radium-226	EPA 9315	0.0945 ± 0.177 (0.404) C:90% T:NA	pCi/L	04/08/20 07:57	7 13982-63-3	
	Pace Analytical Serv	vices - Greensburg				
Radium-228	EPA 9320	0.335 ± 0.354 (0.739) C:80% T:85%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Serv	vices - Greensburg				
Total Radium	Total Radium Calculation	0.430 ± 0.531 (1.14)	pCi/L	04/21/20 08:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-18 PWS:	Lab ID: 26304 4 Site ID:	49012 Collected: 03/26/20 12:10 Sample Type:	Received:	03/27/20 08:55	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	ervices - Greensburg				
Radium-226	EPA 9315	0.306 ± 0.131 (0.183) C:85% T:NA	pCi/L	04/07/20 18:21	1 13982-63-3	
	Pace Analytical S	ervices - Greensburg				
Radium-228	EPA 9320	0.743 ± 0.452 (0.848) C:76% T:76%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical S	ervices - Greensburg				
Total Radium	Total Radium Calculation	1.05 ± 0.583 (1.03)	pCi/L	04/21/20 08:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-33 PWS:	Lab ID: 26304490 Site ID:	O13 Collected: 03/26/20 14:55 Sample Type:	Received:	03/27/20 08:55	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	vices - Greensburg				
Radium-226	EPA 9315	0.428 ± 0.153 (0.192) C:81% T:NA	pCi/L	04/07/20 18:22	2 13982-63-3	
	Pace Analytical Serv	rices - Greensburg				
Radium-228	EPA 9320	0.0451 ± 0.399 (0.918) C:71% T:74%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Serv	rices - Greensburg				
Total Radium	Total Radium Calculation	0.473 ± 0.552 (1.11)	pCi/L	04/21/20 08:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: DUP-01 PWS:	Lab ID: 26304490 Site ID:	14 Collected: 03/26/20 00:00 Sample Type:	Received:	03/27/20 08:55	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	ices - Greensburg				
Radium-226		0.159 ± 0.0936 (0.142) C:85% T:NA	pCi/L	04/07/20 18:24	13982-63-3	
	Pace Analytical Serv	ices - Greensburg				
Radium-228		0.435 ± 0.359 (0.725) C:75% T:96%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Serv	ices - Greensburg				
Total Radium	Total Radium Calculation	0.594 ± 0.453 (0.867)	pCi/L	04/21/20 08:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-15 PWS:	Lab ID: 26304490 Site ID:	O15 Collected: 03/26/20 11:12 Sample Type:	Received:	03/27/20 08:55	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	vices - Greensburg				
Radium-226	EPA 9315	0.438 ± 0.295 (0.477) C:89% T:NA	pCi/L	04/08/20 07:57	7 13982-63-3	
	Pace Analytical Serv	rices - Greensburg				
Radium-228	EPA 9320	0.425 ± 0.409 (0.843) C:75% T:79%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Serv	rices - Greensburg				
Total Radium	Total Radium Calculation	0.863 ± 0.704 (1.32)	pCi/L	04/21/20 08:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-16 PWS:	Lab ID: 2630449 Site ID:	O16 Collected: 03/26/20 09:38 Sample Type:	Received:	03/27/20 08:55	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	vices - Greensburg				
Radium-226	EPA 9315	0.0910 ± 0.163 (0.365) C:91% T:NA	pCi/L	04/08/20 07:56	6 13982-63-3	
	Pace Analytical Ser	vices - Greensburg				
Radium-228	EPA 9320	0.431 ± 0.421 (0.867) C:76% T:75%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Ser	vices - Greensburg				
Total Radium	Total Radium Calculation	0.522 ± 0.584 (1.23)	pCi/L	04/21/20 08:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: PZ-19 PWS:	Lab ID: 263044 Site ID:	9017 Collected: 03/26/20 14:00 Sample Type:	Received:	03/27/20 08:55	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Se	ervices - Greensburg				-
Radium-226	EPA 9315	0.765 ± 0.424 (0.675) C:85% T:NA	pCi/L	04/08/20 07:56	6 13982-63-3	
	Pace Analytical Se	ervices - Greensburg				
Radium-228	EPA 9320	0.891 ± 0.478 (0.862) C:72% T:79%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Se	ervices - Greensburg				
Total Radium	Total Radium Calculation	1.66 ± 0.902 (1.54)	pCi/L	04/21/20 08:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Sample: DUP-02 PWS:	Lab ID: 26304490 Site ID:	Collected: 03/26/20 00:00 Sample Type:	Received:	03/27/20 08:55	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Servi	ces - Greensburg				
Radium-226		0.883 ± 0.387 (0.385) C:85% T:NA	pCi/L	04/08/20 07:56	3 13982-63-3	
	Pace Analytical Servi	ces - Greensburg				
Radium-228		0.743 ± 0.428 (0.794) C:72% T:93%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Servi	ces - Greensburg				
Total Radium	Total Radium Calculation	1.63 ± 0.815 (1.18)	pCi/L	04/21/20 08:48	3 7440-14-4	



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 390593 Analysis Method: EPA 9320

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005

METHOD BLANK: 1891465 Matrix: Water

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005

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

 Radium-228
 0.112 ± 0.287 (0.643) C:74% T:91%
 pCi/L
 04/15/20 13:00

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 390590 Analysis Method: EPA 9315

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005

METHOD BLANK: 1891462 Matrix: Water

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005

ParameterAct \pm Unc (MDC) Carr TracUnitsAnalyzedQualifiersRadium-2260.0954 \pm 0.125 (0.246) C:85% T:NApCi/L04/07/20 09:13

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.



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 391016 Analysis Method: EPA 9320

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

METHOD BLANK: 1893276 Matrix: Water

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

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

 Radium-228
 0.311 ± 0.302 (0.622) C:72% T:102%
 pCi/L
 04/20/20 12:19

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.



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 391014 Analysis Method: EPA 9315

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

METHOD BLANK: 1893273 Matrix: Water

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

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

 Radium-226
 0.0879 ± 0.146 (0.316) C:93% T:NA
 pCi/L
 04/07/20 19:50

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 390594 Analysis Method: EPA 9320

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449006, 2630449007, 2630449008, 2630449009, 2630449010

METHOD BLANK: 1891466 Matrix: Water

Associated Lab Samples: 2630449006, 2630449007, 2630449008, 2630449009, 2630449010

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

 Radium-228
 -0.184 ± 0.318 (0.783) C:80% T:81%
 pCi/L
 04/16/20 15:55

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

QC Batch: 390591 Analysis Method: EPA 9315

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449006, 2630449007, 2630449008, 2630449009, 2630449010

METHOD BLANK: 1891463 Matrix: Water

Associated Lab Samples: 2630449006, 2630449007, 2630449008, 2630449009, 2630449010

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

 Radium-226
 0.0696 ± 0.172 (0.412) C:90% T:NA
 pCi/L
 04/07/20 08:03

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



QUALIFIERS

Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Date: 05/11/2020 04:17 PM

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

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



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2630449001	PZ-1D	-			
2630449002	PZ-2D				
630449005	PZ-31				
630449006	PZ-14				
630449007	PZ-23A				
630449008	PZ-17				
630449009	PZ-25				
630449010	PZ-32				
630449011	PZ-7D				
630449012	PZ-18				
630449013	PZ-33				
630449015	PZ-15				
630449016	PZ-16				
630449017	PZ-19				
630449001	PZ-1D	EPA 3010A	45067	EPA 6010D	45072
630449002	PZ-2D	EPA 3010A	45067	EPA 6010D	45072
630449003	EB-01	EPA 3010A	45067	EPA 6010D	45072
630449004	FB-01	EPA 3010A	45066	EPA 6010D	45071
630449005	PZ-31	EPA 3010A	45066	EPA 6010D	45071
630449006	PZ-14	EPA 3010A	45066	EPA 6010D	45071
630449007	PZ-23A	EPA 3010A	45121	EPA 6010D	45135
630449008	PZ-17	EPA 3010A	45121	EPA 6010D	45135
630449009	PZ-25	EPA 3010A	45121	EPA 6010D	45135
630449010	PZ-32	EPA 3010A	45121	EPA 6010D	45135
630449011	PZ-7D	EPA 3010A	45172	EPA 6010D	45193
630449012	PZ-18	EPA 3010A	45172	EPA 6010D	45193
630449013	PZ-33	EPA 3010A	45172	EPA 6010D	45193
630449014	DUP-01	EPA 3010A	45172	EPA 6010D	45193
30449015	PZ-15	EPA 3010A	45172	EPA 6010D	45193
630449016	PZ-16	EPA 3010A	45172	EPA 6010D	45193
630449017	PZ-19	EPA 3010A	45172	EPA 6010D	45193
630449018	DUP-02	EPA 3010A	45172	EPA 6010D	45193
630449001	PZ-1D	EPA 3005A	45112	EPA 6020B	45137
630449002	PZ-2D	EPA 3005A	45112	EPA 6020B	45137
630449003	EB-01	EPA 3005A	45112	EPA 6020B	45137
630449004	FB-01	EPA 3005A	45112	EPA 6020B	45137
630449005	PZ-31	EPA 3005A	45112	EPA 6020B	45137
30449006	PZ-14	EPA 3005A	45112	EPA 6020B	45137
30449007	PZ-23A	EPA 3005A	45112	EPA 6020B	45137
630449008	PZ-17	EPA 3005A	45112	EPA 6020B	45137
30449009	PZ-25	EPA 3005A	45112	EPA 6020B	45137
630449010	PZ-32	EPA 3005A	45112	EPA 6020B	45137
630449011	PZ-7D	EPA 3005A	45171	EPA 6020B	45192
630449012	PZ-18	EPA 3005A	45171	EPA 6020B	45192
630449013	PZ-33	EPA 3005A	45171	EPA 6020B	45192
630449014	DUP-01	EPA 3005A	45171	EPA 6020B	45192

REPORT OF LABORATORY ANALYSIS

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Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2630449015	PZ-15	EPA 3005A	<u>45171</u>	EPA 6020B	45192
2630449016	PZ-16	EPA 3005A	45171	EPA 6020B	45192
630449017	PZ-19	EPA 3005A	45171	EPA 6020B	45192
630449018	DUP-02	EPA 3005A	45171	EPA 6020B	45192
630449001	PZ-1D	EPA 9315	390590		
630449002	PZ-2D	EPA 9315	390590		
630449003	EB-01	EPA 9315	390590		
630449004	FB-01	EPA 9315	390590		
630449005	PZ-31	EPA 9315	390590		
630449006	PZ-14	EPA 9315	390591		
630449007	PZ-23A	EPA 9315	390591		
630449008	PZ-17	EPA 9315	390591		
630449009	PZ-25	EPA 9315	390591		
630449010	PZ-32	EPA 9315	390591		
630449011	PZ-7D	EPA 9315	391014		
630449012	PZ-18	EPA 9315	391014		
630449012 630449013	PZ-10 PZ-33	EPA 9315	391014		
630449014	DUP-01	EPA 9315	391014		
30449015	PZ-15	EPA 9315	391014		
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030449016		EPA 9315			
630449001	PZ-1D	EPA 9320	390593		
630449002	PZ-2D	EPA 9320	390593		
630449003	EB-01	EPA 9320	390593		
630449004	FB-01	EPA 9320	390593		
630449005	PZ-31	EPA 9320	390593		
630449006	PZ-14	EPA 9320	390594		
630449007	PZ-23A	EPA 9320	390594		
630449008	PZ-17	EPA 9320	390594		
630449009	PZ-25	EPA 9320	390594		
630449010	PZ-32	EPA 9320	390594		
630449011	PZ-7D	EPA 9320	391016		
630449012	PZ-18	EPA 9320	391016		
630449013	PZ-33	EPA 9320	391016		
630449014	DUP-01	EPA 9320	391016		
630449015	PZ-15	EPA 9320	391016		
30449016	PZ-16	EPA 9320	391016		
630449017	PZ-19	EPA 9320	391016		
630449018	DUP-02	EPA 9320	391016		
630449001	PZ-1D	Total Radium Calculation	392582		
630449002	PZ-2D	Total Radium Calculation	392582		
630449003	EB-01	Total Radium Calculation	395575		
630449004	FB-01	Total Radium Calculation	392582		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

_ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2630449005	PZ-31	Total Radium Calculation	392582	_	
630449006	PZ-14	Total Radium Calculation	392702		
630449007	PZ-23A	Total Radium Calculation	392702		
630449008	PZ-17	Total Radium Calculation	392702		
630449009	PZ-25	Total Radium Calculation	392702		
630449010	PZ-32	Total Radium Calculation	392702		
630449011	PZ-7D	Total Radium Calculation	393019		
630449012	PZ-18	Total Radium Calculation	393019		
630449013	PZ-33	Total Radium Calculation	393019		
630449014	DUP-01	Total Radium Calculation	393019		
30449015	PZ-15	Total Radium Calculation	393019		
630449016	PZ-16	Total Radium Calculation	393019		
630449017	PZ-19	Total Radium Calculation	393019		
630449018	DUP-02	Total Radium Calculation	393019		
630449001	PZ-1D	SM 2540C	45027		
630449002	PZ-2D	SM 2540C	45027		
630449003	EB-01	SM 2540C	45027		
630449004	FB-01	SM 2540C	45027		
30449005	PZ-31	SM 2540C	45160		
630449006	PZ-14	SM 2540C	45160		
30449007	PZ-23A	SM 2540C	45160		
30449008	PZ-17	SM 2540C	45160		
30449009	PZ-25	SM 2540C	45160		
30449010	PZ-32	SM 2540C	45160		
630449011	PZ-7D	SM 2540C	45207		
630449012	PZ-18	SM 2540C	45207		
630449013	PZ-33	SM 2540C	45207		
630449014	DUP-01	SM 2540C	45207		
30449015	PZ-15	SM 2540C	45207		
630449016	PZ-16	SM 2540C	45207		
630449017	PZ-10	SM 2540C SM 2540C	45207		
630449018	DUP-02	SM 2540C	45207		
630449001	PZ-1D	EPA 300.0 Rev 2.1 1993	533972		
630449002	PZ-2D	EPA 300.0 Rev 2.1 1993	533972		
630449003	EB-01	EPA 300.0 Rev 2.1 1993	533972		
630449004	FB-01	EPA 300.0 Rev 2.1 1993	533972		
		EPA 300.0 Rev 2.1 1993 EPA 300.0 Rev 2.1 1993			
30449005	PZ-31		533972		
30449006	PZ-14	EPA 300.0 Rev 2.1 1993	533972		
30449007	PZ-23A	EPA 300.0 Rev 2.1 1993	533972		
30449008	PZ-17	EPA 300.0 Rev 2.1 1993	533972		
30449009	PZ-25	EPA 300.0 Rev 2.1 1993	533972		
630449010	PZ-32	EPA 300.0 Rev 2.1 1993	533972		
630449011	PZ-7D	EPA 300.0 Rev 2.1 1993	533985		
30449012	PZ-18	EPA 300.0 Rev 2.1 1993	533985		
630449013	PZ-33	EPA 300.0 Rev 2.1 1993	533985		



Project: PLANT MITCHELL ASH PONDS A 1&2

Pace Project No.: 2630449

Date: 05/11/2020 04:17 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2630449014	DUP-01	EPA 300.0 Rev 2.1 1993	533985		
2630449015	PZ-15	EPA 300.0 Rev 2.1 1993	533985		
2630449016	PZ-16	EPA 300.0 Rev 2.1 1993	533985		
2630449017	PZ-19	EPA 300.0 Rev 2.1 1993	533985		
2630449018	DUP-02	EPA 300.0 Rev 2.1 1993	533985		

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

Section B
Required Project Information: Section C trucice information: ዴ J

	Add pH to	Appendix	and note	Please no		12	Ē	ē	9	6	7	6	5		3	N	-	ITEM#			Manhay		Email To:		Address:	Company:
	Add pH to COC for field sheet	Appendix IV for March 2020 Event, Sb As Ba Cr Co Pb Li Mo Se	and note when the last sample for the event has been taken.	Please note dry wells, state thorugh any wells not sampled.	ADDITIONAL COMMENTS	+ Z-25	-PZ-23A	PZ-19	-81-Ze	PZ 17	PZ-16	PZ-15	-P244	12-78	\ PZ 31	PZ 28	-PZ-TD	SAMPLE ID WIFE WASTE WITER PRODUCT SOLUSOUD OUT OTHER SERVICE TISSUE SEMPLE TISSUE	Section D Valid Matrix Codes (Required Clear Information MATRIX CODE DESIGNATION OF THE PARTY P		Aron :: Williams one hard	L	SCS Contacts	1	Atlanta, GA	
PRI SIG		Se		David & Hound Wood	RELIMOUISHED BY / AFFILIATION			NT G 32620 1400			02/26/20	MT G 3/16/10 1112						MATRIX CODE (See valid code SAMPLE TYPE (G=GRAB C=C START TIME	P (eq.)		Project Number: 6122160170	Project Name: Plant Mitchell Ash Ponds A 1&2	1 21		Copy To: Wood Contacts	
PRINT NAME OF SAMPLER: Danie How			100/60	ろったい アスター	DATE TI	3 2 1	3 2 4	95 2 8/			25 2 37	~	3 2	3 2	2 2	3 2 1	3-2-1	SAMPLE TEMP AT COLLECTION # OF CONTAINERS Unpreserved H ₂ SO ₄ HNO ₃ HCI NaOH Na ₂ S ₂ O ₃			7 0 Pace Prolite #: 2904-1		Pace Curve Reference:	Address:	Company Name:	Attention: Southern Co.
WAT DATE SIGNED 3/26/20			11/10 July 1/100	Shirt DICA Blands	BY / AFFILIATION	×××××	X X	× × × × × × × × × ×		, ,	x > x > x > x > x > x > x > x > x > x >	x x x x x x x x x x x x x x x x x x x	× × × × × × × × × × × × × × × × × × ×	X X X X X X X	×××××××××××××××××××××××××××××××××××××××	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	Methanol Other Analysis Test TDS by SM 2540C Chloride by 300.0 Fluoride by 300.0 Sorion & Catclum by 8020 Appendix IV Metals by 8020 Redium by 8315+9320	MWWXYYY	Requested Analysis Filtered	STATE:	\$100	□ UST	C NPDES	REGULATORY AGENCY	
Temp in °C Received on ice (Y/N) Custody Sealed Coolor (Y/N) Samples intact (Y/N)			L		TIME SAMPLE COMPATIONS		611.0			<u> </u>	15	1					to the state of the state of	Residual Chlorine (Y/N)		ed (VIN)	GA		RCRA W OTHER CCB	NO WATER IT	A VENUA .	

Imported Note: By signing this form you are accepting Pace's NET 30 day payment forms and agreeing to bate charges of 1.5% per month for an, throlices not poid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007

Page 77 of 85

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

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			Add pH to COC for field sheet	Appendix IV for March 2020 Event: Sb As Be Cr Co Pb Li N5 Se Ti	and note when the last sample for the event has been taken.	Please note dry wells, strike thorugh any wells not sampled.		F		T	-	-		\vdash		-		1	\dagger		S	Require				8				18,
			or field sh	Aarch 202	NO PER SE	wells, spri	ADDIT										M				SAMPLE ID (A-Z, 0-91-) Sample 0's MUST BE UNIQUE	Section D Required Client Information				SLA Contacts		Allanta, GA	GA Power	Information
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CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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			Add pH to COC for field sheet	Appendix IV for March 2020 Event: Sb As Ba Cr Co Pb II Mo Se 11	and note when the lest sample for the event has been taken.	Please note dry wells, strike thorugh any wells not sampled,	ADDITIONAL COMMENTS	-BZ25	PZ-23A	- PZ-19	PZ-18	PZ 17	\$2.16	₩Z-46	- P2-14	PZ-7D	-FZ-34	- P 220	- P2-48		SAMPLE ID WIFE AND OTHER CHARGOLE TO SAMPLE ID WIFE AND OTHER CHARGOLE TISSUE	DEMONDA WATER DW WATER WI WASTE WATER WW	Section D Valid Matrix (Remarked Civet Information MATRIX		Requested Dus Date/TAT: 10 Day	Fax	SCS Contacts		Atlanta, GA	: GA Power	Section A Required Client Information:
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Important Nater By signing this form you are accepting Pacets NET 30 day payment terms and agreeing to late alterges of 1.5% per morth for any timoless not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007

Page 79 of 85

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A

Required Client Information: Appendix IV for March 2020 Event: Sb As Ba Cr Co Pb Li Mo Se mai To: Add pH to COC for field sheel dares: ad note when the last sample for the event has been taken. ITEM# ease note dry wells, strike thorugh any wells not sempled. washed Due Dete/TAT: Section D Required Clert Information (A-Z, 0-9 / ,-)
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Required Project Information: Project Number: Project Name: Plant Mitchell Ash Ponds A 1&2 urchase Order No.: 1) weed 5/26/20 1730 NIC STATE OF ITSS RELINCUISHED BY / AFFILIATION MATRIX CODE (see voted codes to left) SAMPLE TYPE (GRGRAB C=COMP) 6122160170 COMPOSITE START SAMPLER NAME AND SIGNATURE COLLECTED 翼 SIGNATURE of SAMPLER. PRINT Name of SAMPLER: EMENDAME DATE SAMPLE TEMP AT COLLECTION Paca Quote Reference: Pace Project Invoice Informa Attention: Saction C # OF CONTAINERS ddress: Company Name: ω ω ω ω 2 Unpreserved N H₂SO, Southern Co. HNO₃ 2904-1 Howard NaOH Na₂S₂O₃ NCCEPTED BY ! AFFILIATION Methanol Other Analysis Test Y/ N DATE Signod Requested Analysis Filtered (Y/N) Chloride by 300.0 Ę > × REGULATORY AGENCY Site Location 3/26/20 × TSU × × NPDES STATE: DATE Radium by 9315+9320 2550 GROUND WATER 뷺 g Page: 19.9 N Temp in *C Residual Chlorine (Y/N) pH=7.00 Received or Pace Project No./ Lab I.D. SAMPLE CONDITIONS ice (Y/N) 9, DRINKING WATER OTHER CCE Custody Sealed Cools (Y/N) Samples Inta (Y/N)



CHAIN-OF-CUSTODY / Analytical Request Document

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

Please note dry wells, strike thorugh any wells not sampled. Email To: Add pH to COC for field sheet Appendix IV for March 2020 Event: Sb As Ba Cr Co Pb LI Mo Se and note when the last sample for the event has been taken. Section A
Required Client Information: Requested Due DateRAT: company ITEM# ddress = 3 Section D Required Clerk Information (A-Z, 0-9 / -)
Sample IOs MUST BE UNIQUE SCS Contacts Atlanta, GA **GA Power** SAMPLE ID ADDITIONAL COMMENTS 10 Дау PZ-32 P7-39 Walfd Mebrix Codes
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OTHER OF Copy To: Wood Contacts Report To: SCS Contacts Section B
Required Project Information: Project Number: urchase Order No.: roject Name: Plant Mitchell Ash Ponds A 182 RELINQUISHED BY / AFFILIATION MATRIX CODE (see valid codes to left) 6 3/15/24 1105 SAMPLE TYPE (G=GRAB C=COMP) 6122 160170 Homan 11/ Was 13/25/20 1800 START SAMPLER NAME AND SIGNATURE COLLECTED SIGNATURE OF SAMPLE COMA PRINT Name of SAMPLER: CATE COMPOSITE HE. DATE SAMPLE TEMP AT COLLECTION Section C Invoice Information: Attention: Southern Co. Pace Police Kevin H.
Managar.
Pace Prolice 8: 2904-1 # OF CONTAINERS Company Name: Address: H. 2 N 2 73 Unpreserved N Ŋ H₂SO₄ HNO₃ Preservatives Kevin Herring Howarz HÇI NaOH 122 Na₂S₂O₃ ACCEPTED BY / AFFILIATION Melhanol Other Analysis Test Y/ N TOS by SM 2540C DATE Signed 3/25/20 2 2 Requested Analysis Filtered (Y/N) × Chloride by 300.0 MAY × × × × × × × REGULATORY AGENCY Site Location × × × × X CST NPDES DATE STATE: × × × Radium by 9315+9320 Ħ GROUND WATER 9 Page Temp in *C Residual Chlorine (Y/N) ٦ Pace Project No. I Lab I.D. Received on 263044 ice (Y/N) SAMPLE CONDITIONS 9, Custody OTHER COR DRINKING WATER Sealed Cooler N (Y/N) Samples Intect (Y/N)

Section A

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

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PRINT Name of SAMPLER: Danie Howard DATE Signed			C + 200	3/25/20 1800 /V/ Le Hula	DATE TIME // ACCOPTED BY LAFFILLATION	1 2 3 X X X	3 2	8 2 3 7 7	٥	`		3 2 1	- 0 - 2 - 1 - 1 - X X X	3 2	3 2 1 X X X X	* * *	× × ×		SAMPLE TEMP AT COLLECTION # OF CONTAINERS Unpreserved H ₂ SO ₄ HNO ₃ HCI NaOH Na ₂ S ₂ O ₃ Methanol Other Analysis Test DS by SM 2540C Chioride by 300.0	Preservatives > NN N	Request	Paca Profes 8: 2904-1		Pace Quote Reference	Address:	Company Name:	Attention: Southern Co.	Section C Invoice information:
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CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A
Required Client Information:
GA Power and note when the last sample for the event has been taken. Please note dry wells, strike thorugh any walls not sampled. idd pH to COC for field sheel Appendix IV for March 2020 Event: Sb As Ba Cr Co Pb Li Mo Se Requested Due Date/TAT: Email To: Address: ITEM# 3 Section D Required Client Information (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE SCS Contacts Atlanta, GA SAMPLE ID ADDITIONAL COMMENTS 10 Day E8X PZ-23A ₽7.4a P7.28 # # # 中中 P7 17 PZ-14 45.7g PZ-31 PZ 28 77.0 PZ-16 MATRIX CODES
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Required Project Information: Copy To: Wood Contacts 300 RELINQUISHED BY / AFFILIATION SIC MATRIX CODE G 3/25/20 1605 SAMPLE TYPE (G=GRAS C=COMP) 3/25/20 1340 DATE COMPOSITE 1020 SAMPLER NAME AND SIGNATURE 1000c 160170 COLLECTED SIGNATURE OF SAMPLER: Demak PRINT Name of SAMPLER: DATE COMPOSITE 3/25/10 1800 DATE SAMPLE TEMP AT CUILECTION Reference Page Project # OF CONTAINERS Address Invoice Information:
Attention: Southern Co. Company Name: along and H H Unpreserved H₂SO₄ 2904-1 HNO, Preservatives Kevin Herring HÇI NaOH Howes Na₂S₂O₃ ACCEPTED BY JAFFILLATION Methanol Other Analysis Test K K K DATE Signed 3/25/20 Requested Analysis Filtered (Y/N) <u>₹</u> REGULATORY AGENCY Site Location TSJ NPDES DATE STATE: Radium by 9315+0320 0820 H RCRA GROUND WATER ð Page: Temp in *C Residual Chlorina (Y/N) 04=7,02 H= 7,15 ice (Y/N) SAMPLE CONDITIONS H= 6.84 Pace Project No./ Lab i.D. 762044 T) \$ Custody OTHER CCE DRINKING WATER Sealed Coole (Y/N) Samples Intect (Y/N)



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

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			Add pH to COC for field sheet	Appendix IV for March 2020 Event: Sb As Ba Cr Co Pb U Mo Se	and note when the last sample for the event has been taken.	risase note dry wells, strike thorugh any wells not sampled.	ADDITIONAL COMMENTS	PZ-25	PZ-23A	PZ-19	PZN	\$Z-17	₹ PZ-16	PZ	PZ-14	PZ-70	PZ-31	PZ-2D	PZ-1D	SAMPLE ID (A-Z, 0-9/) Sample IDS MUST BE UNIQUE	Section D Regulard Coort Information		Requested Due Date/TAT: 10 Day		o: SCS Contacts		Atlanta, GA	y. GA Power	ĮŽ.
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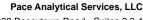
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Section A
Required Client Information:
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Sample IDs MUST BE UNIQUE SCS Contacts Atlanta, GA SAMPLE ID ADDITIONAL COMMENTS 16 Day 77.95 EB-01 E8-0 PZ-33 Valid Matrix Codes

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TISSUE 15 Project Number: Copy To: Wood Contacts Report To: SCS Contacts Required Project Information: Project Name: Plant Mitchell Ash Ponds A 182 Purchase Order No.: Land & Hora RELINCUISHED BY ! AFFILIATION いる MG \$300030 MATRIX CODE (see valid codes to left) SAMPLE TYPE (G=GRAB C=COMP) 6122 160170 32.71 PR. M. C. E. PATE COMPOSITE SAMPLER NAME AND SIGNATURE TIME. COLLECTED / Nood SIGNATURE OF SAMPLERS PRINT Name of SAMPLER: COMPOSITE 3/25/20 1800 DATE SAMPLE TEMP AT COLLECTION 3 2 Pace Duote Reference: Pace Project # OF CONTAINERS Section C Address: Company Name: Invoice Information:
Attention: Sou ace Profile #: 2904-1 HE H Unpreserved H₂SO₄ HNO₃ Preservatives Kevin Herring Southern Co. HCI Thouse NaOH Na₂S₂O₃ ACCEPTED BY I AFFULATION Methanol Other Analysis Test Y/N DATE Signed (MM/DD/YY): TDS by SM 2540C N N N N Y Requested Analysis Filtered (Y/N) chlaride by 300.0 Fluoride by 300.0 × Sulfate by 300.0 3/25/20 Site Location REGULATORY AGENCY × Appendix IV Metals by 6020 UST NPDES DATE STATE: Radium by 9315+9320 07000 APPE. RCRA GROUND WATER GA Page: Temp in *C Residual Chlorine (Y/N) ¥ Received on ice (Y/N) SAMPLE CONDITIONS Pace Project No./ Lab I.D. Custody Sealed Cooler (Y/N) <u>•</u> OTHER COM DRINKING WATER ند (Y/N)







May 11, 2020

Mr. Joju Abraham Georgia Power 2480 Maner Road Atlanta, GA 30339

RE: Project: 2630449

Pace Project No.: 30356720

Dear Mr. Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between March 27, 2020 and March 31, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

• Pace Analytical Services - Greensburg

Revision 1 - This report replaces the April 21, 2020 report. This project was revised on May 11, 2020 to reflect the reanalyzed results for sample 2630449003/EB-01 as per client request. (Greensburg, PA)

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

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com

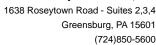
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(724)850-5612

Project Manager

Enclosures







CERTIFICATIONS

Project: 2630449
Pace Project No.: 30356720

Pace Analytical Services Pennsylvania

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

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

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

Delaware Certification EPA Region 4 DW Rad

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

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

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

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

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190

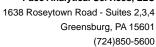
Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Ohio EPA Rad Approval: #41249

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

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

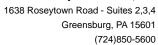




SAMPLE SUMMARY

Project: 2630449
Pace Project No.: 30356720

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2630449001	PZ-1D	Water	03/24/20 15:30	03/27/20 09:15
2630449002	PZ-2D	Water	03/24/20 16:22	03/27/20 09:15
2630449003	EB-01	Water	03/24/20 12:55	03/27/20 09:15
2630449004	FB-01	Water	03/25/20 09:20	03/27/20 09:15
2630449005	PZ-31	Water	03/25/20 10:20	03/27/20 09:15
2630449006	PZ-14	Water	03/25/20 13:40	03/27/20 09:15
2630449007	PZ-23A	Water	03/25/20 16:05	03/27/20 09:15
2630449008	PZ-17	Water	03/25/20 15:11	03/27/20 09:15
2630449009	PZ-25	Water	03/25/20 13:33	03/27/20 09:15
2630449010	PZ-32	Water	03/25/20 11:05	03/27/20 09:15
2630449011	PZ-7D	Water	03/26/20 09:55	03/31/20 09:00
2630449012	PZ-18	Water	03/26/20 12:10	03/31/20 09:00
2630449013	PZ-33	Water	03/26/20 14:55	03/31/20 09:00
2630449014	DUP-01	Water	03/26/20 00:00	03/31/20 09:00
2630449015	PZ-15	Water	03/26/20 11:12	03/31/20 09:00
2630449016	PZ-16	Water	03/26/20 09:38	03/31/20 09:00
2630449017	PZ-19	Water	03/26/20 14:00	03/31/20 09:00
2630449018	DUP-02	Water	03/26/20 00:00	03/31/20 09:00

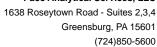




SAMPLE ANALYTE COUNT

Project: 2630449
Pace Project No.: 30356720

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630449001	PZ-1D	EPA 9315	LAL	1	PASI-PA
2630449002	PZ-2D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449003	EB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449004	FB-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449005	PZ-31	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449006	PZ-14	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449007	PZ-23A	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449008	PZ-17	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449009	PZ-25	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449010	PZ-32	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449011	PZ-7D	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449012	PZ-18	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449013	PZ-33	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA





SAMPLE ANALYTE COUNT

Project: 2630449
Pace Project No.: 30356720

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2630449014	DUP-01	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449015	PZ-15	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449016	PZ-16	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449017	PZ-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2630449018	DUP-02	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg



Project: 2630449
Pace Project No.: 30356720

Sample: PZ-1D Lab ID: 2630449001 Collected: 03/24/20 15:30 Received: 03/27/20 09:15 Matrix: Water PWS: Site ID: Sample Type: Comments: • One container received empty. Client notified. Client advised to analyze at low volume. **Parameters** Method Act ± Unc (MDC) Carr Trac Units Analyzed CAS No. Qual Pace Analytical Services - Greensburg EPA 9315 $0.219 \pm 0.178 \quad (0.321)$ Radium-226 pCi/L 04/06/20 20:26 13982-63-3 C:87% T:NA Pace Analytical Services - Greensburg Total Radium Total Radium 2.23 ± 0.915 (1.40) pCi/L 04/16/20 14:14 7440-14-4 Calculation EPA 9320 2.01 ± 0.737 (1.08) Radium-228 pCi/L 04/15/20 16:06 15262-20-1 C:67% T:85% Sample: PZ-2D Lab ID: 2630449002 Collected: 03/24/20 16:22 Received: 03/27/20 09:15 PWS: Site ID: Sample Type: **Parameters** Act ± Unc (MDC) Carr Trac Units CAS No. Qual Method Analyzed Pace Analytical Services - Greensburg EPA 9315 $0.192 \pm 0.128 \quad (0.211)$ Radium-226 pCi/L 04/06/20 20:26 13982-63-3 C:84% T:NA Pace Analytical Services - Greensburg Radium-228 EPA 9320 0.706 ± 0.471 (0.902) pCi/L 04/15/20 16:06 15262-20-1 C:68% T:87% Pace Analytical Services - Greensburg Total Radium Total Radium 0.898 ± 0.599 (1.11) pCi/L 04/16/20 14:14 7440-14-4 Calculation Sample: EB-01 Lab ID: 2630449003 Collected: 03/24/20 12:55 Received: 03/27/20 09:15 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual Pace Analytical Services - Greensburg EPA 9315 $0.0382 \pm 0.176 \quad (0.452)$ Radium-226 pCi/L 04/07/20 08:07 13982-63-3 C:71% T:NA Pace Analytical Services - Greensburg EPA 9320 $0.519 \pm 0.408 \quad (0.810)$ Radium-228 pCi/L 05/08/20 11:33 15262-20-1 C:79% T:80% Pace Analytical Services - Greensburg Total Radium Total Radium 0.557 ± 0.584 (1.26) 05/08/20 15:14 7440-14-4 pCi/L Calculation



Project: 2630449
Pace Project No.: 30356720

Sample: FB-01 PWS:	Lab ID: 2630449 Site ID:	O04 Collected: 03/25/20 09:20 Sample Type:	Received:	03/27/20 09:15	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	vices - Greensburg		-		
Radium-226	EPA 9315	0.197 ± 0.233 (0.480) C:73% T:NA	pCi/L	04/07/20 08:03	3 13982-63-3	
	Pace Analytical Ser	vices - Greensburg				
Radium-228	EPA 9320	0.665 ± 0.520 (1.04) C:68% T:83%	pCi/L	04/15/20 16:00	5 15262-20-1	
	Pace Analytical Ser	vices - Greensburg				
Total Radium	Total Radium Calculation	0.862 ± 0.753 (1.52)	pCi/L	04/16/20 14:14	1 7440-14-4	
Sample: PZ-31 PWS:	Lab ID: 2630449 Site ID:	005 Collected: 03/25/20 10:20 Sample Type:	Received:	03/27/20 09:15	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	vices - Greensburg				
Radium-226	EPA 9315	0.380 ± 0.243 (0.370) C:83% T:NA	pCi/L	04/07/20 08:03	3 13982-63-3	
	Pace Analytical Ser	vices - Greensburg				
Radium-228	EPA 9320	1.41 ± 0.557 (0.868) C:71% T:86%	pCi/L	04/15/20 16:07	7 15262-20-1	
	Pace Analytical Ser	vices - Greensburg				
Total Radium	Total Radium Calculation	1.79 ± 0.800 (1.24)	pCi/L	04/16/20 14:14	1 7440-14-4	
Sample: PZ-14	Lab ID: 2630449	006 Collected: 03/25/20 13:40	Received:	03/27/20 09:15	Matrix: Water	
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	vices - Greensburg				
Radium-226	EPA 9315	0.115 ± 0.155 (0.319) C:83% T:NA	pCi/L	04/07/20 08:03	3 13982-63-3	
	Pace Analytical Ser	vices - Greensburg				
Radium-228	EPA 9320	0.579 ± 0.415 (0.812) C:78% T:84%	pCi/L	04/16/20 15:54	1 15262-20-1	
	Pace Analytical Ser	vices - Greensburg				
Total Radium	Total Radium Calculation	$0.694 \pm 0.570 (1.13)$	pCi/L	04/17/20 10:48	3 7440-14-4	



Project: 2630449
Pace Project No.: 30356720

Sample: PZ-23A PWS:	Lab ID: 2630449 Site ID:	OO7 Collected: 03/25/20 16:05 Sample Type:	Received:	03/27/20 09:15	Matrix: Water	
Parameters	Method	. ,.	Units	Analyzad	CAS No.	Ougl
Parameters		Act ± Unc (MDC) Carr Trac	Units	Analyzed	- CAS NO.	Qual
Deather 000	Pace Analytical Ser	· ·	·· O://	04/07/00 00 04	10000 00 0	
Radium-226	EPA 9315	0.436 ± 0.268 (0.404) C:78% T:NA	pCi/L	04/07/20 08:04	13982-63-3	
	Pace Analytical Ser	vices - Greensburg				
Radium-228	EPA 9320	0.953 ± 0.461 (0.799) C:78% T:82%	pCi/L	04/16/20 15:54	15262-20-1	
	Pace Analytical Ser	vices - Greensburg				
Total Radium	Total Radium Calculation	1.39 ± 0.729 (1.20)	pCi/L	04/17/20 10:48	7440-14-4	
Sample: PZ-17	Lab ID: 2630449		Received:	03/27/20 09:15	Matrix: Water	
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	vices - Greensburg				
Radium-226	EPA 9315	0.343 ± 0.239 (0.388) C:78% T:NA	pCi/L	04/07/20 08:04	13982-63-3	
	Pace Analytical Ser	vices - Greensburg				
Radium-228	EPA 9320	0.0423 ± 0.318 (0.731) C:79% T:86%	pCi/L	04/16/20 15:54	15262-20-1	
	Pace Analytical Ser	vices - Greensburg				
Total Radium	Total Radium Calculation	0.385 ± 0.557 (1.12)	pCi/L	04/17/20 10:48	7440-14-4	
Sample: PZ-25	Lab ID: 2630449	009 Collected: 03/25/20 13:33	Received:	03/27/20 09:15	Matrix: Water	
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	vices - Greensburg				
Radium-226	EPA 9315	0.559 ± 0.349 (0.574) C:65% T:NA	pCi/L	04/07/20 08:04	13982-63-3	
	Pace Analytical Ser	vices - Greensburg				
Radium-228	EPA 9320	0.351 ± 0.385 (0.806) C:78% T:85%	pCi/L	04/16/20 15:54	15262-20-1	
	Pace Analytical Ser	vices - Greensburg				
Total Radium	Total Radium Calculation	0.910 ± 0.734 (1.38)	pCi/L	04/17/20 10:48	7440-14-4	



Project: 2630449
Pace Project No.: 30356720

Sample: PZ-32 PWS:	Lab ID: 2630 4 Site ID:	Collected: 03/25/20 11:05 Sample Type:	Received:	03/27/20 09:15	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.0513 ± 0.134 (0.327) C:86% T:NA	pCi/L	04/07/20 08:04	1 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.282 ± 0.347 (0.736) C:81% T:90%	pCi/L	04/16/20 15:54	1 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	0.333 ± 0.481 (1.06)	pCi/L	04/17/20 10:48	3 7440-14-4	
Sample: PZ-7D PWS:	Lab ID: 2630 ⁴ Site ID:	149011 Collected: 03/26/20 09:55 Sample Type:	Received:	03/31/20 09:00	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.0945 ± 0.177 (0.404) C:90% T:NA	pCi/L	04/08/20 07:57	7 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.335 ± 0.354 (0.739) C:80% T:85%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	0.430 ± 0.531 (1.14)	pCi/L	04/21/20 08:48	3 7440-14-4	
Sample: PZ-18	Lab ID: 26304		Received:	03/31/20 09:00	Matrix: Water	
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.306 ± 0.131 (0.183) C:85% T:NA	pCi/L	04/07/20 18:21	1 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.743 ± 0.452 (0.848) C:76% T:76%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	1.05 ± 0.583 (1.03)	pCi/L	04/21/20 08:48	3 7440-14-4	



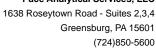
Project: 2630449
Pace Project No.: 30356720

Sample: PZ-33 PWS:	Lab ID: 2630449 Site ID:	O013 Collected: 03/26/20 14:55 Sample Type:	Received:	03/31/20 09:00	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	rvices - Greensburg				
Radium-226	EPA 9315	0.428 ± 0.153 (0.192) C:81% T:NA	pCi/L	04/07/20 18:22	2 13982-63-3	
	Pace Analytical Ser	rvices - Greensburg				
Radium-228	EPA 9320	0.0451 ± 0.399 (0.918) C:71% T:74%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Ser	rvices - Greensburg				
Total Radium	Total Radium Calculation	0.473 ± 0.552 (1.11)	pCi/L	04/21/20 08:4	8 7440-14-4	
Sample: DUP-01 PWS:	Lab ID: 2630449 Site ID:	O014 Collected: 03/26/20 00:00 Sample Type:	Received:	03/31/20 09:00	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	rvices - Greensburg				
Radium-226	EPA 9315	0.159 ± 0.0936 (0.142) C:85% T:NA	pCi/L	04/07/20 18:24	4 13982-63-3	
	Pace Analytical Ser	rvices - Greensburg				
Radium-228	EPA 9320	0.435 ± 0.359 (0.725) C:75% T:96%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical Ser	rvices - Greensburg				
Total Radium	Total Radium Calculation	0.594 ± 0.453 (0.867)	pCi/L	04/21/20 08:4	8 7440-14-4	
Sample: PZ-15	Lab ID: 2630449		Received:	03/31/20 09:00	Matrix: Water	
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Ser	rvices - Greensburg				
Radium-226	EPA 9315	0.438 ± 0.295 (0.477) C:89% T:NA	pCi/L	04/08/20 07:5	7 13982-63-3	
	Pace Analytical Ser	rvices - Greensburg				
Radium-228	EPA 9320	0.425 ± 0.409 (0.843) C:75% T:79%	pCi/L	04/20/20 15:23	3 15262-20-1	
	•	rvices - Greensburg				
Total Radium	Total Radium Calculation	0.863 ± 0.704 (1.32)	pCi/L	04/21/20 08:48	8 7440-14-4	



Project: 2630449
Pace Project No.: 30356720

Sample: PZ-16 PWS:	Lab ID: 2630 4 Site ID:	449016 Collected: 03/26/20 09:38 Sample Type:	Received:	03/31/20 09:00	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.0910 ± 0.163 (0.365) C:91% T:NA	pCi/L	04/08/20 07:50	6 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.431 ± 0.421 (0.867) C:76% T:75%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	0.522 ± 0.584 (1.23)	pCi/L	04/21/20 08:4	8 7440-14-4	
Sample: PZ-19 PWS:	Lab ID: 26304 Site ID:	149017 Collected: 03/26/20 14:00 Sample Type:	Received:	03/31/20 09:00	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.765 ± 0.424 (0.675) C:85% T:NA	pCi/L	04/08/20 07:50	6 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.891 ± 0.478 (0.862) C:72% T:79%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	1.66 ± 0.902 (1.54)	pCi/L	04/21/20 08:4	8 7440-14-4	
Sample: DUP-02	Lab ID: 26304	149018 Collected: 03/26/20 00:00	Received:	03/31/20 09:00	Matrix: Water	
PWS:	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical S	Services - Greensburg				
Radium-226	EPA 9315	0.883 ± 0.387 (0.385) C:85% T:NA	pCi/L	04/08/20 07:50	6 13982-63-3	
	Pace Analytical S	Services - Greensburg				
Radium-228	EPA 9320	0.743 ± 0.428 (0.794) C:72% T:93%	pCi/L	04/20/20 15:23	3 15262-20-1	
	Pace Analytical S	Services - Greensburg				
Total Radium	Total Radium Calculation	1.63 ± 0.815 (1.18)	pCi/L	04/21/20 08:4	8 7440-14-4	





Project: 2630449
Pace Project No.: 30356720

QC Batch: 390590 Analysis Method: EPA 9315

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005

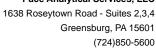
METHOD BLANK: 1891462 Matrix: Water

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005

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

 Radium-226
 0.0954 ± 0.125 (0.246) C:85% T:NA
 pCi/L
 04/07/20 09:13

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





Project: 2630449
Pace Project No.: 30356720

QC Batch: 390593 Analysis Method: EPA 9320

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005

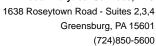
METHOD BLANK: 1891465 Matrix: Water

Associated Lab Samples: 2630449001, 2630449002, 2630449003, 2630449004, 2630449005

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

 Radium-228
 0.112 ± 0.287 (0.643) C:74% T:91%
 pCi/L
 04/15/20 13:00

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





Project: 2630449
Pace Project No.: 30356720

QC Batch: 391016 Analysis Method: EPA 9320

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

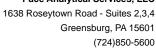
METHOD BLANK: 1893276 Matrix: Water

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

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

 Radium-228
 0.311 ± 0.302 (0.622) C:72% T:102%
 pCi/L
 04/20/20 12:19

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630449
Pace Project No.: 30356720

QC Batch: 391014 Analysis Method: EPA 9315

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

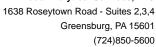
METHOD BLANK: 1893273 Matrix: Water

Associated Lab Samples: 2630449011, 2630449012, 2630449013, 2630449014, 2630449015, 2630449016, 2630449017, 2630449018

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

 Radium-226
 0.0879 ± 0.146 (0.316) C:93% T:NA
 pCi/L
 04/07/20 19:50

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





QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630449
Pace Project No.: 30356720

QC Batch: 390591 Analysis Method: EPA 9315

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

Laboratory: Pace Analytical Services - Greensburg

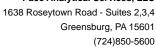
Associated Lab Samples: 2630449006, 2630449007, 2630449008, 2630449009, 2630449010

METHOD BLANK: 1891463 Matrix: Water

Associated Lab Samples: 2630449006, 2630449007, 2630449008, 2630449009, 2630449010

ParameterAct \pm Unc (MDC) Carr TracUnitsAnalyzedQualifiersRadium-226 0.0696 ± 0.172 (0.412) C:90% T:NApCi/L04/07/20 08:03

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





QUALITY CONTROL - RADIOCHEMISTRY

Project: 2630449
Pace Project No.: 30356720

QC Batch: 390594 Analysis Method: EPA 9320

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

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 2630449006, 2630449007, 2630449008, 2630449009, 2630449010

METHOD BLANK: 1891466 Matrix: Water

Associated Lab Samples: 2630449006, 2630449007, 2630449008, 2630449009, 2630449010

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

 Radium-228
 -0.184 ± 0.318 (0.783) C:80% T:81%
 pCi/L
 04/16/20 15:55

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



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

QUALIFIERS

Project: 2630449
Pace Project No.: 30356720

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

Date: 05/11/2020 03:44 PM

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

Chair	Chain of Custody	 								Ì					d	^	
	Samples were sent directly to the Subcontracting Laboratory	ent directly	to the Sui	bcontracting) Laboratory.			State	State Of Origin:	gin:	₽ G	,	·		P	ace An	Pace Analytical
•		٠,				•			Cert. Needed:	ىـــا ت	\ \text{Yes}	(y)	<u>શ</u>	· .		دم	XXXX
Workord	Workorder: 2630449	Workord	er Name:	PLANT MI	Workorder Name: PLANT MITCHELL ASH PONDS A 1&2	H PONDS	A 182	•	Owner Received Date:	ived	Date	3/	3/26/2020	Results	Results Requested By:	≸ By: ≺	192020
Report fo				Substantiacino									eisenbe	Red desied Analysis			
Kevin Herring Pace Analytical C 9800 Kincey Ave. Suite 100 Huntersville, NC Phone (704)875-	Kevin Herring Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092		•	Pace Analytica 1638 Roseytov Suites 2,3, & 4 Greensburg, P Phone (724)85	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600	urgh d				372	320		; 	303	30356720		
								Sesental Contractors	Mainers	E CIAR	e CIAA'		30356720				
			Sample Colle				EON			1						-	
Ties Sam	Sample 10	44	THE STREET		0.85	Mark	4									8	AB USE ONLY
1 PZ-1D		PS		3/24/2020 15:30	2630449001	Water	1 X	1		×	×					0	CCI
2 PZ-2D		PS		3/24/2020 16:22	2630449002	Water	7			×	×					_	220
3 EB-01		PS		3/24/2020 12:55	2630449003	Water	2 1			×	×					2	SQ \
4 FB-01	WWWWW	PS		3/25/2020 09:20	2630449004	Water	7 2	,		×	×					υ I	422
5 PZ-31		PS		3/25/2020 10:20	2630449005	Water	7 2			×	×					<u>ر</u>	500
6 PZ-14		PS		3/25/2020 13:40	2630449006	Water	7 7			X	X					0	220
7 PZ-23A	¥	PS		3/25/2020 16:05	2630449007	Water	7 X			×	X					0	027
8 PZ-17		PS		3/25/2020 15:11	2630449008	Water	م ا			×	×					\mathcal{I}	ÇL,
9 PZ-25	**************************************	PS		3/25/2020 13:33	2630449009	Water	$\frac{1}{2}$,		×	×					0	$\alpha c q$
10 PZ-32		Sd		3/25/2020 11:05	2630449010	Water	J X			×	×					3	SI
															comments	San San San San San San San San San San	
Transfers	Released By			Date/Time	Received By	λ	į		Date/Time	me				-			
1		Broke		31376/37018	202				32-16	6)zb							
2					· }						·····T						
3							l										
Cooler 1	Cooler Temperature on Receipt WWA	Receipt M	O to	Cust	Custody Seal Y	or (N		Rec	Received on Ice	n Ice	>	or (N	(Sal	Samples Intact	t Y or	N.
							į										

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

6 Thursday, March 26, 2020 12:18:32 PM

FMT-ALL-C-002rev.00 24March2009

Page 1 of 1

FMT-ALL-C-002rev.00 24March2009

Friday, March 27, 2020 10:58:01 AM

Page 1 of 2

Friday, March 27, 2020 10;58:03 AM

Transfers Released By Date/Time Received By Date/Time (MC) CL) 2 3 Cooler Temperature on Receipt W °C Custody Seal Y or N Received on Ice Y or N Samples Intact P or N								
eipt W °C Custody Seal Y or (N) Received on Ice Y or (N)	Transfers	K	Date/Time	Received By	Date/Time	# W		
eipt /// °C Custody Seal Y or (N) Received on Ice Y or (N)					1-3/2000		をある。	
eipt //// °C Custody Seal Y or (N) Received on Ice Y or (N)	2							
eipt /// °C Custody Seal Y or (N) Received on Ice Y or (N)	6	`						
	Cooler To	eipt W/	Custod		ived on Ice	(or /N)	Samples Intacf V or N	T

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO#:30356720

PM: JAC Due Date: 04/17/20 CLIENT: PACE_26_ATGA

Pittsburgh Lab Sample Condi	iion i	nbor	1 Ke	ceipt	
Pacs Analytical Client Name:		Pace	G	Project # _ 3 0 3 5 6 7	2 ()
				Page Other	
Courier: Fed Ex UPS USPS Client Tracking #: 1657 9507 1540	iD	Comme	rcial	Pace Other Label 110	
		_			
Custody Seal on Cooler/Box Present: yes	/_ n	10	Seals	s intact: Lyes no	
Thermometer Used	Туре	of ice:	: Wel	t Blue (CO)	
Cooler Temperature Observed Temp		_°C	Corr	ection Factor: °C Final Temp: °C	
Temp should be above freezing to 6°C				pH paper Lot# Date and Initials of person examining	
·_	<u> </u>		T \$178	100>161 contents: 100 3-27-20	
Comments:	Yes	No	N/A		
Chain of Custody Present:				1.	
Chain of Custody Filled Out:	1		-	2.	
Chain of Custody Relinquished:	//			3.	
Sampler Name & Signature on COC:	<u> </u>		<u> </u>	4.	
Sample Labels match COC:				5.	
-Includes date/time/ID Matrix:	اس	! 			
Samples Arrived within Hold Time:				6.	
Short Hold Time Analysis (<72hr remaining):				7.	
Rush Turn Around Time Requested:				8.	
Sufficient Volume:				9. Lan volume to Opi and DOZ	
Correct Containers Used:				10.	
-Pace Containers Used:					
Containers Intact:				11.4 hottle for not received completely spelled, a both	P
Orthophosphate field filtered				12. FAV DOZ received with 400 ml	
Hex Cr Aqueous sample field filtered				13.	
Organic Samples checked for dechlorination:	1			14.	
Filtered volume received for Dissolved tests				15.	
All containers have been checked for preservation.	 	-	ĺ	16	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Non-aqueous matrix	Radon		1	lo. pricz	
All containers meet method preservation requirements.				Initial when DIC Date/time of preservation	
			ji.	Lot # of added preservative	
Headspace in VOA Vials (>6mm):	T	T	/	17.	
Trip Blank Present:	1	1 /	1	18.	
Trip Blank Custody Seals Present		1	/		
Rad Samples Screened < 0.5 mrem/hr		1	-	Initial when MC Date: 3 -30 - 20	٠,
			<u> </u>	completed: Date:) 300 200	
Client Notification/ Resolution:					•
Person-Contacted:			-Date/	Time:Gontacted-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)

 \square A check in this box indicates that additional information has been stored in ereports.

*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

					WO#: 30356720	
Pittsburgh Lab Sample Condit	ion l	Jpor	Re	ceipt	PM: JAC Due Date: 04	
Pace Analytical Client Name:				GA	CLIENT: PACE_26_ATGA	
		•			1 00/2	
Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client		omme	rcial	Pace Other	Label 100	
Tracking #: 1657 9507 2112		_			LIMS Login V/V/	
Custody Seal on Cooler/Box Present: yes	₹ r	10	Seals	s intact: yes	no	
Thermometer Used ///	Туре	of Ice:	Wet	Blue None		
Cooler Temperature Observed Temp		· C	Corre	ection Factor:	°C Final Temp:°C	
Temp should be above freezing to 6°C				F111-48		
				pH paper Lot#	Date and Initials of person examining contents: 1) 2 3-31-20	
Comments:	Yes	No	N/A	10001-11		
Chain of Custody Present:				1.		
Chain of Custody Filled Out:		 		2.		
Chain of Custody Relinquished:				3.		
Sampler Name & Signature on COC:	ļ	ļ		4.		
Sample Labels match COC:				5.		
-Includes date/time/ID Matrix:	WI		<u> </u>			
Samples Arrived within Hold Time:		1		6.		
Short Hold Time Analysis (<72hr remaining):]			7.		
Rush Turn Around Time Requested:	ļ,			8.		
Sufficient Volume:			<u> </u>	9.		
Correct Containers Used:		<u> </u>	ļ	10.		
-Pace Containers Used:		<u> </u>	ļ			
Containers Intact:		<u> </u>	ļ	11.		
Orthophosphate field filtered		<u> </u>		12.		
Hex Cr Aqueous sample field filtered				13.		
Organic Samples checked for dechlorination:		<u> </u>		14.		
Filtered volume received for Dissolved tests		<u> </u>		15.		-
All containers have been checked for preservation.		<u> </u>	<u> </u>	16.	77	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Non-aqueous matrix	Radon	· ·		" prur		
All containers meet method preservation requirements.				Initial when completed	Date/time of preservation	
	<i>V</i>			Lot # of added preservative		
Hoodenage in VOA Vials / Samm		F		17.		
Headspace in VOA Vials (>6mm): Trip Blank Present:		\vdash	/	18.		
•		1		-		•
Trip Blank Custody Seals Present Rad Samples Screened < 0.5 mrem/hr		-		Initial when	Date: 3-3/-7C	*.
		<u> </u>		completed:	Date:))/ ¿C	
Client Notification/ Resolution:			Detail	Timor	Centreted Du	
Person-Contacted:			-⊎ate/	Time:	Gontacted 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 compilance 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.

Face Analytical"

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Ra-226 LAL 4/5/2020 53221 DW

Test. Analyst. Date: Worklist. Matrix: 0.095 0.095 0.124 0.246 1.51 N/A Pass

MB Sample ID
MB concentration:
M/B Counting Uncertainty:
M/B MDC:

Method Blank Assessment

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

MS/MSD 2	
MS/MSD 1	
Sample Matrix Spike Control Assessment Sample Collection Date: Sample 1.D. Sample 1.D. Sample MS 1.D. Sample MS 1.D. Sample MS 1.D. Sample MS 1.D. Spike Concentration (DC/Im1): Spike Volume Used in MS (mL): Spike Volume Used in MS (mL): Spike Volume Used in MS (mL): MS Target Conc. (pC/Im. 1; MS Target Conc. (pC/Im. 1; MSD Aliquot (1. g. F): MSD Aliquot (1. g. F):	MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated): Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result Matrix Spike Duplicate Result MSD Uncertainty (pCi/L, g, F): MSD Numerical Performance Indicator: MSD Numerical Performance Indicator: MSD Percent Recovery: MSD Percent Recovery: MSD Percent Recovery: MSD Status vs Numerical Indicator: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery: MSD Status vs Recovery Limits:
	Y 17/2020 17/2020 18-0:33 18-0:33 18-0:33 10.0:56

aboratory Control Sample Assessment	LCSD (Y or N)?	
	LCS53221	LCSD53221
Count Date;	4/7/2020	4/7/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.049	24.049
Volume Used (mL):	0.10	0.10
Aliquot Volume (L. g, F):	0.513	0.520
Target Conc. (pCI/L, g, F):	4.685	4.627
Uncertainty (Calculated):	0.056	0.056
Result (pCi/L, g, F):	4.614	4.549
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.725	0.687
Numerical Performance Indicator:	0.19	-0.22
Percent Recovery:	98.48%	98.31%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

		-
		E S
LCS53221	Enter Duplicate	
CSD53221	sample IDs if	
4.614	other than	
0.725	LCS/LCSD in	
4.549	the space below.	
0.687		
Q.		_
0.128	2630435007	
3.17%	2630435007DUP	
N/A		
Pass		
25%		
	\$53221 053221 514 7725 549 687 100 17% 17% 17%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment Sample N.D. Sample N.S. D Sample MSD I.D. Sample MSD I.D. Sample Matrix Spike Result Matrix Spike Result Counting Uncertainty (DCII., g, F): Sample Matrix Spike Duplicate Result: Duplicate Result Counting Uncertainty (DCII., g, F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MSI MSD Duplicate RPD: MS/ MSD Duplicate Status vs Numerical Indicator: MS/ MSD Duplicate Status vs 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:

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1 of 1

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Analyst: Date: Test

Worklist: Matrix:

MS/MSD 2 MS/MSD 1 Sample I.D. Sample MS I.D. Sample MSD I.D. ike Duplicate Result Counting Uncertainty (pCi/l, g, F): MS Numerical Performance Indicator: MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): Sample Result Counting Uncertainty (pCi/l., g, F): Sample Matrix Spike Result: Sample Collection Date: Spike I.D. MS/MSD Decay Corrected Spike Concentration (pCl/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): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated): Sample Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result: MSD Numerical Performance Indicator MSD Percent Recovery MS Status vs Numerical Indicator MSD Status vs Numerical Indicator MSD Status vs Recovery MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits: MS Percent Recovery MS Status vs Recovery Sample Matrix Spike Control Assessment LAL 4/5/2020 Ra-226 53221 DW 0.095 0.124 0.246

N/A Pass

MB concentration: M/B Counting Uncertainty:

MB Sample ID

Method Blank Assessment

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

MB MDC:

P***			,				Matrix Spik									*********	
,	=	LCSD53221															
000	LCSD (T of N)?	LCS53221	4/7/2020	19-033	24.049	0,10	0.513	4.685	0.056	4.614	0,725	-0.19	98.48%	N/A	Pass	125%	75%
	Franciatory control dample Assessment		Count Date:	Spike I.D.:	Decay Corrected Spike Concentration (pCi/mL):	Volume Used (mL):	Aliquot Volume (L. g, F):	Target Conc. (pC//L. g, F):	Uncertainty (Calculated):	Result (pCi/L, g, F):	LCS/LCSD Counting Uncertainty (pCi/L, g, F):	Numerical Performance Indicator:	Percent Recovery.	Status vs Numerical Indicator:	Status vs Recovery:	Upper % Recovery Limits:	Lower % Recovery Limits:

Musicate Sample Accessment			Matrix Snike/Matrix Snike Dunlicate Sample Accessment
Sample I.D.:	Sample I.D.: 2630435007	Enter Duplicate	Sample I.D.
Duplicate Sample I.D. 2630435007DUP	2630435007DUP	sample IDs if	Sample MS 1.D.
Sample Result (pCi/L, g, F):	0.161	other than	Sample MSD I.D.
Sample Result Counting Uncertainty (pCi/L, g, F):	0.152	LCS/LCSD in	Sample Matrix Spike Result:
Sample Duplicate Result (pCi/L, g, F):	0.099	the space below.	Matrix Spike Result Counting Uncertainty (pCi/l., g, F):
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.158		Sample Matrix Spike Duplicate Result:
Are sample and/or duplicate results below RL?	See Below #		Matrix Spike Duplicate Result Counting Uncertainty (pCl/L, g, F):
Duplicate Numerical Performance Indicator:	0.550	2630435007	Duplicate Numerical Performance Indicator:
Duplicate RPD:	47.42%	2630435007DUP	(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:
Duplicate Status vs Numerical Indicator.	N/A		MS/ MSD Duplicate Status vs Numerical Indicator:
Duplicate Status vs RPD:	Fail		MS/ MSD Duplicate Status vs RPD;
% RPD Limit	75%		% RPD Limit:
## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.	imple or duplicate r	results are below th	e MDC.

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Comments:

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Ra-226

Test Analyst: Date:

	MS/MSD 2																											***************************************	
	MS/MSD 1																												
	Sample Matrix Spike Control Assessment	Sample Collection Date:	Sample I.D.	Sample MS I.D.	Sample MSD I.D.	Spike I.D.:	MS/MSD Decay Corrected Spike Concentration (pCi/mL):	Spike Volume Used in MS (mL):	Spike Volume Used in MSD (mL):	MS Aliquot (L, g, F):	MS Target Conc.(pCi/L, g, F):	MSD Aliquot (L. g. F):	MSD Target Conc. (pCifl., g, F):	MS Spike Uncertainty (calculated):	MSD Spike Uncertainty (calculated):	Sample Result:	Sample Result Counting Uncertainty (pClift, 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 (pCl/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:
															Å	LCSD53222	4/7/2020	19-033	24.049	0.10	0.501	4.798	0.058	4.698	0.719	-0.27	97.92%	ΑΝ	Pass
27.2	K	4/5/2020	53222	Š			1891463	0.070	0.172	0.412	0.79	N/A	Pass		LCSD (Y or N)?	LCS53222	4/7/2020	19-033	24.049	0,10	0.514	4.675	0.056	4.859	0.707	0.51	103.94%	V/A	Pass
	Analyst	Date:	Worklist	Matrix:			MB Sample ID	MB concentration:	M/B Counting Uncertainty:	MB MDC:	merical Performance Indicator:	Status vs Numerical Indicator.	MB Status vs. MDC:		ment		Count Date:	Spike I.D.:	Spike Concentration (pCi/mL):	Volume Used (mL):	Aliquot Volume (L, g, F):	Target Conc. (pCi/L, g, F):	Uncertainty (Calculated):	Result (pCi/L, g, F):	unting Uncertainty (pCi/L, g, F):	merical Performance Indicator:	Percent Recovery:	Status vs Numerical Indicator:	Status vs Recovery:

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

Method Blank Assessment

Laboratory Control Sample Assessment

	LCS53222	LCSD53222	Sample Result:
Count Date:	4/7/2020	4/7/2020	Sample Result Counting Uncertainty (pCi/L, g, F):
Spike I.D.:	19-033	19-033	Sample Matrix Spike Result:
Decay Corrected Spike Concentration (pCl/mL):	24.049	24.049	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Volume Used (mL):	0,10	0.10	Sample Matrix Spike Duplicate Result:
Aliquot Volume (L, g, F):	0.514	0.501	Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Target Conc. (pCi/L, g, F):	4.675	4.798	MS Numerical Performance Indicator:
Uncertainty (Calculated):	0.056	0.058	MSD Numerical Performance Indicator:
Result (pCi/L, g, F):	4.859	4.698	MS Percent Recovery:
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.707	0.719	MSD Percent Recovery:
Numerical Performance Indicator:	0.51	-0.27	MS Status vs Numerical Indicator:
Percent Recovery:	103.94%	97.92%	MSD Status vs Numerical Indicator;
Status vs Numerical Indicator:	N/A	A/N	MS Status vs Recovery:
Status vs Recovery:	Pass	Pass	MSD Status vs Recovery:
Upper % Recovery Limits:	125%	125%	MS/MSD Upper % Recovery Limits:
Lower % Recovery Limits:	75%	75%	MS/MSD Lower % Recovery Limits:
Duplicate Sample Assessment			Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.:	LCS53222	Enter Duplicate	Sample I.D.
Duplicate Sample I.D.	LCSD53222	sample IDs if	Sample MS I.D.
Sample Result (pCi/L, g, F):	4.859	other than	Sample MSD I.D.
Sample Result Counting Uncertainty (pCift., g, F):	0.707	LCS/LCSD in	Sample Matrix Spike Result:
Sample Duplicate Result (pCi/L, g, F):	4.698	the space below.	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Duplicate Result Counting Uncertainty (pCi/l., g, F):	0.719		Sample Matrix Spike Duplicate Result:
Are sample and/or duplicate results below RL?	0N		Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator:	0.313		Duplicate Numerical Performance Indicator:
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.96%		(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:
Duplicate Status vs Numerical Indicator:	N/A		MS/ MSD Duplicate Status vs Numerical Indicator;
Duplicate Status vs RPD:	Pass		MS/ MSD Duplicate Status vs RPD:
% RPD Limit:	25%		% RPD Limit:

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Comments:

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Ra-226

Pace Analytical

MS/MSD 2 MS/MSD MS Ailquot (L, g, F):
MS Target Conc. (pCi/L, g, F):
MSD Aliquot (L, g, F):
MSD Target Conc. (pCi/L, g, F): Sample I.D. Sample MS I.D. Sample MSD I.D. Sample Result Counting Uncertainty (pCi/l., g, F): Sample Matrix Spike Result. Sample Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): trix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
MS Numerical Performance Indicator: Sample Collection Date: Spike I.D. MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Spike Uncertainty (calculated). **MSD Spike Uncertainty (calculated)** Sample Matrix Spike Duplicate Result: MSD Numerical Performance Indicator MS Percent Recovery. Sample Matrix Spike Control Assessment 4/5/2020 1891463 0.070 53222 DW 0.172 0.412 0.79 N/A Test: Analyst: Date: Worklist: Matrix: MB concentration: M/B Counting Uncertainty: MB Numerical Performance Indicator: MB Status vs Numerical Indicator: MB Status vs. MDC: MB Sample ID MB MDC: Method Blank Assessment

Laboratory Control Sample Assessment	LCSD (Y or N)?	Z	
	LCS53222	LCSD53222	
Count Date:	4/7/2020		
Spike I.D.:	19-033		
Decay Corrected Spike Concentration (pCi/mL):	24.049		
Volume Used (mL):	0.10		
Aliquot Volume (L, g, F):	0.514		Matr
Target Conc. (pCi/L, g, F):	4,675		
Uncertainty (Calculated):	0.056		
Result (pCi/L, g, F):	4.859		
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.707		
Numerical Performance Indicator;	0.51		
Percent Recovery:	103.94%		
Status vs Numerical Indicator:	N/A		
Status vs Recovery:	Pass		
Upper % Recovery Limits:	125%		
Lower % Recovery Limits:	75%		

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

Duplicate Sample Assessment			Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.:	Sample I.D.: 2630449010 Enter Duplicate	Enter Duplicate	Sample I.D.
Duplicate Sample I.D. 2630449010DUP	2630449010DUP	sample IDs if	Sample MS I.D.
Sample Result (pC//L, g, F):	0.051	other than	Sample MSD I.D.
Sample Result Counting Uncertainty (pCi/L, g, F):	0.134	LCS/LCSD in	Sample Matrix Spike Result:
Sample Duplicate Result (pCi/L, g, F):	0.127	the space below.	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.138		Sample Matrix Spike Duplicate Result:
Are sample and/or duplicate results below RL?	See Below #		Matrix Spike Duplicate Result Counting Uncertainty (pCI/L, g, F):
Duplicate Numerical Performance Indicator:	-0.770	2630449010	Duplicate Numerical Performance Indicator:
Duplicate RPD:	84.72%	2630449010DUP	(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:
Duplicate Status vs Numerical Indicator:	NA		MS/ MSD Duplicate Status vs Numerical Indicator:
Duplicate Status vs RPD:	Fail		MS/ MSD Duplicate Status vs RPD:
-timit-	25%		-imil Udd %

MS/ MSD Duplicate Status vs RPD: % RPD Limit:

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

Comments:

عاداميس "Batch must be re-prepped due to unacceptable precision." N

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TAR_53222_W Total Alpha Radium (R104-3 11Feb2019).xls をというの

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Analyst Must Manually Enter All Fields Highlighted in Yellow. Ra-226

Face Analytical www.pacetobac.com

Sample Matrix Spike Control As LAL 4/7/2020 53273 DW 0.145 1.19 N/A Pass MB Numerical Performance Indicator: MB Status vs Numerical Indicator: MB Status vs. MDC: Analyst: Date: Worklist: Matrix: MB Sample ID M/B Counting Uncertainty: MB MDC: Method Blank Assessmen

	Sample Matrix Spike Control Accessment	MS/MSD 1	MS/MSD 2
	Sample Collection Date:		
	Sample I.D.		
	Sample MSD 1.D.		
	Spike I.D.:		
	MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
	Spike Volume Used in MS (mL):		
	Spike Volume Used in MSD (ml.):		
	MS Aliquot (L, g, F):		
	MS Target Conc.(pCi/L, g, F):		
	MSD Aliquot (L, g, F):		
	MSD Target Conc. (pCl/L, g, F):		
	MS Spike Uncertainty (calculated):		
Γ-	MSD Spike Uncertainty (calculated):		
T	Sample Result		
1	Sample Result Counting Uncertainty (pCi/L, g, F):		
	Sample Matrix Spike Result:		
	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
	Sample Matrix Spike Duplicate Result:		
	Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
	MS Numerical Performance Indicator:		
	MSD Numerical Performance Indicator:		
	MS Percent Recovery:		
	MSD Percent Recovery.		
	MS Status vs Numerical Indicator:		
	MSD Status vs Numerical Indicator:		
	MS Status vs Recovery:		
	MSD Status vs Recovery:		
	MS/MSD Upper % Recovery Limits:		
_	MS/MSD Lower % Recovery Limits:		

19-033 24.049

Count Date: Spike I.D.:

Laboratory Control Sample Assessmen

Decay Corrected Spike Concentration (pCi/mL):

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

Uncertainty (Calculated):

Volume Used (mL):

INCO Spine Office learning (caromater):	Sample Result:	Sample Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Result:	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:	Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	MS Numerical Performance Indicator:	MSD Numerical Performance Indicator:	MS Percent Recovery:	MSD Percent Recovery:	MS Status vs Numerical Indicator:	MSD Status vs Numerical Indicator:	MS Status vs Recovery:	MSD Status vs Recovery:	MS/MSD Upper % Recovery Limits:	MS/MSD Lower % Recovery Limits:
-																
-	CSD53273	4/8/2020	19-033	24.049	0.10	0.508	4.734	0.057	5.065	0.785	0.83	107.00%	A/N	Pass	125%	75%

Result (pC/JL, g, F): LCS/LCSD Counting Uncertainty (pC/JL, g, F):

Percent Recovery: Status vs Recovery:

Numerical Performance Indicator Status vs Numerical Indicator Upper % Recovery Limits: Lower % Recovery Limits:

Duplicate Sample Assessment

plicate Sample Assessment			Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.:	LCS53273	Enter Duplicate	Sampl
Duplicate Sample I.D.	LCSD53273	sample IDs if	Sample MS
Sample Result (pCi/L, g, F):	4.815	other than	Sample MSE
Sample Result Counting Uncertainty (pCi/L, g, F):	0.784	LCS/LCSD in	Sample Matrix Spike Re
Sample Duplicate Result (pCi/L, g, F):	5.065	the space below.	Matrix Spike Result Counting Uncertainty (pCi/L, p
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.785		Sample Matrix Spike Duplicate Ro
Are sample and/or duplicate results below RL?	8		Matrix Spike Duplicate Result Counting Uncertainty (pCi/L,
Duplicate Numerical Performance Indicator:	-0.441	2630325039	Duplicate Numerical Performance Indic
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.95%	2630325039DUP	(Based on the Percent Recoveries) MS/ MSD Duplicate
Duplicate Status vs Numerical Indicator:	N/A		MS/ MSD Duplicate Status vs Numerical Indic
Duplicate Status vs RPD:	Pass		MS/ MSD Duplicate Status vs
% RPD Limit	25%		% RPD

Sample I.D. Sample MS I.D. Sample MSI.D. Sample MSI.D.	Matrix Spike Result Counting Uncertainty (pCi/I., g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (pCi/I., g, F): Upplicate Numerical Performance Indicator: (Rased on the Perent Recoveries) MSI MSD Duplicate RPD.	MS/ MSD Duplicate Status vs Numerical Indicator: MS/ MSD Duplicate Status vs RPD: 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:

02/8/hw40

TAR_53273_W Total Alpha Radium (R104-3 11Feb2019).xls

TAR DW QC Printed: 4/8/2020 10:57 AM

1 of 1

Analyst Must Manually Enter All Fields Highlighted in Yellow.

MS/MSD 2

Sample Matrix Spike Control Assessment Ra-226 LAL 477/2020 1893273 53273 DW 0.088 0.145 0.316 1.19 N/A Pass Analyst: Date: Test Worklist: Matrix: MB Sample ID MB concentration: M/B Counting Uncertainty: Face Analytical" Method Blank Assessment

	Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD
	Sample Collection Date:		
	Sample I.D.		
	Sample MS I.D.		
	Sample MSD I.D.		
	Spike I.D.:		
	MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
	Spike Volume Used in MS (mL):		
	Spike Volume Used in MSD (mL):		
	MS Aliquot (L, g, F):		
	MS Target Conc.(pCi/L, g, F):		
	MSD Aliquot (L, g, F):		
	MSD Target Conc. (pCi/L, g, F):		
	MS Spike Uncertainty (calculated):		
z	MSD Spike Uncertainty (calculated):		
LCSD53273	Sample Result:		
	Sample Result Counting Uncertainty (pCi/L, g, F):		
	Sample Matrix Spike Result:		
	Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
	Sample Matrix Spike Duplicate Result:		***********
•	Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
	MS Numerical Performance Indicator:		
	MSD Numerical Performance Indicator:		
•	MS Percent Recovery:		
	MSD Percent Recovery:		
	MS Status vs Numerical Indicator:		.,,
	MSD Status vs Numerical Indicator:		
	MS Status vs Recovery:		
	MSD Status vs Recovery:		
	MS/MSD Upper % Recovery Limits:		
•	MS/MSD Lower % Recovery Limits:		

D (Y or N)? LCS53273 4/8/2020 19-033 24.049 0.10 0.504 4.776 0.057

Volume Used (mL):

Count Date: Spike 1.D.: Decay Corrected Spike Concentration (pCl/mL):

Laboratory Control Sample Assessment

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

MB MDC

Matrix Spike Duplicate Result Counting Uncertainty (pCl/I., g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MSD Percent Recovery: MSD Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MSD Status vs Recovery: MS/MSD Upper % Recovery: MS/MSD Upper % Recovery: MS/MSD Upper % Recovery Limits:	Matrix Spike/Matrix Spike Duplicate Sample Assessment Sample MS 1D. Sample MS 1D. Sample MS 1D. Sample MSD 1D. Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (DCIV. g. F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result: Matrix Spike Duplicate Result: Matrix Spike Duplicate Result: Matrix Spike Duplicate Result: Matrix Spike Duplicate Result: Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Spike Duplicate Result: Matrix Spike Duplicate Matrix Matrix Spike Duplicate Matrix Matrix Matrix Spike Duplicate Matrix Mat
	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
0.504 4.776 0.057 4.815 0.784 0.10 100.82% N/A N/A Pass 125% 75%	2630325039 2630325039DUP 0.837 0.246 0.140 0.251 See Below ##
Aliquot Volume (L. g. F): Target Conc. (pCi/L. g. F): Uncertainty (Calculated): Result (pCi/L. g. F): LCS/LCSD Counting Uncertainty (pCi/L. g. F): Numerical Performance Indicator: Status vs Numerical Indicator: Status vs Recovery: Upper % Recovery Limits: Lower % Recovery Limits:	Duplicate Sample Assessment Sample I.D.: Duplicate Sample I.D.: Sample Result Counting Uncertainty (CI/I., g, F): Sample Result Counting Uncertainty (CI/I., g, F): Sample Duplicate Result (Counting Uncertainty (CI/I., g, F): Are sample and/or duplicate results below RL?

Sample MSD I.D.	Sample Matrix Spike Result Counting Uncertainty (PC/IL, 9, F):	Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (PCi/L, g, F):	Duplicate Numerical Performance Indicator (Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	MS/ MSD Duplicate Status vs Numerical Indicator: MS/ MSD Duplicate Status vs RPD:	% RPD Limit.

2.768 127.71% N/A Fail***

Duplicate Status vs Numerical Indicator:
Duplicate Status vs RPD:
% RPD Limit:

Duplicate Numerical Performance Indicator:

Duplicate RPD:

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

Comments:

き2 ***Batch must be re-prepped due to unacceptable precision.

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Face Analytical

Quality Control Sample Performance Assessment

Ra-228	VAL 477/2020	93224 WT
Test	Analyst: Date:	Matrix:

Ra-228	4/7/2020	53224 WT
Test	Date:	Worklist Matrix:

Ra-228	۸AL	4/7/2020	53224
Test	Analyst	Date:	Worklist

MS/MSD 2

MS/MSD 1

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.)

Sample Collection Date:

Sample Matrix Spike Control Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

VAL 4772020 53224 WT	1891465
Analyst Date: Worklist Matrix:	MB Sample ID

Method Blank Assessment

1891465	0.112	0.287	0.643	0.76	Pass	Pass
MB Sample ID	MB concentration:	M/B 2 Sigma CSU:	MB MDC:	MB Numerical Performance Indicator:	MB Status vs Numerical Indicator:	MB Status vs. MDC:

>	LCSD (Y or N)?	
	Pass	Status vs. MDC:
	Pass	imerical Indicator:

Laboratory Control Sample Assessment

MSD Target Conc. (pCi/L, g, F):

MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated):

Sample Result:

Sample Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Result:

Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result:

Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator

MS Percent Recovery MSD Percent Recovery MS Status vs Numerical Indicator MSD Status vs Numerical Indicator

MS Aliquot (L, g, F): MS Target Conc.(pCi/L, g, F):

ol Sample Assessment	LCSD (Y or N)?	٨
	LCS53224	LCSD53224
Count Date:	4/15/2020	4/15/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.481	34.481
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.814	0.813
Target Conc. (pCi/L, g, F):	4.234	4,240
Uncertainty (Calculated):	0.305	0.305
Result (pCi/L, g, F):	4.852	4.733
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.102	1.081
Numerical Performance Indicator:	1.06	0.86
Percent Recovery:	114.60%	111.63%
Status vs Numerical Indicator;	N/A	Ϋ́
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	%09	%09

MS/MSD Lower % Recovery Limits: MS/MSD Lower % Recovery Limits:
--

MS Status vs Recovery:

Sample I.D. Sample MS I.D. Sample MSD I.D. (Based on the Percent Recoveries) MS/ MSD Duplicate RPD:
MS/ MSD Duplicate Status vs Numerical Indicator:
MS/ MSD Duplicate Status vs Numerical Indicator:
MS/ MSD Duplicate Status vs RPD:
% RPD Limit. Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pC/L, g, F): Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):

Enter Duplicate sample IDs if other than LCS/LCSD in	the space below.		
LCS53224 LCSD53224 4.852 1.102		0.151 2.63% Pass	Pass 36%
Sample I.D.: Duplicate Sample I.D.: Sample Result (pCid., g, F): Sample Result 2 Sigma CSU (pCid., g, F):	Sample Duplicate Result (pCi/L, g, F): Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F): Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator: (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD: Duplicate Status vs Numerical Indicator:	Duplicate Status vs RPD. % RPD Limit:

Duplicate Sample Assessment

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

Comments:



6 of 10

Face Analytical

Quality Control Sample Performance Assessment

VAL 4/7/2020 53225 WT Test Analyst: Date: Worklist: Matrix:

1891466 -0.184

MB Sample ID

Method Blank Assessment

MB concentration: M/B 2 Sigma CSU: MB MDC:

0.783 -1.13 Pass Pass

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

Laboratory Control Sample Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

	Control of Control of	/000
	MS/MSD Upper % Recovery Limits:	135%
	MSD Status vs Recovery:	Pass
	MS Status vs Recovery:	K/N
	MSD Status vs Numerical Indicator;	104.44%
	MS Status vs Numerical Indicator:	0.35
	MSD Percent Recovery:	1.019
	MS Percent Recovery:	4.458
	MSD Numerical Performance Indicator:	0.307
	MS Numerical Performance Indicator:	4.269
	Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.807
	Sample Matrix Spike Duplicate Result:	0.10
	Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	34.469
	Sample Matrix Spike Result:	19-057
	Sample Result 2 Sigma CSU (pCi/L, g, F):	4/16/2020
	Sample Result:	CSD53225
	MSD Spike Uncertainty (calculated):	>
	MS Spike Uncertainty (calculated):	
	MSD Target Conc. (pCi/L, g, F):	
	MSD Aliquot (L, g, F);	
	MS Target Conc.(pCl/L, g, F):	
	MS Aliquot (L, g, F);	
	Spike Volume Used in MSD (mL):	
	Spike Volume Used in MS (mL):	
	MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
	Spike I.D.:	
	Sample MSD I.D.	
	Sample MS LD.	
	C alamen	
	Sample Collection Date:	
MS/MSD 1	Sample Matrix Spike Control Assessment	
		ample Collection Date: Sample I.D. Sample I.D. Sample MSD I.D. Sample MSD I.D. Sample MSD I.D. Spike I.D.: Spike I.D.: Spike I.D.: Spike I.D.: MSD Aliquot (L, g, F): MSD Aliquot (L, g, F): MSD Aliquot (L, g, F): MSD Aliquot (L, g, F): MSD Aliquot (L, g, F): MSD Aliquot (L, g, F): MSD Aliquot (L, g, F): Bet Conc. (pCi/L, g, F): The Conc. (pCi/L, g, F): Sample Result Sample Result Spike Duplicate Result Spike Duplicate Result Spike Duplicate Result Spike Duplicate Result Spike Duplicate Result Spike Duplicate Result Spike Duplicate Result Spike Duplicate Result Spike Duplicate Result Spike Duplicate Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Spike Result Spike Spike Spike Result Spike Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Spike Result Spike Result

LCS53228 4/16/2020 19-057 34.469 0.10 0.808 4.266 0.307 4.487

Volume Used (mL): Aliquot Volume (L, g, F): Target Conc. (pCi/L, g, F):

Uncertainty (Calculated):

Result (pCi/L, g, F): LCS/LCSD 2 Sigma CSU (pCi/L, g, F): Numerical Performance Indicator;

Count Date: Spike 1.D.:

Decay Corrected Spike Concentration (pCi/mL):

	1					
MS/MSD Upper 9, Recovery Limits: MS/MSD Lower 9, Recovery Limits:		Matrix Spike/Matrix Spike Duplicate Sample Assessment	Sample I.D.	Sample MS I.D.	Sample MSD I.D.	
135% 60%			Enter Duplicate	sample IDs if	other than	

other than LCS/LCSD in

LCS53225 LCSD53225

Sample I.D.:

Duplicate Sample I.D.
Sample Result (pCiL., 9, F):
Sample Result 2 Signa OSU (pCiL., 9, F):
Sample Duplicate Result (pCiL., 9, F):

0.40 105.19% N/A Pass 135% 60%

Percent Recovery: Status vs Numerical Indicator: Status vs Recovery:

Upper % Recovery Limits: Lower % Recovery Limits:

Duplicate Sample Assessment

he space below.

4,487 1.030 4,458 1.019 NO 0.72% Pass Pass 36%

Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):
Are sample and/or duplicate results below RL?

Duplicate Numerical Performance Indicator: (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD: Duplicate Status vs Numerical Indicator:

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Duplicate Status vs RPD: % RPD Limit:

Comments:



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Sample Matrix Spike Control Assessmer	VAI	Analyst.
	Ra-228	Test
Alialyst Must Maliually Ciller All C		

Face Analytical

Quality Control Sample Performance Assessment

2 COMSW	1																												
1 CSMSM	3000																												
Sample Matrix Calke Control Accessment	Sample man a pine Common Assessment Sample Collection Date:	Sample I.D.	Sample MSD LD.	Spike I.D.:	MS/MSD Decay Corrected Spike Concentration (pCi/mt.):	Spike Volume Used in MS (mL):	Spike Volume Used in MSD (mL):	MS Aliquot (L, g, F):	MS Target Conc.(pCiA., g, F):	MSD Aliquot (L. g, F);	MSD Target Conc. (pCi/L, g, F):	MS Spike Uncertainty (calculated):	MSD Spike Uncertainty (calculated):	Sample Result:	Sample Result 2 Sigma CSU (pCi/L, g, F):	Sample Matrix Spike Result:	Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:	Matrix Spike Duplicate Result 2 Sigma CSU (pCl/l., g, F):	MS Numerical Performance Indicator.	MSD Numerical Performance Indicator:	MS Percent Recovery:	MSD Percent Recovery:	MS Status vs Numerical Indicator:	MSD Status vs Numerical Indicator:	MS Status vs Recovery:	MSD Status vs Recovery:	MS/MSD Upper % Recovery Limits:	MS/MSD Lower % Recovery Limits:
													≻	LCSD53274	4/20/2020	19-057	34.425	0.10	0,810	4.250	0.306	3.984	0.924	.0.54	93.74%	¥.	Pass	135%	%09
\ \ \ \ \ \	4/8/2020	53274	2		1893276	0.311	0.302	0.622	2.01	Warning	Pass		LCSD (Y or N)?	LCS53274	4/20/2020	19-057	34.425	0.10	0.813	4.235	0.305	4.402	1.007	0.31	103.95%	ΝΆ	Pass	135%	%O9
TSVIEUA TSVIEUA	Date:	Worklist	Maulx	Method Blank Assessment	MB Sample ID	MB concentration:	M/B 2 Sigma CSU:	MB MDC;	MB Numerical Performance Indicator;	MB Status vs Numerical Indicator;	MB Status vs. MDC:		Laboratory Control Sample Assessment		Count Date:	Spike I.D.:	Decay Corrected Spike Concentration (pCl/mL);	Volume Used (mL):	Aliquot Volume (L, g, F):	Target Conc. (pCi/L, g, F):	Uncertainty (Calculated):	Result (pCi/L, g, F);	LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	Numerical Performance Indicator:	Percent Recovery:	Status vs Numerical Indicator.	Status vs Recovery:	Upper % Recovery Limits:	Lower % Recovery Limits:

						Matrix Spii											Matrix Spike/Matrix							Matrix Spil		(Based on the F	MS/		
À	LCSD53274	4/20/2020	19-057	34.425	0.10	0,810	4.250	0.306	3.984	0.924	, 54 45, 0	93.74%	N/A	Pass	135%	60%		Enter Duplicate	sample IDs if	other than	LCS/LCSD in	the space below.							
CSD // or N/2	LCS53274	4/20/2020	19-057	34,425	0.10	0.813	4.235	0.305	4.402	1.007	0.31	103.95%	N/A	Pass	135%	60%		LCS53274	LCSD53274	4.402	1.007	3.984	0.924	2	0.600	10.32%	Pass	Pass	36%
I shoratory Control Sample Accocoment	-	Count Date:	Spike I.D.:	Decay Corrected Spike Concentration (pCl/mL):	Volume Used (mL):	Aliquot Volume (L. g, F):	Target Conc. (pCVL, g, F):	Uncertainty (Calculated):	Result (pCi/L, g, F):	LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	Numerical Performance Indicator:	Percent Recovery:	Status vs Numerical Indicator:	Status vs Recovery:	Upper % Recovery Limits:	Lower % Recovery Limits:	Duplicate Sample Assessment	Sample I.D.:	Duplicate Sample I.D.	Sample Result (pCVL, g, F):	Sample Result 2 Sigma CSU (pCi/L, g, F):	Sample Duplicate Result (pCi/L, g, F):	Sample Duplicate Result 2 Sigma CSU (pCi/l., g, F):	Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator:	(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	Duplicate Status vs Numerical Indicator:	Duplicate Status vs RPD:	% RPD Limit:

Matrix Spike/Matrix Spike Duplicate Sample Assessment Sample I.D. Sample MS I.D. Sample MS I.D. Sample Matrix Spike Result 2 Sigma CSU (DCML, 9, F). Sample Matrix Spike Duplicate Result. Matrix Spike Duplicate Result 2 Sigma CSU (DCML, 9, F). Sample Matrix Spike Duplicate Result. Duplicate Result 2 Sigma CSU (DCML, 9, F). Duplicate Nesult 2 Sigma CSU Duplicate Result. MS/ MSD Duplicate Status vs Numerical Indicator. MS/ MSD Duplicate Status vs Numerical Indicator. MS/ MSD Duplicate Status vs Numerical Indicator. MS/ MSD Duplicate Status vs Numerical Indicator.	x Spike/Matrix Spike Duplicate Sample Assessment Sample I.D. Sample MS I.D. Sample MS I.D. Sample MSD I.D. Sample Matrix Spike Result: Matrix Spike Result 2 Signa CSU (pCif., g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Signa CSU (pCif., g, F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/ MSD Duplicate SPD: MS/ MSD Duplicate Status vs Numerical Indicator: MS/ MSD Duplicate Status vs Numerical Indicator: MS/ MSD Duplicate Status vs RPD:

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

Comments:

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DATA QUALITY EVALUATION



Data Evaluation Narrative

Project: Plant Mitchell CCR Groundwater Assessment Monitoring Event #3

Wood Project Number: 6122160170.2003.****
Site: Ash Ponds 1&2 - Plant Mitchell, Georgia

Matrix: Groundwater

Pace SDG Nos: 2630449 and 30356720

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the Assessment Monitoring Event #3 (March 2020) conducted at Ash Ponds 1 and 2 at Plant Mitchell, located in Albany, Georgia for Southern Company Services (SCS). The samples were collected and analyzed per the protocols presented in the *Draft* Plant Mitchell *Field Sampling Plan* (FSP) (SCS, 2016). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory's precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u> J	Usable Data The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. Note: SCS does not use the "U" flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).
U*	This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

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Qualifier Unusable Data

R The sample results are rejected due to deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed and the data are unusable.

UR The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this sample delivery group (SDG) are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly, Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6010D/SW6020B, EPA 300.0, SM2540C, SW9315, and SW9320.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III and Appendix IV metals (boron, calcium, antimony, arsenic, barium, chromium, cobalt, lead, lithium, molybdenum, selenium, and thallium) by Method SW6010D (calcium only) and SW6020B, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM2540C. Samples were also sent from Pace's Georgia facility to their laboratory in Greenburg, Pennsylvania and analyzed for radium-226, radium-228, and total radium by Methods SW9315 and SW9320.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package. It was noted by the laboratory that the COC indicated the samples were filtered, however it was confirmed that no field filtration was performed, therefore the results in this SDG represent total metals. No dissolved metals samples were collected and reported in this SDG.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
PZ-1D	03/24/20	II	PZ-15	03/26/20	П
PZ-2D	03/24/20	II	PZ-16	03/26/20	II
PZ-31	03/25/20	II	PZ-19	03/26/20	II
PZ-14	03/25/20	II			
PZ-23A	03/25/20	II	QC Samples		
PZ-17	03/25/20	II	FB-01	03/25/20	II
PZ-25	03/25/20	II	EB-01	03/24/20	II
PZ-32	03/25/20	II			
PZ-7D	03/26/20	II			
PZ-18	03/26/20	II			
PZ-33	03/26/20	II			

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These samples were collected from Ash Ponds 1 and 2 between March 24 and 26, 2020. The associated field QC blanks include samples FB-01 and EB-01. Sample FB-01 is a field blank sample, and sample EB-01 is an equipment blank.

The analytical results for the metals, anions, TDS, and radium data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6010D and SW6020B)

The samples were submitted to Pace for CCR Appendix III and Appendix IV metals by Methods SW6010D and SW6020B. The CCR Appendix III metals for this event are: boron (B) and calcium (Ca). The Appendix IV metals for this event are antimony (Sb), arsenic (As), barium (Ba), chromium (Cr), cobalt (Co), lead (Pb), lithium (Li), molybdenum (Mo), selenium (Se), and thallium (Tl). Each of the Level II components were within laboratory QC limits for metals except for MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 6-month analysis holding time.

Method Blanks

The method blanks associated with the samples analyzed within this SDG did not contain analytes of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCSs.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis for Ca by Method 6010D was performed on sample PZ-23A, and the MSD recovery was outside of the laboratory limits. However, no qualification is required if the sample was analyzed at a dilution, or if the sample result is greater than 4 times the spiked concentration.

Action: No qualification was required because the sample concentration was greater than 4x the spike amount potentially masking the spike.

An MS/MSD was also performed for the other 11 metals by Method 6020B on sample PZ-7D, and the recoveries and RPDs were within QC limits.

Post Digestion Spike (PDS)

PDS analyses results were not reported within this Level 2 data package.

Field Duplicate Precision

Two blind field duplicate samples were collected and submitted to the laboratory for this sampling event. Dup-01 is associated with monitoring well PZ-7D, and Dup-02 is associated with monitoring well PZ-19. Acceptable duplicate precision was achieved, and no qualification of the associated samples was required.

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Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. FB-01 is a field blank and is associated with the samples reported in this SDG. FB-01 reported no contamination for metals. EB-01 is an equipment blank associated with sample PZ-2D and no metals were detected.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6010D/SW6020B. Since the laboratory analyzed calcium by SW6010D, no dilutions were required for any of the samples submitted in this SDG (all analyzed 1x).

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within laboratory QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding time.

Method Blanks

The method blanks associated with the samples analyzed within this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCSs.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed on sample PZ-25, and the percent recoveries and RPDs were within QC limits.

Field Duplicate Precision

Two blind field duplicate samples were collected and submitted to the laboratory for this sampling event. Dup-01 is associated with monitoring well PZ-7D, and Dup-02 is associated with monitoring well PZ-19. Acceptable duplicate precision was achieved, and no qualification of the associated samples was required.

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Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. EB-01 is an equipment blank and is associated with sample PZ-2D. EB-01 reported no contamination for anions. FB-01 is a field blank and is associated with the samples reported in this SDG. FB-01 reported no contamination for anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. No samples required dilution.

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

TDS (SM2540C)

The samples were submitted to Pace for TDS by Method SM2540C. Each of the Level II components were within QC limits except for equipment and field blank contamination; however, no qualification was required per guidance from SCS.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Method SM2540C does not require method blank analyses.

<u>Laboratory Control Sample (LCS)</u>

Percent recoveries for target analytes were within quality control limits in the LCSs.

Laboratory Duplicate Precision

Batch precision for TDS was measured through the analysis of laboratory duplicates. The laboratory analyzed sample PZ-31 in duplicate, and the RPD was within QC limits indicating good analytical precision.

Field Duplicate Precision

Two blind field duplicate samples were collected and submitted to the laboratory for this sampling event. Dup-01 is associated with monitoring well PZ-7D and Dup-02 is associated with monitoring well PZ-19. Acceptable duplicate precision was achieved, and no qualification of the associated samples was required.

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Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Sample EB-01 is an equipment blank associated with sample PZ-2D and reported contamination for TDS at a concentration of 213 mg/L. Sample FB-01 is a field blank associated with all samples collected with this sampling event. FB-01 reported detections of TDS at a concentration of 163 mg/L. No qualification was applied per SCS guidance.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM2540C and no samples required dilutions; therefore, RLs were met for this project.

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Radium (SW9315/SW9320)

The samples were submitted to Pace for radium-226 (Ra-226), radium-228 (Ra-228), and total radium by Methods SW9315 and SW9320. Total radium was measured by calculation. Each of the Level II components were within OC limits.

Holding Times

The sample analyses were performed within the 6-month analysis holding time.

Method Blanks

The laboratory method blanks did not contain reportable concentrations of Ra-226 or Ra-228 above the MDC indicating the analytical system was free of contamination.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCSs.

Laboratory Duplicate Precision

Laboratory duplicate analysis was performed for Ra-226 in sample PZ-32, and the RPD was above the QC limit.

Action: No qualification was necessary because the Ra-226 result for PZ-32 was less than the MDC.

Field Duplicate Precision

Two blind field duplicate samples were collected and submitted to the laboratory for this sampling event. Dup-01 is associated with monitoring well PZ-7D, and Dup-02 is associated with monitoring well PZ-19. Acceptable duplicate precision was achieved, and no qualification of the associated samples was required.

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Sampling Accuracy (Equipment Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. The field blank sample (FB-01) contained both Ra-226 and Ra-228 but activity counts were below the MDC indicating that Ra-226 and Ra-228 did not contribute to the results.

The equipment blank sample (EB-01, associated with sample PZ-2D) was re-analyzed on 5/08/20 for Ra-228 due to a high initial result. The laboratory confirmed that radon daughter interference in the original sample count was not noted before the initial results were finalized (Pace, 2020). The reanalyzed results were reported, and EB-01 contained both Ra-226 and Ra-226 but activities were below the MDCs indicating that Ra-226 and Ra-228 did not contribute to the results.

Carrier and Tracer Yield Recoveries

The carrier and tracer yield recoveries for the samples and QC were within the QC limit of 30% to 110%.

Reporting Limits/Minimum Detectable Concentrations

The RLs (MDCs) were below the screening level of 5 pCi/L for samples submitted for the analysis of radium-226 and radium-228 by Methods SW9315 and SW9320.

Sample results in which the values were reported at concentrations below the MDC were flagged "U" and considered not detected.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan. DQE flags were not applied or edited based on professional judgment.

References

Pace, 2020. Email communication from Kevin Herring (Pace) to Rhonda Quinn (Wood), May 12, 2020.

SCS, 2016. *Draft Field Sampling Plan – Plant Mitchell*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), August 17, 2016.

USEPA, 2014. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JTP 04/18/2020 Prepared by/Date: JPM 04/30/2020 Checked by/Date: DWK 05/01/2020 Revised by/Date: DWK 05/12/2020

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TABLE 1 SUMMARY OF DATA QUALIFIERS

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TABLE 1

SUMMARY OF DATA QUALIFIERS SAMPLE DELIVERY GROUPS 2630449 and 30356720

SAMPLING DATES: March 24-26, 2020 Plant Mitchell Ash Ponds 1 and 2

No additional flags were required based on data quality evaluation. The laboratory "J" flags will remain in place where the reported constituent concentration is between the MDL and the RL.

Notes:

No qualification was required for the data reported in this sample delivery group.

Prepared by/Date: <u>JTP 04/20/2020</u> Prepared by/Date: <u>JPM 04/30/2020</u> Checked by/Date: <u>DWK 05/01/2020</u>



DQE CHECKLISTS

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LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Mitchell CCR Assessment Monitoring Event 3

Project No: 6122160170.2003.****

Method: Metals by SW6020B/6010D (Ca only) Laboratory and Lot: Pace SDG: 2630449

Reviewer/Date: T. Parker 04/20/20 Senior Reviewer/Date: D. Knaub 04/21/2020

YES NO NA COMMENTS

Case Narrative and COC Completeness Review

No Case Narrative is included with Level II data package from Pace Analytical. An error was noted by reviewer on the COC: In the upper portion of the COC where there is a question (Requested Analysis Filtered Y/N?), the field manager thought that space was for indicating preservative and recorded "Y" for metals and radium analytes. He indicated no field filtration was performed, so results are for total metals and total radium.

Sample Preservation and cooler temperature met (HNO₃ to pH<2; 6°C±2°C)

1 cooler sent 3/25 = 4.5°C and 2 coolers sent 3/26 = 3.9°C and 1.5°C. OK

Holding times met (180 days/Hg = 28 days)

OK

QC Blanks Review – any MB results above RL?

Method Blanks:

p. 29-32 for 4 x 6010D

MB 207564 Ca = ND

MB 207568 Ca = ND

MB 207982 Ca = ND

MB 208108 Ca = ND

p. 33-35 for 2 x 6020B

MB 207955 = All ND

MB 208104 = All ND

<u>Field/Equipment Blanks</u>:

EB-01 = ND (associated with PZ-2B)

FB-01 = ND (associated with all samples)

Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg

= 80-120%)

X

p. 29-32 for 4 x 6010D LCS

LCS 207565 Ca only = 106%

LCS 207569 Ca only = 104%

LCS 207983 Ca only = 108%

LCS 208109 Ca only = 101%

p. 33-35 for 2 x 6020B LCS

LCS 207956 6020 Metals = All OK

LCS 208105 6020 Metals = All Ok

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Lab Duplicate - Field Duplicate precision goals met (lab limits - 20%)

PZ-7D = Dup-01

X

X

Χ

Parent Conc (mg/L)	Dup (mg/L)	RPD/Diff
122	125	2.4
0.00042J	0.00065J	0.00023
0.0072J	0.0075J	0.0003
0.24	0.25	4.1
0.0016J	0.0019J	0.0003
0.0031J	0.0032J	0.0001
0.000085J	0.000085J	0.0
	122 0.00042J 0.0072J 0.24 0.0016J 0.0031J	122 125 0.00042J 0.00065J 0.0072J 0.0075J 0.24 0.25 0.0016J 0.0019J 0.0031J 0.0032J

PZ-19 = Dup-02

<u>Constituent</u>	Parent Conc (mg/L)	Dup Conc (mg/L)	RPD/Diff
calcium	158	155	1.9
barium	0.052	0.052	0.0
boron	0.60	0.61	0.01
chromium	0.00073J	ND	NC
lithium	0.013J	0.013J	0.0
molybdenum	0.0021J	0.0020J	0.0001
selenium	0.0016J	0.0017J	0.0001
thallium	0.00068 J	0.00068J	0.0

In cases where results are less than the RL (lab "J" values), all differences between the parent sample and the duplicate were less than the RL per GP guidance and no flag is necessary other than to indicate the result is less than the RL (J).

Matrix Spike recoveries and RPDs within limits (if applicable: 75-125%, RPD 20)

Only 2 MS/MSDs analyzed by laboratory on project sample matrix:

PZ-23A MS/MSD Ca = 93, 15% RPD = 0 Sample result is >4 times spike amount (1.0 mg/L). No flag necessary.

PZ-7D MS/MSD (remaining 11 metals) pass recovery and RPD limits

Post Digestion Spike recoveries within limits (if applicable: 80-120%)

Not reported for L2 data package

Total metals vs dissolved metals (RPD < 20% or diff. < RL)

No dissolved results in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Checked Dup-02 and PZ-7D. All Correct. (18 samples total in SDG)

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LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Mitchell CCR Assessment Monitoring Event 3

Project No: 6122160170.2003.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300

Laboratory and Lot: Pace SDG: 2630449

Reviewer/Date: T. Parker 04/20/20 Senior Reviewer/Date: D. Knaub 04/21/2020

YES NO NA **COMMENTS Case Narrative and COC Completeness Review** No Case Narrative is included with Level II data package from Pace Analytical. Sample Preservation and cooler temperature met (Cool to 6°C) 1 cooler sent 3/25 = 4.5°C and 2 coolers sent 3/26 = 3.9°C and 1.5°C. OK Χ Holding times met (Cl, SO₄, F –28 days) OK Χ QC Blanks Review – Any detections above RL? Method Blanks: p. 40 MB 2849817 = ND p. 41 MB 2849882 = ND Field/Equipment Blanks: EB-01 = ND (associated with PZ-2B)

Laboratory Control Sample (LCS) recovery within lab limits (90-110%)

p. 40 LCS 2849818: All % Rec OK p. 41 LCS 2849883: All % Rec OK

FB-01 = ND (associated with all samples)

Lab Duplicate - Field Duplicate precision goals met (20%)

PZ-7D = Dup-01

<u>Constituent</u> RPD/Diff Parent Sample Conc (mg/L) Dup Conc (ma/L) chloride 4.8 4.8 0.0 fluoride ND ND NC. sulfate 57.1 57.8 1.2

PZ-19 = Dup-02

Parent Sample Conc (mg/L) Constituent Dup Conc (mg/L) RPD/Diff chloride 5.4 5.3 1.9 fluoride 0.077J 0.075J 0.002 sulfate 84.9 83.9 1.2

Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)

p. 40 MS/MSD PZ-25 - %Rec and RPDs OK. 3

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Checked Dup-02 and PZ-7D. All Correct. (18 samples total in SDG)

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LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Mitchell CCR Assessment Monitoring Event 3

Project No: 6122160170.2003.**** **Method:** TDS by SM 2540C

X

Laboratory and Lot: Pace SDG: 2630449

Reviewer/Date: T. Parker 4/20/20 Senior Reviewer/Date: D. Knaub 04/21/2020

YES NO NA COMMENTS

Case Narrative and COC Completeness Review

No Case Narrative is included with Level II data package from Pace Analytical.

Sample Preservation and cooler temperature met (Cool to 6°C)

1 cooler sent 3/25 = 4.5°C and 2 coolers sent 3/26 = 3.9°C and 1.5°C. OK

Holding times met (7 days)

OK

QC Blanks Review - Any detections above RL?

Method Blanks:

Method SM2540C does not require a method blank.

Field/Equipment Blanks:

EB-01 (associated with PZ-2B)

TDS = 213 mg/L

FB-01 (associated with all samples)

TDS = 163 mg/L

No flags applied due to new ES rule

Laboratory Control Sample (LCS) recovery within lab limits

p. 37 207416 TDS = 104% (Samples 001-004) p. 38 208030 TDS = 93% (Samples 005-010)

p. 39 208288 TDS=85% (Samples 011-018)

Lab Duplicate - Field Duplicate precision goals met (20%)

PZ-7D = Dup-01

 Constituent
 Parent Conc (mg/L)
 Dup Conc (mg/L)
 RPD/Diff

 TDS
 332
 333
 0.3

PZ-19 = Dup-02

 Constituent
 Parent Conc (mg/L)
 Dup Conc (mg/L)
 RPD/Diff

 TDS
 440
 512
 15

Lab duplicate: p. 38 PZ-31

PZ-31 & PZ-31 lab dup

ConstituentParent Conc (mg/L)Dup Conc (mg/L)RPD/DiffTDS2782780.0

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Matrix Spike recoveries and RPDs within limits (if applicable)

None for TDS



EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Checked Dup-02 and PZ-7D. All Correct. (18 samples total in SDG)

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LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Mitchell CCR Assessment Monitoring Event 3

Project No: 6122160170.03.****

X

Χ

Method: Radium-226, Radium-228, Total Radium by EPA 9315 and EPA 9320

Laboratory and Lot: Pace SDG: 30244272

Reviewer/Date: J. McIntyre 04/30/2020 Senior Reviewer/Date: D. Knaub 04/30/2020

Revised/Date: D. Knaub 05/12/2020

YES NO NA COMMENTS

Case Narrative and COC Completeness Review

Low volume received for 2 samples:
 PZ-1D (1 of 2 bottles empty) and PZ-2D (1 bottle contained only 400 ml)
 Lab analyzed using a reduced volume, no qualification was necessary

• Sample EB-01 re-anal. on <u>05/08/20</u> for Ra-228 due to high initial result. Per email from the lab, the cause of the initial elevated result was radon daughter interference in the original sample count that wasn't noted before the results were finalized. Reanalyzed results were reported.

Sample Preservation and cooler temperature met (HNO₃ to pH<2)

OK

Holding times met (180 days)

OK

QC Blanks Review (net blank value < MDC)

p. 12-13 radium-228 (1891465) and radium-226 (1891462) = present but < MDC

p. 14-15 radium-228 (1893276) and radium-226 (1893273) = present but <MDC

p. 16-17 radium-228 (1891466) and radium-226 (1891463) = present but <MDC

Field/Equipment Blanks:

p. 6 EB-01 (assoc. w/ PZ-2B)

radium-226 present but <MDC (ND)

radium-228 present but <MDC (ND) (re-analyzed 05/08)

p. 7 FB-01– present but <MDC

Laboratory Control Sample (LCS) recovery within lab limits (80-120%; RPD = RER ($2\sigma < 3$)

(00-120%, RFD = RER (20 < 3)

p. 24 LCS/LCSD 53221 Ra-226 = 98.48, 98.31% RPD = 0.17

p. 26 LCS/LCSD 53222 Ra-226 = 103.94, 97.92% RPD = 5.96

p. 28 LCS/LCSD 53273 Ra-226 = 100.82, 107.00% RPD = 5.95

p. 30 LCS/LCSD 53224 Ra-228 = 114.60, 111.63% RPD = 2.63

p. 31 LCS/LCSD 53225 Ra-228 = 105.19, 104.44% RPD = 0.72

p. 32 LCS/LCSD 53274 Ra-228 = 103.95, 93.74% RPD = 10.32

Lab Duplicate - Field Duplicate precision goals met (lab limits); lab dup every 10 samples (RPD = RER (2σ) < 3)

PZ-7D = Dup-01

Constituent	Parent Conc (pCi/L)	Dup Conc (pCi/L)	<u>RPD</u>
Ra-226	<mdc< td=""><td>0.159</td><td>NC</td></mdc<>	0.159	NC
Ra-228	<mdc< td=""><td>< MDC</td><td>NC</td></mdc<>	< MDC	NC
tot. radium	<mcc< td=""><td>< MDC</td><td>NC</td></mcc<>	< MDC	NC

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					¥	
YES NO NA					COI	MMENT:
			Lab Duplicat	te - Field Duplicate (cor	nt.)	
			PZ-19 = Dup-	02		
			Constituent	Parent Conc (pCi/L)	Dup Conc (pCi/L)	RPD
			Ra-226	0765	0.883	14.3
			Ra-228	0.891	<mdc< td=""><td>NC</td></mdc<>	NC
			tot. radium	1.66	1.63	1.8
				– PZ-32 Ra-226 RPD = 84. b dup for Ra-228 on sample	. 5	-
X			-	e recoveries and RPDs v		
×				er Yield Recovery Ra-22 rier Ba, Tracer: Y) (30-1		
X			EDD Data Ve	erification vs. Hardcopy	(10% samples for eac	h SDG)

EDD Data Verification vs. Hardcopy (10% samples for each SDG) Lab reports required reissue due to LIMS problem and for re-analysis.

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RPD Calculations

Quality control procedures included calculating the relative percent difference (RPD) between sample and sample duplicate concentrations. This is calculated as:

$$RPD = \frac{Conc1 - Conc2}{(Conc1 + Conc2)/2}$$

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

The RPD calculations are provided in the attached table **(RPD Calculations)** for detected concentrations above the laboratory reporting limits for wells and corresponding duplicates for the August 2019, October 2019, and March 2020 assessment events. Other constituents were below the laboratory reporting limits. For an RPD to be representative of the process, the concentrations have to be five times the laboratory reporting limit in accordance with US EPA guidance on inorganic data review, (US EPA August 2014). The RPD values of concentrations five times the laboratory reporting limit were within the allowable 20% RPD indicating good sampling precision for the August 2019, October 2019, and March 2020 assessment events.

RPD CALCULATIONS

Parameter	Concentration 1	Concentration 2	RPD
8/22/2019	Dup-01	PZ-19	
Barium	0.049	0.047	4%
Radium	1.55	1.37	12%
Parameter	Concentration 1	Concentration 2	RPD
8/22/2019	Dup-02	PZ-33	
Barium	0.062	0.064	3%
Parameter	Concentration 1	Concentration 2	RPD
10/2/2019	Dup-01	PZ-17	
Barium	0.083	0.074	11%
Boron	0.30	0.28	7%
Calcium	125	115	8%
Chloride	7.8	7.9	1%
Sulfate	102	104	2%
TDS	418	415	1%
Parameter	Concentration 1	Concentration 2	RPD
10/2/2019	Dup-02	PZ-25	
Barium	0.12	0.11	9%
Boron	0.21	0.21	0%
Calcium	93.2	92.3	1%
Chloride	2.6	2.6	0%
Sulfate	42.9	43.0	0%
TDS	315	312	1%
Parameter	Concentration 1	Concentration 2	
3/26/2020	Dup-01	PZ-7D	RPD
Calcium	125	122	2%
Boron	0.25	0.24	4%
Chloride	4.8	4.8	0%
Sulfate	57.8	57.1	1%
Total Dissolved Solids	333	332	0%
Radium-226	0.159	<mdc< td=""><td>NC</td></mdc<>	NC
Parameter	Concentration 1	Concentration 2	
3/26/2020	Dup-02	PZ-19	RPD
Calcium	155	158	2%
Barium	0.052	0.052	0%
Boron	0.61	0.60	0%
Chloride	5.3	5.4	2%
Sulfate	83.9	84.9	1%
Total Dissolved Solids	512	440	15%
Radium-226	0.883	0.765	14%
Total Combined Radium	1.63	1.66	2%

Notes:

Concentrations are reported in milligrams per liter (mg/L)

Radium concentrations are reported in pci/L (picocuries per liter)

RPD is relative percent difference

MDC is minimum detected concentration

NC is not calculated

MARCH 2020 FIELD SAMPLING DATA

Date: 2020-03-24 15:28:00

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Woob	Tubing Type	HDPE
Project Name	Plant Mitchell CCT Phase 2	Tubing Diameter	.17 in
Site Name	PZ-1D	Tubing Length	61.21 ft
Latitude	00 0' 0"		

Latitude 0° 0′ 0″

Longitude 0° 0′ 0″

Sonde SN 369807

Turbidity Make/Model Hach 2100Q

Pump placement from TOC 56.21 ft

Well Information: Pumping Information:

Well ID PZ-1D Final Pumping Rate 200 mL/min Total System Volume Calculated Sample Rate Well diameter 2 in 0.7532061 L Well Total Depth 61.21 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water 40.84 ft Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	15:05:07	1200.02	23.91	7.65	244.16	1.42	41.77	3.58	84.33
Last 5	15:10:07	1500.02	23.74	7.69	244.39	1.52	41.77	3.55	85.22
Last 5	15:15:07	1800.08	23.42	7.73	243.29	1.65	41.77	3.50	85.72
Last 5	15:20:08	2101.06	24.18	7.74	246.86	1.86	41.77	3.50	85.64
Last 5	15:25:08	2401.02	23.47	7.78	246.29	1.41	41.77	3.49	86.37
Variance 0			-0.32	0.05	-1.10			-0.06	0.50
Variance 1			0.76	0.01	3.57			0.01	-0.08
Variance 2			-0.71	0.04	-0.57			-0.02	0.73

Notes

Sample collected @ 1530

Date: 2020-03-24 15:55:11

Project Information:

Operator Name

Daniel Howard

Pump Information:

Pump Model/Type

Operator NameDaniel HowardPump Model/TypeQEDCompany NameWood E&ISTubing TypeHD polyProject NamePlant Mitchell CCR Phase IITubing Diameter0.17 inSite NamePZ-2DTubing Length81 ft

Site Name PZ-2D
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369323

Turbidity Make/Model Hach 2100Q Pump placement from TOC 76 ft

Well Information: Pumping Information:

Final Pumping Rate 200 mL/min Well ID PZ-2D Well diameter 2 in Total System Volume 0.5515373 L Calculated Sample Rate Well Total Depth 80.98 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water **Total Volume Pumped** 0 L 22.64 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	1		+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	15:30:26	600.03	20.36	8.00	118.13	5.57	23.40	3.00	92.07
Last 5	15:35:26	900.03	20.10	8.30	126.86	3.57	23.40	3.09	84.03
Last 5	15:40:26	1200.03	20.01	8.43	134.17	2.93	23.40	3.16	81.70
Last 5	15:45:26	1500.02	20.01	8.50	138.79	2.62	23.40	3.19	80.09
Last 5	15:50:26	1800.02	20.03	8.56	141.30	1.78	23.40	3.19	77.35
Variance 0			-0.09	0.13	7.31			0.07	-2.33
Variance 1			-0.00	0.07	4.62			0.03	-1.61
Variance 2			0.03	0.06	2.51			-0.01	-2.74

Notes

Date: 2020-03-24 16:23:38

Project Information:

Operator Name

Daniel Howard

Pump Information:

Pump Model/Type

Operator NameDaniel HowardPump Model/TypeQEDCompany NameWood E&ISTubing TypeHD polyProject NamePlant Mitchell CCR Phase IITubing Diameter0.17 inSite NamePZ-2DTubing Length81 ft

Site Name PZ-2D
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369323

Turbidity Make/Model Hach 2100Q Pump placement from TOC 76 ft

Well Information: Pumping Information:

Final Pumping Rate 200 mL/min Well ID PZ-2D Well diameter 2 in Total System Volume 0.5515373 L Calculated Sample Rate Well Total Depth 80.98 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water 22.64 ft **Total Volume Pumped** 11 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	16:01:05	300.03	20.06	8.58	147.90	2.03	23.40	3.17	76.16
Last 5	16:06:05	600.02	19.97	8.60	150.07	2.18	23.40	3.16	75.74
Last 5	16:11:05	900.02	19.91	8.59	152.38	2.09	23.40	3.16	77.34
Last 5	16:16:05	1200.02	19.92	8.57	155.07	1.73	23.40	3.16	77.36
Last 5	16:21:05	1500.02	19.89	8.57	157.08	1.58	23.40	3.14	76.66
Variance 0			-0.06	-0.01	2.31			0.01	1.60
Variance 1			0.02	-0.02	2.69			0.00	0.02
Variance 2			-0.03	0.00	2.01			-0.02	-0.71

Notes

Sample PZ-2D. Time 1622

Date: 2020-03-26 09:58:33

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood	Tubing Type	HDPE
Project Name	Plant Mitchell CCR Phase 2	Tubing Diameter	.17 in
Site Name	PZ-7D	Tubing Length	60.37 ft
Latitude	00 0' 0"	-	
Longitude	00 0, 0,,		
Sonde SN	369807		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	55.37 ft
Well Information:		Pumping Information:	
Well ID	PZ-7D	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.7494568 L
Well Total Depth	60.37 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	26.97 ft	Total Volume Pumped	9 L

Low-Flow S	ampling Stabiliz	ation Summary	1						
	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilizatio	n		+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	09:34:15	1800.03	20.39	7.07	586.65	0.81	27.21	0.39	62.00
Last 5	09:39:15	2100.03	20.34	7.08	589.88	0.74	27.21	0.39	60.62
Last 5	09:44:15	2400.03	20.36	7.07	592.44	0.71	27.21	0.38	60.85
Last 5	09:49:15	2700.03	20.35	7.09	595.18	0.72	27.21	0.37	59.32
Last 5	09:54:15	3000.03	20.34	7.09	596.96	0.56	27.21	0.35	61.22
Variance 0			0.02	-0.01	2.56			-0.01	0.22
Variance 1			-0.02	0.03	2.73			-0.01	-1.52
Variance 2			-0.01	-0.01	1.78			-0.02	1.90

Notes

Sample time = 0955 Also collected Dup-01 at this location

Date: 2020-03-25 13:40:17

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood	Tubing Type	HDPE
Project Name	Plant Mitchell CCR Phase 2	Tubing Diameter	.17 in
Site Name	PZ-14	Tubing Length	43.20 ft
Latitude	0° 0' 0"		
Longitude	00 0' 0"		
Sonde SN	369807		

Turbidity Make/Model Hach 2100Q Pump placement from TOC 48.20 ft

Well Information: Pumping Information:

Final Pumping Rate Total System Volume Calculated Sample Rate Well ID PZ-14 200 mL/min Well diameter 2 in 0.6728199 L Well Total Depth 53.20 ft 300 sec Screen Length Depth to Water 10 ft Stabilization Drawdown 0 in 36.18 ft **Total Volume Pumped** 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	13:16:42	1199.88	22.26	6.98	504.46	2.78	36.72	4.63	98.07
Last 5	13:21:42	1499.88	22.34	6.98	506.99	2.40	36.72	4.44	101.09
Last 5	13:26:42	1799.88	22.26	6.97	503.31	1.63	36.72	4.28	98.97
Last 5	13:31:42	2099.88	22.26	6.97	506.07	1.33	36.72	4.15	98.38
Last 5	13:36:42	2399.88	22.28	6.97	503.62	0.32	36.72	4.05	99.96
Variance 0			-0.08	-0.00	-3.68			-0.15	-2.11
Variance 1			-0.00	-0.00	2.75			-0.13	-0.59
Variance 2			0.02	-0.00	-2.45			-0.10	1.58

Notes

Sample time = 1340

Date: 2020-03-26 11:12:57

QED

Project Information:

Operator Name

Company Name

Daniel Howard

Wood E&IS

Pump Information:

Pump Model/Type

Tubing Type

Company NameWood E&ISTubing TypeHDPEProject NamePlant Mitchell CCR Phase IITubing Diameter.25 inSite NamePZ-15Tubing Length83.2 ft

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 369323

Turbidity Make/Model Hach 2100Q Pump placement from TOC 78.2 ft

Well Information: Pumping Information:

Final Pumping Rate 300 mL/min Well ID PZ-15 Well diameter 2 in Total System Volume 1.283107 L Calculated Sample Rate Well Total Depth 83.22 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water **Total Volume Pumped** 6 L 25.21 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	10:50:02	600.03	23.18	7.11	541.68	2.34	24.87	0.10	25.73
Last 5	10:55:02	900.03	23.23	7.09	542.29	1.59	24.87	0.11	15.63
Last 5	11:00:02	1200.03	23.35	7.09	541.51	1.57	24.87	0.12	9.92
Last 5	11:05:02	1500.03	23.41	7.08	540.50	1.90	24.87	0.13	1.02
Last 5	11:10:02	1800.57	23.41	7.08	539.06	2.72	24.87	0.15	-9.18
Variance 0			0.12	-0.00	-0.78			0.01	-5.71
Variance 1			0.06	-0.00	-1.01			0.01	-8.90
Variance 2			-0.00	-0.00	-1.44			0.01	-10.20

Notes

PZ-15. Time 1112

Date: 2020-03-26 09:40:29

Project Information:		Pump Information:	
Operator Name	Daniel Howard	Pump Model/Type	QED
Company Name	Wood E&IS	Tubing Type	HDPE
Project Name	Plant Mitchell CCR Phase II	Tubing Diameter	.25 in
Site Name	PZ-16	Tubing Length	53.2 ft

Site Name PZ-16
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369323
Turbidity Make/Model Hach 21

Turbidity Make/Model Hach 2100Q Pump placement from TOC 48.2 ft

Well Information: Pumping Information:

Well ID PZ-16 Final Pumping Rate 300 mL/min Total System Volume Calculated Sample Rate Well diameter 2 in 0.9935253 L Well Total Depth 53.19 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water **Total Volume Pumped** 6 L 27.27 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:17:01	600.03	21.03	7.02	467.55	1.45	27.79	1.17	197.03
Last 5	09:22:00	899.94	21.04	7.06	467.36	1.03	27.79	1.15	196.05
Last 5	09:27:00	1199.94	21.08	7.09	467.99	0.70	27.79	1.16	196.41
Last 5	09:32:01	1500.01	21.17	7.11	467.87	0.62	27.79	1.16	197.05
Last 5	09:37:01	1799.96	21.21	7.12	467.75	0.46	27.79	1.16	198.13
Variance 0			0.04	0.03	0.63			0.00	0.36
Variance 1			0.09	0.02	-0.11			0.00	0.65
Variance 2			0.04	0.01	-0.12			-0.00	1.07

Notes

PZ-16. Time 0938

Date: 2020-03-25 15:14:11

Tubing Length

62.7 ft

Project Information:

Operator Name

Company Name

Pump Information:

Pump Model/Type

QED

Tubing Type

HDPE

Project Name

Plant Mitchell CCR Phase II

Pump Model/Type

Tubing Type

Tubing Diameter

.25 in

Site Name PZ-17
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369323
Turbidity Make/Model Hook 310

Turbidity Make/Model Hach 2100Q Pump placement from TOC 57.7 ft

Well Information: Pumping Information:

Final Pumping Rate 300 mL/min Well ID PZ-17 Well diameter 2 in Total System Volume 1.085226 L Calculated Sample Rate Well Total Depth 62.7 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water 6 L 25.21 ft **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	1		+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	14:50:40	600.03	22.29	6.94	657.71	1.58	26.04	0.12	-15.68
Last 5	14:55:40	900.03	22.37	6.93	657.92	0.96	26.04	0.11	-14.05
Last 5	15:00:40	1200.02	22.46	6.93	656.57	1.10	26.04	0.12	-12.26
Last 5	15:05:40	1500.03	22.33	6.93	657.22	0.83	26.04	0.14	-10.71
Last 5	15:10:40	1800.03	22.30	6.93	657.89	0.69	26.04	0.15	-9.99
Variance 0			0.09	-0.01	-1.35			0.01	1.79
Variance 1			-0.13	0.00	0.65			0.01	1.55
Variance 2			-0.02	-0.00	0.68			0.01	0.72

Notes

PZ-17. Time 1511

Date: 2020-03-26 12:08:04

Pumping Information:

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood	Tubing Type	HDPE
Project Name	Plant Mitchell CCR Phase 2	Tubing Diameter	.17 in
Site Name	PZ-18	Tubing Length	63.18 ft
Latitude	00 0' 0"		
Longitude	00 0' 0"		

Longitude 0° 0' 0"
Sonde SN 369807

Turbidity Make/Model Hach 2100Q Pump placement from TOC 58.18 ft

Well Information:

Well ID PZ-18 Final Pumping Rate 200 mL/min Total System Volume Calculated Sample Rate Well diameter 2 in 0.761999 L Well Total Depth 63.18 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water 23.30 ft **Total Volume Pumped** 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	11:45:28	1816.03	22.08	7.05	683.95	1.75	23.61	0.15	18.72
Last 5	11:50:29	2117.03	22.13	7.05	683.79	1.62	23.61	0.15	19.47
Last 5	11:55:29	2417.03	22.15	7.05	683.94	1.15	23.61	0.16	19.96
Last 5	12:00:28	2716.87	22.19	7.03	683.41	0.98	23.61	0.16	21.05
Last 5	12:05:28	3016.87	22.19	7.03	683.59	0.90	23.61	0.16	21.59
Variance 0			0.03	-0.00	0.15			0.00	0.48
Variance 1			0.04	-0.02	-0.53			0.00	1.10
Variance 2			0.00	-0.01	0.18			-0.00	0.54

Notes

Sample time = Sample time = 1210

Date: 2020-03-26 14:05:10

QED

Project Information:		Pump Information:	
Operator Name	Daniel Howard	Pump Model/Type	
O NI	\A/ E 0.10	Tarking at Tarke	

Company NameWood E&ISTubing TypeHDPEProject NamePlant Mitchell CCR Phase IITubing Diameter.25 inSite NamePZ-19Tubing Length62.6 ft

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 369323

Turbidity Make/Model Hach 2100Q Pump placement from TOC 57.6 ft

Well Information: Pumping Information:

Well ID Final Pumping Rate 300 mL/min PZ-19 Well diameter 2 in Total System Volume 1.084261 L Calculated Sample Rate Well Total Depth 62.63 ft 300 sec Screen Length 10 ft Stabilization Drawdown 0 in Depth to Water **Total Volume Pumped** 6 L 24.16 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	1		+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:35:01	600.03	22.67	6.72	805.37	0.65	24.72	0.16	113.53
Last 5	13:40:01	900.04	22.64	6.72	809.53	0.46	24.72	0.16	109.83
Last 5	13:45:02	1200.96	22.59	6.71	809.61	0.78	24.72	0.16	110.17
Last 5	13:50:03	1501.95	22.52	6.71	812.39	0.68	24.72	0.16	107.20
Last 5	14:00:13	2111.95	22.42	6.70	815.24	0.63	24.72	0.17	105.96
Variance 0			-0.05	-0.00	0.09			0.00	0.34
Variance 1			-0.07	-0.00	2.78			0.00	-2.97
Variance 2			-0.10	-0.01	2.85			0.01	-1.24

Notes

PZ-19. Time 1400. And DUP-02 collected

Date: 2020-03-25 16:00:28

Project Information:		Pump Information:	
Operator Name	Ever Guillen	Pump Model/Type	QED
Company Name	Wood	Tubing Type	HDPE
Project Name	Plant Mitchell CCR Phase 2	Tubing Diameter	.17 in
Site Name	PZ-23A	Tubing Length	64.5 ft

Latitude PZ-23A
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369807

Turbidity Make/Model Hach 2100Q Pump placement from TOC 59.5 ft

Well Information: Pumping Information:

Well ID PZ-23A Final Pumping Rate 200 mL/min Total System Volume Calculated Sample Rate Well diameter 2 in 0.7678908 L Well Total Depth 64.50 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water 40.11 ft **Total Volume Pumped** 9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	15:38:06	1500.03	22.90	6.81	735.75	35.90	41.07	3.29	91.68
Last 5	15:43:06	1800.03	22.98	6.81	728.40	28.30	41.07	3.28	92.36
Last 5	15:48:06	2100.03	23.07	6.80	723.51	17.70	41.07	3.28	93.19
Last 5	15:53:06	2400.03	22.82	6.79	719.09	6.51	41.07	3.31	94.98
Last 5	15:58:06	2700.03	22.40	6.78	719.93	3.68	41.07	3.34	94.81
Variance 0			0.09	-0.01	-4.89			0.00	0.83
Variance 1			-0.25	-0.01	-4.42			0.03	1.79
Variance 2			-0.42	-0.01	0.84			0.03	-0.17

Notes

Sample time= 1605

Date: 2020-03-25 13:36:28

Project Information:		Pump Information:	
Operator Name	Daniel Howard	Pump Model/Type	QED
Company Name	Wood E&IS	Tubing Type	HDPE
Project Name	Plant Mitchell CCR Phase II	Tubing Diameter	.25 in
Site Name	PZ-25	Tubing Length	63.2 ft
Latitude	00 0' 0"		

Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369323

Turbidity Make/Model Hach 2100Q Pump placement from TOC 58.2 ft

Well Information: Pumping Information:

Final Pumping Rate Total System Volume Calculated Sample Rate Well ID PZ-25 300 mL/min Well diameter 2 in 1.090053 L Well Total Depth 63.19 ft 300 sec Screen Length Depth to Water 10 ft Stabilization Drawdown 0 in 22.41 ft **Total Volume Pumped** 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:11:40	600.03	22.23	7.01	477.25	1.10	22.66	0.16	-30.09
Last 5	13:17:20	940.03	22.33	7.01	477.44	0.86	22.66	0.12	-33.94
Last 5	13:22:20	1240.02	22.47	7.01	478.23	0.66	22.66	0.12	-34.35
Last 5	13:27:20	1540.03	22.33	7.01	476.88	0.51	22.66	0.13	-34.82
Last 5	13:32:20	1840.02	22.42	7.01	477.77	0.53	22.66	0.14	-35.70
Variance 0			0.14	-0.00	0.78			0.01	-0.41
Variance 1			-0.13	0.00	-1.35			0.01	-0.46
Variance 2			0.09	0.00	0.90			0.01	-0.89

Notes

PZ-25. Time 1333

Date: 2020-03-25 10:20:13

QED

Project Information: Pump Information: Operator Name Ever Guillen Pump Model/Type

Company NameWoodTubing TypeHDPEProject NamePlant Mitchell CCR Phase 2Tubing Diameter.17 inSite NamePZ-31Tubing Length61.60 ft

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 369807

Turbidity Make/Model Hach 2100Q Pump placement from TOC 56.60 ft

Well Information: Pumping Information:

Final Pumping Rate 200 mL/min Well ID PZ-31 Well diameter 2 in Total System Volume 0.7549468 L Calculated Sample Rate Well Total Depth 61.60 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water 6 L 27.63 ft **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cmTurb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	09:56:52	600.03	20.18	7.09	461.39	0.99	29.71	4.59	96.60
Last 5	10:01:52	900.03	20.23	7.09	461.41	0.76	28.81	4.59	96.83
Last 5	10:06:52	1200.03	20.21	7.08	461.23	1.71	29.71	4.60	97.08
Last 5	10:11:52	1499.89	20.19	7.08	461.59	0.71	28.71	4.60	97.59
Last 5	10:16:53	1800.88	20.21	7.08	461.71	0.81	28.71	4.61	97.24
Variance 0			-0.02	-0.01	-0.18			0.00	0.25
Variance 1			-0.01	-0.00	0.36			0.01	0.51
Variance 2			0.02	0.01	0.12			0.00	-0.36

Notes

Sample time = 1020

Date: 2020-03-25 11:07:41

Project Information:

Operator Name

Daniel Howard

Pump Information:

Pump Model/Type

Operator NameDaniel HowardPump Model/TypeQEDCompany NameWood E&ISTubing TypeHDPEProject NamePlant Mitchell CCR Phase IITubing Diameter0.25 inSite NamePZ-32Tubing Length63.30 ft

Site Name PZ-32
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 369323

Turbidity Make/Model Hach 2100Q Pump placement from TOC 58.3 ft

Well Information: Pumping Information:

Final Pumping Rate 300 mL/min Well ID PZ-32 Well diameter 2 in Total System Volume 0.8010179 L Calculated Sample Rate Well Total Depth 65.30 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water **Total Volume Pumped** 6 L 25.02 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	10:44:52	600.03	19.04	7.09	321.34	1.82	26.05	0.46	96.34
Last 5	10:49:52	900.03	18.96	7.14	320.34	1.25	26.05	0.45	91.76
Last 5	10:54:52	1200.03	18.99	7.18	320.64	0.64	26.05	0.44	89.69
Last 5	10:59:52	1500.02	19.04	7.21	320.42	0.75	26.05	0.44	87.62
Last 5	11:04:52	1800.03	19.07	7.23	318.69	0.58	26.05	0.48	87.39
Variance 0			0.03	0.04	0.30			-0.01	-2.07
Variance 1			0.04	0.03	-0.22			0.00	-2.07
Variance 2			0.03	0.02	-1.73			0.03	-0.23

Notes

PZ-32. Time 1105

Date: 2020-03-26 14:50:42

Project Information: Pump Information: Operator Name Ever Guillen Pump Model/Type QED Company Name **HDPE** Wood **Tubing Type** Project Name Tubing Diameter .17 in Plant Mitchell CCR Phase 2 Tubing Length Site Name PZ-33 73.60 ft

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 369807

Turbidity Make/Model Hach 2100Q Pump placement from TOC 68.60 ft

Well Information: Pumping Information:

Final Pumping Rate 200 mL/min Well ID PZ-33 Well diameter 2 in Total System Volume 0.8085079 L Calculated Sample Rate Well Total Depth 73.60 ft 300 sec Stabilization Drawdown Screen Length 10 ft 0 in Depth to Water 41.83 ft **Total Volume Pumped** 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	14:28:14	1799.88	21.94	7.01	614.50	0.50	42.11	0.27	58.84
Last 5	14:33:14	2099.88	21.98	7.01	614.85	0.44	42.11	0.25	60.64
Last 5	14:38:14	2399.88	21.91	7.01	614.84	0.23	42.11	0.23	61.54
Last 5	14:43:14	2699.88	21.93	7.01	614.58	0.20	42.11	0.21	62.02
Last 5	14:48:14	2999.88	21.86	7.01	614.73	0.19	42.11	0.20	62.95
Variance 0			-0.07	0.00	-0.01			-0.02	0.90
Variance 1			0.01	0.00	-0.25			-0.02	0.48
Variance 2			-0.07	-0.00	0.15			-0.01	0.93

Notes

Sample time= 1465

SHIPPED TO:

SAMPLER:

betsy.mcdaniel@pacelabs.com

uniel Howar

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __Event 9; __Event 10; __Event 11; _X_Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

WELL ID / SAMPL	EID: <u>FB</u> *~Ø	1	MATRIX: G	: Groundwater					
WELL MATERIAL:	PVC SS	OTHER							
WELL MATERIAL: SAMPLE METHOD	Direct	L ELII			Λ. Ι.Α				
				WELL DIA	METER: NA				
DUP./REP. OF:				DEPTH TO) WATER:/V/-		GRAB (x) CO	MPOSITE ()	
Pump Intake Set a	t (btoc): N	A		TOTAL DE	EPTH: /VA OLUMN HEIGHT: //	TA.			
or	(^		PURGE V					
or Tubing Inlet Set at	(btoc): /	H_{\perp}			ater column height (ft)	– x 3 (well volu	mes) for 2" we	llsĭ	
_	, ,				ater column height (ft)		-	-	
					ter column height (ft) x	•	•	-	
TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L/ for DO < 0.5 mg/L	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (μs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC) ¹
		record only					A	,	
Initial:								()	
									·
							-		
						·			
- · · · · · · · · · · · · · · · · · · ·									
NOTES:	¹ Stabilization o	f water column w than 100 ml/min	ill be consider	red achieve	d when 3 consecutive wa	ater level mea	surements vary	by 0.3 foot or less	at a pumping
		l dry, allow to rec							
					of ASTM T	200 J/	Twister	R TCCO	Rocal
	Hotal	2808E	94 Ex	172 / 2	020	/ po / w	I WEST.		13 CCONC
SAMPLE DATE: 3	125/20	TODIA	59	b)	-/	*			
SAMPLE TIME:	0920								
CONTAINER					ANALYTICAL				
SIZE/TYPE	NO.	A	RVATIVE		METHOD		ANA	ALYSIS	
250 mL/Poly	1		to pH <2		SW6020B			& IV Metals	
500 mL/Poly	12		to 6°C		E300.0		CI, F,	SO4/TDS	
1 L/Poly	2	HNO3	to pH <2		E9315/9320		Radium 226 8	& 228 Combined	
V. 1000000000000000000000000000000000000			OC.11	DAL MES	DMATION				
WEATHER:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	·4 (**)	****	RAL INFO	RIVIATION		·		
	<u>Dverc</u> FED-X	ast, 75					<u> </u>		

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVEN	EVENT: Event 9; Event 10; Event 11; _X_ Event 12; Event 13; Event 14; Event 15; Event 16; OTHER										
WELL ID / SAMPL	EID: EB-	+ 01	MATRIX: Gr	oundwater							
WELL MATERIAL:											
SAMPLE METHOD						•					
				WELL DIA	METER:						
DUP./REP. OF:					WATER:	_	GRAB (x) CO	MPOSITE ()			
				TOTAL DE	PTH:						
Pump Intake Set a	t (btoc):			WATER C	OLUMN HEIGHT:						
or				PURGE V	OLUME:						
Tubing Inlet Set at	: (btoc):	Ç*************************************		[0.163 x w	ater column height (ft)	x 3 (well volu	mes) for 2" we	lls]			
				[0.653 x w	ater column height (ft)	x 3 (well volu	mes) for 4" we	lls]			
	· · · · · · · · · · · · · · · · · · ·			[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" well	s]			
TIME	VOL. PUR (gal)	GED DO (±0.2 mg/L) or 10% for DO > 0.5 mg/L/ for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (μs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC) ¹		
Initial:			and the second second second					()	**************************************		
							-				
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, , , , , , , , , , , , , , , , , , ,						
			· · · · · · · · · · · · · · · · · · ·								
NOTES:					d when 3 consecutive wa		surements vary	by 0.3 foot or less	at a pumping		
	If well is pu	irged dry, allow to rec	harge and sar	nple within	24 hrs. Riaddes	Puma	TD!14	264			
	Turbidity <	5 NTUs AST	MTVO	C T 4	I water u	30 d	Olleg	t samate			
	AT C	CA Branc	l Lot	# 2 5	108EOH. 1	Ex a 2	12020	Joseph C	2		
SAMPLE DATE:	1/24/2	0									
SAMPLE TIME:	1255										
CONTAINER					ANALYTICAL						
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		AN	ALYSIS	İ		
250 mL/Poly	1	HNO3	to pH <2		SW6020B		App. III	& IV Metals			
500 mL/Poly	1	Cool	to 6°C		E300.0		CI, F,	SO4/TDS			
1 L/Poly	2	HNO3	to pH <2		E9315/9320		Radium 226	& 228 Combined			
		2002 (2011) 1002 1002 (1002 1003 1004 1005 1005 1005 1005 1005 1005 1005 1005 1005		****							
***************************************			GENE	RAL INFO				W			
NEATHER: Partly Cloudy, Temp 850F											
SHIPPED VIA:	FED-X	oratorios - 140 Toch	nology Place	Donobies -	Cornore CA 20002 DI	1. (770) 724 44	002 DOC: D-4	/ MoDewiel:	-		
SHIPPED TO:		aniel@pacelabs.con		reachuee	Corners, GA 30092 PH	1. (110) 134-42	ios mod: Bets	y wcDaniel:			
		Ha. 1 (~ ()			ORSERVER:						

WEATHER:

SHIPPED VIA:

SHIPPED TO:

SAMPLER: EVER

WARM - CLOUDY - DRY FED-X

betsy.mcdaniel@pacelabs.com

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT	Γ:Event 9;				2; Event 13; Eve	nt 14; Eve	nt 15; Even	it 16: OTHER	
WELL ID / SAMPLI			MATRIX: Gr				,		
WELL MATERIAL:		OTHER							
SAMPLE METHOD			VASP						
			• • • • • • • • • • • • • • • • • • • •	WELL DIA	METER: 2"				
DUP./REP. OF:				DEPTH TO	WATER: 40,84		GRAB (x) CO	MPOSITE ()	
					PTH: 6/121		(,	,	
Pump Intake Set a	t (btoc):5	6,21			OLUMN HEIGHT:	_			
or				PURGE V					
Tubing Inlet Set at	(btoc):			[0.163 x w	ater column height (ft)	x 3 (well volu	mes) for 2" we	lis1	
					ater column height (ft)				
				[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" well	s]	
	1	DO (±0.2 mg/L				1		<u> </u>	
	VOL BUBOLD	or 10% for DO				l .		Pump Rate	l
TIME	VOL. PURGED (gal)	> 0.5 mg/L/ for	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm)	TEMP (°C)	TURB. (NTU)	ml/min. (& pump	Water Level
	(941)	DO < 0.5 mg/L	lecord only	pri units)	[+/- 5%]	Record only	[<5 NTU]	setting) (100 ml/min)	(Ft BTOC) ¹
		record only			anny in the contract of the co				
Initial: 300	6152	- Fallenda	79.90	7.30-	244,10	25719-	-0,23	- ZOO ()	41.77
1450 300600	ETS 0,25	3.38	77,60		247,30	25,48	0.23	200	41,77
1455 600	0.5	3155	79,90	7,47	244,10	25.19	12,17	200	41,77
1500 900	0,75	3,53	82.30	7,59	242,20	24,69	1.74	200	41.77
1505 1200	10	3,58	84130	7,65	244,20	23.91	1,42	200	41077
1510 1500	1,25	3.55	85,20	7,69	244,40	23,74	1,52	200	41177
1515 1800		3,50	85,70	7.73	243,30	23,42	1,65	200	41,77
1520 2101	1,75	3,50	85,60	7:74	246,90	24,18	1182	200	41.77
1525 24,01	2,0	3.49	86.40	7.78	246,30	23,47	1,41	200	91,77

NOTES:					d when 3 consecutive wa ove the top of the screen		surements vary	by 0.3 foot or less	at a pumping
	If well is purged	d dry, allow to red	harge and sar	nple within :	24 hrs.				
	Turbidity < 5 N	ITUs - PH	(SAMI	11NG =	7,79 - HNO	3 Sample	e PH = 11	DON PHST	218
		•							
SAMPLE DATE:	3-24-20								
SAMPLE TIME:	1536	T							
CONTAINER					ANALYTICAL				
SIZE/TYPE	NO.		RVATIVE		METHOD		ANA	ALYSIS	
250 mL/Poly	1	HNO3	to pH <2		SW6020B		App. III a	& IV Metals	
500 mL/Poly	oly 1 Cool to 6°C E300.0 CI, F, SO4/TDS								
1 L/Poly	2	HNO3	to pH <2		E9315/9320		Radium 226 8	& 228 Combined	
					D1117101				
			GENE	ERAL INFO	RMATION				1

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

250

SHIPPED TO:

SAMPLER:

betsy.mcdaniel@pacelabs.com

Hovard

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __ Event 9; __ Event 10; __ Event 11; _X _ Event 12; __ Event 13; __ Event 14; __ Event 15; __ Event 16; __ OTHER

WELL ID / SAIVIPLI			MATRIX. O	Odildwater					
WELL MATERIAL:	X PVC _ SS.	OTHER	2-2					•	
SAMPLE METHOD	: Bladd	er pump	CXED		. //				
		•			METER: 2	7 ,			
DUP./REP. OF:					O WATER: 32,6	7	GRAB (x) CO	MPOSITE ()	
					ЕРТН: <u>80,98</u>				
Pump Intake Set a	t (btoc): <i> [</i> _	<i>0</i>			OLUMN HEIGHT:				
or					OLUME: // /				
Tubing Inlet Set at	(btoc):			[0.163 x w	rater column height (ft)	x 3 (well volu	ımes) for 2" we	ils]	
				[0.653 x w	ater column height (ft)	x 3 (well volu	ımes) for 4" we	ils]	
				[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" wel	ls]	
		DO (±0.2 mg/L							
	VOL. PURGED	or 10% for DO	ORP (mV)	pH (+/- 0.1	SPEC. COND. (µs/cm)	TEMP (°C)	TURB. (NTU)	Pump Rate	Water Level
TIME	(gal)	> 0.5 mg/L/ for	record only	pH units)	[+/- 5%]	Record only	[<5 NTU]	ml/min. (& pump setting) (100	(Ft BTOC)
and the state of t		DO < 0.5 mg/L record only		l' '				ml/min)	(1.13.33)
Start 1320		100010 01119		<i>A</i> 4					
Initial: 1525	0,25	7.36	104.90	6.76	0,20	30.17	9.54	200()	23.40
1530	0.5	183.00	92,10	8.00	118,10	20.36	5,57	200	23.40
/.5.35	0.75	3.09	84,00	830	126,90	20.10	3.57	200	23.40
1540	1,0	3,16	81,70	8.43	01726,134,20	20,01	2.93	200	23,40
1545	1.25	3.19	80.10	8.50	138,80	20.01	2.62	200	23.40
1550	1.50	3.19	7740	8.56	141,30	20.03	1.78	200	23.40
1555	1.75								
1501	1.75	3.17	76.20	8.58	147.90	20.06	2.03	200	23,40
1606	2.0	3,16		8.60	150,10	19.97	2.18	200	23,40
0476101611	2,25	3.16	77.30		152,40	19.91	2.09	200	23,40
1616	2,5	3,16	77.40	8.57	155,10	19.91	1.72	200	72 40
1621	2, 25	3.16	77.40	2.57	157,10	19.89	1.58	200	23 4 A
						, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7,00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	~~~
	1 Stabilization of	f water column w	iil ha consider	red achieve	d when 3 consecutive wa	ator lovel mon	euromonte von	by 0.3 foot or loos	at a numpina
NOTES:					ove the top of the screen		sulcineilis valy	by 0.3 loot of less	s at a pumping
	If well is purged				·				
	Turbidity < 5 N	, congress)	rament			1 1	to rest	L . J	
	Final	pH = 8		2100	red at 150	nack	10 1631	apt	
SAMPLE DATE: 1	01 3/2 4/	2/1 - 01	<u> </u>						
SAMPLE TIME:	1622	~ 0		*,					
CONTAINER					ANALYTICAL				
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		ΔN	ALYSIS	
250 mL/Poly	1		to pH <2		SW6020B			& IV Metals	11 45
500 mL/Poly	12		to 6°C		E300.0			SO4/TDS	H 22
1 L/Poly	2		to pH <2		E9315/9320			& 228 Combined	V - M
1 Lift Oly		11103	to pri 🐾		E931019320		Naululli 220	& 228 Combined	pHCD
		<u> </u>		!					· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·		GENE	RAL INFO	RMATION				
WEATHER:	1 Jack and	Too	850		(11011		11. 1 - 10		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
SHIPPED VIA:	FED-X	1 cmp	ر دن						

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

SHIPPED VIA:

SHIPPED TO:

SAMPLER: EVER GUILLEN

betsy.mcdaniel@pacelabs.com

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVEN	LING EVENT: Event 9; Event 10; Event 11; _X_ Event 12; Event 13; Event 14; Event 15; Event 16; OTHER									
WELL ID / SAMPL	EID: PZ	Z-7D		MATRIX: Gr	oundwater	•				
			OTHER &	· • • • • • • • • • • • • • • • • • • •						
WELL MATERIAL: SAMPLE METHOD	: Low	FLOR	U -BLADDE	RUMP						
					WELL DIA	METER: 2				
DUP./REP. OF:,	DUP-	0				WATER: 26,97	_	GRAB (x) CO	MPOSITE ()	
					TOTAL DE	PTH: 60,37				
Pump Intake Set a	t (btoc):_	55,	37		WATER C	OLUMN HEIGHT:				
or ·					PURGE V	OLUME:				
Tubing Inlet Set at	(btoc):_				[0.163 x w	ater column height (ft)	x 3 (well volu	mes) for 2" we	ells]	
					[0.653 x w	ater column height (ft)	x 3 (well volu	mes) for 4" we	ells]	
					[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" well	ls]	
			DO (±0.2 mg/L						Pump Rate	
TIME	VOL. PU		or 10% for DO > 0.5 mg/L/ for	ORP (mV)	pH (+/- 0.1	, , ,	TEMP (°C)	TURB. (NTU)	m!/min. (& pump	Water Level
]	(ga	11)	DO < 0.5 mg/L	record only	pH units)	[+/- 5%]	Record only	[<5 NTU]	setting) (100	(Ft BTOC)1
Ì			record only			<i>(</i>	İ		m!/min)	
Initial: 0909 300	OIZ	5-	0,24	84,60	6,73	587.90	20,13	4,22	200 ()	27,21
914 600	0.5		0.18	70,20	6.92	586,00	20,16	1,05	200	27,21
919 900	0.7	5	0.26	64.80	7,02	581.80	20,17	0,94	200	27.21
924 1200	1.0	·	0135	62.10	7,03	579,30	20,21	0.81	200	27,21
929 1500	1,2	5-	0.38	61.00		582,50	20.39	0,66	700	27,21
934 1800	115		0.39	62,00	7,07	5-86.60	20.39	0.81	200	27,21
939 2100	1:75	r=	0.39	60,60	7,08	589,90	20.34	0.74	200	27.2/
944 2400	2.0	>	0.38	60,80	7,07	592,40	20,36	0.71	200	27,21
949 2700	2.2	5''''	0.37		7,09	595,20	20,35	0,72	200	27,21
955 Ca	llec	in	Samy	2Ce						
NOTES:	1 Stabiliza	ation of	water column w	ill be consider and the water	ed achieve	d when 3 consecutive was ove the top of the screen	ater level meas	surements vary	by 0.3 foot or less	at a pumping
			dry, allow to rec			· · · · · · · · · · · · · · · · · · ·		PLING =	7.17	
	Turbidity					HNO3 SA				D.
		9650	Cocce	CTED	DUP-	(2) (2) (2)	7772	107 - 100	THE STRE	<u>(* 3</u>
SAMPLE DATE:	3-26	-20		<u> </u>	<u> </u>					
SAMPLE TIME:	755									
CONTAINER				***************************************		ANALYTICAL				
SIZE/TYPE	NO.		PRESE	RVATIVE		METHOD		ANA	ALYSIS	
250 mL/Poly	1		HNO3	to pH <2		SW6020B			& IV Metals	<u> </u>
500 mL/Poly	1	·	Cool	to 6°C		E300.0			SO4/TDS	
1 L/Poly	2		HNO3	to pH <2		E9315/9320			& 228 Combined	

				GENE	RAL INFO	RMATION				
WEATHER:	WARK	7 - C	LEAR-HU	MID						

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

WELL ID / SAMPLE ID: PZ-14

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __Event 9; __Event 10; __Event 11; _X_Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

MATRIX: Groundwater

WELL MATERIAL: SAMPLE METHOD	PVCS	S _ OTHER QEO	Roman								
SAIVIPLE IVIE I NOL	COWFE	V - DENTYER	VOME	WELLDIA	AMETER: 2"						
DUP./REP. OF:				DEPTH TO	O WATER: 36, 18	•	GRAB (x) CO	MPOSITE ()			
					EPTH: 53,20	_	011112 (X) 00	00112 ()			
Pump Intake Set a	t (btoc): 4	8,20			OLUMN HEIGHT:	-					
or				PURGE V							
Tubing Inlet Set at	(btoc):				vater column height (ft)	— x 3 (well volu	mes) for 2" we	lie1			
ruonig mier oor ar	(5:00)				rater column height (ft)	•	•	-			
					iter column height (ft) x	-	-	=			
	T		T	[1.47 X W	lter column neight (it) x	Well volui	lies) for 6 wen	5]	T		
TIME	VOL. PURGE (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L/ for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (μs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC) ¹		
Initial: 130 \ 300	0,25	5,42	104.00	7.04	499,20	22,92	7,67	200 ()	36,72		
1306 600			2100,90		503.70	22.40	4,95	200	36,72		
1311 899		4,94	98,00	6.99	502,40	22.47	3.69	200	36,72		
13/4 1/99	1,0	4.63	98.10	6.98		22.26	2.78	200	36.72		
1321 1499	1,25	4,44	101,10	6.98	507.00	22,34	2,40	200	36,72		
1326 1799	1.5	4.28		6,97	503.30	22,26	1,63	200	36,72		
1331 2099	1,75	4,15	98,40		506,10	22,26	1.33	200	36.72		
1336 2399	ZO	4105		6.27		22.28	0,32	ZOU	36,72		
1340	Cal		rmpl		00000	66,66	013		3617		
1.34.	باحزاج ب	care j	my	<u> </u>							
	i										
	¹ Stabilization	of water column v	vill be conside	rod achieve	d when 3 consecutive wa	ntor lovel mon	ouromonto von	by 0.2 foot or load	ot o numerina		
NOTES:					ove the top of the screen		surements vary	by 0.3 loot or less	at a pumping		
		ed dry, allow to red			<u> </u>		Sanderson	,=7,02			
	Turbidity < 5				HNO3 SAMPLE	- PU - 1	DATE LING	5-1,00			
	,,				11100. 3/4/01/20	117-11	U BR IH	JTKIIJ			
SAMPLE DATE:	3-25-2	0						······································			
SAMPLE TIME:	1340					•					
CONTAINER					ANALYTICAL	de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la	- Company Company Company	1			
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		ANA	ALYSIS			
250 mL/Poly	1		to pH <2		SW6020B			& IV Metals			
500 mL/Poly	1		to 6°C		E300.0			SO4/TDS			
1 L/Poly	2		to pH <2		E9315/9320			& 228 Combined			
1 El Oly			to pr2		23013/3020		Nudidiii 220	a zzo combinea			
<u> </u>					<u></u>						
- 11. 3. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	arit		GENI	ERAL INFO	RMATION						
WEATHER:	HOT-1	1101004-1				- <u>(, , , , , , , , , , , , , , , , , , ,</u>					
	FED-X										
				, Peachtree	Corners, GA 30092 PH	l: (770) 734-4;	203 POC: Betsy	y McDaniel:			
SAMPLER: EU	IER GUI	Stsy.mcdaniel@pacelabs.com OBSERVER:									

250

SHIPPED TO:

SAMPLER:

betsy.mcdaniel@pacelabs.com

Howard

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT	Γ: Event 9;	Event 10; _	_ Event 11; _	X_ Event 1:	2; Event 13; Eve	nt 14; Eve	ent 15; Ever	nt 16; OTHER	
WELL ID / SAMPLE			MATRIX: Gr						
WELL MATERIAL:	X PVC SS	OTHER							
SAMPLE METHOD	Bladd	es Dumo							
		7		WELL DIA	AMETER: _2				
DUP./REP. OF:				DEPTH TO	O WATER: 25,21		GRAB (x) CO	MPOSITE ()	
					EPTH: 83.22		• •	. ,	
Pump Intake Set at	t (btoc):7	<u>3, 2</u>			OLUMN HEIGHT:				
or				PURGE V	OLUME:	_			
Tubing Inlet Set at	. (btoc):	, market		[0.163 x w	ater column height (ft)	x 3 (well volu	ımes) for 2" we	ells]	
				[0.653 x w	ater column height (ft)	x 3 (well volu	ımes) for 4" we	lls]	
					iter column height (ft) x	•	•	-	
		DO (±0.2 mg/L					T	<u> </u>]
	VOL DUBOED	or 10% for DO	222					Pump Rate	l
TIME	VOL. PURGED (gal)	> 0.5 mg/L/ for	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (μs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	ml/min. (& pump setting) (100	Water Level (Ft BTOC) ¹
Start	15,	DO < 0.5 mg/L	100010.5,	p., a,	[11-0.0]	Necola only	[-0,11,0]	ml/min)	(FEBIOC)
7040		record only							
Initial: 1045	0.25	0.12	44,60	7,14	539.40	23.16	3,01	300()	24,87
1050	0.50	0.10	25.70	7.11	541.70	23.18	2.34	300	24,87
1055	0.75	0.11	15,60	7,09		23.23	1,59	300	24.87
1100	1.0	0.12	9.90	7.09	541.50	23.35	1,57	300	24.87
1105	1.2-5	0.13	1.00	7,08	540,50	23,41	1,90	300	24.87
1110	1.50	0.15	-9,20	7,08	539,10	23,41	2,72	300	24.87
									,
	1				·				
	1 Stabilization c	of water column v	will be consider	red achieve	d when 3 consecutive wa	eter level mea	surements vary	by 0.3 foot or less	et a numning
NOTES:	rate no greater	than 100 ml/min	and the water	level is abo	ove the top of the screen.		salonionto rai,	by 0.0 100t of 1000	at a pumping
· •		d dry, allow to rec			·······			· · /	
ŀ	Turbidity < 5 N			•				/ / / / / / / / / / / / / / / / / / / /	
	Ī	Final	PH=	フ.カタ					
SAMPLE DATE:	3/26/20	5	P	1140					
SAMPLE TIME:	1112		•						
CONTAINER		Constitution of the second			ANALYTICAL		 	and the second s	
SIZE/TYPE	NO.	PRESE	RVATIVE	1	METHOD		AN/	ALYSIS	
250 mL/Poly	1		to pH <2		SW6020B		<u></u>		pH<2
500 mL/Poly	1/2		to 6°C		E300.0			SO4/TDS	111- 2
1 L/Poly	2		to pH <2		E9315/9320			& 228 Combined	11.7
7 Init (1)		11144	10 pii -		LOUIDIOULU		Nami and	X ZZO OOMBING	pH<2
J		· · · · · · · · · · · · · · · · · · ·							
The state of the s		Man 1874	GENF	ERAL INFO	RMATION	And the first the second secon			
WEATHER:	HATT	Humid.	80 75°0E	7			<u>***</u>		
	FED-X	mana,	AUF						

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

SHIPPED VIA:

SHIPPED TO:

SAMPLER:

betsy.mcdaniel@pacelabs.com

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486 SAMPLING EVENT: __Event 9; __Event 10; __Event 11; _X_Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

WELL MATERIAL: X PVC SS OTHER SAMPLE METHOD: BILLOW 9 SS OTHER SAMPLE METHOD: BILLOW 9 SS OTHER SAMPLE METHOD: BILLOW 9 SS OTHER SAMPLE METHOD: BILLOW 9 SS OTHER SAMPLE METHOD: BILLOW 9 STATE COLUMN HEIGHT: TOTAL DEPTH: 53,19 WATER COLUMN HEIGHT: 54,19 WATER COLUMN HEIGHT: 54,19 WATER COLUM
SAMPLE METHOD: B & let - ρ a - ρ
DUP./REP. OF: DEPTH TO WATER: 27.27 GRAB (x) COMPOSITE ()
DUP./REP. OF:
Pump Intake Set at (btoc):
Pump Intake Set at (btoc):
PURGE VOLUME:
Tubing Inlet Set at (btoc): [0.163 x water column height (ft) x 3 (well volumes) for 2" wells] [0.653 x water column height (ft) x 3 (well volumes) for 4" wells] [1.47 x water column height (ft) x 3 (well volumes) for 6" wells] [1.47 x water column height (ft) x 3 (well volumes) for 6" wells] DO (±0.2 mg/L or 10% for DO > 0.5 mg/L for DO > 0.5 mg/L for DO < 0.5 mg/L for DO < 0.5 mg/L for DO > 0.5
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells] [1.47 x water column height (ft) x 3 (well volumes) for 6" wells] Do (±0.2 mg/L or 10% for DO > 0.5 mg/L for DO < 0.5 mg/L record only PH (+/- 0.1 pH units) PH (+/- 5%] TEMP (°C) Record only Record onl
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells] Time
Time (gal) Vol. Purgeb (gal) ORP (mV) record only rec
TIME OGO 7 (gal) VOL. PURGED (gal) ORP (mV) record only record only Initial: 0912 0.25 1.25 198.40 6.97 467.00 21.05 2.81 300 (Ft. Ed.) OGO 7.05 1.15 196.10 7.06 467.40 21.08 0.70 300 27 0.927 1.0 1.16 196.40 7.09 468.00 21.08 0.70 300 27 0.932 1.25 1.16 197.10 7.11 467.90 21.17 0.62 300 27
TIME OGO7 (gal) VOL. PURGED (gal) 20.5 mg/L for DO < 0.5 mg/L record only reco
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
0927 1.0 1.16 196.40 7.09 468.08 21.08 0.70 300 27 0932 1.25 1.16 197.10 7.11 467.90 21.17 0.62 300 27
0932 1,25 1,16 197,10 7,11 467,90 21,17 0,62 300 27
0932 1,25 1,16 197,10 7,11 467,90 21,17 0,62 300 27
0937 1.50 1.16 198.10 7.12 467.80 21,21 0.46 300 27
NOTES: 1 Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a p rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs
SAMPLE DATE: 3/26/20
SAMPLE TIME: 0938
SIZE/TYPE NO. PRESERVATIVE METHOD ANALYSIS
250 mL/Poly 1 HNO3 to pH <2 SW6020B App. III & IV Metals pH 500 mL/Poly 1/2 Cool to 6°C E300.0 CI, F, SO4/TDS
500 mL/Poly 1/2 Cool to 6°C E300.0 CI, F, SO4/TDS
1 L/Poly 2 HNO3 to pH <2 E9315/9320 Radium 226 & 228 Combined
GENERAL INFORMATION WEATHER: Clear & Sunny, Temp 750/F

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __Event 9; __Event 10; __Event 11; __Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

WELL ID / SAMP		OTHER	MATRIX: G	roundwate	ſ				
WELL MATERIA SAMPLE METHO	L: <u>X</u> PVC SS	OTHER	•						
SAMPLE METHO	DD: (4) 43 14	sager pu	mp	WELLDIA	METED: 2	e u			
DUP./REP. OF:_				DEPTH TO	AMETER: 2 0) O WATER: 25.91	25.21	GRAB (v) CO	MPOSITE ()	
DOI 1/1(E1 . O/				TOTAL DI	EPTH: 62.70	7	GIVAD (X) CO	WIF OSTIL ()	
Pump Intake Set	at (btoc): 5	ס ד. 7			OLUMN HEIGHT:				
or	, , , , , , , , , , , , , , , , , , , ,			PURGE V					
Tubing Inlet Set	at (btoc):			[0.163 x w	ater column height (ft)	x 3 (well volu	ımes) for 2" we	elisi	
					ater column height (ft)	•	*	=	
					ter column height (ft)			_	
TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L/ for DO < 0.5 mg/L record only	ORP (mV)	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Leve
Initial: L L		0.20	-13.70	6.95	657,50	22.20	2.17	300()	26.04
1450		0.12	-15.70	6.94		22.29	1.58	300	26.05
1455	10.75	OUT	-14.00	6,93	657.90	22.37	0.96	300	26.04
1500	1.0	0.12	7/2/3/2	6.93		2246	1.10	300	26.04
1805	125	0.14	-10.70	6.93		2233	0.83	300	26.0
1510	1,50	0.15	-10.00	6.93	657.90	22,30	0.69	300	26,04
									- 30//
						:			
NOTES:	1 Stabilization of rate no greater	of water column than 100 ml/min	will be conside and the water	red achieve level is abo	d when 3 consecutive was	ater level mea	surements vary	by 0.3 foot or less	at a pumpin
	If well is purged	d dry, allow to red	charge and sar	mple within	24 hrs.				
	Turbidity < 5 N	ITUs							
		Final	DHE6	92				***************************************	***************************************
SAMPLE DATE:_		, ,							
SAMPLE TIME:	1511	_							
CONTAINER					ANALYTICAL			_100	
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		AN	ALYSIS	
250 mL/Poly	1	HNO3	to pH <2		SW6020B		App. III	& IV Metals	AH 2
/500 mL/Poly	12	Coo	l to 6°C		E300.0		CI, F,	SO4/TDS	,
1 L/Poly	2	HNO3	to pH <2		E9315/9320	-	Radium 226	& 228 Combined	PH-2
·									
	1 6 3	الم		ERAL INFO	RMATION				
WEATHER:	FED-X	Sunny,	Temp:	85°F					
SHIPPED VIA: SHIPPED TO:	PACE Laborat	ories - 110 Tech		, Peachtree	Corners, GA 30092 Ph	1: (770) 734-4	203 POC: Bets	y McDaniel:	
SAMDIED:	 		<u> </u>		OBSERVER:				
SAMPLER:	Daniel	Howard			OBSERVER:				

SHIPPED VIA:

SHIPPED TO:

SAMPLER:

betsy.mcdaniel@pacelabs.com

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PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __Event 9; __Event 10; __Event 11; _X_Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

WELL ID / SAI	MPLE	id: <u>PZ-1</u>	<u>8</u>	MATRIX: Gr	roundwater	r				
WELL MATER	RIAL:	PVC	SS OTHER							
SAMPLE MET	HOD:	Low F	LOW-QED	PUMP						
					WELL DIA	AMETER: 2				
DUP./REP. OF	::					O WATER: 23.30		GRAB (x) CO	MPOSITE ()	
			rn . n			EPTH: <u> </u>	_			
Pump Intake S	Set at	(btoc): <u>5</u>	8.10			OLUMN HEIGHT:	-			
or					PURGE V		_			
Tubing Inlet S	et at ((btoc):				vater column height (ft)	· ·	•	-	
					[0.653 x w	vater column height (ft)	x 3 (well volu	mes) for 4" we	ils]	
<u></u>				<u></u>	[1.47 x wa	ater column height (ft) x	3 (well volun	nes) for 6" well	s]	·
1			DO (±0.2 mg/L					1	Burn Bata	
TIME		VOL. PURG	GED or 10% for DO	ORP (mV)	pH (+/- 0.1	SPEC. COND. (µs/cm)	TEMP (°C)	TURB. (NTU)	Pump Rate ml/min. (& pump	Water Level
TIME		(gal)	> 0.5 mg/L/ for DO < 0.5 mg/L	record only	pH units)	[+/- 5%]	Record only	[<5 NTU]	setting) (100	(Ft BTOC)1
	ĺ		record only					1	ml/min)	
Initial: //20	318	0,25	- 0,39	19,40	7.17	681,40	22.16	5-,69	200 ()	23.61
	16	015		20,30		683.20	22.04		ZNE	23.61
	16	017		19.30		683.70	22,11	3,43	200	23.61
1135 12	$\overline{}$	1,0		18:20	7,07	684.50	22,15	2.97	200	23.61
1140 15		1,25		17.30	7,06		22,09		200	23.61
1145 181	-	1,5		18,70		68400	27.08		200	23.41
1150 211		1.75		19,50		683.80	22,13	1,62	200	23.61
1155 24		2.0	0.16	20,00		683.90	22.15	1,15	200	23.61
1200 271		2.25		21,10	7,03	683.40	22,19	0198	200	23.61
1205 30		2,5		21,60	7,03	683.60	22,19	0,90	200	23,61
1210	_4	"alla	27 gom	ple						
			-							
	\dashv									
NOTES:	1					d when 3 consecutive wa		surements vary	by 0.3 foot or less	at a pumping
	-					ove the top of the screen.				 ,
	<u> </u>		rged dry, allow to red	harge and sar	nple within :	24 hrs. PH HN03 SAA	@ Spr	TPLE =	7,01	
	<u> </u>	Turbidity <	5 N I Us			HNO3 SAN	MPLE PI	4 = 1.0		
CIMPLEDATE		10 P .10	5%		· ····					
SAMPLE TIME		1210								
SAMPLE TIME:		-				ANALYTICAL				
CONTAINER SIZE/TYPE		NO.	PRESE	RVATIVE		ANALYTICAL		·AN	AI VOIO	
250 mL/Poly		1	and the second second second second second	to pH <2		METHOD SW6020B			ALYSIS & IV Metals	
500 mL/Poly		1		to 6°C		E300.0		• • • • • • • • • • • • • • • • • • • •	SO4/TDS	
1 L/Poly	y -	2		to pH <2		E9315/9320			& 228 Combined	
1 1 015	+		11100	to pri 👊		L3313/3320		Naulum ZZG (X ZZO COMBINEG	
· · · · · · · · · · · · · · · · · · ·				GENE	RAL INFO	RMATION	F			
WEATHED:	GENERAL INFORMATION P: Harder Co. Co. 2 - Haran 15									

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

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SHIPPED TO:

SAMPLER:

betsy.mcdaniel@pacelabs.com

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PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __Event 9; __Event 10; __Event 11; __X_Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

WELL ID / SAMPLE ID: <u>PZ-19</u> MATR WELL MATERIAL: X PVC _ SS _ OTHER			MATRIX: Gr	oundwater					
	, ,								
SAMPLE METHOD				WELLDIA	METER: 2				
DUP./REP. OF:	JUL	-02		DEPTH TO	WATER: 24,16		GRAB (x) CO	MPOSITE ()	
					PTH: 62.63		,		
Pump Intake Set a	it (btoc):_	57.6			OLUMN HEIGHT:				
or				PURGE V	OLUME:				
Tubing Inlet Set at	ı (btoc):			[0.163 x w	ater column height (ft)	x 3 (well volu	mes) for 2" we	lls]	
				[0.653 x w	ater column height (ft)	x 3 (well volu	mes) for 4" we	lis]	
	т	The state of the s	1	[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" well	s]	·
1324		DO (±0.2 mg/L						Pump Rate	
TIME	VOL. PUR	1 > 0 5 ma/l / for	ORP (mV)	pH (+/- 0.1	,,	TEMP (°C)	TURB. (NTU)	m!/min. (& pump	Water Level
Start	(gal)	DO < 0.5 mg/L	record only	pH units)	[+/- 5%]	Record only	[<5 NTU]	setting) (100	(Ft BTOC)1
17/17		record only						ml/min)	
Initial: 1329	10.2	K 0.16	108,50	6.73	803.30	22.64	1.18	30000	24,72
1334	0.5	10.16		6.72	805,40	22.67	0.65	300	24.72
1339	0.7.5	0.16	109.80		80950	22,64	0,46	300	24,72
1344	1.0	0.16	110.20		809.60	22.59	0.78	300	24.72
1349		5 016	107,20		812.40	22,52	0.68	300	24.72
1354	1.57				- A		0,64	300	24.72
/3 59	1,75	0.17	106.00	6.70	815,20	22,42	0.63	300	24,72
	ļ						-	-	
	<u> </u>								
	ļ				3				
	<u> </u>								
	<u> </u>								
	 				, <u>, , , , , , , , , , , , , , , , , , </u>				
NOTES:					d when 3 consecutive wa		surements vary	by 0.3 foot or less	at a pumping
		urged dry, allow to rec			ove the top of the screen.	•			
	Turbidity		Ilaiye and sun	The with a	1P-02 +	1.011 0	カフェー	>	
	Tarbiany		Hected	X - 1 - V	ストーリム at	well	7/	ļ	
SAMPLE DATE	126/2	Final	1 pH=6	21/0					
SAMPLE TIME:	1356								
CONTAINER					ANALYTICAL				
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		AN/	ALYSIS	
250 mL/Poly	1	HNO3	to pH <2		SW6020B		App. III	& IV Metals	pH<2
500 mL/Poly	1	Cool	l to 6°C		E300.0		CI, F,	SO4/TDS	
1 L/Poly	2	HNO3	to pH <2		E9315/9320		Radium 226 8	& 228 Combined	01122
									, any
h		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CENE	DAL INCO	DASATION:				
WEATHER:	ΔΙ.	- 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4		RAL INFO	RMATION	· · · · · · · · · · · · · · · · · · ·			
	FED-X	r + Suppay, To	emp 80	<i>y-</i> -					

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

SHIPPED TO:

SAMPLER:

betsy.mcdaniel@pacelabs.com

EVER GUILLEN

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __Event 9; __Event 10; __Event 11; _X_Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

	MPLE ID: PZ-23A MATRIX: Groundwater									
WELL MATERIAL SAMPLE METHOR	: PVC SS	OTHER Q	Da					•		
SAMPLE METHO	: Low From	J-BLADDE	RIVAP		//					
				WELL DIA	METER: Z					
DUP./REP. OF:				DEPIRIC	WAIER: TOTO		GRAB (x) CO	MPOSITE ()		
	هر ووورد			TOTAL DE	PTH: 64.5					
Pump Intake Set a	at (btoc): 5°°	<u>}.5</u>		WATER C	OLUMN HEIGHT:					
or				PURGE V						
Tubing Inlet Set a	t (btoc):				ater column height (ft)			-		
				[0.653 x w	ater column height (ft)	x 3 (well volu	mes) for 4" we	lls]		
			· · · · · · · · · · · · · · · · · · ·	[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" well	s]		
		DO (±0.2 mg/L			:			Pump Rate		
TIME	VOL. PURGED	or 10% for DO > 0.5 mg/L/ for	ORP (mV)	pH (+/- 0.1	SPEC. COND. (µs/cm)	TEMP (°C)	TURB. (NTU)	ml/min. (& pump	Water Level	
I IIVIE	(gal)	DO < 0.5 mg/L	record only	pH units)	[+/- 5%]	Record only	[<5 NTU]	setting) (100	(Ft BTOC) ¹	
		record only						ml/min)		
Initial: 1518 300	0,25	4.16	98.40	6.83	766.50	25,40	17,2	2000 ()	41,07	
1353 40 600	0.5	3,60	97,00	6.82	752,50	22.84	1513	200	41,07	
1528 900	0.75	3,38	93,10	6.83	748.90	22,62	20,2	200	41.07	
1533 1200	110	3,30	91,10	6.82	741,50	22,62	47.6	200	41.07	
1538 1500	1,25	3,29	91,70	6,81	735.80	22.90	35.9	200	41,07	
1543 1800	115	3,28	92,40	6.81	728,40	22,98	28.3	200	41,07	
1548 2100	1,75	3.28	93,20	6180	723.50	23,07	17.70	200	41.07	
1553 2400	2.0	3.31	95,00	6.79	719,10	22.82	6,51	200	41.07	
1558 2700	2.25	3.34	94.80	6.78	719,90	2240	3,68	200	41.07	
1605 C	ellect	San	eple							
			<u> </u>			•				
NOTES:					d when 3 consecutive wa		surements vary	by 0.3 foot or less	at a pumping	
					ove the top of the screen					
		dry, allow to rec	harge and sar		24 hrs. PH 62	SAMPLI	NG = 61	84		
	Turbidity < 5 N	TUs			NO3 Samplep H-	= 1,0				
	2 2 2 2 2 2				, ,					
SAMPLE DATE:	3-25-20	•								
SAMPLE TIME:	1 1			· · · · · · · · · · · · · · · · · · ·	ANAL VITIGAL					
CONTAINER SIZE/TYPE	NO.	DDESE	RVATIVE		ANALYTICAL		A 61	NI Vele		
250 mL/Poly			to pH <2		METHOD			ALYSIS		
500 mL/Poly	1		to 6°C		SW6020B E300.0			& IV Metals SO4/TDS		
1 L/Poly	2				E9315/9320					
1 L/Poly 2 HNO3 to pH <2 E9315/9320 Radium 226 & 228 Combined										
	L	<u> </u>		l						
	The second of th		GEN	RAL INFO	RMATION		· · · · · · · · · · · · · · · · · · ·			
WEATHER:	HOT-	CLOUDY-1	HUMID		The second secon	***************************************				
SHIPPED VIA:	FED-X		1-1-11-							

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

SHIPPED TO:

SAMPLER:

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Howard

uniel

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __Event 9; __Event 10; __Event 11; _X_Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

WELL MATERIAL: SAMPLE METHOD	EID: <u>PZ-25</u> PVC_ss	OTHER										
SAMPLE METHOD	: (VEI)	Plack KER	hump	WELL DIA	метер. 2							
DUP./REP. OF:					WATER: 22 4	1	GRAB (x) CO	MPOSITE ()				
		e) a		TOTAL DE	1 1 1 1	 1	(,	,				
Pump Intake Set a	t (btoc): 	8.2		WATER C	OLUMN HEIGHT:							
or				PURGE V								
Tubing Inlet Set at	(btoc):	And the same of th			ater column height (ft)		•	=				
					rater column height (ft)		•					
	Τ			[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" well	s]	· · · · · · · · · · · · · · · · · · ·			
TIME 130%	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L/ for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (μs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water L			
Initial: 130 %	0.2.5	0.27	27.00	7.03	476.50	22.26	1.75	300()	22.0			
1312	0.5	0.16	-30.10	7.01	477,20	22.27	1.10	300	22.			
13/2	0.75	0.12	-33,90	7.01	477.40	22,33	0.86	300	22.6			
1322	1.0	0.12	-34.40	7.01	478,20	22.47	0.66	300	22,6			
13287	1.25	0.13	-34.80	7.01	476.90	22,33	0.51	300	12.			
1332011	1,50	0.14	<u>- 35.70</u>	7.01	477.80	22,42	0.53	300	22.			
<u> </u>				-								
	1 01 - 12 11 12		411									
NOTES:					d when 3 consecutive wa		surements vary	by 0.3 foot or less	at a pum			
	rate no greater than 100 ml/min and the water level is above the top of the screen. If well is purged dry, allow to recharge and sample within 24 hrs.											
	Turbidity < 5 NTUs											
	Fin.	= Ha L	701									
SAMPLE DATE: 3	1333	, p , , , , ,	7, 5					**************************************				
CONTAINER			2.13.3.100		ANALYTICAL		<u> </u>					
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		AN	ALYSIS				
250 mL/Poly	1	HNO3	to pH <2		SW6020B		App. III	& IV Metals p	142			
500 mL/Poly	12		to 6°C		E300.0		CI, F,	SO4/TDS				
1 L/Poly	2	HNO3	to pH <2		E9315/9320		Radium 226	& 228 Combined	pHC.			
									7			
								· · · · · · · · · · · · · · · · · · ·				
The state of the s							·					
WEATHER:		y Sunn		RAL INFO				Lange of the Lange of				

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

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PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVEN	Γ: Event 9;	Event 10;	Event 11; _	X_ Event 12	2; Event 13; Eve	nt 14; Eve	ent 15; Ever	t 16; OTHER	
WELL ID / SAMPL	E ID: PZ-31		MATRIX: Gr	oundwater					
WELL MATERIAL:		OTHER OF							
SAMPLE METHOD	: LOWFLOW	- Propoer	YUMP						
			•	WELL DIA	METER: 2"				
DUP./REP. OF:				DEPTH TO	WATER: 27,63	_	GRAB (x) CO	MPOSITE ()	
		2			PTH: 6160	-			
Pump Intake Set a	t (btoc): <i>.</i> 5 <i>6</i>	160		WATER C	OLUMN HEIGHT:				
or				PURGE V	OLUME:	_			
Tubing Inlet Set at	: (btoc):			[0.163 x w	ater column height (ft)	x 3 (well volu	mes) for 2" we	lls]	
				[0.653 x w	ater column height (ft)	x 3 (well volu	mes) for 4" we	lls]	
				[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" well	s]	
TIME	VOL. PURGED (gał)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L/ for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (μs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC) ¹
Initial: 930 300	0.25	2.90	136.30	6.58	432,80	21,38	1,00	200 ()	28.53
951 300	1	4.57	96,90	7.06	461.10	20,21	1.05	200	28:71
956 600	0,5	4,59	96,60		461,40	20.18	0,99	200	28.71
1001 900		4,59		7,09	461,40	20,23	0,76	200	Z8,7(
1006 1200	1.0	4,60	97.10		461,20	20,21	1,71	200	28.71
1011 1499		4,60	97.60		461.60		ONIA	200	28,71
1016 1800		4.61	97,20	7.08	461,70	20,21	081	200	28.71
	10 1- 0 (1)		100						
4		100							
						·			
				**					
NOTES:	¹ Stabilization of	of water column v	vill be consider	ed achieve	d when 3 consecutive wa	iter level mea	surements vary	by 0.3 foot or less	at a pumping
		d dry, allow to red			····		ING = 7	15-	
	Turbidity < 5 N		<u> </u>		HND3 SAMI				
					HUD SAM	<u> </u>	- IID BAJF	H STKIPS	
SAMPLE DATE:	3-25-20	,							
SAMPLE TIME:	1020								
CONTAINER			A.77		ANALYTICAL		. <u></u>		
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		ANA	ALYSIS	
250 mL/Poly	1	HNO3	to pH <2		SW6020B		App. III	& IV Metals	
500 mL/Poly	1	Cool	to 6°C		E300.0	CI, F, SO4/TDS			
1 L/Poly	2	HNO3	to pH <2		E9315/9320			& 228 Combined	
						٧			
			GENE	RAL INFO	RMATION				
WEATHER:	HOT-CL	ovby- Hur	10						
SHIPPED VIA:	FED-X								

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

250/

SHIPPED TO:

SAMPLER:

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Daniel Howard

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND, 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: __Event 9; __Event 10; __Event 11; _X_Event 12; __Event 13; __Event 14; __Event 15; __Event 16; __OTHER

WELL ID / SAMPLI	E ID: PZ-32		MATRIX: Gr						
WELL MATERIAL:	X PVC SS.	OTHER							
WELL MATERIAL: SAMPLE METHOD	RED	<u>Bladde</u> r	pump)					
	-	-	, ,	WELL DIA	METER: 12				
DUP./REP. OF:				DEPTH TO	WATER: 25.0		GRAB (x) CO	MPOSITE ()	
	em ed	, Pa		TOTAL DE	EPTH: 65.3	<u>D</u>			
Pump Intake Set a	t (btoc): <u>5 </u>	<u>,3</u>		WATER C	OLUMN HEIGHT:				
or	_			PURGE V	OLUME:				
Tubing Inlet Set at	(btoc):			[0.163 x w	ater column height (ft)	x 3 (well volu	ımes) for 2" we	lis]	
				[0.653 x w	ater column height (ft)	x 3 (well volu	ımes) for 4" we	lis]	
				[1.47 x wa	ter column height (ft) x	3 (well volun	nes) for 6" well	s]	
		DO (±0.2 mg/L							
	VOL. PURGED	or 10% for DO	ORP (mV)	pH (+/- 0.1	SPEC. COND. (μs/cm)	TEMP (°C)	TURB. (NTU)	Pump Rate	Water Level
TIME	(gal)	> 0.5 mg/L/ for	record only	pH (+/- 0.1	SPEC. COND. (με/cm) [+/- 5%]	TEMP (°C) Record only	[<5 NTU]	ml/min. (& pump setting) (100	(Ft BTOC) ¹
Lat at a second	"-	DO < 0.5 mg/L record only		'				ml/min)	(1.2.55)
5Tart: 1034		4 (1.6							
Initial: 1039	0,25	0.46	101.80	7.04	321.10	19,04	3,59	300 ()	26,05
1044	0.5	0.46	96.30	7.09	321,30	19.04	1.82	300	26,05
1049	0.75	0.45	91.80	7.14	320,30	18,46	1.25	300	26.05
/054	1.0	0.44	89:70	7.18	320.60		0.64	300	26.05
10.59	1.25	0,44	87.60	7.21	320.40	19.04	0.75	300	26.05
1104	1,50	0.48	87,40	7,23	318.69	19,07	0.58	300	26.05
						,			
						· · · · · · · · · · · · · · · · · · ·			
	1 Stabilization of	f water column v	vill be consider	red achieve	d when 3 consecutive wa	ter level mea:	surements vary	by 0.3 foot or less	at a numping
NOTES:					ove the top of the screen		301011101110 10.,	by 0.0 100t 01 1000	at a pamping
	If well is purged	dry, allow to rec	harge and sar	nple within :	24 hrs.				
ĺ					a bottles	Far I	dium)	For Lab	QC
	Final	nH = 7	23	<u> </u>	le Not I I I I I I	<u> </u>		W	<u> </u>
SAMPLE DATE: _3	125/20	, 							
SAMPLE TIME:	1105								
CONTAINER					ANALYTICAL		 	<u>,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	27.77 (m. 1944)
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD	ANALYSIS			
250 mL/Poly	1	HNO3	to pH <2		SW6020B		Contract to the second		
500 mL/Poly	12		to 6°C		E300.0	CI, F, SO4/TDS			2 Ha
1 L/Poly	RH		to pH <2		E9315/9320	Radium 226 & 228 Combined			11/2
-			***************************************						111
					I		parameter		
	The state of the s		GENE	RAL INFO	RMATION				
WEATHER:	Overca FED-X	st. Tem	25°F			and the state of t			
SHIPPED VIA:	FED-X	31/							

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

SHIPPED TO:

SAMPLER:

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EVER GUILLEN

PLANT MITCHELL FIELD SAMPLING REPORT

Project Number: 6122-16-0170.1902

ASH PONDS 1 AND 2

Wood E&I Solutions, Inc.

1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144

PHONE: (770) 421-3400 / FAX: (770) 421-3486

					z; Event 13; Eve	nt 14; Eve	nt 15; Even	It 16; OTHER				
WELL ID / SAMPL WELL MATERIAL:			MATRIX: Gr	ounowater								
SAMPLE METHOD	_ PVC_ :_ <u>Low 1</u>	FLOW - QED	PUMP		· ·							
DUP./REP. OF:				WELL DIAMETER: C DEPTH TO WATER: 41.83 GRAB (x) COMPOSITE ()								
				DEPTH TO	D WATER: <u> 7/<i>18</i>フ</u> :nru: "フ3, <i>6</i> ジ	-	GRAB (x) CO	MPOSITE ()				
Pump Intake Set at (btoc): 68.60					FOTAL DEPTH: 73,60 NATER COLUMN HEIGHT:							
or	. (0.00)			PURGE V								
Tubing Inlet Set at	(btoc):				ater column height (ft)	– x 3 (well volu	mes) for 2" we	lls]				
_					ater column height (ft)							
					ter column height (ft) x							
TIME	VOL. PUR (gal)	> 0.5 ma/l / for l	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (μs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC) ¹			
Initial: 1403 299	0.29	5 0.96	1,20	7,28	608,60	22,10	0145	200 ()	42,11			
1408 599	1	0.49	32.40	7,05	610,60	21.95	0:31	200	92.11			
1413 899	0.73	5 0.39	43,90	7.03	611,10	2493	0135	200	42,11			
1418 1199			50,40	7,02	613,50	21.99	0,24	200	42.11			
1423 1499	1,2	5 0,29	55.20	7,02	614,50	21.99	0181	200	42.11			
1428 1799	1.5	0,27	58.80	7.01	614,50	21.94	0,50	200	42,11			
1433 2099			60,60	7,01	614.80	21,98	0,44	200	42,11			
1438 2399	2,0		61.50	7.01	614.80	21,91	0123	200	42,11			
1443 2699	2.25		62.00	7101	614,60	21,93	0,20	200	42,11			
1448 2999			63,00	7,01	614,70	21,86	0,19	200	42,11			
14.55	Coll	ect Sar	nple									
												
	1							alan a di santa di santa di santa di santa di santa di santa di santa di santa di santa di santa di santa di s				
NOTES:					d when 3 consecutive was ove the top of the screen		surements vary	by 0.3 foot or less	at a pumping			
		irged dry, allow to rec		·			A 11 A D 1 1 C	- 7.00				
	Turbidity <		naigo ana oai		INO3 Sample P	11-10	FMF21NG	= 7,00				
					1000 sample 1	17-110						
SAMPLE DATE:	3-26-	-20										
SAMPLE TIME:	145	5										
CONTAINER			*_1.775,_1.11.11.124.11.11		ANALYTICAL							
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD	ANALYSIS						
250 mL/Poly	1	HNO3 1	to pH <2		SW6020B		App. III a	& IV Metals				
500 mL/Poly	1	Cool	to 6°C		E300.0	CI, F, SO4/TDS						
1 L/Poly	2	HNO3 t	to pH <2		E9315/9320		Radium 226 8	& 228 Combined				
	NG KATTURA PER MANAGEMENT AND AND AND AND AND AND AND AND AND AND		CENE	DAL INEO	PMATION		·					
WEATHER:	11.	D. C. C. 2. 11.		RAL INFO	INMATION			N. N. N. N. N. N. N. N. N. N. N. N. N. N				
	FED-X	CLEAR- HU	MIN			···						

PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel:

WELL INSPECTIONS

Groundwater Monitoring Well Integrity Form

Name	Plant Mitchell			
it Number	N/A	_		
ID	PZ-01D	_		
	3/23/2020	-		
	3.20.20.20	yes	no	n/a
1 Location	n/Identification	•		
a	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	yes		
2 Protectiv	ve Casing			
a	Is the protective casing free from apparent damage and able to be			
	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
С	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,			
	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
3 Surface	nad			
a <u>Surrace</u>	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and	<u> </u>		
u	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
1 Internal	againg			
4 Internal	Does the cap prevent entry of foreign material into the well?	VOS		
a b	Is the casing free of kinks or bends, or any obstructions from	yes		
b	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		-
d	Is the survey point clearly marked on the inner casing?	yes		
e	Is the depth of the well consistent with the original well log?	<u> </u>		N/A
f	Is the casing stable? (or does the pvc move easily when touched			- 1 1/1
•	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
F 0	an One we director Mights Only			
· · · · · · · · · · · · · · · · · · ·	g: Groundwater Wells Only:	1100		
a	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition	V00		
	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		<u>no</u>	
6 Based o	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	yes		

Signature and Seal of PE/PG responsible for inspection

Site Name Permit Number Well ID	Plant Mitchell N/A PZ-02D			
Date	3/23/2020	V00	no	n/o
1 Location/le	dentification	yes	no	n/a
a	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	yes		
2 Protective	Casing			
a <u>1101001140</u>	Is the protective casing free from apparent damage and able to be			
u	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,			
	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
2 0				
3 <u>Surface page</u>	ad Is the well pad in good condition (not cracked or broken)?	\/OO		
a	Is the well pad sloped away from the protective casing?	yes		
b	Is the well pad in complete contact with the protective casing?	yes		
c d	Is the well pad in complete contact with the ground surface and	yes		
u	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
	· · · · · · · · · · · · · · · · · · ·			
4 Internal ca				
a	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
C	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing? Is the depth of the well consistent with the original well log?	yes		N/A
e f	Is the casing stable? (or does the pvc move easily when touched			IN/A
I	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
	,	,00		
5 <u>Sampling:</u>	Groundwater Wells Only:			
а	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?			N/A
С	Does the well require redevelopment (low flow, turbid)?		<u>no</u>	
6 Based on	your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	VOS		
	roquiromonio:	yes		
7 Corrective	actions as needed, by date:			

Site Name Permit Number Well ID Date	Plant Mitchell N/A PZ-07D 3/24/2019			(a
1 Location/L	dentification	yes	no	n/a
a <u>Location/i</u>	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
C	Is the well in a high traffic area and does the well require	you		
· ·	·	yes		
d	Is the drainage around the well acceptable? (no standing water,	<u> </u>		
4	nor is well located in obvious drainage flow path)	yes		
2 Protective				
a	Is the protective casing free from apparent damage and able to be			
	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,			
	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
3 Surface p	ad			
a	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
С	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
1 Internal of	aning			
4 Internal ca	Does the cap prevent entry of foreign material into the well?	VAS		
a b	Is the casing free of kinks or bends, or any obstructions from	yes		
b	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
5.0	On the standard Malla Onl			
· -	Groundwater Wells Only:			
a b		yes		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	V00		
С	Does the well require redevelopment (low flow, turbid)?	yes	no	
C	boes the well require redevelopment (low now, turbid):			
6 Based on	your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	yes		
7 Corrective	actions as needed, by date:			

Site Name	Plant Mitchell			
Permit Number	N/A			
Well ID	PZ-14			
Date	3/24/2020			
		yes	no	n/a
1 Location/I	<u>dentification</u>			
а	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,			
_	nor is well located in obvious drainage flow path)	yes		
2 Protective	a Casina			
a <u>110tcotive</u>	Is the protective casing free from apparent damage and able to be			
u	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,	you		
ŭ	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
	•	,,,,		
3 Surface p				
a	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
4 Internal ca	asing			
а	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		
е	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
5 Sampling	: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition			' <u></u>
	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		no	
6 Based on	your professional judgement, is the well construction / location			
- D acca on	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	yes		
	·			
7 Corrective	e actions as needed, by date:			

Site Name Permit Number Well ID Date	Plant Mitchell N/A PZ-15 3/24/2019	· ·		n/a
1 Location/L	<u>dentification</u>	yes	no	n/a
a <u>Location/i</u>	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
C	Is the well in a high traffic area and does the well require			
	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	yes		
2 Protective	Casing			
a <u>Frotective</u>	Is the protective casing free from apparent damage and able to be			
α	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,			
-	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
0.0.7				
3 Surface p				
a	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing? Is the well pad in complete contact with the ground surface and	yes		
d	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)			
е	Is the pad surface clean (not covered with sediment or debris)?	yes yes		
C	is the pad surface sleaff (flot severed with seafficit of debits):	yco		
4 Internal ca				
a	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		N1/A
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
	oodpiirigo iii oorioti dottori)	yco		
5 <u>Sampling</u> :	Groundwater Wells Only:			
a	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		no	
6 Based on	your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	yes		
7 Corrective	actions as needed, by date:			

Site Name Permit Number Well ID Date	Plant Mitchell N/A PZ-16 3/24/2020			
4.1	double out on	yes	no	n/a
1 Location/l	dentification Is the well visible and accessible?	V00		
a	Is the well properly identified with the correct well ID?	yes		
b c	Is the well in a high traffic area and does the well require	yes		
U	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,	you		
u u	nor is well located in obvious drainage flow path)	yes		
2 Protective	Casing			
a <u>Frotective</u>	Is the protective casing free from apparent damage and able to be			
a	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,	,,,,		
<u>.</u>	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
3 Surface pa				
a	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing? Is the well pad in complete contact with the ground surface and	yes		
d	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	VAS		
е	Is the pad surface clean (not covered with sediment or debris)?	yes yes		
e	is the pad surface clean (not covered with sediment of debits):	ycs		
4 Internal ca				
a	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
C	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		- NI/A
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	V06		
	couplings in construction)	yes		
5 Sampling:	Groundwater Wells Only:			
a	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		no	
6 Based on	your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	yes		
7 Corrective	actions as needed, by date:			

Site Name	Plant Mitchell			
Permit Number	N/A	-		
Well ID	PZ-17	-		
Date	3/23/2020	-		
Date	3/23/2020	-		n/o
1 Location/	<u>Identification</u>	yes	no	n/a
а	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	yes		
2 Protective	e Casing			
<u>a</u>	Is the protective casing free from apparent damage and able to be			
	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,	700		
ď	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
C	to the well looked and to the look in good condition.	<u> </u>		
3 Surface p	o <u>ad</u>			
а	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
С	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
4 Internal c				
а	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		
е	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
E Complina	Croundwater Walla Only			
_	: Groundwater Wells Only: Does well recharge adequately when purged?	V/00		
a		yes		
b	If dedicated sampling equipment installed, is it in good condition			
_	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		_no_	
6 Rased on	your professional judgement, is the well construction / location			
o Dagoa on	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	yes		
	104anomonio:	<u> </u>		
7 Corrective	e actions as needed, by date:			

Site Name	Plant Mitchell			
Permit Number	N/A			
Well ID	PZ-18			
	3/23/2020			
Date	3/23/2020		no	n/o
1 Location/	Identification	yes	no	n/a
<u>=======</u>	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	yes		
2 Protective	e Casing			
a <u>110.000.17</u>	Is the protective casing free from apparent damage and able to be			
u	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,			
	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
2.0.1				
3 Surface p				
a	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	VAS		
е	Is the pad surface clean (not covered with sediment or debris)?	yes yes		
G	is the pad surface death (not covered with sediment of debits):	<u>ycs</u>		
4 Internal o				
a	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
C	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		- NI/A
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	VOC		
	couplings in construction)	yes		
5 Sampling	: Groundwater Wells Only:			
а	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		_no	
6 Based or	your professional judgement, is the well construction / location			
- 20000 01	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	yes		
7.0	and the second s			
/ Correctiv	e actions as needed, by date:			

Site Name	Plant Mitchell			
Permit Number	N/A			
Well ID	PZ-19			
Date	3/24/2020			
		yes	no	n/a
1 Location/I	<u>dentification</u>	•		
а	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require			·
		yes		
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	yes		
2 Protective	Casing			
a <u>110tcotive</u>	Is the protective casing free from apparent damage and able to be			
ű.	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,	,		
-	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
3 Surface p				
a	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not	1/00		
0	move when stepped on) Is the pad surface clean (not covered with sediment or debris)?	yes		
е	is the pad surface clean (not covered with sediment of debits):	yes		
4 Internal ca	asing			
а	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			·
	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		
е	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
5 Sampling:	Groundwater Wells Only:			
a	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		no	
6 D	value professional independent in the coefficient of the coefficient		_	
o Based on	your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	VAS		
	requirements:	yes		
7 Corrective	e actions as needed, by date:			

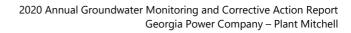
	Plant Mitchell	-		
nit Number	N/A	-		
ID	PZ-23A	•		
	3/24/2020	•		
		yes	no	n/a
1 Location	n/Identification			
a	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	yes		
2 Protectiv	ve Casing			
а	Is the protective casing free from apparent damage and able to be			
	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
С	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,	_	_	-
	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
3 Surface	nad			
a	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
4 Internal	casing			
a	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
-	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		
е	Is the depth of the well consistent with the original well log?	<u> </u>		N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
5 Samplin	g: Groundwater Wells Only:			
a <u>oampiii</u>	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition	<u>ycs</u>		
Ь	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?	<u> </u>	no	
	, , , , , , , , , , , , , , , , , , , ,			
6 Based c	on your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	yes		

Site Name Permit Number Well ID	Plant Mitchell N/A PZ-25 3/24/2020			
Date	3/24/2020	yes	no	n/a
1 Location/I	<u>dentification</u>	you		1174
а	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,	yes		
2 Protective	Casing			
a <u>Frotective</u>	Is the protective casing free from apparent damage and able to be			
α	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
C	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,	,		
_		yes		
е	Is the well locked and is the lock in good condition?	yes		
0.0.4	-			
3 Surface p				
a	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
4 Internal ca	asing			
а	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		
е	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
5 Sampling	: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		no	
0.5				
b Based on	your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	yes		
7 Corrective	e actions as needed, by date:			

Site Name	Plant Mitchell			
Permit Number	N/A	•		
Well ID	PZ-31	•		
Date	3/23/2020	•		
		yes	no	n/a
1 Location/I	<u>dentification</u>	,		
a	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
С	Is the well in a high traffic area and does the well require			
	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	yes		
2 Protoctive	Casing			
2 Protective				
а	Is the protective casing free from apparent damage and able to be secured?	VOC		
b	Is the casing free of degradation or deterioration?	yes		
	Does the casing have a functioning weep hole?	yes		
c d	Is the annular space between casings clear of debris and water,	yes		
u	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
Ü	to the well tooked and to the look in good container.	<u> </u>		
3 Surface p				
а	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
С	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and			
	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
4 Internal ca	asina			
a	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		
е	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip			
	couplings in construction)	yes		
E Complina	Croundwater Walla Only			
· -	: Groundwater Wells Only:	V00		
a	Does well recharge adequately when purged? If dedicated sampling equipment installed, is it in good condition	yes		
b	and specified in the approved groundwater plan for the facility?	VOC		
С	Does the well require redevelopment (low flow, turbid)?	yes		
C	2000 and won require redevelopment flow flow, turbid):		no	
6 Based on	your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	yes		
7 Carraction	a actions as peopled, by data.			_
/ Corrective	e actions as needed, by date:			

Site Name Plant Mitchell		
Permit Number N/A		
Well ID PZ-32		
Date 3/23/2020		
yes	no	n/a
1 Location/Identification		
a Is the well visible and accessible? <u>yes</u>		
b Is the well properly identified with the correct well ID? <u>yes</u>		
c Is the well in a high traffic area and does the well require		
protection from traffic?yes		
d Is the drainage around the well acceptable? (no standing water,		
nor is well located in obvious drainage flow path) <u>yes</u>		
2 Protective Cooling		
Protective Casing a Is the protective casing free from apparent damage and able to be		
<u> </u>		
d Is the annular space between casings clear of debris and water,		
or filled with pea gravel/sand? <u>yes</u>		
e Is the well locked and is the lock in good condition? <u>yes</u>		
3 Surface pad		
a Is the well pad in good condition (not cracked or broken)? yes		
b Is the well pad sloped away from the protective casing? yes		
c Is the well pad in complete contact with the protective casing? yes		
d Is the well pad in complete contact with the ground surface and		
stable? (not undermined by erosion, animal burrows, and does not		
move when stepped on) yes		
e Is the pad surface clean (not covered with sediment or debris)? yes		
4 Internal casing		
a Does the cap prevent entry of foreign material into the well? <u>yes</u>		
b Is the casing free of kinks or bends, or any obstructions from		
foreign objects (such as bailers)? yes yes		
c Is the well properly vented for equilibration of air pressure? <u>yes</u>		
d Is the survey point clearly marked on the inner casing? yes		NI/A
e Is the depth of the well consistent with the original well log?		N/A
f Is the casing stable? (or does the pvc move easily when touched		
or can it be taken apart by hand due to lack of grout or use of slip couplings in construction) yes		
couplings in construction) <u>yes</u>		
5 Sampling: Groundwater Wells Only:		
a Does well recharge adequately when purged? yes		
b If dedicated sampling equipment installed, is it in good condition		
and specified in the approved groundwater plan for the facility? yes		
c Does the well require redevelopment (low flow, turbid)?	no	
6 Based on your professional judgement, is the well construction / location		
appropriate to 1) achieve the objectives of the Groundwater		
Monitoring Program and 2) comply with the applicable regulatory		
requirements? <u>yes</u>		
7 Corrective actions as needed, by date:		

Site Name	Plant Mitchell			
Permit Number	N/A			
Well ID	PZ-33			
Date	3/24/2020			
Dato	0/2 1/2020	yes	no	n/a
1 Location/le	dentification	you	110	11/4
a	Is the well visible and accessible?	yes		
b	Is the well properly identified with the correct well ID?	yes		
C	Is the well in a high traffic area and does the well require			
	protection from traffic?	yes		
d	Is the drainage around the well acceptable? (no standing water,			
	nor is well located in obvious drainage flow path)	yes		
		,		
2 Protective				
а	Is the protective casing free from apparent damage and able to be			
	secured?	yes		
b	Is the casing free of degradation or deterioration?	yes		
С	Does the casing have a functioning weep hole?	yes		
d	Is the annular space between casings clear of debris and water,			
	or filled with pea gravel/sand?	yes		
е	Is the well locked and is the lock in good condition?	yes		
3 Surface pa	ad			
a <u>edinace pr</u>	Is the well pad in good condition (not cracked or broken)?	yes		
b	Is the well pad sloped away from the protective casing?	yes		
C	Is the well pad in complete contact with the protective casing?	yes		
d	Is the well pad in complete contact with the ground surface and	,,,,		
<u>.</u>	stable? (not undermined by erosion, animal burrows, and does not			
	move when stepped on)	yes		
е	Is the pad surface clean (not covered with sediment or debris)?	yes		
4 Internal ca				
a	Does the cap prevent entry of foreign material into the well?	yes		
b	Is the casing free of kinks or bends, or any obstructions from			
	foreign objects (such as bailers)?	yes		
С	Is the well properly vented for equilibration of air pressure?	yes		
d	Is the survey point clearly marked on the inner casing?	yes		- N. 1/A
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched			
	or can it be taken apart by hand due to lack of grout or use of slip	1/00		
	couplings in construction)	yes		
5 Sampling:	Groundwater Wells Only:			
a	Does well recharge adequately when purged?	yes		
b	If dedicated sampling equipment installed, is it in good condition			
	and specified in the approved groundwater plan for the facility?	yes		
С	Does the well require redevelopment (low flow, turbid)?		no	
• -				
6 Based on	your professional judgement, is the well construction / location			
	appropriate to 1) achieve the objectives of the Groundwater			
	Monitoring Program and 2) comply with the applicable regulatory			
	requirements?	yes		
7 Corrective	e actions as needed, by date:			
	to the control of the			



APPENDIX C

STATISTICAL ANALYSES

2020 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company – Plant Mitchell

STATISTICAL ANALYSES OF OCTOBER 2019 DATA

Table C-1
Appendix III October 2019 Results Compared with Prediction Limits
Plant Mitchell Ash Ponds A, 1 & 2

					September 10, 2019 and October
Parameter	Units	Well ID	Upper PL	Lower PL	2-3, 2019
		P	urpose of Ever	nt:	Assessment Semi-annual
Boron	mg/L	PZ-7D	0.028	i	0.24
Boron	mg/L	PZ-14	0.028	ı	0.021 (J)
Boron	mg/L	PZ-15	0.028	ı	0.17
Boron	mg/L	PZ-16	0.028	-	0.19
Boron	mg/L	PZ-17	0.028	-	0.28
Boron	mg/L	PZ-18	0.028	-	0.35
Boron	mg/L	PZ-19	0.028	-	0.52
Boron	mg/L	PZ-23	0.028	-	0.15
Boron	mg/L	PZ-25	0.028	-	0.21
Boron	mg/L	PZ-33	0.028	-	0.36
Calcium	mg/L	PZ-7D	110	-	127
Calcium	mg/L	PZ-14	110	-	103
Calcium	mg/L	PZ-15	110	-	101
Calcium	mg/L	PZ-16	110	-	89.1
Calcium	mg/L	PZ-17	110	-	115
Calcium	mg/L	PZ-18	110	-	139
Calcium	mg/L	PZ-19	110	-	125
Calcium	mg/L	PZ-23	110	-	137
Calcium	mg/L	PZ-25	110	-	92.3
Calcium	mg/L	PZ-33	110	-	110
Chloride	mg/L	PZ-7D	4.8	_	5.9
Chloride	mg/L	PZ-14	4.8	_	5.4
Chloride	mg/L	PZ-15	4.8	_	8.0
Chloride	mg/L	PZ-16	4.8	_	7.7
Chloride	mg/L	PZ-17	4.8	_	7.9
Chloride	mg/L	PZ-18	4.8	-	7.0
Chloride	mg/L	PZ-19	4.8	_	5.6
Chloride	mg/L	PZ-23	4.8	-	3.8
Chloride	mg/L	PZ-25	4.8	_	2.6
Chloride	mg/L	PZ-33	4.8	_	4.1
Fluoride	mg/L	PZ-7D	0.29	-	0.041 (J)
Fluoride	mg/L	PZ-14	0.29	_	0.056 (J)
Fluoride	mg/L	PZ-15	0.29	-	0.075 (J)
Fluoride	mg/L	PZ-16	0.29	-	0.053 (J)
Fluoride	mg/L	PZ-17	0.29	-	0.063 (J)
Fluoride	mg/L	PZ-18	0.29	-	0.043 (J)
Fluoride	mg/L	PZ-19	0.29	-	0.043 (J)
Fluoride	mg/L	PZ-23	0.29	-	<0.050
Fluoride	mg/L	PZ-25	0.29	-	0.16 (J)
Fluoride	mg/L	PZ-33	0.29	-	0.060 (J)
рН	s.u.	PZ-7D	9.7	7.0	6.9
рН	s.u. s.u.	PZ-14	9.7	7.0	7.0
рН	s.u. s.u.	PZ-14	9.7	7.0	7.0
рн		PZ-13	9.7	7.0	7.2
	S.U.	PZ-10 PZ-17	9.7	7.0	7.0
pH	S.U.	PZ-17 PZ-18	9.7	7.0	6.8
pH	S.U.		1		6.9
pH	S.U.	PZ-19	9.7	7.0	6.8
pH	S.U.	PZ-23	9.7	7.0	
рН	s.u.	PZ-25	9.7	7.0	7.2

Table C-1
Appendix III October 2019 Results Compared with Prediction Limits
Plant Mitchell Ash Ponds A, 1 & 2

			<u> </u>		September 10, 2019 and October
Parameter	Units	Well ID	Upper PL	Lower PL	2-3, 2019
		P	urpose of Ever	nt:	Assessment Semi-annual
рН	s.u.	PZ-33	9.7	7.0	7.0
Sulfate	mg/L	PZ-7D	6.4	-	59.6
Sulfate	mg/L	PZ-14	6.4	-	6.2
Sulfate	mg/L	PZ-15	6.4	ı	83.0
Sulfate	mg/L	PZ-16	6.4	-	48.5
Sulfate	mg/L	PZ-17	6.4	-	104
Sulfate	mg/L	PZ-18	6.4	-	95.8
Sulfate	mg/L	PZ-19	6.4	-	84.9
Sulfate	mg/L	PZ-23	6.4	-	45.1
Sulfate	mg/L	PZ-25	6.4	-	43.0
Sulfate	mg/L	PZ-33	6.4	-	72.1
TDS	mg/L	PZ-7D	320	-	405
TDS	mg/L	PZ-14	320	-	312
TDS	mg/L	PZ-15	320	-	355
TDS	mg/L	PZ-16	320	-	284
TDS	mg/L	PZ-17	320	-	415
TDS	mg/L	PZ-18	320	-	464
TDS	mg/L	PZ-19	320	-	485
TDS	mg/L	PZ-23	320	-	420
TDS	mg/L	PZ-25	320	-	312
TDS	mg/L	PZ-33	320	-	414

Notes:

Downgradient well PZ-23 was sampled on September 10, 2019 before it was abandoned for construction activities. The other downgradient wells were sampled on October 2 - 3, 2019.

- = Not applicable
- < indicates the constituent was not detected above the method detection limit.
- (J) indicates the constituent was detected between the analytical method detection limit and the laboratory reporting limit. The value followed by (J) is qualified by the laboratory as estimated.

mg/L = milligrams per liter

s.u. - standard units

TDS = Total Dissolved Solids

PL = prediction limit

Shaded and bolded values indicate an exceedance of the statistically derived PL.

The pH value presented was recorded at the time of sample collection in the field. pH is the only parameter where the field result is compared to both the upper and lower PL.

An Alternate Source Demonstration (ASD) has not been prepared for these Appendix III statistical exceedances. Assessment monitoring is currently being implemented.



10 April 2020

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Mr. Joju Abraham Georgia Power Company – Environmental Affairs 241 Ralph McGill Blvd Atlanta, GA 30308-3374

RE: 2019 Semi-Annual Groundwater Monitoring & Corrective Action Statistical

Summary Letter

Plant Mitchell Ash Ponds A, 1, and 2

Wood Environment & Infrastructure Solutions, Inc. Project 6122-16-0170

Dear Mr. Abraham:

Wood Environment & Infrastructure Solutions, Inc. (Wood) is pleased to submit this 2019 Semi-Annual Groundwater Monitoring & Corrective Action Statistical Summary Letter for the Plant Mitchell Ash Ponds A, 1, and 2 in Putney, Georgia. The letter and attachments are for your submittal to the Georgia Environmental Protection Division (EPD).

This 2019 Semi-Annual Groundwater Monitoring & Corrective Action Statistical Summary Letter provides the statistical analysis of the October 2019 Assessment Monitoring Event for the Georgia Power Company (GPC) Plant Mitchell Ash Ponds A, 1, and 2. The analysis complies with the Federal Rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia EPD Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the USEPA Unified Guidance (2009).

1.0 BACKGROUND

Georgia Power Company's Plant Mitchell is located approximately eight miles south of Albany, Georgia. There are three CCR surface impoundments (ash ponds) at the Site: Ash Pond A, Ash Pond 1, and Ash Pond 2. The former coal-fired plant buildings have been demolished. The CCR material is being removed from the ash ponds and the ponds are in the process of being closed. The removed CCR material will be transported by rail and/or by truck for disposal at an approved landfill or beneficially reused.

Plant Mitchell Ash Pond A was closed in 1962, Ash Pond 1 closed in 1980, and Ash Pond 2 ceased accepting CCR prior to October 19, 2015. Because the units ceased receiving waste prior to October 19, 2015, Ash Ponds A, 1, and 2 are not subject to Federal monitoring requirements of the CCR Rule. The Plant Mitchell CCR Surface Impoundments (Ash Pond A, Ash Pond 1, and Ash Pond 2) Permit Application was submitted to EPD in November 2018 and is currently under review. Groundwater monitoring has been initiated in order to meet EPD CCR requirements. The CCR background study was initiated in







August 2016 and was completed in October 2018. The first detection monitoring event was conducted in March 2019.

Statistically Significant Increases (SSIs) of Appendix III constituents were identified in the initial detection monitoring event (March 2019). Pursuant to § 257.94(e)(1), GPC implemented assessment monitoring in accordance with § 257.95. The initial assessment monitoring screening event was conducted from August 20 to 22, 2019. Pursuant to § 257.95(b), the CCR monitoring wells were sampled for the full suite of Appendix IV constituents during the initial assessment screening event. Following receipt of the initial Appendix IV sample results, the 2019 semi-annual monitoring event/assessment monitoring event was conducted October 1 to 3, 2019. Pursuant to § 257.95(d)(1), groundwater samples collected from the CCR monitoring network wells were analyzed for Appendix III constituents and those Appendix IV constituents detected during the initial assessment screening event in August 2019.

2.0 MONITORING NETWORK

Ash Ponds A, 1, and 2 are located adjacent to each other and are therefore considered to be one multiunit for groundwater quality monitoring purposes. The monitoring network of 14 wells is designed to monitor groundwater passing the waste boundary of the Ash Ponds A, 1, and 2 within the uppermost aquifer and is summarized below.

Well ID	Hydraulic Location
PZ-1D	Upgradient
PZ-2D	Upgradient
PZ-31	Upgradient
PZ-32	Upgradient
PZ-7D	Downgradient
PZ-14	Downgradient
PZ-15	Downgradient
PZ-16	Downgradient
PZ-17	Downgradient
PZ-18	Downgradient
PZ-19	Downgradient
PZ-23	Downgradient
PZ-25	Downgradient
PZ-33	Downgradient

3.0 FIRST SEMI-ANNUAL ASSESSMENT EVENT STATISTICAL METHODS

The October 2019 Appendix III and Appendix IV constituent concentrations were statistically analyzed. The statistical methodology is described in the following sections.



3.1 Appendix III Statistical Method

Statistical analysis of Appendix III groundwater monitoring data was performed on samples collected from the groundwater monitoring network in October 2019 pursuant to § 257.93(f) and following the April 2019 Statistical Analysis Plan developed by Groundwater Stats Consulting. The Sanitas groundwater statistical software was used to perform the statistical analyses of groundwater quality data obtained in October 2019. Sanitas is a commercially available decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the Unified Guidance (USEPA, 2009) document. Interwell prediction limits (PLs) were used for the analysis of the Appendix III constituents. Specific test information is provided below.

When using the interwell method, upgradient well data are pooled to establish a background statistical limit for each constituent. Appendix III data from the October 2019 monitoring event were compared to each statistical limit to determine whether downgradient well concentrations exceed interwell PLs. The interwell statistical method uses an optional 1-of-2 verification resample plan. When an initial statistically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier. Interwell PLs were used for the following locations and constituents:

- Ash Ponds A, 1, and 2 Downgradient Wells: PZ-7D, PZ-14, PZ-15, PZ-16, PZ-17, PZ-18, PZ-19, PZ-23, PZ-25, and PZ-33
- Constituents: boron, calcium, chloride, fluoride, sulfate, total dissolved solids (TDS), and pH

If data from a sampling event initially exceed the PL, an optional resampling strategy can be used to verify the result. In 1-of-2 resampling, one independent resample is collected and evaluated within 90 days to determine whether the initial exceedance is verified. If the resample exceeds the PL, the initial exceedance is verified, and an SSI is identified. When a resample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance. When the resample confirms the initial finding, the exceedance will be reported.

3.2 Appendix IV Statistical Method

The assessment monitoring program statistics for Appendix IV constituents at Plant Mitchell were conducted in two parts. The first part was the calculation of tolerance limits for site-specific background limits for Appendix IV constituents. The second part was the calculation of confidence limits for individual downgradient well/constituent pairs.

Interwell tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents. Parametric tolerance limits are used when data follow



a normal or transformed-normal distribution such as for barium and radium. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR § 257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

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

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified level (RSLs) have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR § 257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

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

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the October 2019 sample event. **Table 1: Summary of Groundwater Protection Standards for October 2019 Semi-Annual Monitoring Event** summarizes the background limits established for each Appendix IV constituent and the GWPS established under Georgia EPD Rules.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well. The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified.

4.0 FIRST SEMI-ANNUAL ASSESSMENT EVENT STATISTICAL RESULTS

The statistical results of the Appendix III and Appendix IV constituents from the October 2019 sampling event are discussed in the following sections.



4.1 Appendix III Statistical Results

Review of the Sanitas results indicates verified SSIs were noted following the October 2019 sampling event. **Table 2: Appendix III October 2019 Results Compared with Prediction Limits** lists the wells and Appendix III constituents with SSIs for the October 2019 sample event. The statistical analysis and comparison to PLs are included as **Appendix A: Appendix III Statistical Calculations.** The following summarizes the SSIs identified during the 2019 semi-annual monitoring event.

Statistical Analysis Results Summary

Constituent	Wells with Concentrations Above Prediction Limits
Boron	PZ-7D, PZ-15, PZ-16, PZ-17, PZ-18, PZ-19, PZ-23, PZ-25,
	PZ-33
Calcium	PZ-7D, PZ-17, PZ-18, PZ-19, PZ-23
Chloride	PZ-7D, PZ-14, PZ-15, PZ-16, PZ-17, PZ-18, PZ-19
рН	PZ-7D, PZ-18, PZ-19, PZ-23
Sulfate	PZ-7D, PZ-15, PZ-16, PZ-17, PZ-18, PZ-19, PZ-23, PZ-25,
	PZ-33
Total Dissolved Solids	PZ-7D, PZ-15, PZ-17, PZ-18, PZ-19, PZ-23, PZ-33

4.2 Appendix IV Statistical Results

Review of the Sanitas results indicates there were no confidence intervals of the individual well/constituent pairs above a GWPS, established according to Georgia EPD Rules 391-3-4-.10(6)(a). An exceedance is identified when the entire confidence interval is above the established GWPS. Therefore, no SSLs were identified for the October 2019 sample event. **Appendix B: Appendix IV Statistical Calculations** shows the individual well/constituent pairs with their respective confidence intervals in comparison to the respective constituent GWPS. Historical Appendix III and IV constituent concentrations are shown in **Appendix C: Time Series.**

Based on the results of the statistical analysis of Appendix III and IV constituents for the October 2019 sample event, Plant Mitchell will continue in assessment monitoring.

We appreciate the opportunity to provide environmental consulting services to the Georgia Power Company and Southern Company Services. Please feel free to contact us at (770) 421-3400 if you have questions or require additional information.

wood.

Sincerely,

Wood Environment & Infrastructure Solutions, Inc.

Rhonda N. Quinn, P.G.

Senior Geologist

Gregory J. Wrenn, P.E.

Associate Engineer/Project Manager

Attachments: Table 1: Summary of Groundwater Protection Standards for October 2019 Semi-Annual Monitoring Event

Table 2: Appendix III October 2019 Results Compared with Prediction Limits

Appendix A: Appendix III Statistical Calculations Appendix B: Appendix IV Statistical Calculations

Appendix C: Time Series

wood.

TABLES

Table 1
Summary of Groundwater Protection Standards for October 2019 Semi-Annual Monitoring Event Plant Mitchell Ash Ponds A, 1 & 2

Constituent	Units	MCL	RSL	Site-Specific Background October 2019	State Derived Site GWPS ⁽²⁾
Antimony	mg/L	0.006		0.0035	0.006
Arsenic	mg/L	0.01		0.005	0.01
Barium	mg/L	2.0		0.066	2.0
Beryllium	mg/L	0.004		0.003	0.004
Cadmium	mg/L	0.005		0.001	0.005
Chromium	mg/L	0.1		0.011	0.1
Cobalt (1)	mg/L		0.006	0.005	0.005
Fluoride	mg/L	4.0		0.3	4.0
Lead ^{(1) (3)}	mg/L		0.015	0.005	0.005
Lithium (1) (4)	mg/L		0.04	0.025	0.03
Mercury	mg/L	0.002		0.0005	0.002
Molybdenum (1)	mg/L		0.1	0.01	0.01
Combined Radium	piC/L	5.0		1.36	5.0
Selenium	mg/L	0.05		0.01	0.05
Thallium	mg/L	0.002		0.001	0.002

Notes:

mg/L - milligrams per liter

piC/L - picoCuries per liter

MCL - Maximum Contaminant Level

RSL - Regional Screening Level established by USEPA. RSL applied for constituent per Federal CCR Rule 40 CFR § 257.95 (h) Amendment July 30, 2018.

GWPS - Groundwater Protection Standard

- (1) Constituent without an established MCL. The background limits were used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia Environmental Protection Division (EPD) Rule 391-3-4-.10(6)(a).
- (2) Under the existing Georgia EPD Rules, the GWPS is: (i) the MCL, (ii) where the MCL is not established, the background concentration, or (iii) background concentrations for constituents where the background level is higher than the MCL.
- (3) Currently, there is no MCL established for lead. The value listed is the established USEPA Action Level for drinking water.
- (4) The background tolerance limit (TL) used to evaluate GWPS for lithium is equal to the most recent laboratory specified reporting limit (RL). Per the Statistical Analysis Plan, and in accordance with the Unified Guidance, a non-parametric limit approach was used since the data set contains greater than 50% non-detect results for this analyte. Under this approach, the TL equals the highest value reported, for which is the laboratory RL. However, the highest laboratory RL used was 0.05 mg/L. As a result, we have modified the GWPS to be equal to the most recently used RL (0.03 mg/L).

Table 2
Appendix III October 2019 Results Compared with Prediction Limits
Plant Mitchell Ash Ponds A, 1 & 2

Parameter	Units	Well ID	Upper PL	Lower PL	September 10, 2019 and October 2-3, 2019
			rpose of Eve		Assessment Semi-annual
Boron	mg/L	PZ-7D	0.028	-	0.24
Boron	mg/L	PZ-14	0.028	-	0.021 (J)
Boron	mg/L	PZ-15	0.028	-	0.17
Boron	mg/L	PZ-16	0.028	-	0.19
Boron	mg/L	PZ-17	0.028	-	0.28
Boron	mg/L	PZ-18	0.028	-	0.35
Boron	mg/L	PZ-19	0.028	-	0.52
Boron	mg/L	PZ-23	0.028	-	0.15
Boron	mg/L	PZ-25	0.028	-	0.21
Boron	mg/L	PZ-33	0.028	-	0.36
Calcium	mg/L	PZ-7D	110	-	127
Calcium	mg/L	PZ-14	110	-	103
Calcium	mg/L	PZ-15	110	-	101
Calcium	mg/L	PZ-16	110	-	89.1
Calcium	mg/L	PZ-17	110	-	115
Calcium	mg/L	PZ-18	110	-	139
Calcium	mg/L	PZ-19	110	-	125
Calcium	mg/L	PZ-23	110	-	137
Calcium	mg/L	PZ-25	110	-	92.3
Calcium	mg/L	PZ-33	110	-	110
Chloride	mg/L	PZ-7D	4.8	-	5.9
Chloride	mg/L	PZ-14	4.8	-	5.4
Chloride	mg/L	PZ-15	4.8	-	8.0
Chloride	mg/L	PZ-16	4.8	-	7.7
Chloride	mg/L	PZ-17	4.8	-	7.9
Chloride	mg/L	PZ-18	4.8	-	7.0
Chloride	mg/L	PZ-19	4.8	ı	5.6
Chloride	mg/L	PZ-23	4.8	-	3.8
Chloride	mg/L	PZ-25	4.8	-	2.6
Chloride	mg/L	PZ-33	4.8	-	4.1
Fluoride	mg/L	PZ-7D	0.29	-	0.041 (J)
Fluoride	mg/L	PZ-14	0.29	-	0.056 (J)
Fluoride	mg/L	PZ-15	0.29	-	0.075 (J)
Fluoride	mg/L	PZ-16	0.29	-	0.053 (J)
Fluoride	mg/L	PZ-17	0.29	-	0.063 (J)
Fluoride	mg/L	PZ-18	0.29	-	0.043 (J)
Fluoride	mg/L	PZ-19	0.29	-	0.084 (J)
Fluoride	mg/L	PZ-23	0.29	-	<0.05
Fluoride	mg/L	PZ-25	0.29	-	0.16 (J)
Fluoride	mg/L	PZ-33	0.29	-	0.060 (J)
рН	s.u.	PZ-7D	9.7	7.0	6.9
рН	s.u.	PZ-14	9.7	7.0	7.0
рН	s.u.	PZ-15	9.7	7.0	7.2
рН	s.u.	PZ-16	9.7	7.0	7.2

Table 2
Appendix III October 2019 Results Compared with Prediction Limits
Plant Mitchell Ash Ponds A, 1 & 2

					September 10, 2019 and
Parameter	Units	Well ID	Upper PL	Lower PL	October 2-3, 2019
		Pu	rpose of Eve	nt:	Assessment Semi-annual
рН	s.u.	PZ-17	9.7	7.0	7.0
рН	s.u.	PZ-18	9.7	7.0	6.8
рН	s.u.	PZ-19	9.7	7.0	6.9
рН	s.u.	PZ-23	9.7	7.0	6.8
рН	s.u.	PZ-25	9.7	7.0	7.2
рН	s.u.	PZ-33	9.7	7.0	7.0
Sulfate	mg/L	PZ-7D	6.4	-	59.6
Sulfate	mg/L	PZ-14	6.4	-	6.2
Sulfate	mg/L	PZ-15	6.4	-	83.0
Sulfate	mg/L	PZ-16	6.4	-	48.5
Sulfate	mg/L	PZ-17	6.4	-	104
Sulfate	mg/L	PZ-18	6.4	-	95.8
Sulfate	mg/L	PZ-19	6.4	-	84.9
Sulfate	mg/L	PZ-23	6.4	-	45.1
Sulfate	mg/L	PZ-25	6.4	-	43.0
Sulfate	mg/L	PZ-33	6.4	-	72.1
TDS	mg/L	PZ-7D	320	-	405
TDS	mg/L	PZ-14	320	-	312
TDS	mg/L	PZ-15	320	-	355
TDS	mg/L	PZ-16	320	-	284
TDS	mg/L	PZ-17	320	-	415
TDS	mg/L	PZ-18	320	-	464
TDS	mg/L	PZ-19	320	-	485
TDS	mg/L	PZ-23	320	-	420
TDS	mg/L	PZ-25	320	-	312
TDS	mg/L	PZ-33	320	-	414

Notes:

Downgradient well PZ-23 was sampled on September 10, 2019 before it was abandoned for construction activities. The other downgradient wells were sampled on October 2 - 3, 2019.

- = Not applicable
- < indicates the constituent was not detected above the method detection limit.
- (J) indicates the constituent was detected between the analytical method detection limit and the laboratory reporting limit. The value followed by (J) is qualified by the laboratory as estimated.

mg/L = milligrams per liter

s.u. - standard units

TDS = Total Dissolved Solids

PL = prediction limit

Shaded and bolded values indicate an exceedance of the statistically derived PL.

The pH value presented was recorded at the time of sample collection in the field. pH is the only parameter where the field result is compared to both the upper and lower PL.

An Alternate Source Demonstration (ASD) has not been prepared for these Appendix III statistical exceedances. Assessment monitoring is currently being implemented.



APPENDIX A APPENDIX III STATISTICAL CALCULATIONS

Prediction Limit Summary Table – App. III Significant Results

Plant Mitchell Client: Southern Company Data: Mitchell_mod V4 Printed 2/24/2020, 1:02 PM Constituent Well Upper Lim. Lower Lim. %NDs Date Observ. Sig. <u>Bg N</u> Transform <u>Alpha</u> Method Boron (mg/L) PZ-23 0.028 n/a 9/10/2019 0.15 Yes 39 5.128 In(x) 0.000... Param Inter 1 of 2 Boron (mg/L) 0.028 n/a 0.17 39 0.000... PZ-15 10/2/2019 Yes 5.128 In(x) Param Inter 1 of 2 Boron (mg/L) Param Inter 1 of 2 PZ-7D 0.028 n/a 10/3/2019 0.24 Yes 39 5.128 In(x) 0.000... Boron (mg/L) PZ-16 0.028 n/a 10/2/2019 0.19 Yes 39 5.128 In(x) 0.000... Param Inter 1 of 2 Boron (mg/L) PZ-17 0.028 n/a 10/2/2019 0.28 Yes 39 5.128 In(x) 0.000... Param Inter 1 of 2 Boron (mg/L) PZ-18 10/3/2019 0.35 39 0.000... 0.028 n/a Yes 5.128 In(x) Param Inter 1 of 2 10/3/2019 Boron (mg/L) PZ-19 0.028 n/a 0.52 39 5.128 In(x) 0.000... Param Inter 1 of 2 Yes Boron (mg/L) PZ-25 0.028 n/a 10/2/2019 0.21 Yes 39 5.128 0.000... Param Inter 1 of 2 In(x) Boron (mg/L) PZ-33 0.028 n/a 10/3/2019 0.36 39 5.128 In(x) 0.000... Param Inter 1 of 2 Yes PZ-23 9/10/2019 137 Calcium (mg/L) 110 n/a Yes 39 2.564 No 0.000... Param Inter 1 of 2 Calcium (mg/L) PZ-7D 110 n/a 10/3/2019 127 Yes 39 2.564 No 0.000... Param Inter 1 of 2 Calcium (mg/L) PZ-17 110 n/a 10/2/2019 115 Yes 39 2.564 No 0.000... Param Inter 1 of 2 Calcium (mg/L) PZ-18 110 n/a 10/3/2019 139 Yes 39 2.564 No 0.000... Param Inter 1 of 2 Calcium (mg/L) PZ-19 110 n/a 10/3/2019 125 Yes 39 2.564 No 0.000... Param Inter 1 of 2 Chloride (mg/L) PZ-14 4.8 n/a 10/2/2019 5.4 Yes 39 0 No 0.000... Param Inter 1 of 2 Chloride (mg/L) PZ-15 39 4.8 n/a 10/2/2019 8 Yes 0 No 0.000... Param Inter 1 of 2 Chloride (mg/L) PZ-7D 4.8 n/a 10/3/2019 5.9 39 0 No 0.000... Param Inter 1 of 2 Yes Chloride (mg/L) **PZ-16** 4.8 n/a 10/2/2019 7.7 39 0 No 0.000... Param Inter 1 of 2 Yes Chloride (mg/L) PZ-17 4.8 n/a 10/2/2019 7.9 0 No 0.000... Param Inter 1 of 2 Yes 39 7 0 0.000... Chloride (mg/L) PZ-18 4.8 n/a 10/3/2019 Yes 39 No Param Inter 1 of 2 Chloride (mg/L) PZ-19 4.8 n/a 10/3/2019 5.6 39 0 No 0.000... Param Inter 1 of 2 Yes pH (pH units) PZ-14 9.7 7.0 10/2/2019 6.96 0 0.001914 NP Inter (normality) ... Yes 44 n/a pH (pH units) PZ-23 9.7 7.0 9/10/2019 6.78 0 n/a 0.001914 NP Inter (normality) ... Yes 44 pH (pH units) PZ-7D 9.7 7.0 10/3/2019 6.85 44 0 n/a 0.001914 NP Inter (normality) ... Yes pH (pH units) PZ-17 9.7 7.0 10/2/2019 6.99 Yes 44 0 n/a 0.001914 NP Inter (normality) ... pH (pH units) PZ-18 9.7 7.0 10/3/2019 6.78 44 0 n/a 0.001914 NP Inter (normality) ... Yes pH (pH units) PZ-19 9.7 7.0 10/3/2019 6.93 0 0.001914 NP Inter (normality) ... Yes 44 n/a Sulfate (mg/L) PZ-23 6.4 n/a 9/10/2019 45.1 Yes 39 0 n/a 0.00117 NP Inter (normality) ... Sulfate (mg/L) PZ-15 6.4 n/a 10/2/2019 83 Yes 39 0 n/a 0.00117 NP Inter (normality) ... Sulfate (mg/L) PZ-7D 6.4 n/a 10/3/2019 59.6 Yes 39 0 n/a 0.00117 NP Inter (normality) ... Sulfate (mg/L) PZ-16 6.4 n/a 10/2/2019 48.5 Yes 39 0 n/a 0.00117 NP Inter (normality) ... Sulfate (mg/L) PZ-17 6.4 n/a 10/2/2019 104 Yes 39 0 n/a 0.00117 NP Inter (normality) ... Sulfate (mg/L) **PZ-18** n/a 10/3/2019 95.8 39 0 0.00117 NP Inter (normality) ... 6.4 Yes n/a Sulfate (mg/L) 10/3/2019 84.9 PZ-19 6.4 n/a 39 0 n/a 0.00117 NP Inter (normality) ... Yes Sulfate (mg/L) PZ-25 6.4 n/a 10/2/2019 43 39 0 n/a 0.00117 NP Inter (normality) ... Yes Sulfate (mg/L) PZ-33 6.4 n/a 10/3/2019 72.1 39 0 n/a 0.00117 NP Inter (normality) ... Yes Total Dissolved Solids (mg/L) PZ-23 320 n/a 9/10/2019 420 39 0 No 0.000... Param Inter 1 of 2 Yes Total Dissolved Solids (mg/L) PZ-15 320 n/a 10/2/2019 355 Yes 39 0 No 0.000... Param Inter 1 of 2 Total Dissolved Solids (mg/L) 320 405 PZ-7D n/a 10/3/2019 Yes 39 0 No 0.000... Param Inter 1 of 2 Total Dissolved Solids (mg/L) PZ-17 320 n/a 10/2/2019 415 Yes 39 0 No 0.000... Param Inter 1 of 2 Total Dissolved Solids (mg/L) **PZ-18** 320 n/a 10/3/2019 464 39 0 No 0.000... Param Inter 1 of 2 Yes Total Dissolved Solids (mg/L) PZ-19 320 10/3/2019 485 0 0.000... n/a Yes 39 No Param Inter 1 of 2 Total Dissolved Solids (mg/L) PZ-33 320 10/3/2019 414 39 0 0.000.. Param Inter 1 of 2 n/a Yes No

Prediction Limit Summary Table – App. IIIAII Results

Plant Mitchell Client: Southern Company Data: Mitchell_mod V4 Printed 2/24/2020, 1:02 PM

Constituent	<u>Well</u>	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
Boron (mg/L)	PZ-14	0.028	n/a	10/2/2019	0.021	No	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-23	0.028	n/a	9/10/2019	0.15	Yes	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-15	0.028	n/a	10/2/2019	0.17	Yes	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-7D	0.028	n/a	10/3/2019	0.24	Yes	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-16	0.028	n/a	10/2/2019	0.19	Yes	39	5.128	In(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-17	0.028	n/a	10/2/2019	0.28	Yes	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-18	0.028	n/a	10/3/2019	0.35	Yes	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-19	0.028	n/a	10/3/2019	0.52	Yes	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-25	0.028	n/a	10/2/2019	0.21	Yes	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Boron (mg/L)	PZ-33	0.028	n/a	10/3/2019	0.36	Yes	39	5.128	ln(x)	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-14	110	n/a	10/2/2019	103	No	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-23	110	n/a	9/10/2019	137	Yes	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-15	110	n/a	10/2/2019	101	No	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-7D	110	n/a	10/3/2019	127	Yes	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-16	110	n/a	10/2/2019	89.1	No	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-17	110	n/a	10/2/2019	115	Yes	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-18	110	n/a	10/3/2019	139	Yes	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-19	110	n/a	10/3/2019	125	Yes	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-25	110	n/a	10/2/2019	92.3	No	39	2.564	No	0.000	Param Inter 1 of 2
Calcium (mg/L)	PZ-33	110	n/a	10/3/2019	110	No	39	2.564	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-14	4.8	n/a	10/2/2019	5.4	Yes	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-23	4.8	n/a	9/10/2019	3.8	No	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-15	4.8	n/a	10/2/2019	8	Yes	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-7D	4.8	n/a	10/3/2019	5.9	Yes	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-16	4.8	n/a	10/2/2019	7.7	Yes	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-17	4.8	n/a	10/2/2019	7.9	Yes	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-18	4.8	n/a	10/2/2019	7.3	Yes	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-19	4.8	n/a	10/3/2019	, 5.6	Yes	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-25	4.8	n/a	10/3/2019	2.6	No	39	0	No	0.000	Param Inter 1 of 2
Chloride (mg/L)	PZ-33	4.8	n/a	10/3/2019	4.1	No	39	0	No	0.000	Param Inter 1 of 2
Fluoride (mg/L)	PZ-14	0.29	n/a	10/2/2019	0.056	No	43	34.88	n/a	0.000	NP Inter (normality)
Fluoride (mg/L)	PZ-23	0.29	n/a	9/10/2019	0.050 0.15ND	No	43	34.88	n/a	0.000	NP Inter (normality)
Fluoride (mg/L)	PZ-15	0.29	n/a	10/2/2019	0.13145	No	43	34.88	n/a	0.000	NP Inter (normality)
Fluoride (mg/L)	PZ-13 PZ-7D	0.29	n/a	10/2/2019	0.073	No	43	34.88	n/a	0.000	NP Inter (normality)
Fluoride (mg/L)	PZ-16	0.29	n/a	10/3/2019	0.053	No	43	34.88	n/a	0.000	NP Inter (normality)
Fluoride (mg/L)	PZ-17	0.29	n/a	10/2/2019	0.063	No	43	34.88	n/a	0.000	NP Inter (normality)
	PZ-17	0.29		10/2/2019	0.003		43	34.88		0.000	, ,,,
Fluoride (mg/L)	PZ-18 PZ-19	0.29	n/a n/a	10/3/2019	0.043	No No	43 43	34.88	n/a	0.000	NP Inter (normality)
Fluoride (mg/L) Fluoride (mg/L)	PZ-19 PZ-25	0.29	n/a n/a	10/3/2019	0.064	No	43 43	34.88	n/a n/a	0.000	NP Inter (normality) NP Inter (normality)
	PZ-23	0.29	n/a	10/2/2019	0.16	No	43	34.88	n/a	0.000	NP Inter (normality)
Fluoride (mg/L)										0.000 0.001914	
pH (pH units)	PZ-14	9.7	7.0 7.0	10/2/2019	6.96 6.79	Yes	44	0	n/a		NP Inter (normality)
pH (pH units)	PZ-23	9.7	7.0	9/10/2019	6.78	Yes	44	0	n/a	0.001914	NP Inter (normality)
pH (pH units)	PZ-15	9.7	7.0	10/2/2019	7.22 6.95	No Vos	44	0	n/a	0.001914	NP Inter (normality)
pH (pH units)	PZ-7D	9.7	7.0	10/3/2019	6.85	Yes	44	0	n/a	0.001914	NP Inter (normality)
pH (pH units)	PZ-16	9.7	7.0	10/2/2019	7.22	No Voc	44	0	n/a	0.001914	NP Inter (normality)
pH (pH units)	PZ-17	9.7	7.0	10/2/2019	6.99	Yes	44	0	n/a	0.001914	NP Inter (normality)
pH (pH units)	PZ-18	9.7	7.0	10/3/2019	6.78	Yes	44	0	n/a /-	0.001914	NP Inter (normality)
pH (pH units)	PZ-19	9.7	7.0	10/3/2019	6.93	Yes	44	0	n/a	0.001914	NP Inter (normality)
pH (pH units)	PZ-25	9.7	7.0	10/2/2019	7.2	No	44	0	n/a	0.001914	NP Inter (normality)
pH (pH units)	PZ-33	9.7	7.0	10/3/2019	7.01	No	44	0	n/a	0.001914	NP Inter (normality)

Prediction Limit Summary Table – App. IIIAII Results

		Plant Mitche	II Client: Southe	rn Company	Data: Mitchell_	_mod V	4 Prir	ited 2/24/20	20, 1:02 PM		
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	Transform	<u>Alpha</u>	Method
Sulfate (mg/L)	PZ-14	6.4	n/a	10/2/2019	6.2	No	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-23	6.4	n/a	9/10/2019	45.1	Yes	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-15	6.4	n/a	10/2/2019	83	Yes	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-7D	6.4	n/a	10/3/2019	59.6	Yes	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-16	6.4	n/a	10/2/2019	48.5	Yes	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-17	6.4	n/a	10/2/2019	104	Yes	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-18	6.4	n/a	10/3/2019	95.8	Yes	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-19	6.4	n/a	10/3/2019	84.9	Yes	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-25	6.4	n/a	10/2/2019	43	Yes	39	0	n/a	0.00117	NP Inter (normality)
Sulfate (mg/L)	PZ-33	6.4	n/a	10/3/2019	72.1	Yes	39	0	n/a	0.00117	NP Inter (normality)
Total Dissolved Solids (mg/L)	PZ-14	320	n/a	10/2/2019	312	No	39	0	No	0.000	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	PZ-23	320	n/a	9/10/2019	420	Yes	39	0	No	0.000	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	PZ-15	320	n/a	10/2/2019	355	Yes	39	0	No	0.000	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	PZ-7D	320	n/a	10/3/2019	405	Yes	39	0	No	0.000	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	PZ-16	320	n/a	10/2/2019	284	No	39	0	No	0.000	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	PZ-17	320	n/a	10/2/2019	415	Yes	39	0	No	0.000	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	PZ-18	320	n/a	10/3/2019	464	Yes	39	0	No	0.000	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	PZ-19	320	n/a	10/3/2019	485	Yes	39	0	No	0.000	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	PZ-25	320	n/a	10/2/2019	312	No	39	0	No	0.000	Param Inter 1 of 2

10/3/2019

Yes 39

No

0.000...

Param Inter 1 of 2

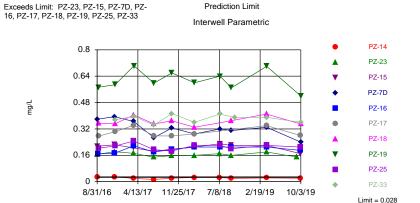
Total Dissolved Solids (mg/L)

PZ-33

320

n/a

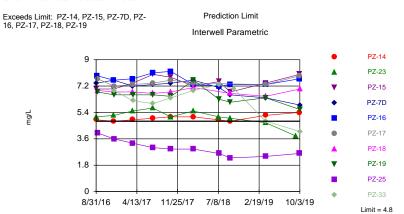
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Background Data Summary (based on natural log transformation): Mean=-4.342, Std. Dev.=0.3785, n=39, 5.128% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9586, critical = 0.917. Kappa = 2.072 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0007523. Comparing 10 points to limit.

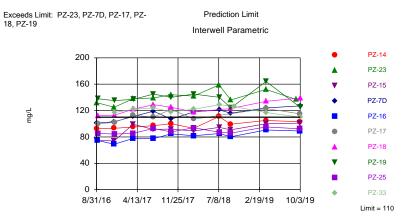
Constituent: Boron Analysis Run 2/24/2020 12:59 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Background Data Summary: Mean=3.292, Std. Dev.=0.7191, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9239, critical = 0.917. Kappa = 2.072 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0007523. Comparing 10 points to limit.

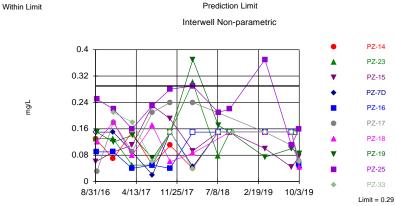
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Background Data Summary: Mean=55.01, Std. Dev.=25.36, n=39, 2.564% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9312, critical = 0.917. Kappa = 2.072 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0007523. Comparing 10 points to limit.

Constituent: Calcium Analysis Run 2/24/2020 12:59 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell mod V4

 $\mbox{Sanitas} \mbox{$^{\text{\tiny{IN}}}$ v.9.6.25 Sanitas software licensed to AMEC. UG} \\ \mbox{Hollow symbols indicate censored values}.$



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 43 background values. 34.88% NDs. Annual perconstituent alpha = 0.01971. Individual comparison alpha = 0.0009949 (1 of 2). Comparing 10 points to limit.

Constituent: Boron (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-23	PZ-14	PZ-7D	PZ-15	PZ-16	PZ-18	PZ-17	PZ-19
8/30/2016	0.0132 (X)								
8/31/2016		0.166	0.0285 (X)						
9/1/2016				0.379	0.215				
9/6/2016						0.17			
9/7/2016							0.355	0.276	0.573
9/8/2016									
10/18/2016									
12/6/2016	0.0096 (X)								
12/7/2016		0.182	0.0292 (X)	0.394	0.224	0.173			
12/8/2016							0.351	0.303	0.588
3/21/2017	0.0082 (X)	0.172	0.0198 (X)						
3/22/2017				0.365	0.205	0.218	0.405	0.342	
3/23/2017									0.703
7/11/2017	0.0067 (X)	0.149	0.0137 (X)			0.18			
7/12/2017				0.267	0.184		0.35	0.278	0.598
10/17/2017	0.0083 (X)								
10/18/2017		0.158	0.0212 (X)		0.197	0.195	0.37	0.277	
10/19/2017				0.326					0.66
2/20/2018	0.024 (X)	0.16	0.026 (X)						
2/21/2018				0.29	0.21	0.21	0.33	0.29	0.6
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	0.017 (X)	0.17	0.026 (X)						
7/12/2018				0.32	0.23	0.21			0.64
9/12/2018	0.012 (X)		0.02 (X)						
9/13/2018		0.16		0.31	0.22	0.21	0.37		
9/14/2018									0.57
10/4/2018									
10/24/2018									
3/26/2019	0.0082 (X)								
3/27/2019		0.18	0.023 (X)			0.21	0.41		
3/28/2019				0.33	0.22			0.34	0.7
9/10/2019		0.15							
10/1/2019	0.0064 (X)								
10/2/2019			0.021 (X)		0.17	0.19		0.28	
10/3/2019				0.24			0.35		0.52

Constituent: Boron (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)	
8/30/2016						
8/31/2016						
9/1/2016						
9/6/2016						
9/7/2016						
9/8/2016	0.204					
10/18/2016		0.0174 (X)	0.0156 (X)			
12/6/2016		0.0133 (X)				
12/7/2016			0.0157 (X)			
12/8/2016	0.216			0.375		
3/21/2017		0.0103 (X)				
3/22/2017	0.247					
3/23/2017			0.0103 (X)	0.396		
7/11/2017	0.194	<0.04	<0.04			
7/12/2017				0.343		
10/17/2017		0.0116 (X)	0.0142 (X)			
10/18/2017	0.186					
10/19/2017				0.413		
2/20/2018		0.046 (X)	0.011 (X)			
2/21/2018	0.22			0.36		
4/12/2018					0.016 (X)	
5/23/2018					0.018 (X)	
6/13/2018					0.014 (X)	
7/11/2018		0.014 (X)	0.014 (X)		0.017 (X)	
7/12/2018	0.22			0.41		
9/12/2018		0.0098 (X)			0.013 (X)	
9/13/2018	0.2		0.013 (X)			
9/14/2018						
10/4/2018				0.39	0.016 (X)	
10/24/2018					0.018 (X)	
3/26/2019		0.0076 (X)				
3/27/2019	0.22		0.012 (X)		0.016 (X)	
3/28/2019				0.39		
9/10/2019						
10/1/2019			0.011 (X)			
10/2/2019	0.21	0.0084 (X)			0.011 (X)	
				0.36		

Constituent: Calcium (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-23	PZ-14	PZ-7D	PZ-15	PZ-16	PZ-18	PZ-17	PZ-19
8/30/2016	40.4								
8/31/2016		132	92.9						
9/1/2016				101	74.8				
9/6/2016						74.6			
9/7/2016							112	100	138
9/8/2016									
10/18/2016									
12/6/2016	43.3								
12/7/2016		125	93.1	103	74	68.9			
12/8/2016							113	102	135
3/21/2017	44.1	138	95						
3/22/2017				111	99.3	77.8	122	113	
3/23/2017									137
7/11/2017	47.4	139	97.1			77.3			
7/12/2017				119	91.4		129	110	145
10/17/2017	48.7								
10/18/2017		144	100		92	84.7	125	122	
10/19/2017				107					140
2/20/2018	46.8	142	93.1						
2/21/2018				118	89	81.8	118	107	145
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	65.3	159	111						
7/12/2018				121	94.5	85.2			140
9/12/2018	46.6		99.3						
9/13/2018		136		116	90.8	80.2	123		
9/14/2018									124
10/4/2018									
10/24/2018									
3/26/2019	43.3								
3/27/2019		152	105			90.5	134		
3/28/2019				124	100			123	164
9/10/2019		137							
10/1/2019	46.8								
10/2/2019			103	107	101	89.1	100	115	105
10/3/2019				127			139		125

Constituent: Calcium (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

					· · · · · · · · · · · · · · · · · · ·
	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	85.2				
10/18/2016		88.3	57.2		
12/6/2016		83.4			
12/7/2016			52.8		
12/8/2016	84.5			117	
3/21/2017		94			
3/22/2017	85.3				
3/23/2017			59.1	122	
7/11/2017	93	86	59.7		
7/12/2017				124	
10/17/2017		91.6	64.9		
10/18/2017	87.6				
10/19/2017				118	
2/20/2018		86.5	64.1		
2/21/2018	93.9			122	
4/12/2018					<25
5/23/2018					17.6 (X)
6/13/2018					14.3
7/11/2018		95.4	60.4		15.6
7/12/2018	87.1			129	
9/12/2018		86			26.9
9/13/2018	85.8		58.7		
9/14/2018					
10/4/2018				126	25
10/24/2018					23.8
3/26/2019		87.3			
3/27/2019	95.2		54.6		26.1
3/28/2019				117	
9/10/2019					
10/1/2019			64.3		
10/2/2019	92.3	95.5			21
10/3/2019				110	

Constituent: Chloride (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-23	PZ-14	PZ-7D	PZ-15	PZ-16	PZ-18	PZ-17	PZ-19
8/30/2016	3.1 (B)								
8/31/2016		5.1	4.9						
9/1/2016				7.4	7				
9/6/2016						7.9 (B)			
9/7/2016							6.9 (B)	7.7 (B)	6.8 (B)
9/8/2016									
10/18/2016									
12/6/2016	3.4								
12/7/2016		5.2	4.8	7.6	7	7.6			
12/8/2016							6.8	7.2	6.6
3/21/2017	2.9	5.5	4.9						
3/22/2017				7.2	7.4	7.7	6.8	7.3	
3/23/2017									6.6
7/11/2017	3.4	5.7	5			8.1			
7/12/2017				7.3	8		6.7	7.4	6.6
10/17/2017	3.3								
10/18/2017		5.1	5.1		7.8	8.2	6.8	7.6	
10/19/2017				7.4					6.5
2/20/2018	3.3	5.5	5.1						
2/21/2018				7.6	7.2	7.3	7.1	7.4	7.6
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	2.9	5.1	4.9						
7/12/2018				7.1	7.5	7.2			6.3
9/12/2018	2.8		4.8						
9/13/2018		5		6.6	6.8	7.3	6.7		
9/14/2018									6.1
10/4/2018									
10/24/2018									
3/26/2019	3.3								
3/27/2019		4.7	5.2			7.3	6.5		
3/28/2019				6.4	7.4			7.3	6.4
9/10/2019		3.8							
10/1/2019	3.6								
10/2/2019			5.4		8	7.7		7.9	
10/3/2019				5.9			7		5.6

Constituent: Chloride (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	4				
10/18/2016		4.5	3.5		
12/6/2016		5			
12/7/2016			3.2		
12/8/2016	3.6			6.9	
3/21/2017		4.3			
3/22/2017	3.3				
3/23/2017			2.9	6.2	
7/11/2017	3	4.7	3.1		
7/12/2017				6	
10/17/2017		4.6	3		
10/18/2017	2.9				
10/19/2017				6.4	
2/20/2018		4.4	3		
2/21/2018	2.9			6.9	
4/12/2018					2.6
5/23/2018					2.5
6/13/2018					2.5
7/11/2018		4	2.8		2.6
7/12/2018	2.6			7.3	
9/12/2018		3.7			2.3
9/13/2018	2.3		2.2		
9/14/2018					
10/4/2018				7	2.7
10/24/2018					2.8
3/26/2019		3.8			
3/27/2019	2.4		3.1		2.5
3/28/2019				4.8	
9/10/2019					
10/1/2019			3.1		
10/2/2019	2.6	4.3			2.7
10/3/2019				4.1	

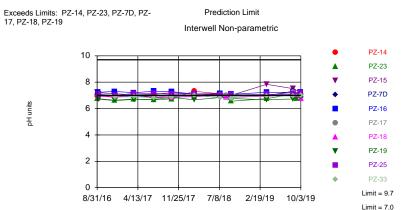
Constituent: Fluoride (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-23	PZ-14	PZ-7D	PZ-15	PZ-16	PZ-18	PZ-17	PZ-19
8/30/2016	0.06 (X)								
8/31/2016		0.13 (X)	0.13 (X)						
9/1/2016				<0.3	0.06 (X)				
9/6/2016						0.09 (X)			
9/7/2016							0.12 (X)	0.03 (X)	0.15 (X)
9/8/2016									
10/18/2016									
12/6/2016	0.06 (X)								
12/7/2016		0.13 (X)	0.07 (X)	0.15 (X)	0.09 (X)	0.09 (X)			
12/8/2016							0.18 (X)	0.18 (X)	0.12 (X)
3/21/2017	0.004 (X)	0.05 (X)	<0.3						
3/22/2017				0.09 (X)	0.11 (X)	0.04 (X)	0.08 (X)	0.09 (X)	
3/23/2017									0.14 (X)
7/11/2017	0.05 (X)	0.05 (X)	0.05 (X)			0.05 (X)			
7/12/2017				0.02 (X)	0.23 (X)		0.17 (X)	0.21 (X)	0.07 (X)
10/17/2017	<0.3								
10/18/2017		<0.3	0.11 (X)		0.19 (X)	0.04 (X)	0.06 (X)	0.24 (X)	
10/19/2017				<0.3					<0.3
2/20/2018	0.098 (X)	0.3 (X)	0.04 (X)						
2/21/2018				0.045 (X)	0.093 (X)	<0.3	0.086 (X)	0.24 (X)	0.37
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	<0.3	0.077 (X)	<0.3						
7/12/2018				<0.3	<0.3	<0.3			0.17 (X)
9/12/2018	0.034 (X)		<0.3						
9/13/2018		<0.3		<0.3	0.15 (X)	<0.3	<0.3		
9/14/2018									<0.3
10/4/2018									
10/24/2018									
3/26/2019	<0.3								
3/27/2019		<0.3	<0.3			<0.3	<0.3		
3/28/2019				<0.3	0.1 (X)			0.15 (X)	0.074 (X)
8/20/2019	<0.3								
8/21/2019		<0.3	<0.3		0.044 (X)	<0.3			
8/22/2019				<0.3			<0.3	0.11 (X)	0.1 (X)
9/10/2019		<0.3							
10/1/2019	0.062 (X)								
10/2/2019			0.056 (X)		0.075 (X)	0.053 (X)		0.063 (X)	
10/3/2019				0.041 (X)			0.043 (X)		0.084 (X)

Constituent: Fluoride (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

_							
		PZ-25	PZ-32 (bg)	PZ-31 (bg)	PZ-33	PZ-2D (bg)	
	8/30/2016						
	8/31/2016						
	9/1/2016						
	9/6/2016						
	9/7/2016						
	9/8/2016	0.25 (X)					
	10/18/2016		0.11 (X)	0.16 (X)			
	12/6/2016			0.15 (X)			
	12/7/2016		0.07 (X)				
	12/8/2016	0.22 (X)			0.21 (X)		
	3/21/2017			0.02 (X)			
	3/22/2017	0.16 (X)					
	3/23/2017		<0.3		0.18 (X)		
	7/11/2017	0.23 (X)	0.02 (X)	0.06 (X)			
	7/12/2017	• •	• •	. ,	0.06 (X)		
	10/17/2017		<0.3	0.05 (X)			
	10/18/2017	0.28 (X)					
	10/19/2017				<0.3		
	2/20/2018		<0.3	0.21 (X)			
	2/21/2018	0.29 (X)			0.039 (X)		
	4/12/2018					<0.3	
	5/23/2018					0.063 (X)	
	6/13/2018					0.11 (X)	
	7/11/2018		<0.3	0.087 (X)		<0.3	
	7/12/2018	0.21 (X)			<0.3		
	9/12/2018			0.049 (X)		0.093 (X)	
	9/13/2018	0.22 (X)	<0.3				
	9/14/2018						
	10/4/2018				0.15 (X)	0.15 (X)	
	10/24/2018					0.29 (X)	
	3/26/2019			<0.3			
	3/27/2019	0.37	<0.3			0.04 (X)	
	3/28/2019				<0.3	•	
	8/20/2019		<0.3				
	8/21/2019	0.11 (X)		<0.3		0.046 (X)	
	8/22/2019	• •			<0.3	• •	
	9/10/2019						
	10/1/2019		0.042 (X)				
	10/2/2019	0.16 (X)	• •	0.057 (X)		0.11 (X)	
	10/3/2019	• •			0.06 (X)	• •	
					` '		

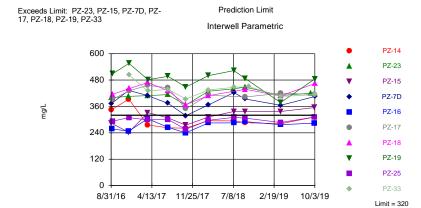
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Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 44 background values. Annual perconstituent alpha = 0.03794. Individual comparison alpha = 0.001914 (1 of 2). Comparing 10 points to limit.

Constituent: pH Analysis Run 2/24/2020 12:59 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

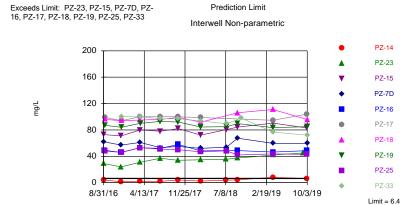
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Background Data Summary: Mean=173.1, Std. Dev.=70.3, n=39. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9488, critical = 0.917. Kappa = 2.072 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0007523. Comparing 10 points to limit.

Constituent: Total Dissolved Solids Analysis Run 2/24/2020 1:00 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell mod V4

Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 39 background values. Annual per-constituent alpha = 0.00214. Individual comparison alpha = 0.00117 (1 of 2). Comparing 10 points to limit.

Constituent: Sulfate Analysis Run 2/24/2020 1:00 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell mod V4

Constituent: pH (pH units) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-23	PZ-14	PZ-7D	PZ-15	PZ-16	PZ-17	PZ-19	PZ-18
8/30/2016	7.62								
8/31/2016		6.75	6.97						
9/1/2016				7.07	7.21				
9/6/2016						7.23			
9/7/2016							7.02	6.71	6.92
9/8/2016									
10/18/2016									
12/6/2016	7.57								
12/7/2016		6.64	6.85	6.85	7.13	7.3			
12/8/2016							6.95	6.61	6.9
3/21/2017	7.54	6.73	7.04						
3/22/2017				6.99	7.04	7.2	7.05		7
3/23/2017								6.69	
7/11/2017	7.43	6.66	6.88			7.31			
7/12/2017				6.83	7.09		7.06	6.69	6.95
10/17/2017	7.7								
10/18/2017		6.73	6.77		7.2	7.28	6.99		6.88
10/19/2017				6.91				6.85	
2/20/2018	7.57	7.11	7.31						
2/21/2018				6.97	7.11	7.1	6.95	6.66	6.89
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	7.48	7	7.12						
7/12/2018				6.85	7.07	7.14	7.06	6.84	7.01
8/15/2018									6.87
8/16/2018							7.01		
8/17/2018									
9/12/2018	7.41		6.87						
9/13/2018		6.56		6.88	7.01	7.08			6.86
9/14/2018							6.83	6.76	
10/4/2018									
10/24/2018									
3/26/2019	7.49								
3/27/2019		6.75	6.98			7.23			6.92
3/28/2019				6.96	7.84		6.97	6.67	
8/20/2019	7.87								
8/21/2019		7.08	7.31		7.51	7.23			
8/22/2019				7.31			7.24	6.73	7.02
9/10/2019		6.78							
10/1/2019	7.5								
10/2/2019			6.96		7.22	7.22	6.99		
10/3/2019				6.85				6.93	6.78

Constituent: pH (pH units) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

					Godinen Genipan, Guda Interior Interior
	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	7.1				
10/18/2016		7.15	7.45		
12/6/2016		7.04			
12/7/2016			7.29		
12/8/2016	6.98			6.86	
3/21/2017		7.01			
3/22/2017	7.16				
3/23/2017			7.26	6.9	
7/11/2017	7.15	6.96	7.31		
7/12/2017				6.81	
10/17/2017		7.31	7.29		
10/18/2017	7.09				
10/19/2017				6.86	
2/20/2018		7.37	7.26		
2/21/2018	7.12			7.02	
4/12/2018					9.54
5/23/2018					9.57
6/13/2018					9.71
7/11/2018		7.26	7.39		9.48
7/12/2018	7.01			6.82	
8/15/2018					
8/16/2018					
8/17/2018					9.31
9/12/2018		7.02			9.07
9/13/2018	7.03		7.25		
9/14/2018				6.75	
10/4/2018				6.9	9.16
10/24/2018					9.29
3/26/2019		7			
3/27/2019	7.08		7.42		8.76
3/28/2019				6.96	
8/20/2019			7.36		
8/21/2019	7.09	7.44			8.76
8/22/2019				6.94	
9/10/2019					
10/1/2019			7.43		
10/2/2019	7.2	7.09			8.97
10/3/2019				7.01	

Constituent: Sulfate (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-23	PZ-14	PZ-7D	PZ-15	PZ-16	PZ-18	PZ-17	PZ-19
8/30/2016	2.1								
8/31/2016		29	4.1						
9/1/2016				62	73				
9/6/2016						49			
9/7/2016							96	99	87
9/8/2016									
10/18/2016									
12/6/2016	2.4								
12/7/2016		24	1.5	57	71	46			
12/8/2016							94	94	84
3/21/2017	2.5	31	2						
3/22/2017				61	80	53	95	100	
3/23/2017									90
7/11/2017	2.6	37	2			52			
7/12/2017				53	78		96	100	93
10/17/2017	2.5								
10/18/2017		34	4.2		82	58	99	100	
10/19/2017				55					92
2/20/2018	2.3	34.7	2.4						
2/21/2018				52.1	72.2	48.2	91.8	98.8	84.5
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	2.5	35.4	3.8						
7/12/2018				53.9	80.5	48.8			84.9
9/12/2018	2		4.3						
9/13/2018		37.4		67.5	84.4	48.7	106		
9/14/2018									89.5
10/4/2018									
10/24/2018									
3/26/2019	2.7								
3/27/2019		41.9	8.2			46.5	111		
3/28/2019				59.6	90.3			94.7	83.5
9/10/2019		45.1							
10/1/2019	2.8								
10/2/2019			6.2		83	48.5		104	
10/3/2019				59.6			95.8		84.9

Constituent: Sulfate (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	48				
10/18/2016		2.2	2.3		
12/6/2016		6.1			
12/7/2016			1.9		
12/8/2016	46			100	
3/21/2017		5.7			
3/22/2017	53				
3/23/2017			1.7	100	
7/11/2017	51	4.8	1.8		
7/12/2017				97	
10/17/2017		6.4	1.9		
10/18/2017	50				
10/19/2017				97	
2/20/2018		5.2	2.1		
2/21/2018	46.8			93.6	
4/12/2018					4.8 (X)
5/23/2018					4.5
6/13/2018					5.3
7/11/2018		3.6	2		5.4
7/12/2018	48.3			89.4	
9/12/2018		2.7			4.4
9/13/2018	42		2.1		
9/14/2018					
10/4/2018				97.8	5.8
10/24/2018					6.2
3/26/2019		1.6			
3/27/2019	43.7		2.4		3.7
3/28/2019				76.7	
9/10/2019					
10/1/2019			2.2		
10/2/2019	43	1.6			4.1
10/3/2019				72.1	

Constituent: Total Dissolved Solids (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells

Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

						· · · · - · ·			
	PZ-1D (bg)	PZ-23	PZ-14	PZ-7D	PZ-15	PZ-16	PZ-19	PZ-18	PZ-17
8/30/2016	136								
8/31/2016		400	344						
9/1/2016				373	284				
9/6/2016						257			
9/7/2016							508	415	392
9/8/2016									
10/18/2016									
12/6/2016	207								
12/7/2016		406	393	433	242	248			
12/8/2016							556	441	431
3/21/2017	128	409	276						
3/22/2017				409	332	304		469	456
3/23/2017							482		
7/11/2017	138	414	263			265			
7/12/2017				374	308		497	432	445
10/17/2017	101								
10/18/2017		366	261		275	240		368	349
10/19/2017				318			448		
2/20/2018	138	429	295						
2/21/2018				367	312	285	500	409	411
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	153	440	294						
7/12/2018				423	337	285	523		
9/12/2018	146		286						
9/13/2018		448		394	336	291		438	
9/14/2018							486		403
10/4/2018									
10/24/2018									
3/26/2019	334								
3/27/2019		410	281			277		408	
3/28/2019				365	337		378		420
9/10/2019		420							
10/1/2019	146								
10/2/2019			312		355	284			415
10/3/2019				405			485	464	

Constituent: Total Dissolved Solids (mg/L) Analysis Run 2/24/2020 1:02 PM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

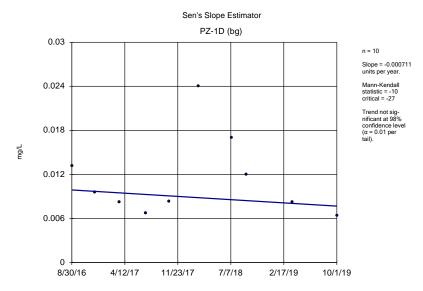
	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	293				
10/18/2016		264	152		
12/6/2016		299			
12/7/2016			214		
12/8/2016	309			503	
3/21/2017		260			
3/22/2017	299				
3/23/2017			165	430	
7/11/2017	301	244	162		
7/12/2017				438	
10/17/2017		218	140		
10/18/2017	256				
10/19/2017				393	
2/20/2018		264	163		
2/21/2018	297			435	
4/12/2018					69
5/23/2018					62
6/13/2018					93
7/11/2018		273	192		84
7/12/2018	310			447	
9/12/2018		252			97
9/13/2018	307		192		
9/14/2018					
10/4/2018				450	103
10/24/2018					110
3/26/2019		253			
3/27/2019	287		167		87
3/28/2019				405	
9/10/2019					
10/1/2019			187		
10/2/2019	312	263			95
10/3/2019				414	

Sen Slope - Significant

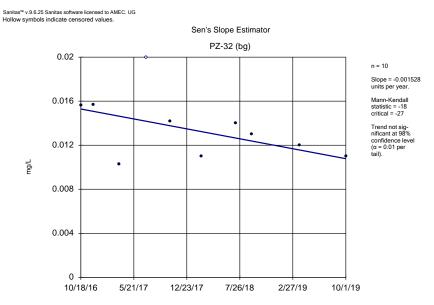
	Plant Mitch	ell Client: So	uthern Compai	ny Data: Mitche	ell_mod V	/4 Printe	d 2/24/2020	, 1:09 PM			
Constituent	Well	<u>Slope</u>	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
pH (pH units)	PZ-2D (bg)	-0.6498	-38	-31	Yes	11	0	n/a	n/a	0.02	NP

Sen Slope - All

	Plant Mito	chell Client:	Southern Comp	oany Data: Mit	chell_mod	I V4 Prii	nted 2/24/20	20, 1:09 PM			
Constituent	Well	<u>Slope</u>	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	PZ-1D (bg)	-0.00	-10	-27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/L)	PZ-31 (bg)	-0.00	-19	-27	No	10	10	n/a	n/a	0.02	NP
Boron (mg/L)	PZ-32 (bg)	-0.00	-18	-27	No	10	10	n/a	n/a	0.02	NP
Boron (mg/L)	PZ-2D (bg)	-0.00	-8	-23	No	9	0	n/a	n/a	0.02	NP
Calcium (mg/L)	PZ-1D (bg)	1.867	13	27	No	10	0	n/a	n/a	0.02	NP
Calcium (mg/L)	PZ-31 (bg)	1.071	12	27	No	10	0	n/a	n/a	0.02	NP
Calcium (mg/L)	PZ-32 (bg)	1.851	11	27	No	10	0	n/a	n/a	0.02	NP
Calcium (mg/L)	PZ-2D (bg)	11.58	16	23	No	9	11.11	n/a	n/a	0.02	NP
Chloride (mg/L)	PZ-1D (bg)	0	0	27	No	10	0	n/a	n/a	0.02	NP
Chloride (mg/L)	PZ-31 (bg)	-0.3724	-24	-27	No	10	0	n/a	n/a	0.02	NP
Chloride (mg/L)	PZ-32 (bg)	-0.164	-15	-27	No	10	0	n/a	n/a	0.02	NP
Chloride (mg/L)	PZ-2D (bg)	0.1142	9	23	No	9	0	n/a	n/a	0.02	NP
Fluoride (mg/L)	PZ-1D (bg)	0.02291	16	31	No	11	36.36	n/a	n/a	0.02	NP
Fluoride (mg/L)	PZ-31 (bg)	-0.00	-4	-31	No	11	18.18	n/a	n/a	0.02	NP
Fluoride (mg/L)	PZ-32 (bg)	0	8	31	No	11	63.64	n/a	n/a	0.02	NP
Fluoride (mg/L)	PZ-2D (bg)	-0.01364	-5	-27	No	10	20	n/a	n/a	0.02	NP
pH (pH units)	PZ-1D (bg)	-0.02483	-8	-31	No	11	0	n/a	n/a	0.02	NP
pH (pH units)	PZ-31 (bg)	0.02343	5	31	No	11	0	n/a	n/a	0.02	NP
pH (pH units)	PZ-32 (bg)	0.02591	7	31	No	11	0	n/a	n/a	0.02	NP
pH (pH units)	PZ-2D (bg)	-0.6498	-38	-31	Yes	11	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	PZ-1D (bg)	0.1304	16	27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	PZ-31 (bg)	-1.607	-22	-27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	PZ-32 (bg)	0.1633	19	27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	PZ-2D (bg)	-0.2891	-2	-23	No	9	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	PZ-1D (bg)	6.822	15	27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	PZ-31 (bg)	-3.476	-6	-27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	PZ-32 (bg)	6.152	10	27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/L)	PZ-2D (bg)	30.96	18	23	No	9	0	n/a	n/a	0.02	NP

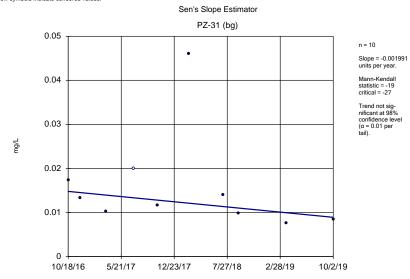


Constituent: Boron Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



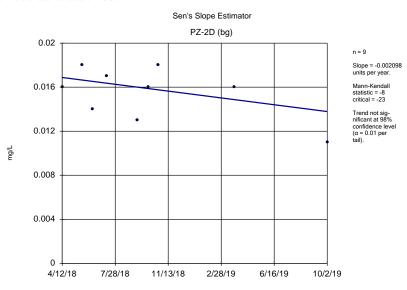
Constituent: Boron Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Boron Analysis Run 2/24/2020 1:07 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

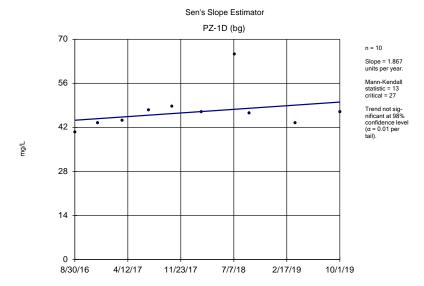
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Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

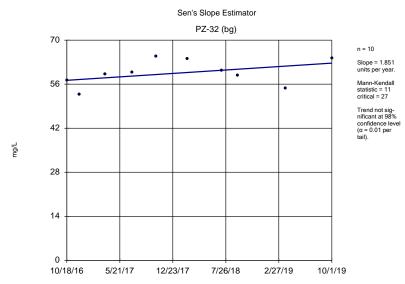
Constituent: Boron Analysis Run 2/24/2020 1:09 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

				. , =
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	T PZ-2D (bg)
8/30/2016	0.0132 (X)			
10/18/2016		0.0174 (X)	0.0156 (X)	
12/6/2016	0.0096 (X)	0.0133 (X)		
12/7/2016			0.0157 (X)	
3/21/2017	0.0082 (X)	0.0103 (X)		
3/23/2017			0.0103 (X)	
7/11/2017	0.0067 (X)	<0.04	<0.04	
10/17/2017	0.0083 (X)	0.0116 (X)	0.0142 (X)	
2/20/2018	0.024 (X)	0.046 (X)	0.011 (X)	
4/12/2018				0.016 (X)
5/23/2018				0.018 (X)
6/13/2018				0.014 (X)
7/11/2018	0.017 (X)	0.014 (X)	0.014 (X)	0.017 (X)
9/12/2018	0.012 (X)	0.0098 (X)		0.013 (X)
9/13/2018			0.013 (X)	
10/4/2018				0.016 (X)
10/24/2018				0.018 (X)
3/26/2019	0.0082 (X)	0.0076 (X)		
3/27/2019			0.012 (X)	0.016 (X)
10/1/2019	0.0064 (X)		0.011 (X)	
10/2/2019		0.0084 (X)		0.011 (X)

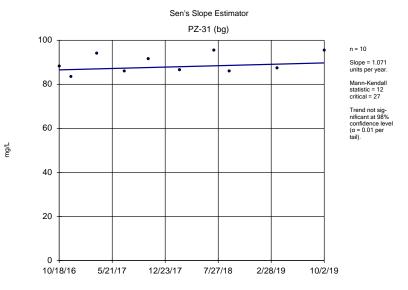


Constituent: Calcium Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



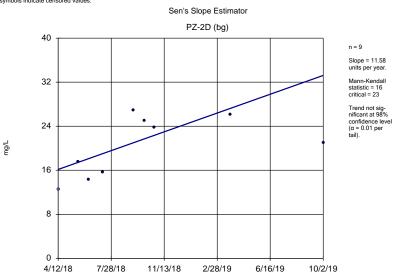


Constituent: Calcium Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



Constituent: Calcium Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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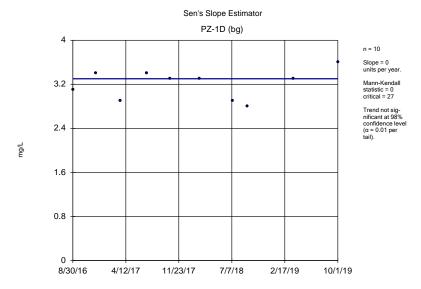


Constituent: Calcium Analysis Run 2/24/2020 1:07 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Calcium Analysis Run 2/24/2020 1:09 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	40.4			
10/18/2016		88.3	57.2	
12/6/2016	43.3	83.4		
12/7/2016			52.8	
3/21/2017	44.1	94		
3/23/2017			59.1	
7/11/2017	47.4	86	59.7	
10/17/2017	48.7	91.6	64.9	
2/20/2018	46.8	86.5	64.1	
4/12/2018				<25
5/23/2018				17.6 (X)
6/13/2018				14.3
7/11/2018	65.3	95.4	60.4	15.6
9/12/2018	46.6	86		26.9
9/13/2018			58.7	
10/4/2018				25
10/24/2018				23.8
3/26/2019	43.3	87.3		
3/27/2019			54.6	26.1
10/1/2019	46.8		64.3	
10/2/2019		95.5		21

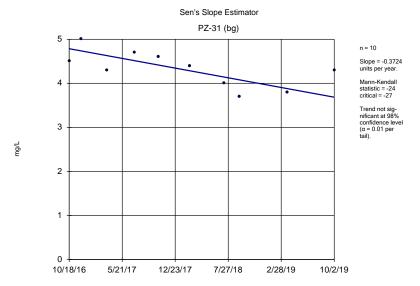
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Constituent: Chloride Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

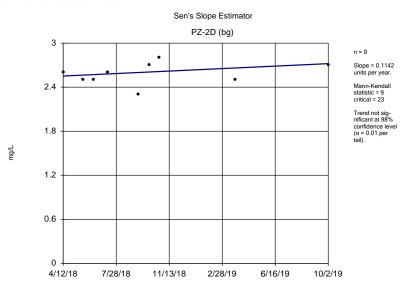
Sen's Slope Estimator PZ-32 (bg) n = 10 Slope = -0.164 units per year. 3.2 Mann-Kendall statistic = -15 critical = -27 Trend not sig-nificant at 98% confidence level (α = 0.01 per tail). 2.4 mg/L 1.6 0.8 10/18/16 5/21/17 12/23/17 7/26/18 2/27/19 10/1/19

Constituent: Chloride Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



Constituent: Chloride Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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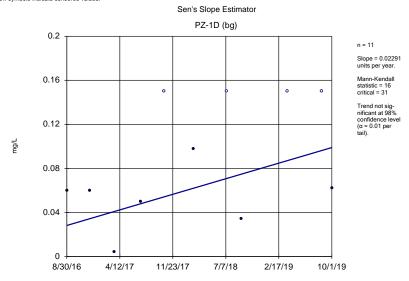


Constituent: Chloride Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell mod V4

Constituent: Chloride Analysis Run 2/24/2020 1:09 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

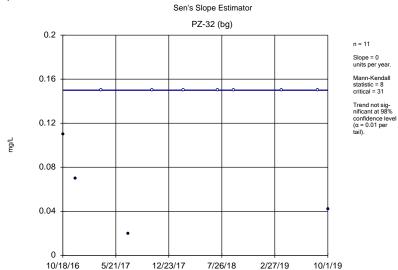
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)	
8/30/2016	3.1 (B)				
10/18/2016		4.5	3.5		
12/6/2016	3.4	5			
12/7/2016			3.2		
3/21/2017	2.9	4.3			
3/23/2017			2.9		
7/11/2017	3.4	4.7	3.1		
10/17/2017	3.3	4.6	3		
2/20/2018	3.3	4.4	3		
4/12/2018				2.6	
5/23/2018				2.5	
6/13/2018				2.5	
7/11/2018	2.9	4	2.8	2.6	
9/12/2018	2.8	3.7		2.3	
9/13/2018			2.2		
10/4/2018				2.7	
10/24/2018				2.8	
3/26/2019	3.3	3.8			
3/27/2019			3.1	2.5	
10/1/2019	3.6		3.1		
10/2/2019		4.3		2.7	

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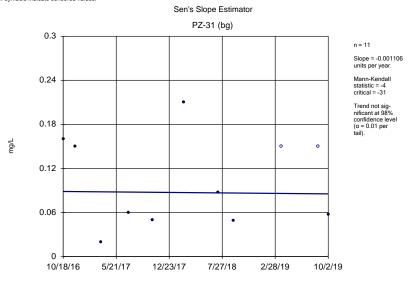
Constituent: Fluoride Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG Hollow symbols indicate censored values.



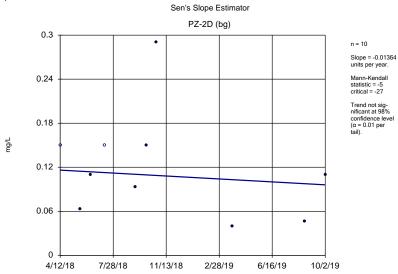
Constituent: Fluoride Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG Hollow symbols indicate censored values.



Constituent: Fluoride Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

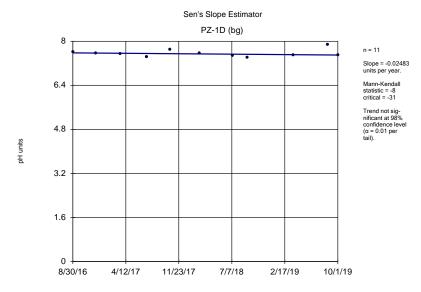
Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG Hollow symbols indicate censored values.



Constituent: Fluoride Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell mod V4

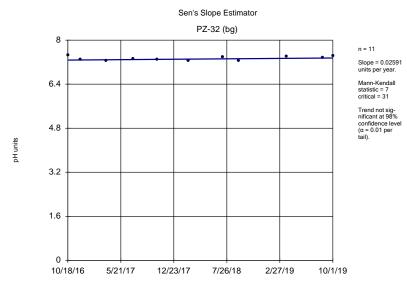
Constituent: Fluoride Analysis Run 2/24/2020 1:09 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	0.06 (X)			
10/18/2016		0.16 (X)	0.11 (X)	
12/6/2016	0.06 (X)	0.15 (X)		
12/7/2016			0.07 (X)	
3/21/2017	0.004 (X)	0.02 (X)		
3/23/2017			<0.3	
7/11/2017	0.05 (X)	0.06 (X)	0.02 (X)	
10/17/2017	<0.3	0.05 (X)	<0.3	
2/20/2018	0.098 (X)	0.21 (X)	<0.3	
4/12/2018				<0.3
5/23/2018				0.063 (X)
6/13/2018				0.11 (X)
7/11/2018	<0.3	0.087 (X)	<0.3	<0.3
9/12/2018	0.034 (X)	0.049 (X)		0.093 (X)
9/13/2018			<0.3	
10/4/2018				0.15 (X)
10/24/2018				0.29 (X)
3/26/2019	<0.3	<0.3		
3/27/2019			<0.3	0.04 (X)
8/20/2019	<0.3		<0.3	
8/21/2019		<0.3		0.046 (X)
10/1/2019	0.062 (X)		0.042 (X)	
10/2/2019		0.057 (X)		0.11 (X)

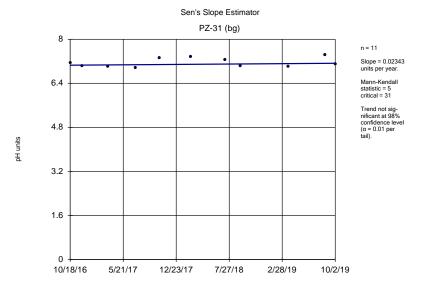


Constituent: pH Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG

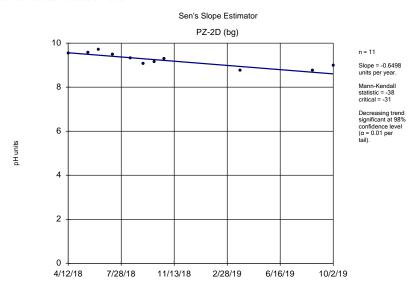


Constituent: pH Analysis Run 2/24/2020 1:07 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



Constituent: pH Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

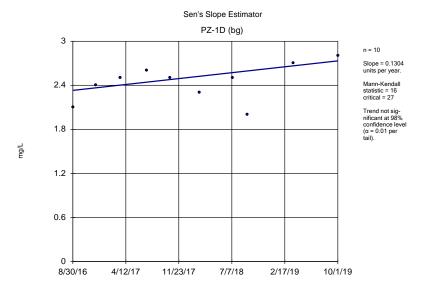
Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG



Constituent: pH Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

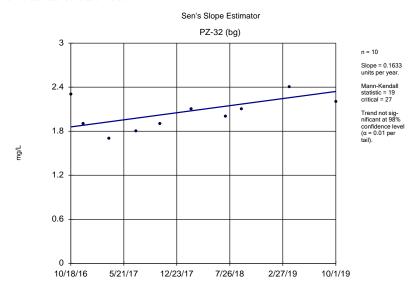
Constituent: pH Analysis Run 2/24/2020 1:09 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	7.62			
10/18/2016		7.15	7.45	
12/6/2016	7.57	7.04		
12/7/2016			7.29	
3/21/2017	7.54	7.01		
3/23/2017			7.26	
7/11/2017	7.43	6.96	7.31	
10/17/2017	7.7	7.31	7.29	
2/20/2018	7.57	7.37	7.26	
4/12/2018				9.54
5/23/2018				9.57
6/13/2018				9.71
7/11/2018	7.48	7.26	7.39	9.48
8/17/2018				9.31
9/12/2018	7.41	7.02		9.07
9/13/2018			7.25	
10/4/2018				9.16
10/24/2018				9.29
3/26/2019	7.49	7		
3/27/2019			7.42	8.76
8/20/2019	7.87		7.36	
8/21/2019		7.44		8.76
10/1/2019	7.5		7.43	
10/2/2019		7.09		8.97

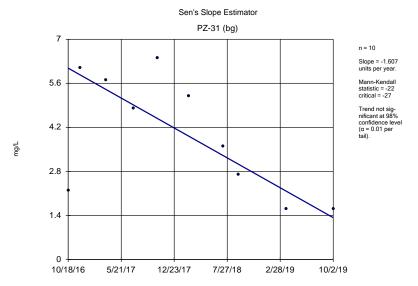


Constituent: Sulfate Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



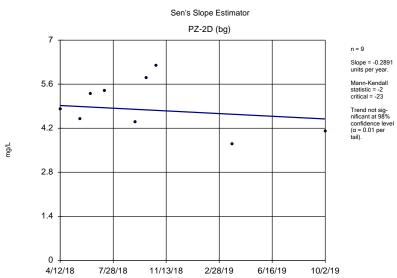


Constituent: Sulfate Analysis Run 2/24/2020 1:07 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



Constituent: Sulfate Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

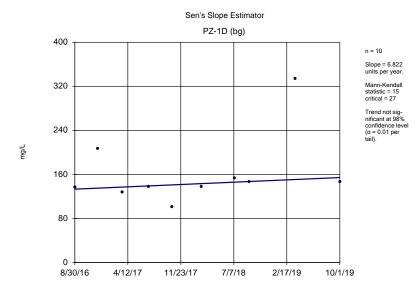
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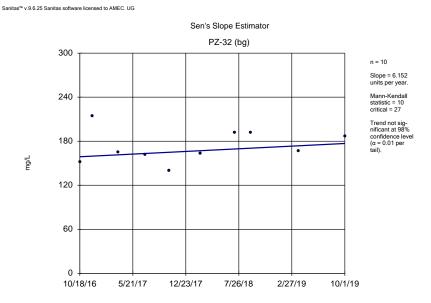
Constituent: Sulfate Analysis Run 2/24/2020 1:07 PM View: App III background only
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Sulfate Analysis Run 2/24/2020 1:09 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

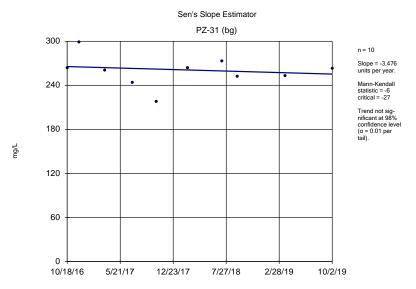
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	2.1			
10/18/2016		2.2	2.3	
12/6/2016	2.4	6.1		
12/7/2016			1.9	
3/21/2017	2.5	5.7		
3/23/2017			1.7	
7/11/2017	2.6	4.8	1.8	
10/17/2017	2.5	6.4	1.9	
2/20/2018	2.3	5.2	2.1	
4/12/2018				4.8 (X)
5/23/2018				4.5
6/13/2018				5.3
7/11/2018	2.5	3.6	2	5.4
9/12/2018	2	2.7		4.4
9/13/2018			2.1	
10/4/2018				5.8
10/24/2018				6.2
3/26/2019	2.7	1.6		
3/27/2019			2.4	3.7
10/1/2019	2.8		2.2	
10/2/2019		1.6		4.1



Constituent: Total Dissolved Solids Analysis Run 2/24/2020 1:07 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

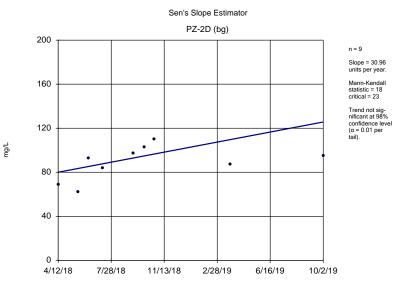


Constituent: Total Dissolved Solids Analysis Run 2/24/2020 1:07 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



Constituent: Total Dissolved Solids Analysis Run 2/24/2020 1:07 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Total Dissolved Solids Analysis Run 2/24/2020 1:07 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Total Dissolved Solids Analysis Run 2/24/2020 1:09 PM View: App III background only Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

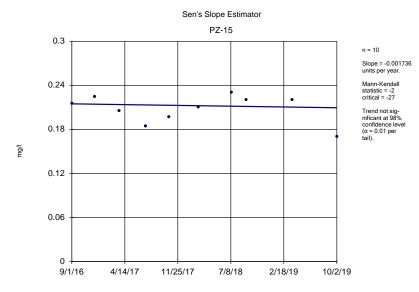
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	136			
10/18/2016		264	152	
12/6/2016	207	299		
12/7/2016			214	
3/21/2017	128	260		
3/23/2017			165	
7/11/2017	138	244	162	
10/17/2017	101	218	140	
2/20/2018	138	264	163	
4/12/2018				69
5/23/2018				62
6/13/2018				93
7/11/2018	153	273	192	84
9/12/2018	146	252		97
9/13/2018			192	
10/4/2018				103
10/24/2018				110
3/26/2019	334	253		
3/27/2019			167	87
10/1/2019	146		187	
10/2/2019	-	263	-	95

Downgradient Sen Slope - Significant Plant Mitchell Client: Southern Company Data: Mitchell V3 Printed 12/19/2019, 9:52 AM

	Plant Mi	tchell Client:	Southern Com	pany Data: Mit	chel V3	Printed 12	2/19/2019, 9	9:52 AM			
Constituent	Well	<u>Slope</u>	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Calcium (mg/l)	PZ-18	6.257	28	27	Yes	10	0	n/a	n/a	0.02	NP
Calcium (mg/l)	PZ-7D	7.604	33	27	Yes	10	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PZ-19	-0.2744	-28	-27	Yes	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-23	5.318	37	27	Yes	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-33	-8.368	-33	-27	Yes	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	PZ-15	23.88	30	27	Yes	10	0	n/a	n/a	0.02	NP

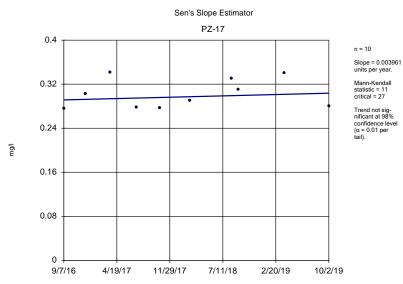
Downgradient Sen Slope - All

	Plant M	litchell Clien	t: Southern Cor	mpany Data: I	Mitchel V3	Printed	12/19/2019,	9:52 AM			
Constituent	<u>Well</u>	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/l)	PZ-15	-0.00	-2	-27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PZ-16	0.01183	15	27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PZ-17	0.003961	11	27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PZ-18	0	3	27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PZ-19	-0.00	-1	-27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PZ-23	-0.00	-6	-27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PZ-25	0	2	27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PZ-33	0	-1	-27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PZ-7D	-0.03443	-21	-27	No	10	0	n/a	n/a	0.02	NP
Calcium (mg/l)	PZ-17	4.803	22	27	No	10	0	n/a	n/a	0.02	NP
Calcium (mg/l)	PZ-18	6.257	28	27	Yes	10	0	n/a	n/a	0.02	NP
Calcium (mg/l)	PZ-19	0.9505	3	27	No	10	0	n/a	n/a	0.02	NP
Calcium (mg/l)	PZ-23	6.225	17	27	No	10	0	n/a	n/a	0.02	NP
Calcium (mg/l)	PZ-33	0	-1	-27	No	10	0	n/a	n/a	0.02	NP
Calcium (mg/l)	PZ-7D	7.604	33	27	Yes	10	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PZ-14	0.1488	20	27	No	10	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PZ-15	0.1557	10	27	No	10	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PZ-16	-0.1796	-11	-27	No	10	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PZ-17	0.1426	14	27	No	10	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PZ-18	-0.06197	-11	-27	No	10	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PZ-19	-0.2744	-28	-27	Yes	10	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PZ-7D	-0.4117	-27	-27	No	10	0	n/a	n/a	0.02	NP
pH (pH units)	PZ-18	-0.03596	-22	-31	No	11	0	n/a	n/a	0.02	NP
pH (pH units)	PZ-19	0.04731	12	27	No	10	0	n/a	n/a	0.02	NP
pH (pH units)	PZ-23	0.02021	9	27	No	10	0	n/a	n/a	0.02	NP
pH (pH units)	PZ-7D	-0.02844	-10	-27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-15	5.108	27	27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-16	-0.5478	-11	-27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-17	1.58	14	27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-18	3.51	18	27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-19	-0.9125	-8	-27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-23	5.318	37	27	Yes	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-25	-2.836	-21	-27	No	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-33	-8.368	-33	-27	Yes	10	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PZ-7D	-0.5524	-2	-27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	PZ-15	23.88	30	27	Yes	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	PZ-17	-4.78	-2	-27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	PZ-18	-0.9148	-1	-27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	PZ-19	-13.04	-15	-27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	PZ-23	16.29	23	27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	PZ-33	8	5	23	No	9	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	PZ-7D	-3.113	-5	-27	No	10	0	n/a	n/a	0.02	NP

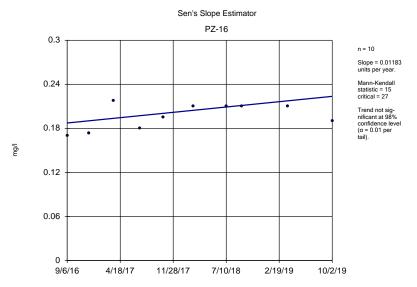


Constituent: Boron Analysis Run 12/19/2019 9:46 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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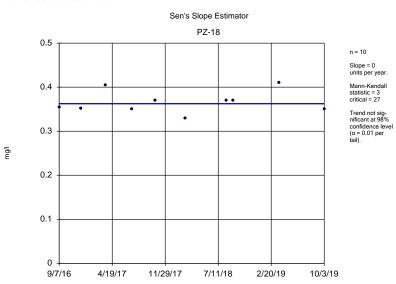


Constituent: Boron Analysis Run 12/19/2019 9:46 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: Boron Analysis Run 12/19/2019 9:46 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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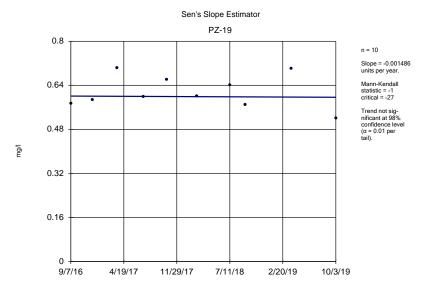
Constituent: Boron Analysis Run 12/19/2019 9:46 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-15
9/1/2016	0.215
12/7/2016	0.224
3/22/2017	0.205
7/12/2017	0.184
10/18/2017	0.197
2/21/2018	0.21
7/12/2018	0.23
9/13/2018	0.22
3/28/2019	0.22
10/2/2019	0.17

	PZ-16
9/6/2016	0.17
12/7/2016	0.173
3/22/2017	0.218
7/11/2017	0.18
10/18/2017	0.195
2/21/2018	0.21
7/12/2018	0.21
9/13/2018	0.21
3/27/2019	0.21
10/2/2019	0.19

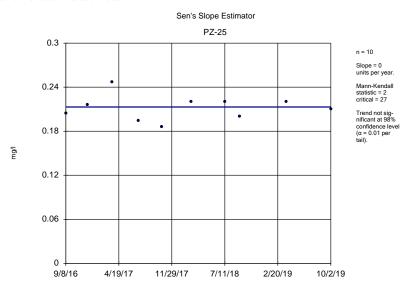
	PZ-17
9/7/2016	0.276
12/8/2016	0.303
3/22/2017	0.342
7/12/2017	0.278
10/18/2017	0.277
2/21/2018	0.29
8/16/2018	0.33
9/14/2018	0.31
3/28/2019	0.34
10/2/2019	0.28

	PZ-18
9/7/2016	0.355
12/8/2016	0.351
3/22/2017	0.405
7/12/2017	0.35
10/18/2017	0.37
2/21/2018	0.33
8/15/2018	0.37
9/13/2018	0.37
3/27/2019	0.41
10/3/2019	0.35

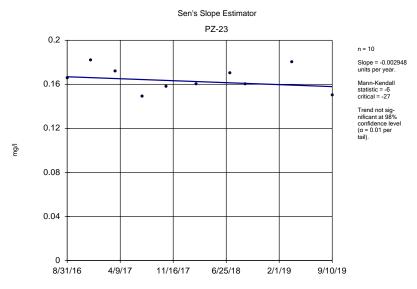


Constituent: Boron Analysis Run 12/19/2019 9:46 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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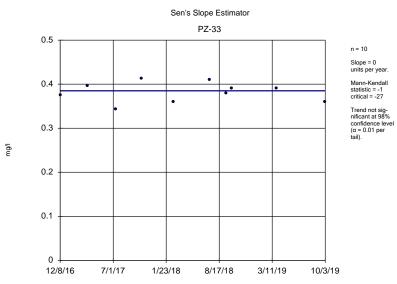


Constituent: Boron Analysis Run 12/19/2019 9:46 AM View: AppIII Sen Slopes Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: Boron Analysis Run 12/19/2019 9:46 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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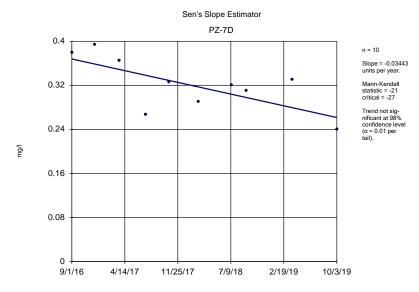
Constituent: Boron Analysis Run 12/19/2019 9:47 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-19
9/7/2016	0.573
12/8/2016	0.588
3/23/2017	0.703
7/12/2017	0.598
10/19/2017	0.66
2/21/2018	0.6
7/12/2018	0.64
9/14/2018	0.57
3/28/2019	0.7
10/3/2019	0.52

	PZ-23
8/31/2016	0.166
12/7/2016	0.182
3/21/2017	0.172
7/11/2017	0.149
10/18/2017	0.158
2/20/2018	0.16
7/11/2018	0.17
9/13/2018	0.16
3/27/2019	0.18
9/10/2019	0.15

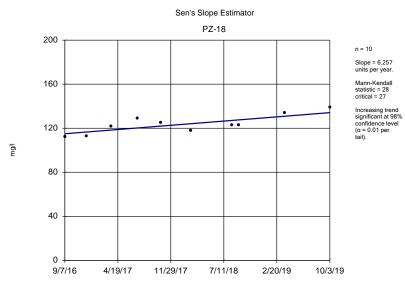
	PZ-25
9/8/2016	0.204
12/8/2016	0.216
3/22/2017	0.247
7/11/2017	0.194
10/18/2017	0.186
2/21/2018	0.22
7/12/2018	0.22
9/13/2018	0.2
3/27/2019	0.22
10/2/2019	0.21

	PZ-33
12/8/2016	0.375
3/23/2017	0.396
7/12/2017	0.343
10/19/2017	0.413
2/21/2018	0.36
7/12/2018	0.41
9/14/2018	0.38
10/4/2018	0.39
3/28/2019	0.39
10/3/2019	0.36

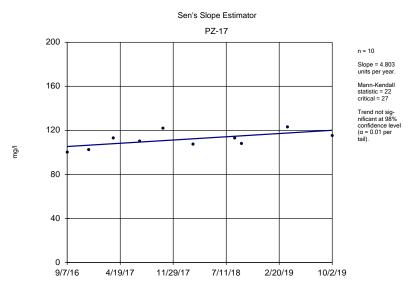


Constituent: Boron Analysis Run 12/19/2019 9:47 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



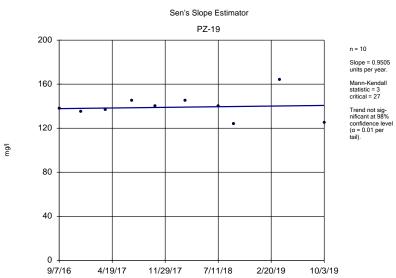


Constituent: Calcium Analysis Run 12/19/2019 9:47 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: Calcium Analysis Run 12/19/2019 9:47 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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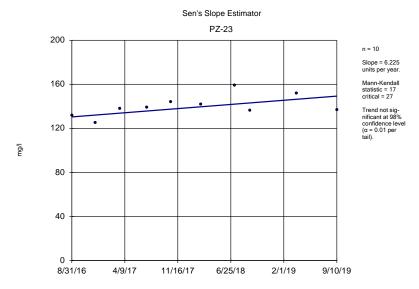
Constituent: Calcium Analysis Run 12/19/2019 9:47 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-7D
9/1/2016	0.379
12/7/2016	0.394
3/22/2017	0.365
7/12/2017	0.267
10/19/2017	0.326
2/21/2018	0.29
7/12/2018	0.32
9/13/2018	0.31
3/28/2019	0.33
10/3/2019	0.24

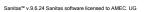
	PZ-17
9/7/2016	100
12/8/2016	102
3/22/2017	113
7/12/2017	110
10/18/2017	122
2/21/2018	107
8/16/2018	113
9/14/2018	108
3/28/2019	123
10/2/2019	115

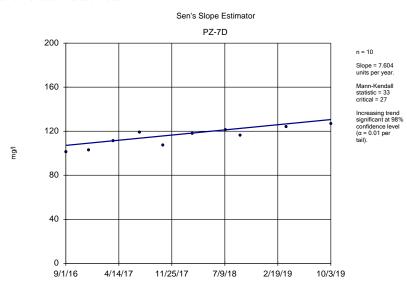
	PZ-18
9/7/2016	112
12/8/2016	113
3/22/2017	122
7/12/2017	129
10/18/2017	125
2/21/2018	118
8/15/2018	123
9/13/2018	123
3/27/2019	134
10/3/2019	139

	PZ-19
9/7/2016	138
12/8/2016	135
3/23/2017	137
7/12/2017	145
10/19/2017	140
2/21/2018	145
7/12/2018	140
9/14/2018	124
3/28/2019	164
10/3/2019	125

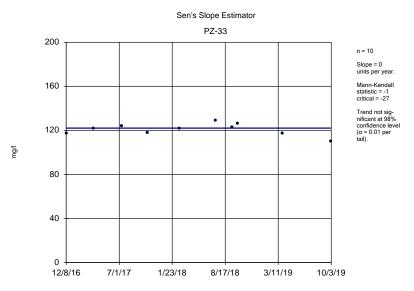


Constituent: Calcium Analysis Run 12/19/2019 9:47 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



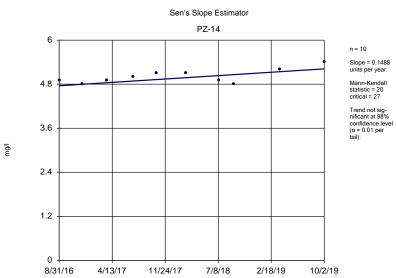


Constituent: Calcium Analysis Run 12/19/2019 9:47 AM View: ApplII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: Calcium Analysis Run 12/19/2019 9:47 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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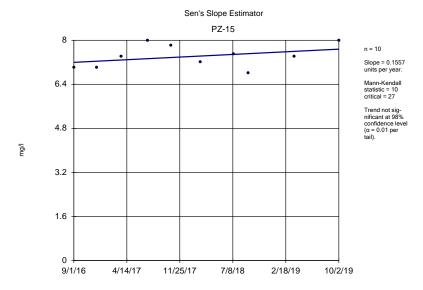
Constituent: Chloride Analysis Run 12/19/2019 9:47 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-23
8/31/2016	132
12/7/2016	125
3/21/2017	138
7/11/2017	139
10/18/2017	144
2/20/2018	142
7/11/2018	159
9/13/2018	136
3/27/2019	152
9/10/2019	137

	PZ-33
12/8/2016	117
3/23/2017	122
7/12/2017	124
10/19/2017	118
2/21/2018	122
7/12/2018	129
9/14/2018	123
10/4/2018	126
3/28/2019	117
10/3/2019	110

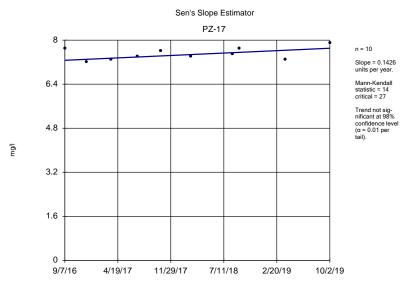
	PZ-7D
9/1/2016	101
12/7/2016	103
3/22/2017	111
7/12/2017	119
10/19/2017	107
2/21/2018	118
7/12/2018	121
9/13/2018	116
3/28/2019	124
10/3/2019	127

	PZ-14
8/31/2016	4.9
12/7/2016	4.8
3/21/2017	4.9
7/11/2017	5
10/18/2017	5.1
2/20/2018	5.1
7/11/2018	4.9
9/12/2018	4.8
3/27/2019	5.2
10/2/2019	5.4

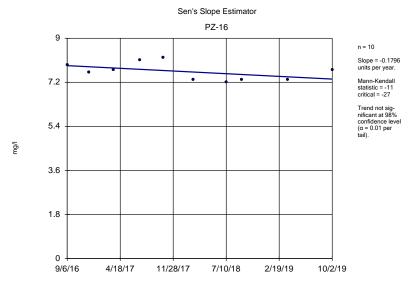


Constituent: Chloride Analysis Run 12/19/2019 9:47 AM View: ApplII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



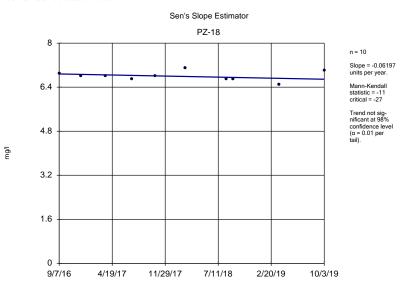


Constituent: Chloride Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: Chloride Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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Constituent: Chloride Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-15
9/1/2016	7
12/7/2016	7
3/22/2017	7.4
7/12/2017	8
10/18/2017	7.8
2/21/2018	7.2
7/12/2018	7.5
9/13/2018	6.8
3/28/2019	7.4
10/2/2019	8

	PZ-16
9/6/2016	7.9
12/7/2016	7.6
3/22/2017	7.7
7/11/2017	8.1
10/18/2017	8.2
2/21/2018	7.3
7/12/2018	7.2
9/13/2018	7.3
3/27/2019	7.3
10/2/2019	7.7

	PZ-17
9/7/2016	7.7
12/8/2016	7.2
3/22/2017	7.3
7/12/2017	7.4
10/18/2017	7.6
2/21/2018	7.4
8/16/2018	7.5
9/14/2018	7.7
3/28/2019	7.3
10/2/2019	7.9

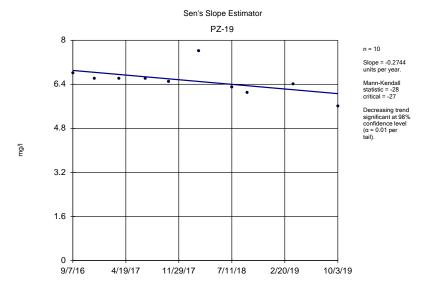
	PZ-18
9/7/2016	6.9
12/8/2016	6.8
3/22/2017	6.8
7/12/2017	6.7
10/18/2017	6.8
2/21/2018	7.1
8/15/2018	6.7
9/13/2018	6.7
3/27/2019	6.5
10/3/2019	7

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1.6

9/7/16

4/19/17



Constituent: Chloride Analysis Run 12/19/2019 9:48 AM View: ApplII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

Sen's Slope Estimator

PZ-18

6.4 Mann-Kendall statistic = -22 critical = -31 Trend not significant at 99% confidence level (a = 0.01 per tail).

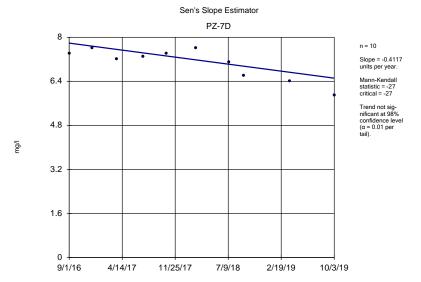
11/29/17

Constituent: pH Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

7/11/18

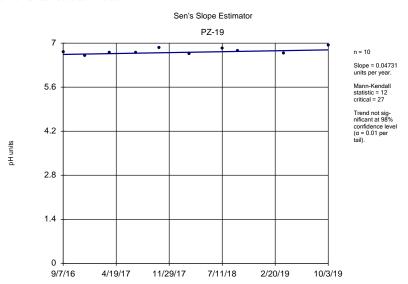
2/20/19

10/3/19



Constituent: Chloride Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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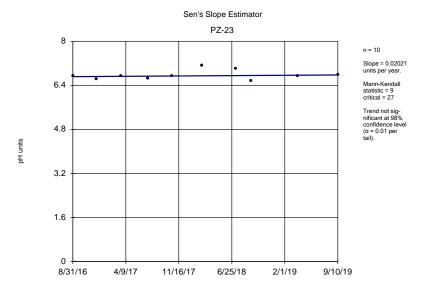
Constituent: pH Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-19
9/7/2016	6.8
12/8/2016	6.6
3/23/2017	6.6
7/12/2017	6.6
10/19/2017	6.5
2/21/2018	7.6
7/12/2018	6.3
9/14/2018	6.1
3/28/2019	6.4
10/3/2019	5.6

	PZ-7D
9/1/2016	7.4
12/7/2016	7.6
3/22/2017	7.2
7/12/2017	7.3
10/19/2017	7.4
2/21/2018	7.6
7/12/2018	7.1
9/13/2018	6.6
3/28/2019	6.4
10/3/2019	5.9

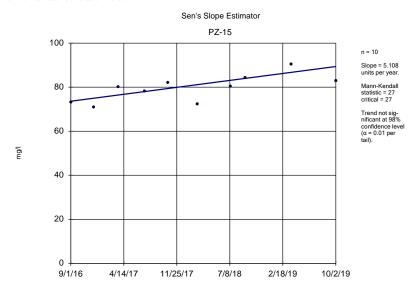
	PZ-18
9/7/2016	6.92
12/8/2016	6.9
3/22/2017	7
7/12/2017	6.95
10/18/2017	6.88
2/21/2018	6.89
7/12/2018	7.01
8/15/2018	6.87
9/13/2018	6.86
3/27/2019	6.92
10/3/2019	6.78

	PZ-19
9/7/2016	6.71
12/8/2016	6.61
3/23/2017	6.69
7/12/2017	6.69
10/19/2017	6.85
2/21/2018	6.66
7/12/2018	6.84
9/14/2018	6.76
3/28/2019	6.67
10/3/2019	6.93

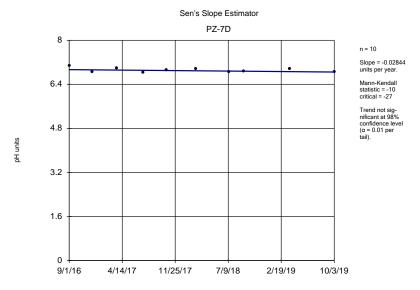


Constituent: pH Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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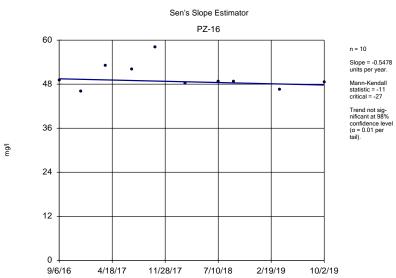


Constituent: Sulfate Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: pH Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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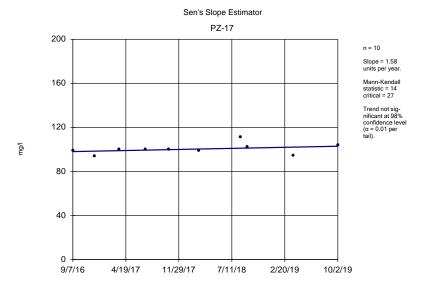
Constituent: Sulfate Analysis Run 12/19/2019 9:48 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-23
8/31/2016	6.75
12/7/2016	6.64
3/21/2017	6.73
7/11/2017	6.66
10/18/2017	6.73
2/20/2018	7.11
7/11/2018	7
9/13/2018	6.56
3/27/2019	6.75
9/10/2019	6.78

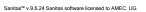
	PZ-7D
9/1/2016	7.07
12/7/2016	6.85
3/22/2017	6.99
7/12/2017	6.83
10/19/2017	6.91
2/21/2018	6.97
7/12/2018	6.85
9/13/2018	6.88
3/28/2019	6.96
10/3/2019	6.85

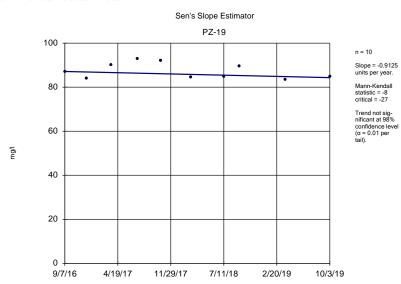
	PZ-15
9/1/2016	73
12/7/2016	71
3/22/2017	80
7/12/2017	78
10/18/2017	82
2/21/2018	72.2
7/12/2018	80.5
9/13/2018	84.4
3/28/2019	90.3
10/2/2019	83

	PZ-16
9/6/2016	49
12/7/2016	46
3/22/2017	53
7/11/2017	52
10/18/2017	58
2/21/2018	48.2
7/12/2018	48.8
9/13/2018	48.7
3/27/2019	46.5
10/2/2019	48.5

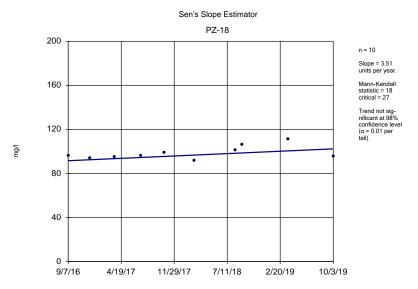


Constituent: Sulfate Analysis Run 12/19/2019 9:49 AM View: ApplII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



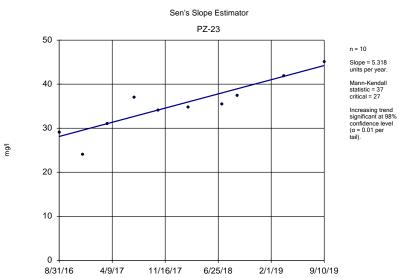


Constituent: Sulfate Analysis Run 12/19/2019 9:49 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: Sulfate Analysis Run 12/19/2019 9:49 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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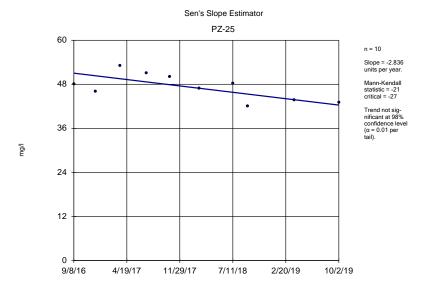
Constituent: Sulfate Analysis Run 12/19/2019 9:49 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-17
9/7/2016	99
12/8/2016	94
3/22/2017	100
7/12/2017	100
10/18/2017	100
2/21/2018	98.8
8/16/2018	111
9/14/2018	102
3/28/2019	94.7
10/2/2019	104

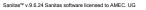
	PZ-18
9/7/2016	96
12/8/2016	94
3/22/2017	95
7/12/2017	96
10/18/2017	99
2/21/2018	91.8
8/15/2018	101
9/13/2018	106
3/27/2019	111
10/3/2019	95.8

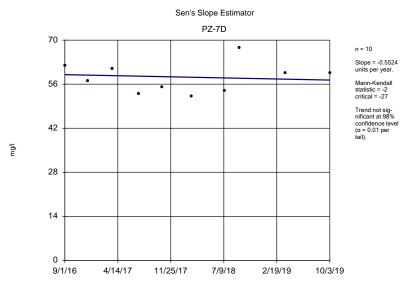
	PZ-19
9/7/2016	87
12/8/2016	84
3/23/2017	90
7/12/2017	93
10/19/2017	92
2/21/2018	84.5
7/12/2018	84.9
9/14/2018	89.5
3/28/2019	83.5
10/3/2019	84.9

	PZ-23
8/31/2016	29
12/7/2016	24
3/21/2017	31
7/11/2017	37
10/18/2017	34
2/20/2018	34.7
7/11/2018	35.4
9/13/2018	37.4
3/27/2019	41.9
9/10/2019	45.1

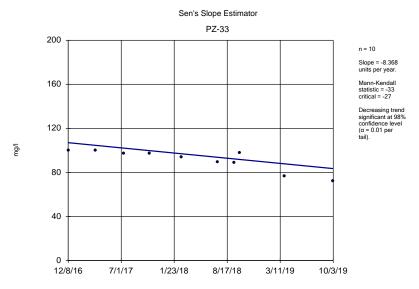


Constituent: Sulfate Analysis Run 12/19/2019 9:49 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



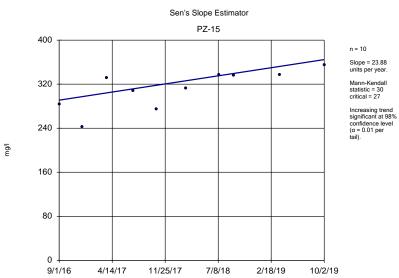


Constituent: Sulfate Analysis Run 12/19/2019 9:49 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: Sulfate Analysis Run 12/19/2019 9:49 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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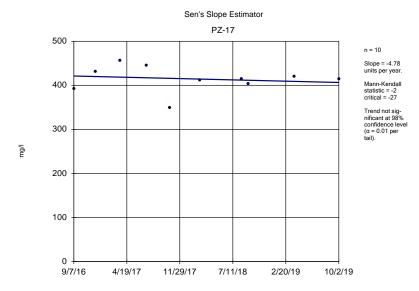
Constituent: Total Dissolved Solids Analysis Run 12/19/2019 9:49 AM View: ApplII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-25
9/8/2016	48
12/8/2016	46
3/22/2017	53
7/11/2017	51
10/18/2017	50
2/21/2018	46.8
7/12/2018	48.3
9/13/2018	42
3/27/2019	43.7
10/2/2019	43

	PZ-33
12/8/2016	100
3/23/2017	100
7/12/2017	97
10/19/2017	97
2/21/2018	93.6
7/12/2018	89.4
9/14/2018	88.9
10/4/2018	97.8
3/28/2019	76.7
10/3/2019	72.1

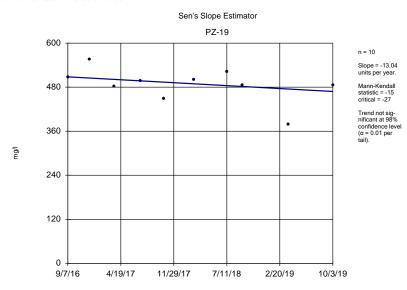
	PZ-7D
9/1/2016	62
12/7/2016	57
3/22/2017	61
7/12/2017	53
10/19/2017	55
2/21/2018	52.1
7/12/2018	53.9
9/13/2018	67.5
3/28/2019	59.6
10/3/2019	59.6

	PZ-15
9/1/2016	284
12/7/2016	242
3/22/2017	332
7/12/2017	308
10/18/2017	275
2/21/2018	312
7/12/2018	337
9/13/2018	336
3/28/2019	337
10/2/2019	355

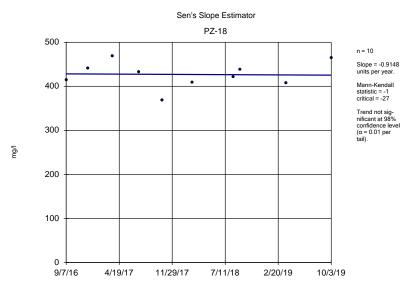


Constituent: Total Dissolved Solids Analysis Run 12/19/2019 9:49 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3



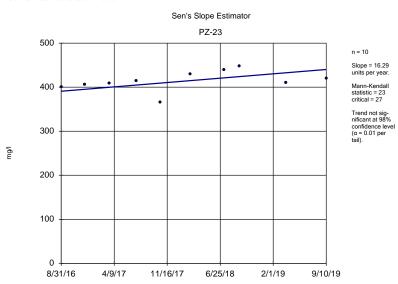


Constituent: Total Dissolved Solids Analysis Run 12/19/2019 9:50 AM View: AppIII Sen Slopes Plant Mitchell Client: Southern Company Data: Mitchel V3



Constituent: Total Dissolved Solids Analysis Run 12/19/2019 9:50 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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Constituent: Total Dissolved Solids Analysis Run 12/19/2019 9:50 AM View: ApplII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

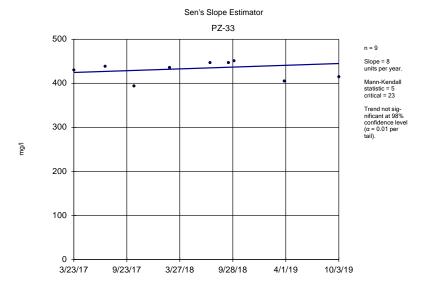
	PZ-17
9/7/2016	392
12/8/2016	431
3/22/2017	456
7/12/2017	445
10/18/2017	349
2/21/2018	411
8/16/2018	415
9/14/2018	403
3/28/2019	420
10/2/2019	415

	PZ-18
9/7/2016	415
12/8/2016	441
3/22/2017	469
7/12/2017	432
10/18/2017	368
2/21/2018	409
8/15/2018	422
9/13/2018	438
3/27/2019	408
10/3/2019	464

	PZ-19
9/7/2016	508
12/8/2016	556
3/23/2017	482
7/12/2017	497
10/19/2017	448
2/21/2018	500
7/12/2018	523
9/14/2018	486
3/28/2019	378 (X)
10/3/2019	485

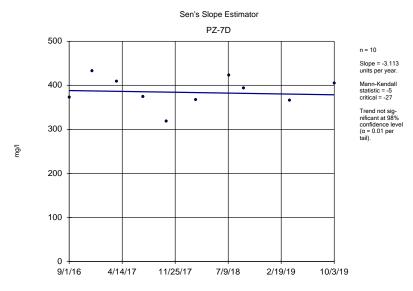
	PZ-23
8/31/2016	400
12/7/2016	406
3/21/2017	409
7/11/2017	414
10/18/2017	366
2/20/2018	429
7/11/2018	440
9/13/2018	448
3/27/2019	410
9/10/2019	420

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Constituent: Total Dissolved Solids Analysis Run 12/19/2019 9:50 AM View: AppIII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

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Constituent: Total Dissolved Solids Analysis Run 12/19/2019 9:50 AM View: ApplII Sen Slopes
Plant Mitchell Client: Southern Company Data: Mitchel V3

	PZ-33
12/8/2016	503 (O)
3/23/2017	430
7/12/2017	438
10/19/2017	393
2/21/2018	435
7/12/2018	447
9/14/2018	447
10/4/2018	450
3/28/2019	405
10/3/2019	414

	PZ-7D
9/1/2016	373
12/7/2016	433
3/22/2017	409
7/12/2017	374
10/19/2017	318
2/21/2018	367
7/12/2018	423
9/13/2018	394
3/28/2019	365
10/3/2019	405



APPENDIX B APPENDIX IV STATISTICAL CALCULATIONS

UTL's - Appendix IV Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 3/26/2019, 10:09 AM

	Pl	ant Mitchell	Client: South	ern Com	npany Data: I	Mitchell Ash Por	nd CCR	Printe	d 3/26/2019, 1	0:09 AM	
Constituent	Well	Upper Lim	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Ad	j. Transform	<u>Alpha</u>	Method
Antimony (mg/L)	n/a	0.0035	n/a	32	n/a	n/a	59.38	n/a	n/a	0.1937	NP Inter(normality)
Arsenic (mg/L)	n/a	0.005	n/a	32	n/a	n/a	84.38	n/a	n/a	0.1937	NP Inter(NDs)
Barium (mg/L)	n/a	0.06635	n/a	32	0.2602	0.06578	3.125	None	x^(1/3)	0.05	Inter
Beryllium (mg/L)	n/a	0.003	n/a	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.001	n/a	32	n/a	n/a	100	n/a	n/a	0.1937	NP Inter(NDs)
Chromium (mg/L)	n/a	0.011	n/a	32	n/a	n/a	34.38	n/a	n/a	0.1937	NP Inter(normality)
Cobalt (mg/L)	n/a	0.005	n/a	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.356	n/a	31	0.5484	0.3655	0	None	No	0.05	Inter
Fluoride (mg/L)	n/a	0.3	n/a	32	n/a	n/a	31.25	n/a	n/a	0.1937	NP Inter(normality)
Lead (mg/L)	n/a	0.005	n/a	32	n/a	n/a	84.38	n/a	n/a	0.1937	NP Inter(NDs)
Lithium (mg/L)	n/a	0.025	n/a	32	n/a	n/a	84.38	n/a	n/a	0.1937	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0005	n/a	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	32	n/a	n/a	84.38	n/a	n/a	0.1937	NP Inter(NDs)
Selenium (mg/L)	n/a	0.01	n/a	32	n/a	n/a	100	n/a	n/a	0.1937	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	32	n/a	n/a	81.25	n/a	n/a	0.1937	NP Inter(NDs)

Confidence Interval Downgradient wells

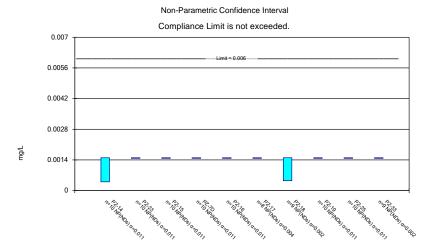
		Plant Mitchell	Client: Southern Co	ompany Data:	Mitchell	_mod V4	Printed 3/2	27/2020, 2:22 PM		
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
Antimony (mg/L)	PZ-14	0.0015	0.0004	0.006	No	10	80	No	0.011	NP (NDs)
Antimony (mg/L)	PZ-23	0.0015	0.0015	0.006	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	PZ-15	0.0015	0.0015	0.006	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	PZ-7D	0.0015	0.0015	0.006	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	PZ-16	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	PZ-17	0.0015	0.0015	0.006	No	8	100	No	0.004	NP (NDs)
Antimony (mg/L)	PZ-18	0.0015	0.00045	0.006	No	9	88.89	No	0.002	NP (NDs)
Antimony (mg/L)	PZ-19	0.0015	0.0015	0.006	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	PZ-25	0.0015	0.0015	0.006	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	PZ-33	0.0015	0.0015	0.006	No	9	100	No	0.002	NP (NDs)
Arsenic (mg/L)	PZ-14	0.0025	0.0025	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	PZ-23	0.0025	0.0025	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	PZ-15	0.0025	0.00089	0.01	No	10	70	No	0.011	NP (normality)
Arsenic (mg/L)	PZ-7D	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	PZ-16	0.0025	0.0025	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	PZ-17	0.0025	0.0007	0.01	No	8	75	No	0.004	NP (normality)
Arsenic (mg/L)	PZ-18	0.0025	0.0025	0.01	No	9	100	No	0.002	NP (NDs)
Arsenic (mg/L)	PZ-19	0.0025	0.0025	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	PZ-25	0.0025	0.00071	0.01	No	10	60	No	0.011	NP (normality)
Arsenic (mg/L)	PZ-33	0.0025	0.0007	0.01	No	9	77.78	No	0.002	NP (NDs)
Barium (mg/L)	PZ-14	0.04121	0.01889	2	No	10	0	sqrt(x)	0.01	Param.
Barium (mg/L)	PZ-23	0.05738	0.03444	2	No	10	0	No	0.01	Param.
Barium (mg/L)	PZ-15	0.07949	0.04891	2	No	10	0	No	0.01	Param.
Barium (mg/L)	PZ-7D	0.01136	0.007558	2	No	10	0	No	0.01	Param.
Barium (mg/L)	PZ-16	0.0589	0.03664	2	No	10	0	ln(x)	0.01	Param.
Barium (mg/L)	PZ-17	0.0824	0.07117	2	No	8	0	No	0.01	Param.
Barium (mg/L)	PZ-18	0.0717	0.022	2	No	9	0	No	0.002	NP (normality)
Barium (mg/L)	PZ-19	0.06168	0.0523	2	No	10	0	No	0.01	Param.
Barium (mg/L)	PZ-25	0.1061	0.098	2	No	10	0	ln(x)	0.01	Param.
Barium (mg/L)	PZ-33	0.162	0.057	2	No	9	0	No	0.002	NP (normality)
Beryllium (mg/L)	PZ-14	0.0075	0.0015	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	PZ-23	0.0015	0.0015	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	PZ-15	0.0015	0.0015	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	PZ-7D	0.0015	0.0015	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	PZ-16	0.0015	0.0015	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	PZ-17	0.0015	0.0015	0.004	No	7	100	No	0.008	NP (NDs)
Beryllium (mg/L)	PZ-18	0.0015	0.0015	0.004	No	8	100	No	0.004	NP (NDs)
Beryllium (mg/L)	PZ-19	0.0015	0.0015	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	PZ-25	0.0015	0.0015	0.004	No	9	100	No	0.002	NP (NDs)
Beryllium (mg/L)	PZ-33	0.0015	0.0015	0.004	No	8	100	No	0.004	NP (NDs)
Cadmium (mg/L)	PZ-14	0.00125	0.0005	0.005	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	PZ-23	0.00125	0.0002	0.005	No	9	77.78	No	0.002	NP (NDs)
Cadmium (mg/L)	PZ-15	0.00125	0.0005	0.005	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	PZ-7D	0.00125	0.0005	0.005	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L)	PZ-16	0.00125	0.0005	0.005	No	9	100	No	0.002	NP (NDs)
Cadmium (mg/L) Cadmium (mg/L)	PZ-10 PZ-17	0.00125	0.0005	0.005	No	9 7	100	No	0.002	NP (NDs)
	PZ-17 PZ-18	0.00125	0.0005	0.005		8			0.008	
Cadmium (mg/L) Cadmium (mg/L)					No No		100	No No		NP (NDs)
	PZ-19	0.00125	0.0005	0.005	No No	9	100	No No	0.002	NP (NDs)
Cadmium (mg/L)	PZ-25	0.00125	0.0005	0.005	No	9	100	No No	0.002	NP (NDs)
Cadmium (mg/L)	PZ-33	0.00125	0.0001	0.005	No	8	87.5	No	0.004	NP (NDs)

Confidence Interval Downgradient wells

		Plant Mitchell	Client: Southern	Company Data:	Mitchell_m	nod V4	Printed 3	/27/2020, 2:22 PM		
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
Chromium (mg/L)	PZ-14	0.005	0.005	0.1	No	10	90	No	0.011	NP (NDs)
Chromium (mg/L)	PZ-23	0.003025	0.001361	0.1	No	10	30	sqrt(x)	0.01	Param.
Chromium (mg/L)	PZ-15	0.005	0.005	0.1	No	10	90	No	0.011	NP (NDs)
Chromium (mg/L)	PZ-7D	0.005	0.0005	0.1	No	10	50	No	0.011	NP (normality)
Chromium (mg/L)	PZ-16	0.005	0.0008	0.1	No	10	70	No	0.011	NP (normality)
Chromium (mg/L)	PZ-17	0.005	0.005	0.1	No 8	8	100	No	0.004	NP (NDs)
Chromium (mg/L)	PZ-18	0.005	0.00081	0.1	No s	9	88.89	No	0.002	NP (NDs)
Chromium (mg/L)	PZ-19	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	PZ-25	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	PZ-33	0.005	0.0017	0.1	No s	9	88.89	No	0.002	NP (NDs)
Cobalt (mg/L)	PZ-14	0.005	0.002	0.005	No	10	80	No	0.011	NP (NDs)
Cobalt (mg/L)	PZ-23	0.005	0.0025	0.005	No	10	90	No	0.011	NP (NDs)
Cobalt (mg/L)	PZ-15	0.005	0.0004	0.005	No	10	50	No	0.011	NP (normality)
Cobalt (mg/L)	PZ-7D	0.005	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	PZ-16	0.005	0.0025	0.005	No	10	90	No	0.011	NP (NDs)
Cobalt (mg/L)	PZ-17	0.0008392	0.0004392	0.005	No 8	8	37.5	In(x)	0.01	Param.
Cobalt (mg/L)	PZ-18	0.005	0.0011	0.005	No s	9	88.89	No	0.002	NP (NDs)
Cobalt (mg/L)	PZ-19	0.005	0.0012	0.005	No	10	80	No	0.011	NP (NDs)
Cobalt (mg/L)	PZ-25	0.0017	0.0008	0.005	No	10	10	No	0.011	NP (normality)
Cobalt (mg/L)	PZ-33	0.002212	0.00037	0.005	No s	9	33.33	sqrt(x)	0.01	Param.
Combined Radium 226 + Radium 22	PZ-14	1.35	0.388	5	No	10	0	sqrt(x)	0.01	Param.
Combined Radium 226 + Radium 22	PZ-23	1.631	0.6598	5	No	10	0	No	0.01	Param.
Combined Radium 226 + Radium 22	PZ-15	1.406	0.6071	5	No	10	0	sqrt(x)	0.01	Param.
Combined Radium 226 + Radium 22	PZ-7D	0.826	0.09002	5	No	10	0	No	0.01	Param.
Combined Radium 226 + Radium 22	PZ-16	1.076	0.4502	5	No	10	0	No	0.01	Param.
Combined Radium 226 + Radium 22	PZ-17	1.28	0.7681	5	No	10	0	No	0.01	Param.
Combined Radium 226 + Radium 22	PZ-18	1.436	0.5433	5	No	10	0	No	0.01	Param.
Combined Radium 226 + Radium 22	PZ-19	1.55	0.7591	5	No	10	0	No	0.01	Param.
Combined Radium 226 + Radium 22	PZ-25	1.381	0.8347	5	No	10	0	No	0.01	Param.
Combined Radium 226 + Radium 22	PZ-33	1.193	0.6008	5	No	10	0	No	0.01	Param.
Fluoride (mg/L)	PZ-14	0.15	0.05	4	No	11	45.45	No	0.006	NP (normality)
Fluoride (mg/L)	PZ-23	0.1672	0.04665	4	No	11	45.45	sqrt(x)	0.01	Param.
Fluoride (mg/L)	PZ-15	0.1648	0.07013	4	No	11	9.091	No	0.01	Param.
Fluoride (mg/L)	PZ-7D	0.15	0.041	4	No	11	54.55	No	0.006	NP (normality)
Fluoride (mg/L)	PZ-16	0.15	0.04	4	No	11	45.45	No	0.006	NP (normality)
Fluoride (mg/L)	PZ-17	0.2205	0.07132	4	No s	9	0	No	0.01	Param.
Fluoride (mg/L)	PZ-18	0.1494	0.0617	4	No	10	30	No	0.01	Param.
Fluoride (mg/L)	PZ-19	0.1856	0.08006	4	No	11	18.18	x^(1/3)	0.01	Param.
Fluoride (mg/L)	PZ-25	0.2867	0.1679	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	PZ-33	0.1751	0.05094	4	No	10	40	No	0.01	Param.
Lead (mg/L)	PZ-14	0.0025	0.0025	0.005	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	PZ-23	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	PZ-15	0.0025	0.0025	0.005	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	PZ-7D	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	PZ-16	0.0025	0.0025	0.005	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	PZ-17	0.0025	0.0025	0.005	No 8	8	100	No	0.004	NP (NDs)
Lead (mg/L)	PZ-18	0.0025	0.00043	0.005	No s	9	88.89	No	0.002	NP (NDs)
Lead (mg/L)	PZ-19	0.0025	0.0025	0.005	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	PZ-25	0.0025	0.0025	0.005	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	PZ-33	0.0025	0.000047	0.005	No s	9	77.78	No	0.002	NP (NDs)

Confidence Interval Downgradient wells

		Plant Mitchell	Client: Southern Co	mpany Data:	Mitchell	_mod V4	Printed 3/2	27/2020, 2:22 PM		
Constituent	<u>Well</u>	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
Lithium (mg/L)	PZ-14	0.025	0.015	0.03	No	10	90	No	0.011	NP (NDs)
Lithium (mg/L)	PZ-23	0.025	0.015	0.03	No	10	90	No	0.011	NP (NDs)
Lithium (mg/L)	PZ-15	0.025	0.0012	0.03	No	10	50	No	0.011	NP (normality)
Lithium (mg/L)	PZ-7D	0.0038	0.0023	0.03	No	10	10	No	0.011	NP (normality)
Lithium (mg/L)	PZ-16	0.025	0.015	0.03	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	PZ-17	0.025	0.002	0.03	No	8	25	No	0.004	NP (normality)
Lithium (mg/L)	PZ-18	0.025	0.0021	0.03	No	9	22.22	No	0.002	NP (normality)
Lithium (mg/L)	PZ-19	0.01521	0.008789	0.03	No	10	0	No	0.01	Param.
Lithium (mg/L)	PZ-25	0.007041	0.004819	0.03	No	10	0	No	0.01	Param.
Lithium (mg/L)	PZ-33	0.125	0.015	0.03	No	9	100	No	0.002	NP (NDs)
Mercury (mg/L)	PZ-14	0.00025	0.00007	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	PZ-23	0.00025	0.00009	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	PZ-15	0.00025	0.000097	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	PZ-7D	0.00025	0.000053	0.002	No	9	77.78	No	0.002	NP (NDs)
Mercury (mg/L)	PZ-16	0.00025	0.000068	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	PZ-17	0.00025	0.000086	0.002	No	7	85.71	No	0.008	NP (NDs)
Mercury (mg/L)	PZ-18	0.00025	0.000057	0.002	No	8	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	PZ-19	0.00025	0.000045	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	PZ-25	0.00025	0.000053	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	PZ-33	0.00025	0.000043	0.002	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	PZ-14	0.005	0.005	0.01	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-23	0.005	0.005	0.01	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-15	0.005	0.005	0.01	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-7D	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-16	0.005	0.005	0.01	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-17	0.005	0.0004	0.01	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	PZ-18	0.005	0.005	0.01	No	9	100	No	0.002	NP (NDs)
Molybdenum (mg/L)	PZ-19	0.0027	0.0021	0.01	No	10	10	No	0.002	NP (normality)
Molybdenum (mg/L)	PZ-25	0.005	0.0014	0.01	No	10	80	No	0.011	NP (NDs)
Molybdenum (mg/L)	PZ-33	0.005	0.005	0.01	No	9	100	No	0.002	NP (NDs)
Selenium (mg/L)	PZ-14	0.005	0.0015	0.05	No	10	80	No	0.011	NP (NDs)
Selenium (mg/L)	PZ-23	0.005	0.0018	0.05	No	10	70	No	0.011	NP (normality)
Selenium (mg/L)	PZ-15	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	PZ-7D	0.005	0.005	0.05	No	10	90	No	0.011	NP (NDs)
Selenium (mg/L)	PZ-16	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	PZ-17	0.005	0.005	0.05	No	8	100	No	0.004	NP (NDs)
Selenium (mg/L)	PZ-18	0.005	0.005	0.05	No	9	100	No	0.004	NP (NDs)
Selenium (mg/L)	PZ-19	0.005	0.003	0.05	No	10	80	No	0.002	NP (NDs)
Selenium (mg/L)	PZ-19	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	PZ-33	0.005	0.005	0.05	No	9	100	No	0.002	NP (NDs)
Thallium (mg/L)	PZ-14	0.0005	0.0005							NP (NDs)
Thallium (mg/L)	PZ-14 PZ-23	0.0003	0.0003	0.002 0.002	No No	10 10	90	No	0.011	
					No		30	sqrt(x)	0.01	Param.
Thallium (mg/L)	PZ-15	0.0005	0.00022	0.002	No No	10	80 E0	No	0.011	NP (NDs)
Thallium (mg/L)	PZ-7D	0.0005	0.000086	0.002	No No	10	50	No	0.011	NP (normality)
Thallium (mg/L)	PZ-16	0.0001836	0.00006696	0.002	No	10	30	sqrt(x)	0.01	Param.
Thallium (mg/L)	PZ-17	0.0005	0.00016	0.002	No	8	75 66 67	No	0.004	NP (normality)
Thallium (mg/L)	PZ-18	0.0005	0.00004	0.002	No	9	66.67	No	0.002	NP (normality)
Thallium (mg/L)	PZ-19	0.0006824	0.0003736	0.002	No	10	10	No	0.01	Param.
Thallium (mg/L)	PZ-25	0.0005	0.00046	0.002	No	10	80	No	0.011	NP (NDs)
Thallium (mg/L)	PZ-33	0.0005	0.0001	0.002	No	9	44.44	No	0.002	NP (normality)

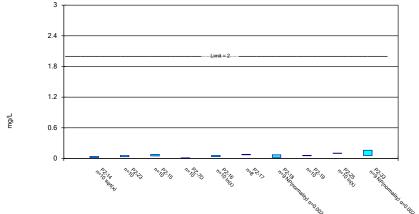


Constituent: Antimony Analysis Run 3/27/2020 2:20 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

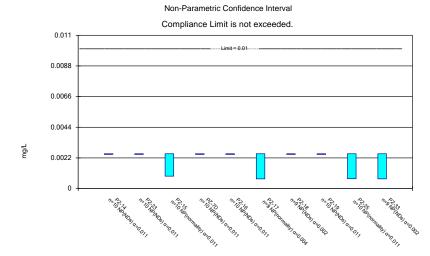
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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

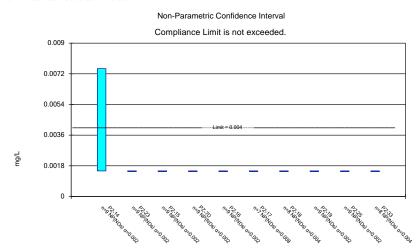


Constituent: Barium Analysis Run 3/27/2020 2:20 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



Constituent: Arsenic Analysis Run 3/27/2020 2:20 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Antimony (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.003	<0.003							
9/1/2016			0.001 (X)	<0.003					
9/6/2016					<0.003				
9/7/2016						<0.003	<0.003	<0.003	
9/8/2016									<0.003
12/7/2016	<0.003	<0.003	<0.003	<0.003	<0.003				
12/8/2016						<0.003	<0.003	<0.003	<0.003
3/21/2017	0.0004 (X)	<0.003							
3/22/2017			<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
3/23/2017								<0.003	
7/11/2017	<0.003	<0.003			<0.003				<0.003
7/12/2017			<0.003	<0.003		<0.003	<0.003	<0.003	
10/18/2017	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003		<0.003
10/19/2017				<0.003				<0.003	
2/20/2018	<0.003	<0.003							
2/21/2018			<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
7/11/2018	<0.003	<0.003							
7/12/2018			<0.003	<0.003	<0.003			<0.003	<0.003
9/12/2018	<0.003								
9/13/2018		<0.003	<0.003	<0.003	<0.003		<0.003		<0.003
9/14/2018								<0.003	
10/4/2018									
8/21/2019	0.00039 (X)	0.00055 (X)	<0.003		<0.003				0.0014 (X)
8/22/2019				<0.003		<0.003	0.00045 (X)	<0.003	
9/10/2019		<0.003							
10/2/2019	<0.003		<0.003		<0.003	<0.003			<0.003
10/3/2019				0.00029 (X)			<0.003	0.00044 (X)	
Mean	0.001279	0.001405	0.00145	0.001379	0.0015	0.0015	0.001383	0.001394	0.00149
Std. Dev.	0.0004659	0.0003004	0.0001581	0.0003826	0	0	0.00035	0.0003352	3.162E-05
Upper Lim.	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Lower Lim.	0.0004	0.0015	0.0015	0.0015	0.0015	0.0015	0.00045	0.0015	0.0015

Constituent: Antimony (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	< 0.003
3/21/2017	
3/22/2017	
3/23/2017	<0.003
7/11/2017	
7/12/2017	<0.003
10/18/2017	
10/19/2017	<0.003
2/20/2018	
2/21/2018	<0.003
7/11/2018	
7/12/2018	<0.003
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.003
8/21/2019	
8/22/2019	<0.003
9/10/2019	
10/2/2019	
10/3/2019	<0.003
Mean	0.0015
Std. Dev.	0
Upper Lim.	0.0015
Lower Lim.	0.0015

Constituent: Arsenic (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.005	<0.005							
9/1/2016			<0.005	<0.005					
9/6/2016					<0.005				
9/7/2016						<0.005	<0.005	<0.005	
9/8/2016									0.0017 (X)
12/7/2016	<0.005	<0.005	<0.005	<0.005	<0.005				
12/8/2016						<0.005	<0.005	<0.005	<0.005
3/21/2017	<0.005	<0.005							
3/22/2017			0.0011 (X)	<0.005	<0.005	0.0007 (X)	<0.005		0.001 (X)
3/23/2017								0.0007 (X)	
7/11/2017	<0.005	<0.005			<0.005				<0.005
7/12/2017			0.0006 (X)	<0.005		<0.005	<0.005	<0.005	
10/18/2017	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		<0.005
10/19/2017				<0.005				<0.005	
2/20/2018	<0.005	<0.005							
2/21/2018			0.00089 (X)	<0.005	<0.005	0.00072 (X)	<0.005	<0.005	0.00071 (X)
7/11/2018	<0.005	<0.005							
7/12/2018			<0.005	<0.005	<0.005			<0.005	<0.005
9/12/2018	<0.005								
9/13/2018		<0.005	<0.005	<0.005	<0.005		<0.005		<0.005
9/14/2018								<0.005	
10/4/2018									
8/21/2019	<0.005	<0.005	<0.005		0.00036 (X)				<0.005
8/22/2019				<0.005		<0.005	<0.005	<0.005	
9/10/2019		0.00036 (X)							
10/2/2019	0.00083 (X)		<0.005		<0.005	<0.005			0.00063 (X)
10/3/2019				<0.005			<0.005	<0.005	
Mean	0.002333	0.002286	0.002009	0.0025	0.002286	0.002052	0.0025	0.00232	0.001904
Std. Dev.	0.0005281	0.0006767	0.0007994	0	0.0006767	0.0008286	0	0.0005692	0.0008191
Upper Lim.	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0025	0.0025	0.00089	0.0025	0.0025	0.0007	0.0025	0.0025	0.00071
	9/1/2016 9/6/2016 9/6/2016 9/7/2016 9/8/2016 12/7/2016 12/8/2016 3/21/2017 3/22/2017 3/23/2017 7/11/2017 7/11/2017 10/18/2017 10/19/2017 2/20/2018 2/21/2018 9/11/2018 9/12/2018 9/13/2018 9/14/2018 8/21/2019 9/10/2019 10/2/2019 10/3/2019 Mean Std. Dev. Upper Lim.	9/1/2016 9/6/2016 9/6/2016 9/8/2016 12/7/2016 3/21/2017 3/22/2017 3/23/2017 7/11/2017 7/11/2017 7/11/2017 10/18/2017 2/20/2018 2/21/2018 7/11/2018 9/12/2018 9/13/2018 9/14/2018 9/14/2018 10/4/2018 8/21/2019 9/10/2019 10/2/2019 10/3/2019 Mean 0.002333 Std. Dev. 0.0005	9/1/2016 9/6/2016 9/6/2016 9/8/2016 12/7/2016 9/8/2016 12/7/2016 3/21/2017 3/22/2017 3/22/2017 3/23/2017 7/11/2017 7/11/2017 10/18/2017 2/20/2018 2/21/2018 2/21/2018 2/21/2018 2/21/2018 2/21/2018 3/11/2018 9/12/2018 9/12/2018 9/14/2018 10/4/2018 8/21/2019 9/10/2019 9/10/2019 10/03/2019 Mean 0.002333 0.002286 Std. Dev. 0.0025 0.005	99/1/2016 99/6/2016 99/7/2016 99/8/2016 12/7/2016 99/8/2016 12/7/2016 3/21/2017	9/1/2016 9/6/2016 9/6/2016 9/7/2016 9/8/2016 12/7/2016 9/8/2016 12/7/2016 3/21/2017	1/2/2016	201/2016	98/12016	1/2016

Constituent: Arsenic (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.005
3/21/2017	
3/22/2017	
3/23/2017	0.0007 (X)
7/11/2017	
7/12/2017	<0.005
10/18/2017	
10/19/2017	<0.005
2/20/2018	
2/21/2018	0.00094 (X)
7/11/2018	
7/12/2018	<0.005
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.005
8/21/2019	
8/22/2019	<0.005
9/10/2019	
10/2/2019	
10/3/2019	<0.005
Mean	0.002127
Std. Dev.	0.0007432
Upper Lim.	0.0025
Lower Lim.	0.0007

Constituent: Barium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	0.0253	0.0407							
9/1/2016			0.103	0.0117					
9/6/2016					0.0794				
9/7/2016						0.0823	0.0717	0.067	
9/8/2016									0.102
12/7/2016	0.065	0.0581	0.0781	0.0133	0.0689				
12/8/2016						0.0668	0.0513	0.0522	0.102
3/21/2017	0.0379	0.0678							
3/22/2017			0.0589	0.0114	0.0423	0.0821	0.0273		0.0951
3/23/2017								0.0591	
7/11/2017	0.036	0.0574			0.0467				0.102
7/12/2017			0.0613	0.0097 (X)		0.0805	0.0269	0.0604	
10/18/2017	0.0247	0.0351	0.0617		0.0446	0.0776	0.0258		0.0997
10/19/2017				0.0091 (X)				0.0542	
2/20/2018	0.03	0.05							
2/21/2018			0.076	0.0086 (X)	0.046	0.073	0.029	0.058	0.11
7/11/2018	0.027	0.051							
7/12/2018			0.056	0.0093 (X)	0.043			0.057	0.1
9/12/2018	0.022								
9/13/2018		0.038	0.048	0.0078 (X)	0.038		0.023		0.1
9/14/2018								0.058	
10/4/2018									
8/21/2019	0.017	0.032	0.05		0.034				0.1
8/22/2019				0.0067 (X)		0.078	0.022	0.047	
9/10/2019		0.029							
10/2/2019	0.017		0.049		0.038	0.074			0.11
10/3/2019				0.007 (X)			0.025	0.057	
Mean	0.03019	0.04591	0.0642	0.00946	0.04809	0.07679	0.03356	0.05699	0.1021
Std. Dev.	0.01408	0.01286	0.01714	0.002132	0.0145	0.005297	0.01678	0.005258	0.004629
Upper Lim.	0.04121	0.05738	0.07949	0.01136	0.0589	0.0824	0.0717	0.06168	0.1061
Lower Lim.	0.01889	0.03444	0.04891	0.007558	0.03664	0.07117	0.022	0.0523	0.098

Constituent: Barium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

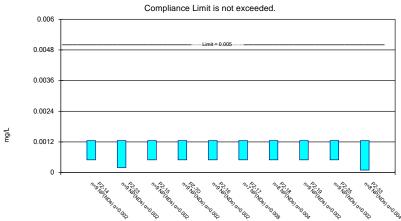
	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	0.162
3/21/2017	
3/22/2017	
3/23/2017	0.0753
7/11/2017	
7/12/2017	0.0756
10/18/2017	
10/19/2017	0.0681
2/20/2018	
2/21/2018	0.085
7/11/2018	
7/12/2018	0.076
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	0.072
8/21/2019	
8/22/2019	0.064
9/10/2019	
10/2/2019	
10/3/2019	0.057
Mean	0.08167
Std. Dev.	0.03117
Upper Lim.	0.162
Lower Lim.	0.057

Constituent: Beryllium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.003	<0.003							
9/1/2016			<0.003	<0.003					
9/6/2016					<0.003				
9/7/2016						<0.003	<0.003	<0.003	
9/8/2016									<0.003
12/7/2016	<0.003	<0.003	<0.003	<0.003	<0.003				
12/8/2016						<0.003	<0.003	<0.003	<0.003
3/21/2017	<0.003	<0.003							
3/22/2017			<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
3/23/2017								<0.003	
7/11/2017	<0.003	<0.003			<0.003				<0.003
7/12/2017			<0.003	<0.003		<0.003	<0.003	<0.003	
10/18/2017	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003		<0.003
10/19/2017				<0.003				<0.003	
2/20/2018	<0.015	<0.003							
2/21/2018			<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
7/11/2018	<0.003	<0.003							
7/12/2018			<0.003	<0.003	<0.003			<0.003	<0.003
9/12/2018	<0.003								
9/13/2018		<0.003	<0.003	<0.003	<0.003		<0.003		<0.003
9/14/2018								<0.003	
10/4/2018									
8/21/2019	<0.003	<0.003	<0.003		<0.003				<0.003
8/22/2019				<0.003		<0.003	<0.003	<0.003	
Mean	0.002167	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Std. Dev.	0.002	0	0	0	0	0	0	0	0
Upper Lim.	0.0075	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Lower Lim.	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015

Constituent: Beryllium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.003
3/21/2017	
3/22/2017	
3/23/2017	<0.003
7/11/2017	
7/12/2017	<0.003
10/18/2017	
10/19/2017	<0.003
2/20/2018	
2/21/2018	<0.003
7/11/2018	
7/12/2018	<0.003
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.003
8/21/2019	
8/22/2019	<0.003
Mean	0.0015
Std. Dev.	0
Upper Lim.	0.0015
Lower Lim.	0.0015

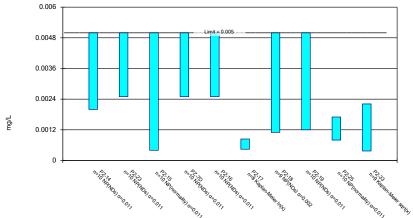


Constituent: Cadmium Analysis Run 3/27/2020 2:20 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Parametric and Non-Parametric (NP) Confidence Interval



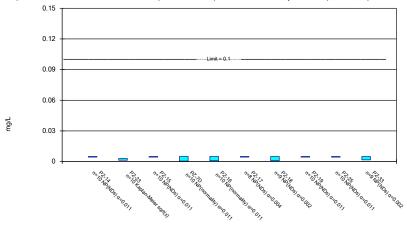


Constituent: Cobalt Analysis Run 3/27/2020 2:20 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

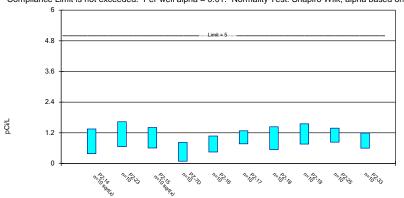


Constituent: Chromium Analysis Run 3/27/2020 2:20 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell mod V4

Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.001	0.0002 (X)							
9/1/2016			<0.001	<0.001					
9/6/2016					<0.001				
9/7/2016						<0.001	<0.001	<0.001	
9/8/2016									<0.001
12/7/2016	<0.001	0.0002 (X)	<0.001	<0.001	<0.001				
12/8/2016						<0.001	<0.001	<0.001	<0.001
3/21/2017	<0.001	<0.001							
3/22/2017			<0.001	<0.001	<0.001	<0.001	<0.001		<0.001
3/23/2017								<0.001	
7/11/2017	<0.001	<0.001			<0.001				<0.001
7/12/2017			<0.001	<0.001		<0.001	<0.001	<0.001	
10/18/2017	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		<0.001
10/19/2017				<0.001				<0.001	
2/20/2018	<0.001	<0.001							
2/21/2018			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/11/2018	<0.001	<0.001							
7/12/2018			<0.001	<0.001	<0.001			<0.001	<0.001
9/12/2018	<0.001								
9/13/2018		<0.001	<0.001	<0.001	<0.001		<0.001		<0.001
9/14/2018								<0.001	
10/4/2018									
8/21/2019	<0.0025	<0.0025	<0.0025		<0.0025				<0.0025
8/22/2019				<0.0025		<0.0025	<0.0025	<0.0025	
Mean	0.0005833	0.0005167	0.0005833	0.0005833	0.0005833	0.0006071	0.0005938	0.0005833	0.0005833
Std. Dev.	0.00025	0.0003041	0.00025	0.00025	0.00025	0.0002835	0.0002652	0.00025	0.00025
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0005	0.0002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005

Constituent: Cadmium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

PZ-33
<0.001
0.0001 (X)
<0.001
<0.001
<0.001
<0.001
<0.001
<0.0025
0.0005438
0.0003178
0.00125
0.0001

Constituent: Chromium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.01	<0.01							
9/1/2016			<0.01	<0.01					
9/6/2016					<0.01				
9/7/2016						<0.01	<0.01	<0.01	
9/8/2016									<0.01
12/7/2016	<0.01	<0.01	<0.01	0.003 (X)	<0.01				
12/8/2016						<0.01	<0.01	<0.01	<0.01
3/21/2017	<0.01	0.0009 (X)							
3/22/2017			<0.01	0.0005 (X)	0.0008 (X)	<0.01	<0.01		<0.01
3/23/2017								<0.01	
7/11/2017	<0.01	0.0016 (X)			<0.01				<0.01
7/12/2017			<0.01	<0.01		<0.01	<0.01	<0.01	
10/18/2017	<0.01	0.0019 (X)	<0.01		<0.01	<0.01	<0.01		<0.01
10/19/2017				0.0005 (X)				<0.01	
2/20/2018	<0.01	<0.01							
2/21/2018			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7/11/2018	<0.01	0.0021 (X)							
7/12/2018			<0.01	<0.01	<0.01			<0.01	<0.01
9/12/2018	<0.01								
9/13/2018		0.0022 (X)	<0.01	<0.01	<0.01		<0.01		<0.01
9/14/2018								<0.01	
10/4/2018									
8/21/2019	0.00073 (X)	0.0024 (X)	0.00048 (X)		0.00095 (X)				<0.01
8/22/2019				0.0013 (X)		<0.01	0.00081 (X)	<0.01	
9/10/2019		0.0044 (X)							
10/2/2019	<0.01		<0.01		0.00044 (X)	<0.01			<0.01
10/3/2019				0.0004 (X)			<0.01	<0.01	
Mean	0.004573	0.00305	0.004548	0.00307	0.003719	0.005	0.004534	0.005	0.005
Std. Dev.	0.00135	0.00161	0.001429	0.002163	0.002066	0	0.001397	0	0
Upper Lim.	0.005	0.003025	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.005	0.001361	0.005	0.0005	0.0008	0.005	0.00081	0.005	0.005

Constituent: Chromium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.01
3/21/2017	
3/22/2017	
3/23/2017	0.0017 (X)
7/11/2017	
7/12/2017	<0.01
10/18/2017	
10/19/2017	<0.01
2/20/2018	
2/21/2018	<0.01
7/11/2018	
7/12/2018	<0.01
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.01
8/21/2019	
8/22/2019	<0.01
9/10/2019	
10/2/2019	
10/3/2019	<0.01
Mean	0.004633
Std. Dev.	0.0011
Upper Lim.	0.005
Lower Lim.	0.0017

Constituent: Cobalt (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.01	<0.01							
9/1/2016			0.0012 (X)	<0.01					
9/6/2016					0.0005 (X)				
9/7/2016						0.0011 (X)	0.0011 (X)	0.0012 (X)	
9/8/2016									0.0008 (X)
12/7/2016	0.002 (X)	0.0008 (X)	0.0005 (X)	<0.01	<0.01				
12/8/2016						0.0006 (X)	<0.01	0.0009 (X)	<0.01
3/21/2017	<0.01	<0.01							
3/22/2017			0.0005 (X)	<0.01	<0.01	0.0006 (X)	<0.01		0.001 (X)
3/23/2017								<0.01	
7/11/2017	0.0003 (X)	<0.01			<0.01				0.001 (X)
7/12/2017			0.0004 (X)	<0.01		0.0005 (X)	<0.01	<0.01	
10/18/2017	<0.01	<0.01	0.0004 (X)		<0.01	0.0005 (X)	<0.01		0.0011 (X)
10/19/2017				<0.01				<0.01	
2/20/2018	<0.01	<0.01							
2/21/2018			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00075 (X)
7/11/2018	<0.01	<0.01							
7/12/2018			<0.01	<0.01	<0.01			<0.01	0.0008 (X)
9/12/2018	<0.01								
9/13/2018		<0.01	<0.01	<0.01	<0.01		<0.01		0.001 (X)
9/14/2018								<0.01	
10/4/2018									
8/21/2019	<0.005	<0.005	<0.005		<0.005				0.0015 (X)
8/22/2019				<0.005		<0.005	<0.005	<0.005	
9/10/2019		<0.005							
10/2/2019	<0.005		<0.005		<0.005	<0.005			0.0017 (X)
10/3/2019				<0.005			<0.005	<0.005	
Mean	0.00373	0.00408	0.0023	0.0045	0.00405	0.001662	0.004011	0.00371	0.001465
Std. Dev.	0.001747	0.001552	0.002024	0.001054	0.001624	0.001595	0.001537	0.001736	0.001279
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.0008392	0.005	0.005	0.0017
Lower Lim.	0.002	0.0025	0.0004	0.0025	0.0025	0.0004392	0.0011	0.0012	0.0008

Constituent: Cobalt (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	0.0041 (X)
3/21/2017	
3/22/2017	
3/23/2017	0.0008 (X)
7/11/2017	
7/12/2017	0.0007 (X)
10/18/2017	
10/19/2017	0.0005 (X)
2/20/2018	
2/21/2018	0.0012 (X)
7/11/2018	
7/12/2018	0.00053 (X)
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.01
8/21/2019	
8/22/2019	<0.005
9/10/2019	
10/2/2019	
10/3/2019	<0.005
Mean	0.001981
Std. Dev.	0.001662
Upper Lim.	0.002212
Lower Lim.	0.00037

Constituent: Combined Radium 226 + Radium 228 (pCi/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient

Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	1.77	1.85							
9/1/2016			1.19	0.88					
9/6/2016					1.12				
9/7/2016						1.06	1.51	1.22	
9/8/2016									1.41
12/7/2016	0.672	0.844	1.88	0.179	1.37				
12/8/2016						1.3	1.29	1.69	1.39
3/21/2017	0.33	0.832							
3/22/2017			0.617	0.279	0.435	0.566	0.799		0.852
3/23/2017								1.07	
7/11/2017	0.701 (U)	0.824 (U)			0.76 (U)				1.04
7/12/2017			0.674 (U)	0.125 (U)		0.856 (U)	0.4 (U)	0.849 (U)	
10/18/2017	0.808 (U)	1.19	0.844 (U)		0.847 (U)	0.957	0.613 (U)		0.678 (U)
10/19/2017				0.329 (U)				0.398 (U)	
2/20/2018	2.12	0.975							
2/21/2018			0.842	0.504	0.373	1.4	0.736	1.03	0.863
7/11/2018	0.232 (U)	1.29							
7/12/2018			0.552 (U)	0.188 (U)	1.15 (U)			1.28 (U)	1.42
8/15/2018							1.02 (U)		
8/16/2018						0.625 (U)			
9/12/2018	0.532 (U)								
9/13/2018		0.765 (U)	0.662 (U)	0.0542 (U)	0.472 (U)		0.708 (U)		0.766 (U)
9/14/2018						1.16		0.74 (U)	
10/4/2018									
8/21/2019	0.705 (U)	2.31	1.86		0.453 (U)				1.18 (U)
8/22/2019				0.672 (U)		0.977 (U)	0.753 (U)	1.37	
9/10/2019		0.575 (U)							
10/2/2019	0.915 (U)		1 (U)		0.65 (U)	1.34 (U)			1.48
10/3/2019				1.37			2.07	1.9	
Mean	0.8785	1.146	1.012	0.458	0.763	1.024	0.9899	1.155	1.108
Std. Dev.	0.6042	0.5444	0.4906	0.4125	0.3505	0.287	0.5005	0.4434	0.3062
Upper Lim.	1.35	1.631	1.406	0.826	1.076	1.28	1.436	1.55	1.381
Lower Lim.	0.388	0.6598	0.6071	0.09002	0.4502	0.7681	0.5433	0.7591	0.8347

Constituent: Combined Radium 226 + Radium 228 (pCi/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

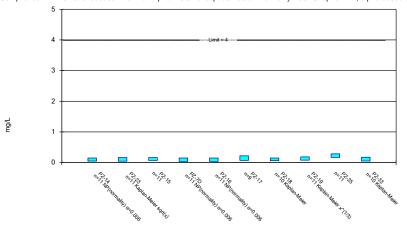
	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	0.968
3/21/2017	
3/22/2017	
3/23/2017	0.444
7/11/2017	
7/12/2017	0.814 (U)
10/18/2017	
10/19/2017	0.748 (U)
2/20/2018	
2/21/2018	1.05
7/11/2018	
7/12/2018	0.751 (U)
8/15/2018	
8/16/2018	
9/12/2018	
9/13/2018	
9/14/2018	1.01 (U)
10/4/2018	1.05
8/21/2019	
8/22/2019	0.513 (U)
9/10/2019	
10/2/2019	
10/3/2019	1.62 (U)
Mean	0.8968
Std. Dev.	0.3317
Upper Lim.	1.193

Lower Lim.

0.6008

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

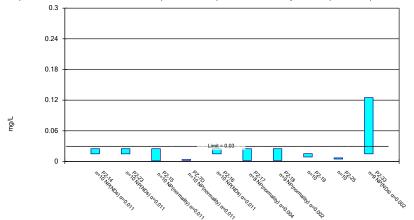


Constituent: Fluoride Analysis Run 3/27/2020 2:20 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

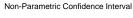
Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG

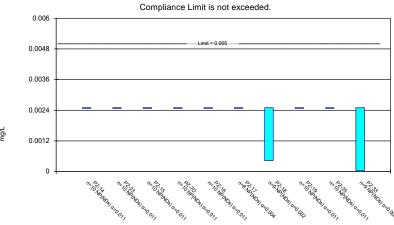
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/27/2020 2:20 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



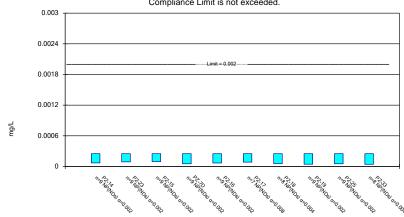


Constituent: Lead Analysis Run 3/27/2020 2:20 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Fluoride (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	0.13 (X)	0.13 (X)							
9/1/2016			0.06 (X)	<0.3					
9/6/2016					0.09 (X)				
9/7/2016						0.03 (X)	0.12 (X)	0.15 (X)	
9/8/2016									0.25 (X)
12/7/2016	0.07 (X)	0.13 (X)	0.09 (X)	0.15 (X)	0.09 (X)				
12/8/2016						0.18 (X)	0.18 (X)	0.12 (X)	0.22 (X)
3/21/2017	<0.3	0.05 (X)							
3/22/2017			0.11 (X)	0.09 (X)	0.04 (X)	0.09 (X)	0.08 (X)		0.16 (X)
3/23/2017								0.14 (X)	
7/11/2017	0.05 (X)	0.05 (X)			0.05 (X)				0.23 (X)
7/12/2017			0.23 (X)	0.02 (X)		0.21 (X)	0.17 (X)	0.07 (X)	
10/18/2017	0.11 (X)	<0.3	0.19 (X)		0.04 (X)	0.24 (X)	0.06 (X)		0.28 (X)
10/19/2017				<0.3				<0.3	
2/20/2018	0.04 (X)	0.3 (X)							
2/21/2018			0.093 (X)	0.045 (X)	<0.3	0.24 (X)	0.086 (X)	0.37	0.29 (X)
7/11/2018	<0.3	0.077 (X)							
7/12/2018			<0.3	<0.3	<0.3			0.17 (X)	0.21 (X)
9/12/2018	<0.3								
9/13/2018		<0.3	0.15 (X)	<0.3	<0.3		<0.3		0.22 (X)
9/14/2018								<0.3	
10/4/2018									
3/27/2019	<0.3	<0.3			<0.3		<0.3		0.37
3/28/2019			0.1 (X)	<0.3		0.15 (X)		0.074 (X)	
8/21/2019	<0.3	<0.3	0.044 (X)		<0.3				0.11 (X)
8/22/2019				<0.3		0.11 (X)	<0.3	0.1 (X)	
9/10/2019		<0.3							
10/2/2019	0.056 (X)		0.075 (X)		0.053 (X)	0.063 (X)			0.16 (X)
10/3/2019				0.041 (X)			0.043 (X)	0.084 (X)	
Mean	0.1096	0.1352	0.1175	0.1133	0.1012	0.1459	0.1189	0.1435	0.2273
Std. Dev.	0.04628	0.06798	0.0568	0.05345	0.04959	0.07723	0.04839	0.08268	0.07129
Upper Lim.	0.15	0.1672	0.1648	0.15	0.15	0.2205	0.1494	0.1856	0.2867
Lower Lim.	0.05	0.04665	0.07013	0.041	0.04	0.07132	0.0617	0.08006	0.1679

Constituent: Fluoride (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	0.21 (X)
3/21/2017	
3/22/2017	
3/23/2017	0.18 (X)
7/11/2017	
7/12/2017	0.06 (X)
10/18/2017	
10/19/2017	<0.3
2/20/2018	
2/21/2018	0.039 (X)
7/11/2018	
7/12/2018	<0.3
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	0.15 (X)
3/27/2019	
3/28/2019	<0.3
8/21/2019	
8/22/2019	<0.3
9/10/2019	
10/2/2019	
10/3/2019	0.06 (X)
Mean	0.1299
Std. Dev.	0.05675
Upper Lim.	0.1751
Lower Lim.	0.05094

Constituent: Lead (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.005	<0.005							
9/1/2016			<0.005	<0.005					
9/6/2016					<0.005				
9/7/2016						<0.005	<0.005	<0.005	
9/8/2016									<0.005
12/7/2016	<0.005	<0.005	<0.005	<0.005	<0.005				
12/8/2016						<0.005	<0.005	<0.005	<0.005
3/21/2017	<0.005	<0.005							
3/22/2017			5E-05 (X)	<0.005	<0.005	<0.005	<0.005		<0.005
3/23/2017								<0.005	
7/11/2017	<0.005	<0.005			<0.005				<0.005
7/12/2017			<0.005	<0.005		<0.005	<0.005	<0.005	
10/18/2017	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		<0.005
10/19/2017				<0.005				<0.005	
2/20/2018	<0.005	<0.005							
2/21/2018			<0.005	<0.005	<0.005	<0.005	0.00043 (X)	<0.005	<0.005
7/11/2018	<0.005	<0.005							
7/12/2018			<0.005	<0.005	<0.005			<0.005	<0.005
9/12/2018	<0.005								
9/13/2018		<0.005	<0.005	<0.005	<0.005		<0.005		<0.005
9/14/2018								<0.005	
10/4/2018									
8/21/2019	6.4E-05 (X)	<0.005	<0.005		<0.005				0.00041 (X)
8/22/2019				<0.005		<0.005	<0.005	<0.005	
9/10/2019		<0.005							
10/2/2019	<0.005		<0.005		8.1E-05 (X)	<0.005			<0.005
10/3/2019				<0.005			<0.005	<0.005	
Mean	0.002256	0.0025	0.002255	0.0025	0.002258	0.0025	0.00227	0.0025	0.002291
Std. Dev.	0.0007703	0	0.0007748	0	0.000765	0	0.00069	0	0.0006609
Upper Lim.	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.00043	0.0025	0.0025

Constituent: Lead (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.005
3/21/2017	
3/22/2017	
3/23/2017	9E-05 (X)
7/11/2017	
7/12/2017	<0.005
10/18/2017	
10/19/2017	<0.005
2/20/2018	
2/21/2018	<0.005
7/11/2018	
7/12/2018	<0.005
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.005
8/21/2019	
8/22/2019	<0.005
9/10/2019	
10/2/2019	
10/3/2019	4.7E-05 (X)
Mean	0.00196
Std. Dev.	0.001072
Upper Lim.	0.0025
Lower Lim.	4.7E-05

Constituent: Lithium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.05	<0.05							
9/1/2016			<0.05	0.0022 (X)					
9/6/2016					<0.05				
9/7/2016						<0.05	<0.05	0.0082 (X)	
9/8/2016									0.0038 (X)
12/7/2016	0.003 (X)	<0.05	<0.05	0.0023 (X)	<0.05				
12/8/2016						<0.05	<0.05	0.0061 (X)	0.0038 (X)
3/21/2017	<0.05	<0.05							
3/22/2017			0.0011 (X)	0.0025 (X)	<0.05	0.0021 (X)	0.0029 (X)		0.0068 (X)
3/23/2017								0.0122 (X)	
7/11/2017	<0.05	<0.05			<0.05				0.0059 (X)
7/12/2017			<0.05	0.0033 (X)		0.002 (X)	0.0024 (X)	0.013 (X)	
10/18/2017	<0.05	<0.05	<0.05		<0.05	0.002 (X)	0.0027 (X)		0.0057 (X)
10/19/2017				<0.25				0.013 (X)	
2/20/2018	<0.25	<0.05							
2/21/2018			<0.05	0.0034 (X)	<0.05	0.0022 (X)	0.0021 (X)	0.0085 (X)	0.0063 (X)
7/11/2018	<0.05	<0.05							
7/12/2018			0.0012 (X)	0.0038 (X)	<0.05			0.013 (X)	0.0063 (X)
9/12/2018	<0.05								
9/13/2018		<0.05	0.0013 (X)	0.0026 (X)	<0.05		0.0029 (X)		0.0061 (X)
9/14/2018								0.018 (X)	
10/4/2018									
8/21/2019	<0.03	0.0009 (X)	0.0013 (X)		<0.03				0.0072 (X)
8/22/2019				0.0029 (X)		0.0025 (X)	0.0026 (X)	0.012 (X)	
9/10/2019		<0.03							
10/2/2019	<0.03		0.0013 (X)		<0.03	0.0024 (X)			0.0074 (X)
10/3/2019				0.0032 (X)			0.0027 (X)	0.016 (X)	
Mean	0.0308	0.02159	0.01312	0.01512	0.023	0.0079	0.007589	0.012	0.00593
Std. Dev.	0.03391	0.00792	0.01252	0.03861	0.004216	0.01056	0.009874	0.003598	0.001245
Upper Lim.	0.025	0.025	0.025	0.0038	0.025	0.025	0.025	0.01521	0.007041
Lower Lim.	0.015	0.015	0.0012	0.0023	0.015	0.002	0.0021	0.008789	0.004819

Constituent: Lithium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.05
3/21/2017	
3/22/2017	
3/23/2017	<0.05
7/11/2017	
7/12/2017	<0.05
10/18/2017	
10/19/2017	<0.25
2/20/2018	
2/21/2018	<0.05
7/11/2018	
7/12/2018	<0.05
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.05
8/21/2019	
8/22/2019	<0.03
9/10/2019	
10/2/2019	
10/3/2019	<0.03
Mean	0.03389
Std. Dev.	0.03444
Upper Lim.	0.125
Lower Lim.	0.015

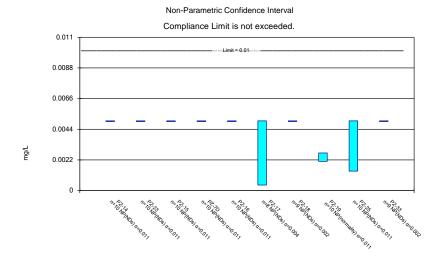
Constituent: Mercury (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.0005	<0.0005							
9/1/2016			<0.0005	<0.0005					
9/6/2016					<0.0005				
9/7/2016						<0.0005	<0.0005	<0.0005	
9/8/2016									<0.0005
12/7/2016	7E-05 (X)	9E-05 (X)	<0.0005	6E-05 (X)	<0.0005				
12/8/2016						<0.0005	<0.0005	<0.0005	<0.0005
3/21/2017	<0.0005	<0.0005							
3/22/2017			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
3/23/2017								<0.0005	
7/11/2017	<0.0005	<0.0005			<0.0005				<0.0005
7/12/2017			<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	
10/18/2017	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005
10/19/2017				<0.0005				<0.0005	
2/20/2018	<0.0005	<0.0005							
2/21/2018			9.7E-05 (X)	5.3E-05 (X)	6.8E-05 (X)	8.6E-05 (X)	5.7E-05 (X)	4.5E-05 (X)	5.3E-05 (X)
7/11/2018	<0.0005	<0.0005							
7/12/2018			<0.0005	<0.0005	<0.0005			<0.0005	<0.0005
9/12/2018	<0.0005								
9/13/2018		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005		<0.0005
9/14/2018								<0.0005	
10/4/2018									
8/21/2019	<0.0005	<0.0005	<0.0005		<0.0005				<0.0005
8/22/2019				<0.0005		<0.0005	<0.0005	<0.0005	
Mean	0.00023	0.0002322	0.000233	0.000207	0.0002298	0.0002266	0.0002259	0.0002272	0.0002281
Std. Dev.	6E-05	5.333E-05	5.1E-05	8.534E-05	6.067E-05	6.199E-05	6.824E-05	6.833E-05	6.567E-05
Upper Lim.	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Lower Lim.	7E-05	9E-05	9.7E-05	5.3E-05	6.8E-05	8.6E-05	5.7E-05	4.5E-05	5.3E-05

Constituent: Mercury (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.0005
3/21/2017	
3/22/2017	
3/23/2017	<0.0005
7/11/2017	
7/12/2017	<0.0005
10/18/2017	
10/19/2017	<0.0005
2/20/2018	
2/21/2018	4.3E-05 (X)
7/11/2018	
7/12/2018	<0.0005
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.0005
8/21/2019	
8/22/2019	<0.0005
Mean	0.0002241
Std. Dev.	7.319E-05
Upper Lim.	0.00025
Lower Lim.	4.3E-05

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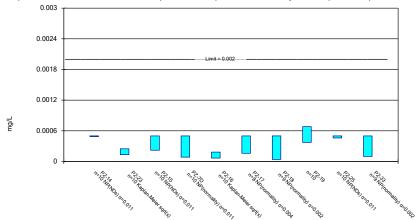


Constituent: Molybdenum Analysis Run 3/27/2020 2:20 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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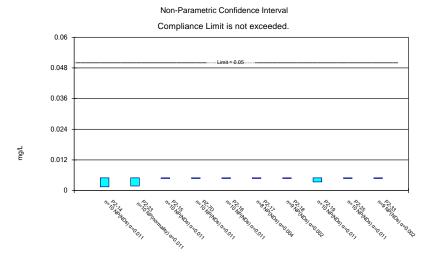
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 3/27/2020 2:21 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Selenium Analysis Run 3/27/2020 2:20 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Molybdenum (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

						_			
	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.01	<0.01							
9/1/2016			<0.01	<0.01					
9/6/2016					<0.01				
9/7/2016						<0.01	<0.01	0.0027 (X)	
9/8/2016									<0.01
12/7/2016	<0.01	<0.01	<0.01	<0.01	<0.01				
12/8/2016						<0.01	<0.01	0.0022 (X)	<0.01
3/21/2017	0.0005 (X)	0.0006 (X)							
3/22/2017			0.0004 (X)	<0.01	0.0004 (X)	0.0004 (X)	<0.01		0.001 (X)
3/23/2017								0.0025 (X)	
7/11/2017	<0.01	<0.01			<0.01				<0.01
7/12/2017			<0.01	<0.01		<0.01	<0.01	0.0022 (X)	
10/18/2017	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01		<0.01
10/19/2017				<0.01				0.0021 (X)	
2/20/2018	<0.01	<0.01							
2/21/2018			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7/11/2018	<0.01	<0.01							
7/12/2018			<0.01	<0.01	<0.01			0.0022 (X)	<0.01
9/12/2018	<0.01								
9/13/2018		<0.01	<0.01	<0.01	<0.01		<0.01		<0.01
9/14/2018								0.0023 (X)	
10/4/2018									
8/21/2019	<0.01	<0.01	<0.01		<0.01				0.0014 (X)
8/22/2019				<0.01		<0.01	<0.01	0.0021 (X)	
9/10/2019		<0.01							
10/2/2019	<0.01		<0.01		<0.01	<0.01			<0.01
10/3/2019				<0.01			<0.01	0.0024 (X)	
Mean	0.00455	0.00456	0.00454	0.005	0.00454	0.004425	0.005	0.00257	0.00424
Std. Dev.	0.001423	0.001391	0.001455	0	0.001455	0.001626	0	0.0008744	0.001605
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.0027	0.005
Lower Lim.	0.005	0.005	0.005	0.005	0.005	0.0004	0.005	0.0021	0.0014

Constituent: Molybdenum (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.01
3/21/2017	
3/22/2017	
3/23/2017	<0.01
7/11/2017	
7/12/2017	<0.01
10/18/2017	
10/19/2017	<0.01
2/20/2018	
2/21/2018	<0.01
7/11/2018	
7/12/2018	<0.01
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.01
8/21/2019	
8/22/2019	<0.01
9/10/2019	
10/2/2019	
10/3/2019	<0.01
Mean	0.005
Std. Dev.	0
Upper Lim.	0.005
Lower Lim.	0.005

Constituent: Selenium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	0.0012 (X)	0.0014 (X)							
9/1/2016			<0.01	<0.01					
9/6/2016					<0.01				
9/7/2016						<0.01	<0.01	<0.01	
9/8/2016									<0.01
12/7/2016	<0.01	<0.01	<0.01	<0.01	<0.01				
12/8/2016						<0.01	<0.01	<0.01	<0.01
3/21/2017	<0.01	<0.01							
3/22/2017			<0.01	<0.01	<0.01	<0.01	<0.01		<0.01
3/23/2017								<0.01	
7/11/2017	<0.01	<0.01			<0.01				<0.01
7/12/2017			<0.01	<0.01		<0.01	<0.01	<0.01	
10/18/2017	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01		<0.01
10/19/2017				<0.01				<0.01	
2/20/2018	<0.01	<0.01							
2/21/2018			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7/11/2018	<0.01	<0.01							
7/12/2018			<0.01	<0.01	<0.01			<0.01	<0.01
9/12/2018	<0.01								
9/13/2018		<0.01	<0.01	<0.01	<0.01		<0.01		<0.01
9/14/2018								0.0015 (X)	
10/4/2018									
8/21/2019	<0.01	0.0022 (X)	<0.01		<0.01				<0.01
8/22/2019				<0.01		<0.01	<0.01	<0.01	
9/10/2019		0.0018 (X)							
10/2/2019	0.0015 (X)		<0.01		<0.01	<0.01			<0.01
10/3/2019				0.0017 (X)			<0.01	0.0034 (X)	
Mean	0.00427	0.00404	0.005	0.00467	0.005	0.005	0.005	0.00449	0.005
Std. Dev.	0.001541	0.001557	0	0.001044	0	0	0	0.001165	0
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0015	0.0018	0.005	0.005	0.005	0.005	0.005	0.0034	0.005

Constituent: Selenium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.01
3/21/2017	
3/22/2017	
3/23/2017	<0.01
7/11/2017	
7/12/2017	<0.01
10/18/2017	
10/19/2017	<0.01
2/20/2018	
2/21/2018	<0.01
7/11/2018	
7/12/2018	<0.01
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.01
8/21/2019	
8/22/2019	<0.01
9/10/2019	
10/2/2019	
10/3/2019	<0.01
Mean	0.005
Std. Dev.	0
Upper Lim.	0.005
Lower Lim.	0.005

Constituent: Thallium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.001	<0.001							
9/1/2016			<0.001	<0.001					
9/6/2016					<0.001				
9/7/2016						<0.001	<0.001	<0.001	
9/8/2016									<0.001
12/7/2016	<0.001	0.0002 (X)	<0.001	<0.001	<0.001				
12/8/2016						<0.001	<0.001	0.0003 (X)	<0.001
3/21/2017	6E-05 (X)	0.0003 (X)							
3/22/2017			<0.001	0.0002 (X)	0.0002 (X)	<0.001	4E-05 (X)		<0.001
3/23/2017								0.0003 (X)	
7/11/2017	<0.001	0.0002 (X)			0.0002 (X)				<0.001
7/12/2017			<0.001	0.0001 (X)		<0.001	<0.001	0.0004 (X)	
10/18/2017	<0.001	0.0001 (X)	<0.001		0.0002 (X)	<0.001	5E-05 (X)		<0.001
10/19/2017				0.0001 (X)				0.0005 (X)	
2/20/2018	<0.001	0.00026 (X)							
2/21/2018			<0.001	<0.001	0.00018 (X)	<0.001	<0.001	0.00049 (X)	<0.001
7/11/2018	<0.001	0.00018 (X)							
7/12/2018			<0.001	<0.001	<0.001			0.00077 (X)	<0.001
9/12/2018	<0.001								
9/13/2018		<0.001	<0.001	<0.001	0.00017 (X)		<0.001		<0.001
9/14/2018								0.00076 (X)	
10/4/2018									
8/21/2019	<0.001	0.00016 (X)	0.00022 (X)		5.7E-05 (X)				0.00046 (X)
8/22/2019				8.6E-05 (X)		0.00018 (X)	7E-05 (X)	0.00055 (X)	
9/10/2019		<0.001							
10/2/2019	<0.001		0.00016 (X)		5.3E-05 (X)	0.00016 (X)			0.00024 (X)
10/3/2019				7.8E-05 (X)			<0.001	0.00071 (X)	
Mean	0.000456	0.00029	0.000438	0.0003064	0.000256	0.0004175	0.0003511	0.000528	0.00047
Std. Dev.	0.0001391	0.0001544	0.0001315	0.0002067	0.000177	0.0001529	0.0002235	0.000173	8.179E-05
Upper Lim.	0.0005	0.0002488	0.0005	0.0005	0.0001836	0.0005	0.0005	0.0006824	0.0005
Lower Lim.	0.0005	0.0001337	0.00022	8.6E-05	6.696E-05	0.00016	4E-05	0.0003736	0.00046

Constituent: Thallium (mg/L) Analysis Run 3/27/2020 2:22 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

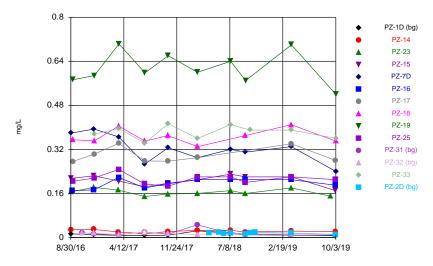
	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.001
3/21/2017	
3/22/2017	
3/23/2017	0.0001 (X)
7/11/2017	
7/12/2017	0.0001 (X)
10/18/2017	
10/19/2017	0.0001 (X)
2/20/2018	
2/21/2018	<0.001
7/11/2018	
7/12/2018	<0.001
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.001
8/21/2019	
8/22/2019	0.00017 (X)
9/10/2019	
10/2/2019	
10/3/2019	0.00018 (X)
Mean	0.0002944
Std. Dev.	0.0001972
Upper Lim.	0.0005
Lower Lim.	0.0001

wood.

APPENDIX C

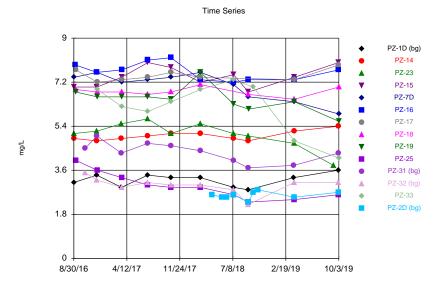
TIME SERIES





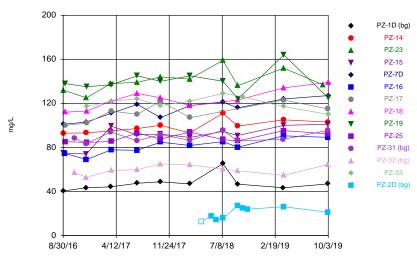
Constituent: Boron Analysis Run 2/24/2020 11:38 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Chloride Analysis Run 2/24/2020 11:38 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4





Constituent: Calcium Analysis Run 2/24/2020 11:38 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Time Series

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0.4 PZ-1D (bg) PZ-14 PZ-23 0.32 PZ-15 PZ-7D PZ-16 PZ-17 0.24 PZ-18 PZ-19 PZ-25 0.16 PZ-31 (bg) PZ-33 PZ-2D (bg) 0.08 8/30/16 4/12/17 11/24/17 7/8/18 2/19/19 10/3/19

Constituent: Fluoride Analysis Run 2/24/2020 11:38 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Boron (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19
8/30/2016	0.0132 (X)								
8/31/2016		0.0285 (X)	0.166						
9/1/2016				0.215	0.379				
9/6/2016						0.17			
9/7/2016							0.276	0.355	0.573
9/8/2016									
10/18/2016									
12/6/2016	0.0096 (X)								
12/7/2016		0.0292 (X)	0.182	0.224	0.394	0.173			
12/8/2016							0.303	0.351	0.588
3/21/2017	0.0082 (X)	0.0198 (X)	0.172						
3/22/2017				0.205	0.365	0.218	0.342	0.405	
3/23/2017									0.703
7/11/2017	0.0067 (X)	0.0137 (X)	0.149			0.18			
7/12/2017				0.184	0.267		0.278	0.35	0.598
10/17/2017	0.0083 (X)								
10/18/2017		0.0212 (X)	0.158	0.197		0.195	0.277	0.37	
10/19/2017					0.326				0.66
2/20/2018	0.024 (X)	0.026 (X)	0.16						
2/21/2018				0.21	0.29	0.21	0.29	0.33	0.6
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	0.017 (X)	0.026 (X)	0.17						
7/12/2018				0.23	0.32	0.21			0.64
9/12/2018	0.012 (X)	0.02 (X)							
9/13/2018			0.16	0.22	0.31	0.21		0.37	
9/14/2018									0.57
10/4/2018									
10/24/2018									
3/26/2019	0.0082 (X)								
3/27/2019		0.023 (X)	0.18			0.21		0.41	
3/28/2019				0.22	0.33		0.34		0.7
9/10/2019			0.15						
10/1/2019	0.0064 (X)								
10/2/2019		0.021 (X)		0.17		0.19	0.28		
10/3/2019					0.24			0.35	0.52

Constituent: Boron (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)	
8/30/2016						
8/31/2016						
9/1/2016						
9/6/2016						
9/7/2016						
9/8/2016	0.204					
10/18/2016		0.0174 (X)	0.0156 (X)			
12/6/2016		0.0133 (X)				
12/7/2016			0.0157 (X)			
12/8/2016	0.216			0.375		
3/21/2017		0.0103 (X)				
3/22/2017	0.247					
3/23/2017			0.0103 (X)	0.396		
7/11/2017	0.194	<0.04	<0.04			
7/12/2017				0.343		
10/17/2017		0.0116 (X)	0.0142 (X)			
10/18/2017	0.186					
10/19/2017				0.413		
2/20/2018		0.046 (X)	0.011 (X)			
2/21/2018	0.22			0.36		
4/12/2018					0.016 (X)	
5/23/2018					0.018 (X)	
6/13/2018					0.014 (X)	
7/11/2018		0.014 (X)	0.014 (X)		0.017 (X)	
7/12/2018	0.22			0.41		
9/12/2018		0.0098 (X)			0.013 (X)	
9/13/2018	0.2		0.013 (X)			
9/14/2018						
10/4/2018				0.39	0.016 (X)	
10/24/2018					0.018 (X)	
3/26/2019		0.0076 (X)				
3/27/2019	0.22		0.012 (X)		0.016 (X)	
3/28/2019				0.39		
9/10/2019						
10/1/2019			0.011 (X)			
10/2/2019	0.21	0.0084 (X)			0.011 (X)	

Constituent: Calcium (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19
8/30/2016	40.4								
8/31/2016		92.9	132						
9/1/2016				74.8	101				
9/6/2016						74.6			
9/7/2016							100	112	138
9/8/2016									
10/18/2016									
12/6/2016	43.3								
12/7/2016		93.1	125	74	103	68.9			
12/8/2016							102	113	135
3/21/2017	44.1	95	138						
3/22/2017				99.3	111	77.8	113	122	
3/23/2017									137
7/11/2017	47.4	97.1	139			77.3			
7/12/2017				91.4	119		110	129	145
10/17/2017	48.7								
10/18/2017		100	144	92		84.7	122	125	
10/19/2017					107				140
2/20/2018	46.8	93.1	142						
2/21/2018				89	118	81.8	107	118	145
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	65.3	111	159						
7/12/2018				94.5	121	85.2			140
9/12/2018	46.6	99.3							
9/13/2018			136	90.8	116	80.2		123	
9/14/2018									124
10/4/2018									
10/24/2018									
3/26/2019	43.3								
3/27/2019		105	152			90.5		134	
3/28/2019				100	124		123		164
9/10/2019			137						
10/1/2019	46.8								
10/2/2019		103		101		89.1	115		
10/3/2019					127			139	125

Constituent: Calcium (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	85.2				
10/18/2016		88.3	57.2		
12/6/2016		83.4			
12/7/2016			52.8		
12/8/2016	84.5			117	
3/21/2017		94			
3/22/2017	85.3				
3/23/2017			59.1	122	
7/11/2017	93	86	59.7		
7/12/2017				124	
10/17/2017		91.6	64.9		
10/18/2017	87.6				
10/19/2017				118	
2/20/2018		86.5	64.1		
2/21/2018	93.9			122	
4/12/2018					<25
5/23/2018					17.6 (X)
6/13/2018					14.3
7/11/2018		95.4	60.4		15.6
7/12/2018	87.1			129	
9/12/2018		86			26.9
9/13/2018	85.8		58.7		
9/14/2018					
10/4/2018				126	25
10/24/2018					23.8
3/26/2019		87.3			
3/27/2019	95.2		54.6		26.1
3/28/2019				117	
9/10/2019					
10/1/2019			64.3		
10/2/2019	92.3	95.5			21
10/3/2019				110	

Constituent: Chloride (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19
8/30/2016	3.1 (B)								
8/31/2016		4.9	5.1						
9/1/2016				7	7.4				
9/6/2016						7.9 (B)			
9/7/2016							7.7 (B)	6.9 (B)	6.8 (B)
9/8/2016									
10/18/2016									
12/6/2016	3.4								
12/7/2016		4.8	5.2	7	7.6	7.6			
12/8/2016							7.2	6.8	6.6
3/21/2017	2.9	4.9	5.5						
3/22/2017				7.4	7.2	7.7	7.3	6.8	
3/23/2017									6.6
7/11/2017	3.4	5	5.7			8.1			
7/12/2017				8	7.3		7.4	6.7	6.6
10/17/2017	3.3								
10/18/2017		5.1	5.1	7.8		8.2	7.6	6.8	
10/19/2017					7.4				6.5
2/20/2018	3.3	5.1	5.5						
2/21/2018				7.2	7.6	7.3	7.4	7.1	7.6
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	2.9	4.9	5.1						
7/12/2018				7.5	7.1	7.2			6.3
9/12/2018	2.8	4.8							
9/13/2018			5	6.8	6.6	7.3		6.7	
9/14/2018									6.1
10/4/2018									
10/24/2018									
3/26/2019	3.3								
3/27/2019		5.2	4.7			7.3		6.5	
3/28/2019				7.4	6.4		7.3		6.4
9/10/2019			3.8						
10/1/2019	3.6								
10/2/2019		5.4		8		7.7	7.9		
10/3/2019					5.9			7	5.6

Constituent: Chloride (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	4				
10/18/2016		4.5	3.5		
12/6/2016		5			
12/7/2016			3.2		
12/8/2016	3.6			6.9	
3/21/2017		4.3			
3/22/2017	3.3				
3/23/2017			2.9	6.2	
7/11/2017	3	4.7	3.1		
7/12/2017				6	
10/17/2017		4.6	3		
10/18/2017	2.9				
10/19/2017				6.4	
2/20/2018		4.4	3		
2/21/2018	2.9			6.9	
4/12/2018					2.6
5/23/2018					2.5
6/13/2018					2.5
7/11/2018		4	2.8		2.6
7/12/2018	2.6			7.3	
9/12/2018		3.7			2.3
9/13/2018	2.3		2.2		
9/14/2018					
10/4/2018				7	2.7
10/24/2018					2.8
3/26/2019		3.8			
3/27/2019	2.4		3.1		2.5
3/28/2019				4.8	
9/10/2019					
10/1/2019			3.1		
10/2/2019	2.6	4.3			2.7
10/3/2019				4.1	

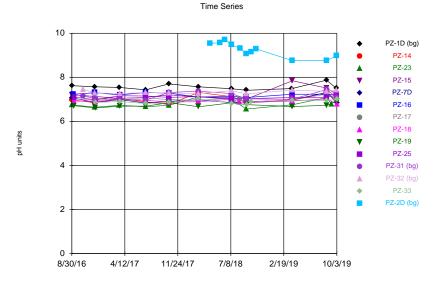
Constituent: Fluoride (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19
8/30/2016	0.06 (X)								
8/31/2016		0.13 (X)	0.13 (X)						
9/1/2016				0.06 (X)	<0.3				
9/6/2016						0.09 (X)			
9/7/2016							0.03 (X)	0.12 (X)	0.15 (X)
9/8/2016									
10/18/2016									
12/6/2016	0.06 (X)								
12/7/2016		0.07 (X)	0.13 (X)	0.09 (X)	0.15 (X)	0.09 (X)			
12/8/2016							0.18 (X)	0.18 (X)	0.12 (X)
3/21/2017	0.004 (X)	<0.3	0.05 (X)						
3/22/2017				0.11 (X)	0.09 (X)	0.04 (X)	0.09 (X)	0.08 (X)	
3/23/2017									0.14 (X)
7/11/2017	0.05 (X)	0.05 (X)	0.05 (X)			0.05 (X)			
7/12/2017				0.23 (X)	0.02 (X)		0.21 (X)	0.17 (X)	0.07 (X)
10/17/2017	<0.3								
10/18/2017		0.11 (X)	<0.3	0.19 (X)		0.04 (X)	0.24 (X)	0.06 (X)	
10/19/2017					<0.3				<0.3
2/20/2018	0.098 (X)	0.04 (X)	0.3 (X)						
2/21/2018				0.093 (X)	0.045 (X)	<0.3	0.24 (X)	0.086 (X)	0.37
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	<0.3	<0.3	0.077 (X)						
7/12/2018				<0.3	<0.3	<0.3			0.17 (X)
9/12/2018	0.034 (X)	<0.3							
9/13/2018			<0.3	0.15 (X)	<0.3	<0.3		<0.3	
9/14/2018									<0.3
10/4/2018									
10/24/2018									
3/26/2019	<0.3								
3/27/2019		<0.3	<0.3			<0.3		<0.3	
3/28/2019				0.1 (X)	<0.3		0.15 (X)		0.074 (X)
8/20/2019	<0.3								
8/21/2019		<0.3	<0.3	0.044 (X)		<0.3			
8/22/2019					<0.3		0.11 (X)	<0.3	0.1 (X)
9/10/2019			<0.3						
10/1/2019	0.062 (X)								
10/2/2019		0.056 (X)		0.075 (X)		0.053 (X)	0.063 (X)		
10/3/2019					0.041 (X)			0.043 (X)	0.084 (X)

Constituent: Fluoride (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	0.25 (X)				
10/18/2016		0.16 (X)	0.11 (X)		
12/6/2016		0.15 (X)			
12/7/2016			0.07 (X)		
12/8/2016	0.22 (X)			0.21 (X)	
3/21/2017		0.02 (X)			
3/22/2017	0.16 (X)				
3/23/2017			<0.3	0.18 (X)	
7/11/2017	0.23 (X)	0.06 (X)	0.02 (X)		
7/12/2017				0.06 (X)	
10/17/2017		0.05 (X)	<0.3		
10/18/2017	0.28 (X)				
10/19/2017				<0.3	
2/20/2018		0.21 (X)	<0.3		
2/21/2018	0.29 (X)			0.039 (X)	
4/12/2018					<0.3
5/23/2018					0.063 (X)
6/13/2018					0.11 (X)
7/11/2018		0.087 (X)	<0.3		<0.3
7/12/2018	0.21 (X)			<0.3	
9/12/2018		0.049 (X)			0.093 (X)
9/13/2018	0.22 (X)		<0.3		
9/14/2018					
10/4/2018				0.15 (X)	0.15 (X)
10/24/2018					0.29 (X)
3/26/2019		<0.3			
3/27/2019	0.37		<0.3		0.04 (X)
3/28/2019				<0.3	
8/20/2019			<0.3		
8/21/2019	0.11 (X)	<0.3			0.046 (X)
8/22/2019				<0.3	
9/10/2019					
10/1/2019			0.042 (X)		
10/2/2019	0.16 (X)	0.057 (X)			0.11 (X)
10/3/2019				0.06 (X)	

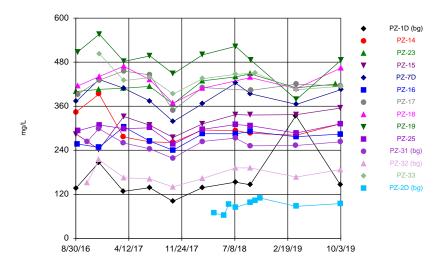
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Constituent: pH Analysis Run 2/24/2020 11:38 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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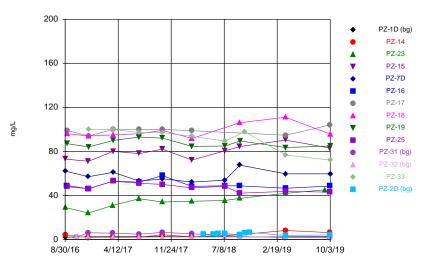




Constituent: Total Dissolved Solids Analysis Run 2/24/2020 11:38 AM View: App III all wells Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



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Constituent: Sulfate Analysis Run 2/24/2020 11:38 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: pH (pH units) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19
8/30/2016	7.62								
8/31/2016		6.97	6.75						
9/1/2016				7.21	7.07				
9/6/2016						7.23			
9/7/2016							7.02	6.92	6.71
9/8/2016									
10/18/2016									
12/6/2016	7.57								
12/7/2016		6.85	6.64	7.13	6.85	7.3			
12/8/2016							6.95	6.9	6.61
3/21/2017	7.54	7.04	6.73						
3/22/2017				7.04	6.99	7.2	7.05	7	
3/23/2017									6.69
7/11/2017	7.43	6.88	6.66			7.31			
7/12/2017				7.09	6.83		7.06	6.95	6.69
10/17/2017	7.7								
10/18/2017		6.77	6.73	7.2		7.28	6.99	6.88	
10/19/2017					6.91				6.85
2/20/2018	7.57	7.31	7.11						
2/21/2018				7.11	6.97	7.1	6.95	6.89	6.66
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	7.48	7.12	7						
7/12/2018				7.07	6.85	7.14	7.06	7.01	6.84
8/15/2018								6.87	
8/16/2018							7.01		
8/17/2018									
9/12/2018	7.41	6.87							
9/13/2018			6.56	7.01	6.88	7.08		6.86	
9/14/2018							6.83		6.76
10/4/2018									
10/24/2018									
3/26/2019	7.49								
3/27/2019		6.98	6.75			7.23		6.92	
3/28/2019				7.84	6.96		6.97		6.67
8/20/2019	7.87								
8/21/2019		7.31	7.08	7.51		7.23			
8/22/2019					7.31		7.24	7.02	6.73
9/10/2019			6.78						
10/1/2019	7.5								
10/2/2019		6.96		7.22		7.22	6.99		
10/3/2019					6.85			6.78	6.93

Constituent: pH (pH units) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

					• • •
	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	7.1				
10/18/2016		7.15	7.45		
12/6/2016		7.04			
12/7/2016			7.29		
12/8/2016	6.98			6.86	
3/21/2017		7.01			
3/22/2017	7.16				
3/23/2017			7.26	6.9	
7/11/2017	7.15	6.96	7.31		
7/12/2017				6.81	
10/17/2017		7.31	7.29		
10/18/2017	7.09				
10/19/2017				6.86	
2/20/2018		7.37	7.26		
2/21/2018	7.12			7.02	
4/12/2018					9.54
5/23/2018					9.57
6/13/2018					9.71
7/11/2018		7.26	7.39		9.48
7/12/2018	7.01			6.82	
8/15/2018					
8/16/2018					
8/17/2018					9.31
9/12/2018		7.02			9.07
9/13/2018	7.03		7.25		
9/14/2018				6.75	
10/4/2018				6.9	9.16
10/24/2018					9.29
3/26/2019		7			
3/27/2019	7.08		7.42		8.76
3/28/2019				6.96	
8/20/2019			7.36		
8/21/2019	7.09	7.44			8.76
8/22/2019				6.94	
9/10/2019					
10/1/2019			7.43		
10/2/2019	7.2	7.09			8.97
10/3/2019				7.01	

Constituent: Sulfate (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19
8/30/2016	2.1								
8/31/2016		4.1	29						
9/1/2016				73	62				
9/6/2016						49			
9/7/2016							99	96	87
9/8/2016									
10/18/2016									
12/6/2016	2.4								
12/7/2016		1.5	24	71	57	46			
12/8/2016							94	94	84
3/21/2017	2.5	2	31						
3/22/2017				80	61	53	100	95	
3/23/2017									90
7/11/2017	2.6	2	37			52			
7/12/2017				78	53		100	96	93
10/17/2017	2.5								
10/18/2017		4.2	34	82		58	100	99	
10/19/2017					55				92
2/20/2018	2.3	2.4	34.7						
2/21/2018				72.2	52.1	48.2	98.8	91.8	84.5
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	2.5	3.8	35.4						
7/12/2018				80.5	53.9	48.8			84.9
9/12/2018	2	4.3							
9/13/2018			37.4	84.4	67.5	48.7		106	
9/14/2018									89.5
10/4/2018									
10/24/2018									
3/26/2019	2.7								
3/27/2019		8.2	41.9			46.5		111	
3/28/2019				90.3	59.6		94.7		83.5
9/10/2019			45.1						
10/1/2019	2.8								
10/2/2019		6.2		83		48.5	104		
10/3/2019					59.6			95.8	84.9

Constituent: Sulfate (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)	
8/30/2016						
8/31/2016						
9/1/2016						
9/6/2016						
9/7/2016						
9/8/2016	48					
10/18/2016		2.2	2.3			
12/6/2016		6.1				
12/7/2016			1.9			
12/8/2016	46			100		
3/21/2017		5.7				
3/22/2017	53					
3/23/2017			1.7	100		
7/11/2017	51	4.8	1.8			
7/12/2017				97		
10/17/2017		6.4	1.9			
10/18/2017	50					
10/19/2017				97		
2/20/2018		5.2	2.1			
2/21/2018	46.8			93.6		
4/12/2018					4.8 (X)	
5/23/2018					4.5	
6/13/2018					5.3	
7/11/2018		3.6	2		5.4	
7/12/2018	48.3			89.4		
9/12/2018		2.7			4.4	
9/13/2018	42		2.1			
9/14/2018						
10/4/2018				97.8	5.8	
10/24/2018					6.2	
3/26/2019		1.6				
3/27/2019	43.7		2.4		3.7	
3/28/2019				76.7		
9/10/2019						
10/1/2019			2.2			
10/2/2019	43	1.6			4.1	
10/3/2019				72.1		

Constituent: Total Dissolved Solids (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells

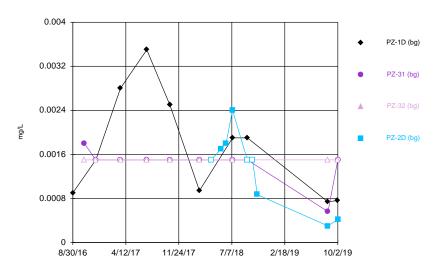
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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	PZ-1D (bg)	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19
8/30/2016	136								
8/31/2016		344	400						
9/1/2016				284	373				
9/6/2016						257			
9/7/2016							392	415	508
9/8/2016									
10/18/2016									
12/6/2016	207								
12/7/2016		393	406	242	433	248			
12/8/2016							431	441	556
3/21/2017	128	276	409						
3/22/2017				332	409	304	456	469	
3/23/2017									482
7/11/2017	138	263	414			265			
7/12/2017				308	374		445	432	497
10/17/2017	101								
10/18/2017		261	366	275		240	349	368	
10/19/2017					318				448
2/20/2018	138	295	429						
2/21/2018				312	367	285	411	409	500
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	153	294	440						
7/12/2018				337	423	285			523
9/12/2018	146	286							
9/13/2018			448	336	394	291		438	
9/14/2018							403		486
10/4/2018									
10/24/2018									
3/26/2019	334								
3/27/2019		281	410			277		408	
3/28/2019				337	365		420		378
9/10/2019			420						
10/1/2019	146								
10/2/2019		312		355		284	415		
10/3/2019					405			464	485

Constituent: Total Dissolved Solids (mg/L) Analysis Run 2/24/2020 11:41 AM View: App III all wells
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

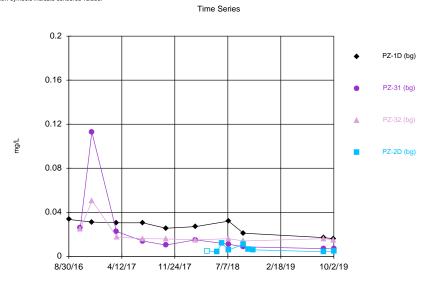
		PZ-25	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-2D (bg)
:	8/30/2016					
:	8/31/2016					
!	9/1/2016					
9	9/6/2016					
:	9/7/2016					
:	9/8/2016	293				
	10/18/2016		264	152		
	12/6/2016		299			
	12/7/2016			214		
	12/8/2016	309			503	
;	3/21/2017		260			
;	3/22/2017	299				
;	3/23/2017			165	430	
	7/11/2017	301	244	162		
	7/12/2017				438	
	10/17/2017		218	140		
	10/18/2017	256				
	10/19/2017				393	
:	2/20/2018		264	163		
:	2/21/2018	297			435	
	4/12/2018					69
!	5/23/2018					62
(6/13/2018					93
	7/11/2018		273	192		84
	7/12/2018	310			447	
!	9/12/2018		252			97
!	9/13/2018	307		192		
!	9/14/2018					
	10/4/2018				450	103
	10/24/2018					110
;	3/26/2019		253			
;	3/27/2019	287		167		87
;	3/28/2019				405	
!	9/10/2019					
	10/1/2019			187		
	10/2/2019	312	263			95
	10/3/2019				414	





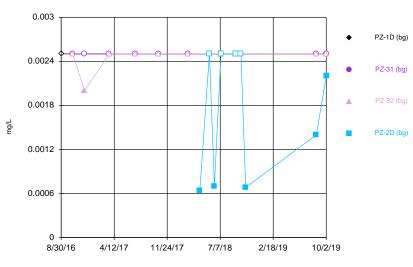
Constituent: Antimony Analysis Run 2/24/2020 4:16 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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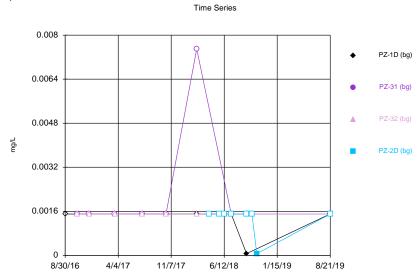
Constituent: Barium Analysis Run 2/24/2020 4:16 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Time Series



Constituent: Arsenic Analysis Run 2/24/2020 4:16 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Beryllium Analysis Run 2/24/2020 4:16 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Antimony (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	0.0009 (X)			
10/18/2016		0.0018 (X)	<0.003	
12/6/2016	<0.003	<0.003		
12/7/2016			<0.003	
3/21/2017	0.0028 (X)	<0.003		
3/23/2017			<0.003	
7/11/2017	0.0035	<0.003	<0.003	
10/17/2017	0.0025 (X)	<0.003	<0.003	
2/20/2018	0.00094 (X)	<0.003	<0.003	
4/12/2018				<0.003
5/23/2018				0.0017 (X)
6/13/2018				0.0018 (X)
7/11/2018	0.0019 (X)	<0.003	<0.003	0.0024 (X)
9/12/2018	0.0019 (X)	<0.003		<0.003
9/13/2018			<0.003	
10/4/2018				<0.003
10/24/2018				0.00087 (X)
8/20/2019	0.00074 (X)		<0.003	
8/21/2019		0.00056 (X)		0.0003 (X)
10/1/2019	0.00076 (X)		<0.003	
10/2/2019		<0.003		0.00042 (X)

Constituent: Arsenic (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

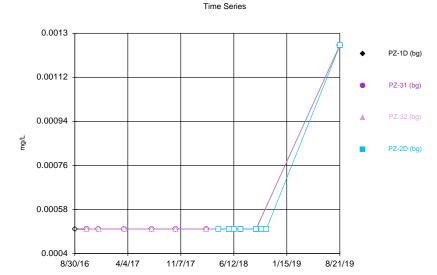
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.005			
10/18/2016		<0.005	<0.005	
12/6/2016	<0.005	<0.005		
12/7/2016			0.002 (X)	
3/21/2017	<0.005	<0.005		
3/23/2017			<0.005	
7/11/2017	<0.005	<0.005	<0.005	
10/17/2017	<0.005	<0.005	<0.005	
2/20/2018	<0.005	<0.005	<0.005	
4/12/2018				0.00064 (X)
5/23/2018				<0.005
6/13/2018				0.0007 (X)
7/11/2018	<0.005	<0.005	<0.005	<0.005
9/12/2018	<0.005	<0.005		<0.005
9/13/2018			<0.005	
10/4/2018				<0.005
10/24/2018				0.00068 (X)
8/20/2019	<0.005		<0.005	
8/21/2019		<0.005		0.0014 (X)
10/1/2019	<0.005		<0.005	
10/2/2019		<0.005		0.0022 (X)

Constituent: Barium (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

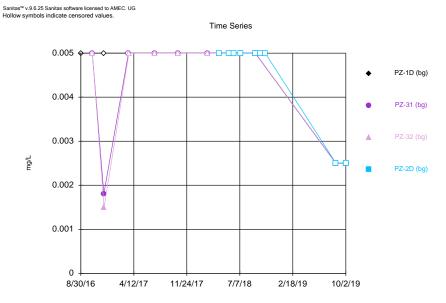
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	0.0335			
10/18/2016		0.0257	0.0248	
12/6/2016	0.0311	0.113		
12/7/2016			0.0506	
3/21/2017	0.0305	0.0226		
3/23/2017			0.0175	
7/11/2017	0.0305	0.0139	0.0161	
10/17/2017	0.0255	0.0103	0.0158	
2/20/2018	0.027	0.015	0.015	
4/12/2018				<0.01
5/23/2018				0.0042 (X)
6/13/2018				0.012
7/11/2018	0.032	0.011	0.016	0.0056 (X)
9/12/2018	0.021	0.0087 (X)		0.011
9/13/2018			0.014	
10/4/2018				0.0066 (X)
10/24/2018				0.0059 (X)
8/20/2019	0.017		0.016	
8/21/2019		0.007 (X)		0.0042 (X)
10/1/2019	0.016		0.015	
10/2/2019		0.0067 (X)		0.0046 (X)

Constituent: Beryllium (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

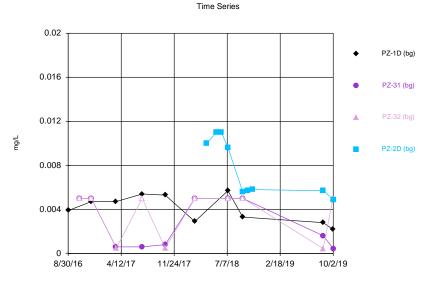
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.003			
10/18/2016		<0.003	<0.003	
12/6/2016	<0.003	<0.003		
12/7/2016			<0.003	
3/21/2017	<0.003	<0.003		
3/23/2017			<0.003	
7/11/2017	<0.003	<0.003	<0.003	
10/17/2017	<0.003	<0.003	<0.003	
2/20/2018	<0.003	<0.015	<0.003	
4/12/2018				<0.003
5/23/2018				<0.003
6/13/2018				<0.003
7/11/2018	<0.003	<0.003	<0.003	<0.003
9/12/2018	6.1E-05 (X)	<0.003		<0.003
9/13/2018			<0.003	
10/4/2018				<0.003
10/24/2018				6E-05 (X)
8/20/2019	<0.003		<0.003	
8/21/2019		<0.003		<0.003



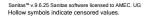
Constituent: Cadmium Analysis Run 2/24/2020 4:16 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

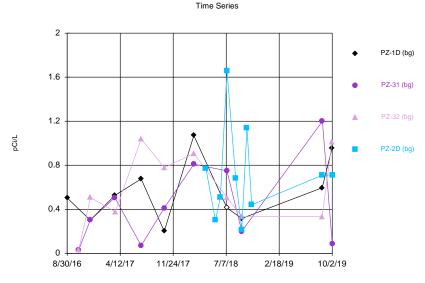


Constituent: Cobalt Analysis Run 2/24/2020 4:16 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



Constituent: Chromium Analysis Run 2/24/2020 4:16 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4





Constituent: Combined Radium 226 + Radium 228 Analysis Run 2/24/2020 4:16 PM View: App IV backgro
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Cadmium (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

·	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.001			
10/18/2016		<0.001	<0.001	
12/6/2016	<0.001	<0.001		
12/7/2016			<0.001	
3/21/2017	<0.001	<0.001		
3/23/2017			<0.001	
7/11/2017	<0.001	<0.001	<0.001	
10/17/2017	<0.001	<0.001	<0.001	
2/20/2018	<0.001	<0.001	<0.001	
4/12/2018				<0.001
5/23/2018				<0.001
6/13/2018				<0.001
7/11/2018	<0.001	<0.001	<0.001	<0.001
9/12/2018	<0.001	<0.001		<0.001
9/13/2018			<0.001	
10/4/2018				<0.001
10/24/2018				<0.001
8/20/2019	<0.0025		<0.0025	
8/21/2019		<0.0025		<0.0025

Constituent: Chromium (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	0.0039 (X)			
10/18/2016		<0.01	<0.01	
12/6/2016	0.0047 (X)	<0.01		
12/7/2016			<0.01	
3/21/2017	0.0047 (X)	0.0006 (X)		
3/23/2017			0.0005 (X)	
7/11/2017	0.0054 (X)	0.0006 (X)	<0.01	
10/17/2017	0.0053 (X)	0.0008 (X)	0.0005 (X)	
2/20/2018	0.0029 (X)	<0.01	<0.01	
4/12/2018				0.01
5/23/2018				0.011
6/13/2018				0.011
7/11/2018	0.0057 (X)	<0.01	<0.01	0.0096 (X)
9/12/2018	0.0033 (X)	<0.01		0.0056 (X)
9/13/2018			<0.01	
10/4/2018				0.0057 (X)
10/24/2018				0.0058 (X)
8/20/2019	0.0028 (X)		0.00044 (X)	
8/21/2019		0.0016 (X)		0.0057 (X)
10/1/2019	0.0022 (X)		<0.01	
10/2/2019		0.00043 (X)		0.0049 (X)

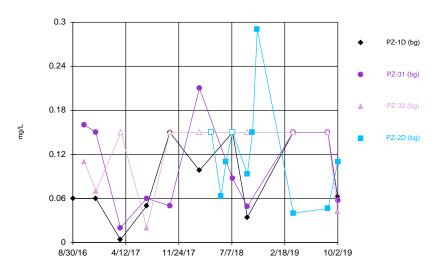
Constituent: Cobalt (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.01			
10/18/2016		<0.01	<0.01	
12/6/2016	<0.01	0.0018 (X)		
12/7/2016			0.0015 (X)	
3/21/2017	<0.01	<0.01		
3/23/2017			<0.01	
7/11/2017	<0.01	<0.01	<0.01	
10/17/2017	<0.01	<0.01	<0.01	
2/20/2018	<0.01	<0.01	<0.01	
4/12/2018				<0.01
5/23/2018				<0.01
6/13/2018				<0.01
7/11/2018	<0.01	<0.01	<0.01	<0.01
9/12/2018	<0.01	<0.01		<0.01
9/13/2018			<0.01	
10/4/2018				<0.01
10/24/2018				<0.01
8/20/2019	<0.005		<0.005	
8/21/2019		<0.005		<0.005
10/1/2019	<0.005		<0.005	
10/2/2019		<0.005		<0.005

Constituent: Combined Radium 226 + Radium 228 (pCi/L) Analysis Run 2/24/2020 4:18 PM View: App IV background Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

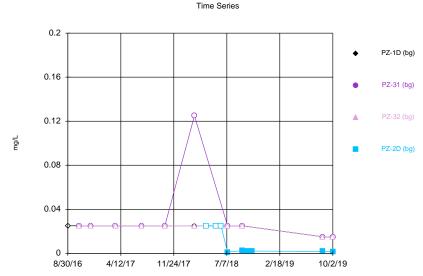
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	0.503			
10/18/2016		0.0311	0.0333	
12/6/2016	0.302	0.301		
12/7/2016			0.507	
3/21/2017	0.526	0.506		
3/23/2017			0.378	
7/11/2017	0.676 (U)	0.0701 (U)	1.04	
10/17/2017	0.201 (U)	0.412 (U)	0.779 (U)	
2/20/2018	1.07	0.81	0.906	
4/12/2018				0.774
5/23/2018				0.301 (U)
6/13/2018				0.508 (U)
7/11/2018	<0.825 (U)	0.749 (U)	0.505 (U)	1.66
8/17/2018				0.683 (U)
9/12/2018	0.317 (U)	0.2 (U)		0.217 (U)
9/13/2018			0.334 (U)	
10/4/2018				1.14
10/24/2018				0.441 (U)
8/20/2019	0.595 (U)		0.334 (U)	
8/21/2019		1.2 (U)		0.71 (U)
10/1/2019	0.953 (U)		1.01 (U)	
10/2/2019		0.0883 (U)		0.712 (U)





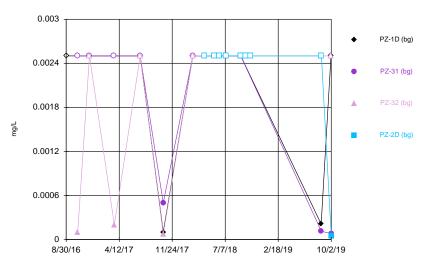
Constituent: Fluoride Analysis Run 2/24/2020 4:17 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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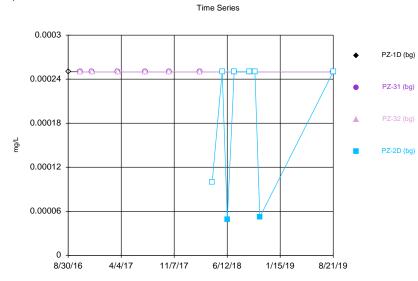
Constituent: Lithium Analysis Run 2/24/2020 4:17 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4





Constituent: Lead Analysis Run 2/24/2020 4:17 PM View: App IV background Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Mercury Analysis Run 2/24/2020 4:17 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Fluoride (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	0.06 (X)			
10/18/2016		0.16 (X)	0.11 (X)	
12/6/2016	0.06 (X)	0.15 (X)		
12/7/2016			0.07 (X)	
3/21/2017	0.004 (X)	0.02 (X)		
3/23/2017			<0.3	
7/11/2017	0.05 (X)	0.06 (X)	0.02 (X)	
10/17/2017	<0.3	0.05 (X)	<0.3	
2/20/2018	0.098 (X)	0.21 (X)	<0.3	
4/12/2018				<0.3
5/23/2018				0.063 (X)
6/13/2018				0.11 (X)
7/11/2018	<0.3	0.087 (X)	<0.3	<0.3
9/12/2018	0.034 (X)	0.049 (X)		0.093 (X)
9/13/2018			<0.3	
10/4/2018				0.15 (X)
10/24/2018				0.29 (X)
3/26/2019	<0.3	<0.3		
3/27/2019			<0.3	0.04 (X)
8/20/2019	<0.3		<0.3	
8/21/2019		<0.3		0.046 (X)
10/1/2019	0.062 (X)		0.042 (X)	
10/2/2019		0.057 (X)		0.11 (X)

Constituent: Lead (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.005			
10/18/2016		<0.005	0.0001 (X)	
12/6/2016	<0.005	<0.005		
12/7/2016			<0.005	
3/21/2017	<0.005	<0.005		
3/23/2017			0.0002 (X)	
7/11/2017	<0.005	<0.005	<0.005	
10/17/2017	0.0001 (X)	0.0005 (X)	7E-05 (X)	
2/20/2018	<0.005	<0.005	<0.005	
4/12/2018				<0.005
5/23/2018				<0.005
6/13/2018				<0.005
7/11/2018	<0.005	<0.005	<0.005	<0.005
9/12/2018	<0.005	<0.005		<0.005
9/13/2018			<0.005	
10/4/2018				<0.005
10/24/2018				<0.005
8/20/2019	0.00021 (X)		<0.005	
8/21/2019		0.00011 (X)		<0.005
10/1/2019	<0.005		<0.005	
10/2/2019		8.1E-05 (X)		4.7E-05 (X)

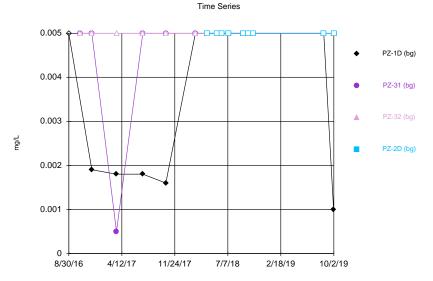
Constituent: Lithium (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.05			
10/18/2016		<0.05	<0.05	
12/6/2016	<0.05	<0.05		
12/7/2016			<0.05	
3/21/2017	<0.05	<0.05		
3/23/2017			<0.05	
7/11/2017	<0.05	<0.05	<0.05	
10/17/2017	<0.05	<0.05	<0.05	
2/20/2018	<0.05	<0.25	<0.05	
4/12/2018				<0.05
5/23/2018				<0.05
6/13/2018				<0.05
7/11/2018	<0.05	<0.05	<0.05	0.0011 (X)
9/12/2018	<0.05	<0.05		0.0025 (X)
9/13/2018			<0.05	
10/4/2018				0.0021 (X)
10/24/2018				0.0021 (X)
8/20/2019	<0.03		<0.03	
8/21/2019		<0.03		0.0018 (X)
10/1/2019	<0.03		<0.03	
10/2/2019		<0.03		0.0016 (X)

Constituent: Mercury (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

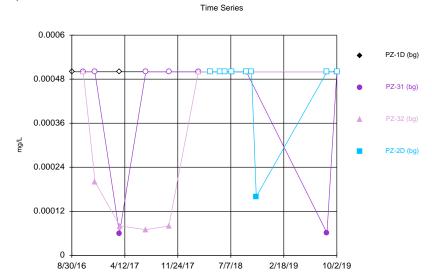
	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.0005			
10/18/2016		<0.0005	<0.0005	
12/6/2016	<0.0005	<0.0005		
12/7/2016			<0.0005	
3/21/2017	<0.0005	<0.0005		
3/23/2017			<0.0005	
7/11/2017	<0.0005	<0.0005	<0.0005	
10/17/2017	<0.0005	<0.0005	<0.0005	
2/20/2018	<0.0005	<0.0005	<0.0005	
4/12/2018				<0.0002
5/23/2018				<0.0005
6/13/2018				4.9E-05 (X)
7/11/2018	<0.0005	<0.0005	<0.0005	<0.0005
9/12/2018	<0.0005	<0.0005		<0.0005
9/13/2018			<0.0005	
10/4/2018				<0.0005
10/24/2018				5.2E-05 (X)
8/20/2019	<0.0005		<0.0005	
8/21/2019		<0.0005		<0.0005

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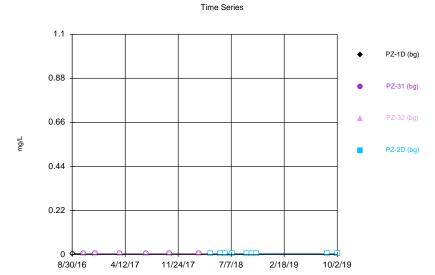
Constituent: Molybdenum Analysis Run 2/24/2020 4:17 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Thallium Analysis Run 2/24/2020 4:17 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Selenium Analysis Run 2/24/2020 4:17 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Molybdenum (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.01			
10/18/2016		<0.01	<0.01	
12/6/2016	0.0019 (X)	<0.01		
12/7/2016			<0.01	
3/21/2017	0.0018 (X)	0.0005 (X)		
3/23/2017			<0.01	
7/11/2017	0.0018 (X)	<0.01	<0.01	
10/17/2017	0.0016 (X)	<0.01	<0.01	
2/20/2018	<0.01	<0.01	<0.01	
4/12/2018				<0.01
5/23/2018				<0.01
6/13/2018				<0.01
7/11/2018	<0.01	<0.01	<0.01	<0.01
9/12/2018	<0.01	<0.01		<0.01
9/13/2018			<0.01	
10/4/2018				<0.01
10/24/2018				<0.01
8/20/2019	<0.01		<0.01	
8/21/2019		<0.01		<0.01
10/1/2019	0.001 (X)		<0.01	
10/2/2019		<0.01		<0.01

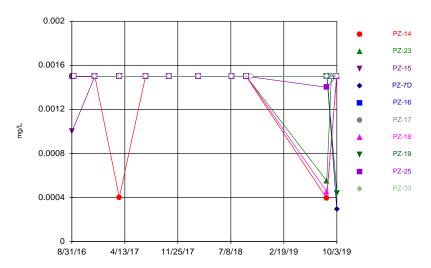
Constituent: Selenium (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

·	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.01			
10/18/2016		<0.01	<0.01	
12/6/2016	<0.01	<0.01		
12/7/2016			<0.01	
3/21/2017	<0.01	<0.01		
3/23/2017			<0.01	
7/11/2017	<0.01	<0.01	<0.01	
10/17/2017	<0.01	<0.01	<0.01	
2/20/2018	<0.01	<0.01	<0.01	
4/12/2018				<0.01
5/23/2018				<0.01
6/13/2018				<0.01
7/11/2018	<0.01	<0.01	<0.01	<0.01
9/12/2018	<0.01	<0.01		<0.01
9/13/2018			<0.01	
10/4/2018				<0.01
10/24/2018				<0.01
8/20/2019	<0.01		<0.01	
8/21/2019		<0.01		<0.01
10/1/2019	<0.01		<0.01	
10/2/2019		<0.01		<0.01

Constituent: Thallium (mg/L) Analysis Run 2/24/2020 4:18 PM View: App IV background Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

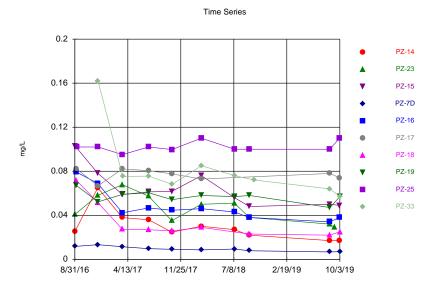
·	PZ-1D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016	<0.001			
10/18/2016		<0.001	<0.001	
12/6/2016	<0.001	<0.001		
12/7/2016			0.0002 (X)	
3/21/2017	<0.001	6E-05 (X)		
3/23/2017			8E-05 (X)	
7/11/2017	<0.001	<0.001	7E-05 (X)	
10/17/2017	<0.001	<0.001	8E-05 (X)	
2/20/2018	<0.001	<0.001	<0.001	
4/12/2018				<0.001
5/23/2018				<0.001
6/13/2018				<0.001
7/11/2018	<0.001	<0.001	<0.001	<0.001
9/12/2018	<0.001	<0.001		<0.001
9/13/2018			<0.001	
10/4/2018				<0.001
10/24/2018				0.00016 (X)
8/20/2019	<0.001		<0.001	
8/21/2019		6.1E-05 (X)		<0.001
10/1/2019	<0.001	. ,	<0.001	
10/2/2019		<0.001		<0.001





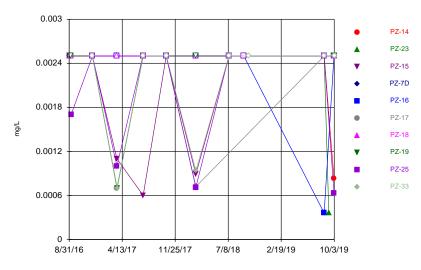
Constituent: Antimony Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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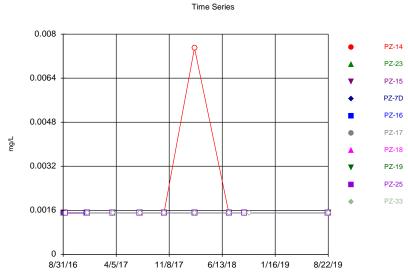
Constituent: Barium Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Time Series



Constituent: Arsenic Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Beryllium Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Antimony (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.003	<0.003							
9/1/2016			0.001 (X)	<0.003					
9/6/2016					<0.003				
9/7/2016						<0.003	<0.003	<0.003	
9/8/2016									<0.003
12/7/2016	<0.003	<0.003	<0.003	<0.003	<0.003				
12/8/2016						<0.003	<0.003	<0.003	<0.003
3/21/2017	0.0004 (X)	<0.003							
3/22/2017			<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
3/23/2017								<0.003	
7/11/2017	<0.003	<0.003			<0.003				<0.003
7/12/2017			<0.003	<0.003		<0.003	<0.003	<0.003	
10/18/2017	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003		<0.003
10/19/2017				<0.003				<0.003	
2/20/2018	<0.003	<0.003							
2/21/2018			<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
7/11/2018	<0.003	<0.003							
7/12/2018			<0.003	<0.003	<0.003			<0.003	<0.003
9/12/2018	<0.003								
9/13/2018		<0.003	<0.003	<0.003	<0.003		<0.003		<0.003
9/14/2018								<0.003	
10/4/2018									
8/21/2019	0.00039 (X)	0.00055 (X)	<0.003		<0.003				0.0014 (X)
8/22/2019				<0.003		<0.003	0.00045 (X)	<0.003	
9/10/2019		<0.003							
10/2/2019	<0.003		<0.003		<0.003	<0.003			<0.003
10/3/2019				0.00029 (X)			<0.003	0.00044 (X)	

Constituent: Antimony (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.003
3/21/2017	
3/22/2017	
3/23/2017	<0.003
7/11/2017	
7/12/2017	<0.003
10/18/2017	
10/19/2017	<0.003
2/20/2018	
2/21/2018	<0.003
7/11/2018	
7/12/2018	<0.003
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.003
8/21/2019	
8/22/2019	<0.003
9/10/2019	
10/2/2019	
10/3/2019	<0.003

Constituent: Arsenic (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.005	<0.005							
9/1/2016			<0.005	<0.005					
9/6/2016					<0.005				
9/7/2016						<0.005	<0.005	<0.005	
9/8/2016									0.0017 (X)
12/7/2016	<0.005	<0.005	<0.005	<0.005	<0.005				
12/8/2016						<0.005	<0.005	<0.005	<0.005
3/21/2017	<0.005	<0.005							
3/22/2017			0.0011 (X)	<0.005	<0.005	0.0007 (X)	<0.005		0.001 (X)
3/23/2017								0.0007 (X)	
7/11/2017	<0.005	<0.005			<0.005				<0.005
7/12/2017			0.0006 (X)	<0.005		<0.005	<0.005	<0.005	
10/18/2017	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		<0.005
10/19/2017				<0.005				<0.005	
2/20/2018	<0.005	<0.005							
2/21/2018			0.00089 (X)	<0.005	<0.005	0.00072 (X)	<0.005	<0.005	0.00071 (X)
7/11/2018	<0.005	<0.005							
7/12/2018			<0.005	<0.005	<0.005			<0.005	<0.005
9/12/2018	<0.005								
9/13/2018		<0.005	<0.005	<0.005	<0.005		<0.005		<0.005
9/14/2018								<0.005	
10/4/2018									
8/21/2019	<0.005	<0.005	<0.005		0.00036 (X)				<0.005
8/22/2019				<0.005		<0.005	<0.005	<0.005	
9/10/2019		0.00036 (X)							
10/2/2019	0.00083 (X)		<0.005		<0.005	<0.005			0.00063 (X)
10/3/2019				<0.005			<0.005	<0.005	

Constituent: Arsenic (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.005
3/21/2017	
3/22/2017	
3/23/2017	0.0007 (X)
7/11/2017	
7/12/2017	<0.005
10/18/2017	
10/19/2017	<0.005
2/20/2018	
2/21/2018	0.00094 (X)
7/11/2018	
7/12/2018	<0.005
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.005
8/21/2019	
8/22/2019	<0.005
9/10/2019	
10/2/2019	
10/3/2019	<0.005

Constituent: Barium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	0.0253	0.0407							
9/1/2016			0.103	0.0117					
9/6/2016					0.0794				
9/7/2016						0.0823	0.0717	0.067	
9/8/2016									0.102
12/7/2016	0.065	0.0581	0.0781	0.0133	0.0689				
12/8/2016						0.0668	0.0513	0.0522	0.102
3/21/2017	0.0379	0.0678							
3/22/2017			0.0589	0.0114	0.0423	0.0821	0.0273		0.0951
3/23/2017								0.0591	
7/11/2017	0.036	0.0574			0.0467				0.102
7/12/2017			0.0613	0.0097 (X)		0.0805	0.0269	0.0604	
10/18/2017	0.0247	0.0351	0.0617		0.0446	0.0776	0.0258		0.0997
10/19/2017				0.0091 (X)				0.0542	
2/20/2018	0.03	0.05							
2/21/2018			0.076	0.0086 (X)	0.046	0.073	0.029	0.058	0.11
7/11/2018	0.027	0.051							
7/12/2018			0.056	0.0093 (X)	0.043			0.057	0.1
9/12/2018	0.022								
9/13/2018		0.038	0.048	0.0078 (X)	0.038		0.023		0.1
9/14/2018								0.058	
10/4/2018									
8/21/2019	0.017	0.032	0.05		0.034				0.1
8/22/2019				0.0067 (X)		0.078	0.022	0.047	
9/10/2019		0.029							
10/2/2019	0.017		0.049		0.038	0.074			0.11
10/3/2019				0.007 (X)			0.025	0.057	

Constituent: Barium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

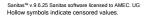
	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	0.162
3/21/2017	
3/22/2017	
3/23/2017	0.0753
7/11/2017	
7/12/2017	0.0756
10/18/2017	
10/19/2017	0.0681
2/20/2018	
2/21/2018	0.085
7/11/2018	
7/12/2018	0.076
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	0.072
8/21/2019	
8/22/2019	0.064
9/10/2019	
10/2/2019	
10/3/2019	0.057

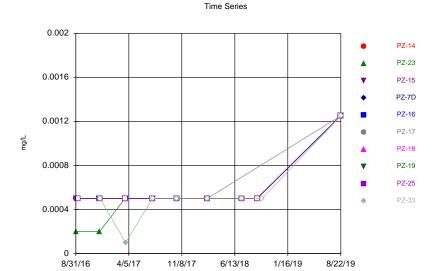
Constituent: Beryllium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.003	<0.003							
9/1/2016			<0.003	<0.003					
9/6/2016					<0.003				
9/7/2016						<0.003	<0.003	<0.003	
9/8/2016									<0.003
12/7/2016	<0.003	<0.003	<0.003	<0.003	<0.003				
12/8/2016						<0.003	<0.003	<0.003	<0.003
3/21/2017	<0.003	<0.003							
3/22/2017			<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
3/23/2017								<0.003	
7/11/2017	<0.003	<0.003			<0.003				<0.003
7/12/2017			<0.003	<0.003		<0.003	<0.003	<0.003	
10/18/2017	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003		<0.003
10/19/2017				<0.003				<0.003	
2/20/2018	<0.015	<0.003							
2/21/2018			<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
7/11/2018	<0.003	<0.003							
7/12/2018			<0.003	<0.003	<0.003			<0.003	<0.003
9/12/2018	<0.003								
9/13/2018		<0.003	<0.003	<0.003	<0.003		<0.003		<0.003
9/14/2018								<0.003	
10/4/2018									
8/21/2019	<0.003	<0.003	<0.003		<0.003				<0.003
8/22/2019				<0.003		<0.003	<0.003	<0.003	

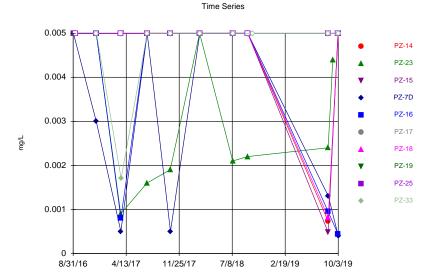
Constituent: Beryllium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33			
8/31/2016				
9/1/2016				
9/6/2016				
9/7/2016				
9/8/2016				
12/7/2016				
12/8/2016	<0.003			
3/21/2017				
3/22/2017				
3/23/2017	<0.003			
7/11/2017				
7/12/2017	<0.003			
10/18/2017				
10/19/2017	<0.003			
2/20/2018				
2/21/2018	<0.003			
7/11/2018				
7/12/2018	<0.003			
9/12/2018				
9/13/2018				
9/14/2018				
10/4/2018	<0.003			
8/21/2019				
8/22/2019	<0.003			



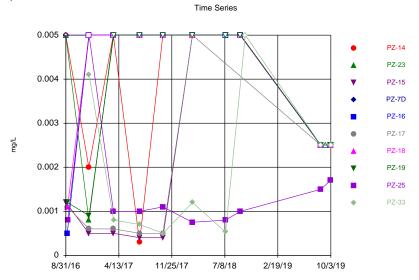


Constituent: Cadmium Analysis Run 2/24/2020 3:10 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4



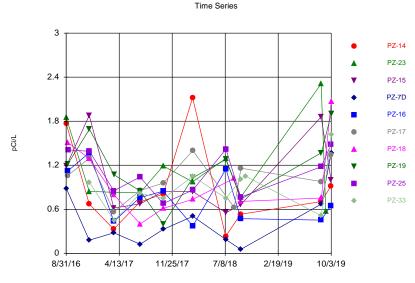
Constituent: Chromium Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Cobalt Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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Constituent: Combined Radium 226 + Radium 228 Analysis Run 2/24/2020 3:10 PM View: App IV downgr Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Cadmium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.001	0.0002 (X)							
9/1/2016			<0.001	<0.001					
9/6/2016					<0.001				
9/7/2016						<0.001	<0.001	<0.001	
9/8/2016									<0.001
12/7/2016	<0.001	0.0002 (X)	<0.001	<0.001	<0.001				
12/8/2016						<0.001	<0.001	<0.001	<0.001
3/21/2017	<0.001	<0.001							
3/22/2017			<0.001	<0.001	<0.001	<0.001	<0.001		<0.001
3/23/2017								<0.001	
7/11/2017	<0.001	<0.001			<0.001				<0.001
7/12/2017			<0.001	<0.001		<0.001	<0.001	<0.001	
10/18/2017	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		<0.001
10/19/2017				<0.001				<0.001	
2/20/2018	<0.001	<0.001							
2/21/2018			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
7/11/2018	<0.001	<0.001							
7/12/2018			<0.001	<0.001	<0.001			<0.001	<0.001
9/12/2018	<0.001								
9/13/2018		<0.001	<0.001	<0.001	<0.001		<0.001		<0.001
9/14/2018								<0.001	
10/4/2018									
8/21/2019	<0.0025	<0.0025	<0.0025		<0.0025				<0.0025
8/22/2019				<0.0025		<0.0025	<0.0025	<0.0025	

Constituent: Cadmium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.001
3/21/2017	
3/22/2017	
3/23/2017	0.0001 (X)
7/11/2017	
7/12/2017	<0.001
10/18/2017	
10/19/2017	<0.001
2/20/2018	
2/21/2018	<0.001
7/11/2018	
7/12/2018	<0.001
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.001
8/21/2019	
8/22/2019	<0.0025

Constituent: Chromium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.01	<0.01							
9/1/2016			<0.01	<0.01					
9/6/2016					<0.01				
9/7/2016						<0.01	<0.01	<0.01	
9/8/2016									<0.01
12/7/2016	<0.01	<0.01	<0.01	0.003 (X)	<0.01				
12/8/2016						<0.01	<0.01	<0.01	<0.01
3/21/2017	<0.01	0.0009 (X)							
3/22/2017			<0.01	0.0005 (X)	0.0008 (X)	<0.01	<0.01		<0.01
3/23/2017								<0.01	
7/11/2017	<0.01	0.0016 (X)			<0.01				<0.01
7/12/2017			<0.01	<0.01		<0.01	<0.01	<0.01	
10/18/2017	<0.01	0.0019 (X)	<0.01		<0.01	<0.01	<0.01		<0.01
10/19/2017				0.0005 (X)				<0.01	
2/20/2018	<0.01	<0.01							
2/21/2018			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7/11/2018	<0.01	0.0021 (X)							
7/12/2018			<0.01	<0.01	<0.01			<0.01	<0.01
9/12/2018	<0.01								
9/13/2018		0.0022 (X)	<0.01	<0.01	<0.01		<0.01		<0.01
9/14/2018								<0.01	
10/4/2018									
8/21/2019	0.00073 (X)	0.0024 (X)	0.00048 (X)		0.00095 (X)				<0.01
8/22/2019				0.0013 (X)		<0.01	0.00081 (X)	<0.01	
9/10/2019		0.0044 (X)							
10/2/2019	<0.01		<0.01		0.00044 (X)	<0.01			<0.01
10/3/2019				0.0004 (X)			<0.01	<0.01	
	9/1/2016 9/6/2016 9/6/2016 9/7/2016 9/8/2016 12/7/2016 12/8/2016 3/21/2017 3/22/2017 3/23/2017 7/11/2017 7/12/2017 10/18/2017 2/20/2018 2/21/2018 7/11/2018 9/12/2018 9/12/2018 9/12/2018 9/12/2018 9/12/2018 9/12/2018 9/12/2018 9/12/2018 9/12/2019 9/10/2019 10/2/2019	8/31/2016	8/31/2016	8/31/2016	8/31/2016 <0.01	8/31/2016 <0.01	8/31/2016 <0.01	8/31/2016 <0.01 <	831/2016 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01

Constituent: Chromium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.01
3/21/2017	
3/22/2017	
3/23/2017	0.0017 (X)
7/11/2017	
7/12/2017	<0.01
10/18/2017	
10/19/2017	<0.01
2/20/2018	
2/21/2018	<0.01
7/11/2018	
7/12/2018	<0.01
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.01
8/21/2019	
8/22/2019	<0.01
9/10/2019	
10/2/2019	
10/3/2019	<0.01

Constituent: Cobalt (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.01	<0.01							
9/1/2016			0.0012 (X)	<0.01					
9/6/2016					0.0005 (X)				
9/7/2016						0.0011 (X)	0.0011 (X)	0.0012 (X)	
9/8/2016									0.0008 (X)
12/7/2016	0.002 (X)	0.0008 (X)	0.0005 (X)	<0.01	<0.01				
12/8/2016						0.0006 (X)	<0.01	0.0009 (X)	<0.01
3/21/2017	<0.01	<0.01							
3/22/2017			0.0005 (X)	<0.01	<0.01	0.0006 (X)	<0.01		0.001 (X)
3/23/2017								<0.01	
7/11/2017	0.0003 (X)	<0.01			<0.01				0.001 (X)
7/12/2017			0.0004 (X)	<0.01		0.0005 (X)	<0.01	<0.01	
10/18/2017	<0.01	<0.01	0.0004 (X)		<0.01	0.0005 (X)	<0.01		0.0011 (X)
10/19/2017				<0.01				<0.01	
2/20/2018	<0.01	<0.01							
2/21/2018			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00075 (X)
7/11/2018	<0.01	<0.01							
7/12/2018			<0.01	<0.01	<0.01			<0.01	0.0008 (X)
9/12/2018	<0.01								
9/13/2018		<0.01	<0.01	<0.01	<0.01		<0.01		0.001 (X)
9/14/2018								<0.01	
10/4/2018									
8/21/2019	<0.005	<0.005	<0.005		<0.005				0.0015 (X)
8/22/2019				<0.005		<0.005	<0.005	<0.005	
9/10/2019		<0.005							
10/2/2019	<0.005		<0.005		<0.005	<0.005			0.0017 (X)
10/3/2019				<0.005			<0.005	<0.005	

Constituent: Cobalt (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	0.0041 (X)
3/21/2017	
3/22/2017	
3/23/2017	0.0008 (X)
7/11/2017	
7/12/2017	0.0007 (X)
10/18/2017	
10/19/2017	0.0005 (X)
2/20/2018	
2/21/2018	0.0012 (X)
7/11/2018	
7/12/2018	0.00053 (X)
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.01
8/21/2019	
8/22/2019	<0.005
9/10/2019	
10/2/2019	
10/3/2019	<0.005

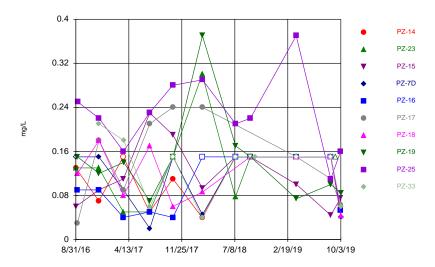
Constituent: Combined Radium 226 + Radium 228 (pCi/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	1.77	1.85							
9/1/2016			1.19	0.88					
9/6/2016					1.12				
9/7/2016						1.06	1.51	1.22	
9/8/2016									1.41
12/7/2016	0.672	0.844	1.88	0.179	1.37				
12/8/2016						1.3	1.29	1.69	1.39
3/21/2017	0.33	0.832							
3/22/2017			0.617	0.279	0.435	0.566	0.799		0.852
3/23/2017								1.07	
7/11/2017	0.701 (U)	0.824 (U)			0.76 (U)				1.04
7/12/2017			0.674 (U)	0.125 (U)		0.856 (U)	0.4 (U)	0.849 (U)	
10/18/2017	0.808 (U)	1.19	0.844 (U)		0.847 (U)	0.957	0.613 (U)		0.678 (U)
10/19/2017				0.329 (U)				0.398 (U)	
2/20/2018	2.12	0.975							
2/21/2018			0.842	0.504	0.373	1.4	0.736	1.03	0.863
7/11/2018	0.232 (U)	1.29							
7/12/2018			0.552 (U)	0.188 (U)	1.15 (U)			1.28 (U)	1.42
8/15/2018							1.02 (U)		
8/16/2018						0.625 (U)			
9/12/2018	0.532 (U)								
9/13/2018		0.765 (U)	0.662 (U)	0.0542 (U)	0.472 (U)		0.708 (U)		0.766 (U)
9/14/2018						1.16		0.74 (U)	
10/4/2018									
8/21/2019	0.705 (U)	2.31	1.86		0.453 (U)				1.18 (U)
8/22/2019				0.672 (U)		0.977 (U)	0.753 (U)	1.37	
9/10/2019		0.575 (U)							
10/2/2019	0.915 (U)		1 (U)		0.65 (U)	1.34 (U)			1.48
10/3/2019				1.37			2.07	1.9	

Constituent: Combined Radium 226 + Radium 228 (pCi/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

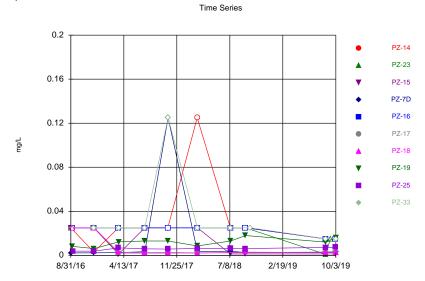
	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	0.968
3/21/2017	
3/22/2017	
3/23/2017	0.444
7/11/2017	
7/12/2017	0.814 (U)
10/18/2017	
10/19/2017	0.748 (U)
2/20/2018	
2/21/2018	1.05
7/11/2018	
7/12/2018	0.751 (U)
8/15/2018	
8/16/2018	
9/12/2018	
9/13/2018	
9/14/2018	1.01 (U)
10/4/2018	1.05
8/21/2019	
8/22/2019	0.513 (U)
9/10/2019	
10/2/2019	
10/3/2019	1.62 (U)





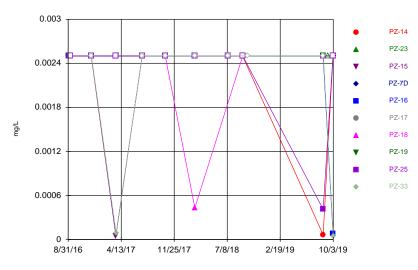
Constituent: Fluoride Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

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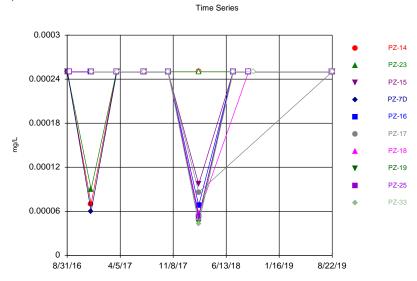
Constituent: Lithium Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Time Series



Constituent: Lead Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Sanitas $^{\text{\tiny{TM}}}$ v.9.6.25 Sanitas software licensed to AMEC. UG Hollow symbols indicate censored values.



Constituent: Mercury Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Fluoride (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	0.13 (X)	0.13 (X)							
9/1/2016			0.06 (X)	<0.3					
9/6/2016					0.09 (X)				
9/7/2016						0.03 (X)	0.12 (X)	0.15 (X)	
9/8/2016									0.25 (X)
12/7/2016	0.07 (X)	0.13 (X)	0.09 (X)	0.15 (X)	0.09 (X)				
12/8/2016						0.18 (X)	0.18 (X)	0.12 (X)	0.22 (X)
3/21/2017	<0.3	0.05 (X)							
3/22/2017			0.11 (X)	0.09 (X)	0.04 (X)	0.09 (X)	0.08 (X)		0.16 (X)
3/23/2017								0.14 (X)	
7/11/2017	0.05 (X)	0.05 (X)			0.05 (X)				0.23 (X)
7/12/2017			0.23 (X)	0.02 (X)		0.21 (X)	0.17 (X)	0.07 (X)	
10/18/2017	0.11 (X)	<0.3	0.19 (X)		0.04 (X)	0.24 (X)	0.06 (X)		0.28 (X)
10/19/2017				<0.3				<0.3	
2/20/2018	0.04 (X)	0.3 (X)							
2/21/2018			0.093 (X)	0.045 (X)	<0.3	0.24 (X)	0.086 (X)	0.37	0.29 (X)
7/11/2018	<0.3	0.077 (X)							
7/12/2018			<0.3	<0.3	<0.3			0.17 (X)	0.21 (X)
9/12/2018	<0.3								
9/13/2018		<0.3	0.15 (X)	<0.3	<0.3		<0.3		0.22 (X)
9/14/2018								<0.3	
10/4/2018									
3/27/2019	<0.3	<0.3			<0.3		<0.3		0.37
3/28/2019			0.1 (X)	<0.3		0.15 (X)		0.074 (X)	
8/21/2019	<0.3	<0.3	0.044 (X)		<0.3				0.11 (X)
8/22/2019				<0.3		0.11 (X)	<0.3	0.1 (X)	
9/10/2019		<0.3							
10/2/2019	0.056 (X)		0.075 (X)		0.053 (X)	0.063 (X)			0.16 (X)
10/3/2019				0.041 (X)			0.043 (X)	0.084 (X)	

Constituent: Fluoride (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	0.21 (X)
3/21/2017	
3/22/2017	
3/23/2017	0.18 (X)
7/11/2017	
7/12/2017	0.06 (X)
10/18/2017	
10/19/2017	<0.3
2/20/2018	
2/21/2018	0.039 (X)
7/11/2018	
7/12/2018	<0.3
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	0.15 (X)
3/27/2019	
3/28/2019	<0.3
8/21/2019	
8/22/2019	<0.3
9/10/2019	
10/2/2019	
10/3/2019	0.06 (X)

Constituent: Lead (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.005	<0.005							
9/1/2016			<0.005	<0.005					
9/6/2016					<0.005				
9/7/2016						<0.005	<0.005	<0.005	
9/8/2016									<0.005
12/7/2016	<0.005	<0.005	<0.005	<0.005	<0.005				
12/8/2016						<0.005	<0.005	<0.005	<0.005
3/21/2017	<0.005	<0.005							
3/22/2017			5E-05 (X)	<0.005	<0.005	<0.005	<0.005		<0.005
3/23/2017								<0.005	
7/11/2017	<0.005	<0.005			<0.005				<0.005
7/12/2017			<0.005	<0.005		<0.005	<0.005	<0.005	
10/18/2017	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		<0.005
10/19/2017				<0.005				<0.005	
2/20/2018	<0.005	<0.005							
2/21/2018			<0.005	<0.005	<0.005	<0.005	0.00043 (X)	<0.005	<0.005
7/11/2018	<0.005	<0.005							
7/12/2018			<0.005	<0.005	<0.005			<0.005	<0.005
9/12/2018	<0.005								
9/13/2018		<0.005	<0.005	<0.005	<0.005		<0.005		<0.005
9/14/2018								<0.005	
10/4/2018									
8/21/2019	6.4E-05 (X)	<0.005	<0.005		<0.005				0.00041 (X)
8/22/2019				<0.005		<0.005	<0.005	<0.005	
9/10/2019		<0.005							
10/2/2019	<0.005		<0.005		8.1E-05 (X)	<0.005			<0.005
10/3/2019				<0.005			<0.005	<0.005	

Constituent: Lead (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

PZ-33
<0.005
9E-05 (X)
<0.005
<0.005
<0.005
<0.005
<0.005
<0.005
4.7E-05 (X)

Constituent: Lithium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.05	<0.05							
9/1/2016			<0.05	0.0022 (X)					
9/6/2016					<0.05				
9/7/2016						<0.05	<0.05	0.0082 (X)	
9/8/2016									0.0038 (X)
12/7/2016	0.003 (X)	<0.05	<0.05	0.0023 (X)	<0.05				
12/8/2016						<0.05	<0.05	0.0061 (X)	0.0038 (X)
3/21/2017	<0.05	<0.05							
3/22/2017			0.0011 (X)	0.0025 (X)	<0.05	0.0021 (X)	0.0029 (X)		0.0068 (X)
3/23/2017								0.0122 (X)	
7/11/2017	<0.05	<0.05			<0.05				0.0059 (X)
7/12/2017			<0.05	0.0033 (X)		0.002 (X)	0.0024 (X)	0.013 (X)	
10/18/2017	<0.05	<0.05	<0.05		<0.05	0.002 (X)	0.0027 (X)		0.0057 (X)
10/19/2017				<0.25				0.013 (X)	
2/20/2018	<0.25	<0.05							
2/21/2018			<0.05	0.0034 (X)	<0.05	0.0022 (X)	0.0021 (X)	0.0085 (X)	0.0063 (X)
7/11/2018	<0.05	<0.05							
7/12/2018			0.0012 (X)	0.0038 (X)	<0.05			0.013 (X)	0.0063 (X)
9/12/2018	<0.05								
9/13/2018		<0.05	0.0013 (X)	0.0026 (X)	<0.05		0.0029 (X)		0.0061 (X)
9/14/2018								0.018 (X)	
10/4/2018									
8/21/2019	<0.03	0.0009 (X)	0.0013 (X)		<0.03				0.0072 (X)
8/22/2019				0.0029 (X)		0.0025 (X)	0.0026 (X)	0.012 (X)	
9/10/2019		<0.03							
10/2/2019	<0.03		0.0013 (X)		<0.03	0.0024 (X)			0.0074 (X)
10/3/2019				0.0032 (X)			0.0027 (X)	0.016 (X)	

Constituent: Lithium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/20	16
9/1/201	6
9/6/201	6
9/7/201	6
9/8/201	6
12/7/20	16
12/8/20	<0.05
3/21/20	17
3/22/20	17
3/23/20	17 <0.05
7/11/20	17
7/12/20	17 <0.05
10/18/2	017
10/19/2	017 <0.25
2/20/20	18
2/21/20	18 <0.05
7/11/20	18
7/12/20	18 <0.05
9/12/20	18
9/13/20	18
9/14/20	18
10/4/20	18 <0.05
8/21/20	19
8/22/20	<0.03
9/10/20	19
10/2/20	
	119

Constituent: Mercury (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient

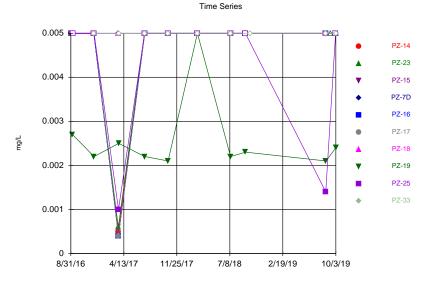
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.0005	<0.0005							
9/1/2016			<0.0005	<0.0005					
9/6/2016					<0.0005				
9/7/2016						<0.0005	<0.0005	<0.0005	
9/8/2016									<0.0005
12/7/2016	7E-05 (X)	9E-05 (X)	<0.0005	6E-05 (X)	<0.0005				
12/8/2016						<0.0005	<0.0005	<0.0005	<0.0005
3/21/2017	<0.0005	<0.0005							
3/22/2017			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
3/23/2017								<0.0005	
7/11/2017	<0.0005	<0.0005			<0.0005				<0.0005
7/12/2017			<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	
10/18/2017	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005
10/19/2017				<0.0005				<0.0005	
2/20/2018	<0.0005	<0.0005							
2/21/2018			9.7E-05 (X)	5.3E-05 (X)	6.8E-05 (X)	8.6E-05 (X)	5.7E-05 (X)	4.5E-05 (X)	5.3E-05 (X)
7/11/2018	<0.0005	<0.0005							
7/12/2018			<0.0005	<0.0005	<0.0005			<0.0005	<0.0005
9/12/2018	<0.0005								
9/13/2018		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005		<0.0005
9/14/2018								<0.0005	
10/4/2018									
8/21/2019	<0.0005	<0.0005	<0.0005		<0.0005				<0.0005
8/22/2019				<0.0005		<0.0005	<0.0005	<0.0005	

Constituent: Mercury (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

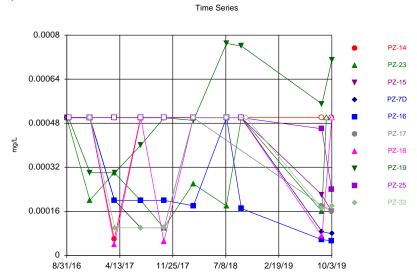
	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.0005
3/21/2017	
3/22/2017	
3/23/2017	<0.0005
7/11/2017	
7/12/2017	<0.0005
10/18/2017	
10/19/2017	<0.0005
2/20/2018	
2/21/2018	4.3E-05 (X)
7/11/2018	
7/12/2018	<0.0005
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.0005
8/21/2019	
8/22/2019	<0.0005

Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG Hollow symbols indicate censored values.



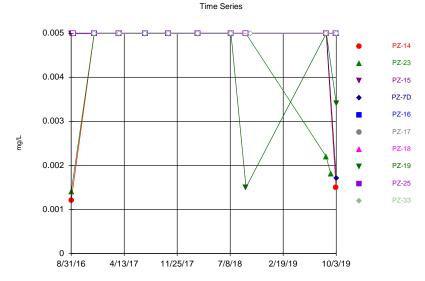
Constituent: Molybdenum Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG Hollow symbols indicate censored values.



Constituent: Thallium Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Sanitas™ v.9.6.25 Sanitas software licensed to AMEC. UG Hollow symbols indicate censored values.



Constituent: Selenium Analysis Run 2/24/2020 3:10 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

Constituent: Molybdenum (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

PZ-23 PZ-14 PZ-15 PZ-7D PZ-16 PZ-17 PZ-18 PZ-19 PZ-25 8/31/2016 <0.01 <0.01 9/1/2016 <0.01 <0.01 9/6/2016 <0.01 9/7/2016 <0.01 <0.01 0.0027 (X) 9/8/2016 <0.01 12/7/2016 <0.01 <0.01 <0.01 <0.01 <0.01 12/8/2016 <0.01 <0.01 0.0022 (X) <0.01 3/21/2017 0.0005 (X) 0.0006 (X) 3/22/2017 0.0004 (X) <0.01 0.0004 (X) 0.0004 (X) <0.01 0.001 (X) 0.0025 (X) 3/23/2017 7/11/2017 <0.01 <0.01 <0.01 < 0.01 7/12/2017 <0.01 <0.01 <0.01 <0.01 0.0022 (X) 10/18/2017 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 10/19/2017 <0.01 0.0021 (X) 2/20/2018 <0.01 <0.01 2/21/2018 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 7/11/2018 <0.01 <0.01 7/12/2018 <0.01 <0.01 <0.01 0.0022 (X) <0.01 9/12/2018 <0.01 9/13/2018 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 9/14/2018 0.0023 (X) 10/4/2018 8/21/2019 <0.01 <0.01 <0.01 <0.01 0.0014 (X) 8/22/2019 0.0021 (X) <0.01 <0.01 < 0.01 9/10/2019 <0.01 10/2/2019 <0.01 <0.01 <0.01 <0.01 <0.01

<0.01

0.0024 (X)

<0.01

10/3/2019

Constituent: Molybdenum (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.01
3/21/2017	
3/22/2017	
3/23/2017	<0.01
7/11/2017	
7/12/2017	<0.01
10/18/2017	
10/19/2017	<0.01
2/20/2018	
2/21/2018	<0.01
7/11/2018	
7/12/2018	<0.01
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.01
8/21/2019	
8/22/2019	<0.01
9/10/2019	
10/2/2019 10/3/2019	<0.01

Constituent: Selenium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	0.0012 (X)	0.0014 (X)							
9/1/2016			<0.01	<0.01					
9/6/2016					<0.01				
9/7/2016						<0.01	<0.01	<0.01	
9/8/2016									<0.01
12/7/2016	<0.01	<0.01	<0.01	<0.01	<0.01				
12/8/2016						<0.01	<0.01	<0.01	<0.01
3/21/2017	<0.01	<0.01							
3/22/2017			<0.01	<0.01	<0.01	<0.01	<0.01		<0.01
3/23/2017								<0.01	
7/11/2017	<0.01	<0.01			<0.01				<0.01
7/12/2017			<0.01	<0.01		<0.01	<0.01	<0.01	
10/18/2017	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01		<0.01
10/19/2017				<0.01				<0.01	
2/20/2018	<0.01	<0.01							
2/21/2018			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7/11/2018	<0.01	<0.01							
7/12/2018			<0.01	<0.01	<0.01			<0.01	<0.01
9/12/2018	<0.01								
9/13/2018		<0.01	<0.01	<0.01	<0.01		<0.01		<0.01
9/14/2018								0.0015 (X)	
10/4/2018									
8/21/2019	<0.01	0.0022 (X)	<0.01		<0.01				<0.01
8/22/2019				<0.01		<0.01	<0.01	<0.01	
9/10/2019		0.0018 (X)							
10/2/2019	0.0015 (X)		<0.01		<0.01	<0.01			<0.01
10/3/2019				0.0017 (X)			<0.01	0.0034 (X)	

Constituent: Selenium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

		PZ-33
8/3	31/2016	
9/1	/2016	
9/6	6/2016	
9/7	7/2016	
9/8	3/2016	
12/	/7/2016	
12/	/8/2016	<0.01
3/2	21/2017	
3/2	22/2017	
3/2	23/2017	<0.01
7/1	1/2017	
	2/2017	<0.01
10/	/18/2017	
10/	/19/2017	<0.01
2/2	20/2018	
2/2	21/2018	<0.01
7/1	1/2018	
	2/2018	<0.01
9/1	2/2018	
9/1	3/2018	
9/1	4/2018	
	/4/2018	<0.01
	21/2019	
8/2	22/2019	<0.01
	0/2019	
	/2/2019	
10/	/3/2019	<0.01

Constituent: Thallium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-14	PZ-23	PZ-15	PZ-7D	PZ-16	PZ-17	PZ-18	PZ-19	PZ-25
8/31/2016	<0.001	<0.001							
9/1/2016			<0.001	<0.001					
9/6/2016					<0.001				
9/7/2016						<0.001	<0.001	<0.001	
9/8/2016									<0.001
12/7/2016	<0.001	0.0002 (X)	<0.001	<0.001	<0.001				
12/8/2016						<0.001	<0.001	0.0003 (X)	<0.001
3/21/2017	6E-05 (X)	0.0003 (X)							
3/22/2017			<0.001	0.0002 (X)	0.0002 (X)	<0.001	4E-05 (X)		<0.001
3/23/2017								0.0003 (X)	
7/11/2017	<0.001	0.0002 (X)			0.0002 (X)				<0.001
7/12/2017			<0.001	0.0001 (X)		<0.001	<0.001	0.0004 (X)	
10/18/2017	<0.001	0.0001 (X)	<0.001		0.0002 (X)	<0.001	5E-05 (X)		<0.001
10/19/2017				0.0001 (X)				0.0005 (X)	
2/20/2018	<0.001	0.00026 (X)							
2/21/2018			<0.001	<0.001	0.00018 (X)	<0.001	<0.001	0.00049 (X)	<0.001
7/11/2018	<0.001	0.00018 (X)							
7/12/2018			<0.001	<0.001	<0.001			0.00077 (X)	<0.001
9/12/2018	<0.001								
9/13/2018		<0.001	<0.001	<0.001	0.00017 (X)		<0.001		<0.001
9/14/2018								0.00076 (X)	
10/4/2018									
8/21/2019	<0.001	0.00016 (X)	0.00022 (X)		5.7E-05 (X)				0.00046 (X)
8/22/2019				8.6E-05 (X)		0.00018 (X)	7E-05 (X)	0.00055 (X)	
9/10/2019		<0.001							
10/2/2019	<0.001		0.00016 (X)		5.3E-05 (X)	0.00016 (X)			0.00024 (X)
10/3/2019				7.8E-05 (X)			<0.001	0.00071 (X)	

Constituent: Thallium (mg/L) Analysis Run 2/24/2020 3:13 PM View: App IV downgradient
Plant Mitchell Client: Southern Company Data: Mitchell_mod V4

	PZ-33
8/31/2016	
9/1/2016	
9/6/2016	
9/7/2016	
9/8/2016	
12/7/2016	
12/8/2016	<0.001
3/21/2017	
3/22/2017	
3/23/2017	0.0001 (X)
7/11/2017	
7/12/2017	0.0001 (X)
10/18/2017	
10/19/2017	0.0001 (X)
2/20/2018	
2/21/2018	<0.001
7/11/2018	
7/12/2018	<0.001
9/12/2018	
9/13/2018	
9/14/2018	
10/4/2018	<0.001
8/21/2019	
8/22/2019	0.00017 (X)
9/10/2019	
10/2/2019	
10/3/2019	0.00018 (X)

2020 Annual Groundwater	Monitoring and Corrective Actic	n Report
	Georgia Power Company - Plant	t Mitchell

STATISTICAL ANALYSES OF MARCH 2020 DATA

Table C-2
Appendix III March 2020 Results Compared with Prediction Limits
Plant Mitchell Ash Ponds A, 1 & 2

Parameter	Units	Well ID	Upper PL	Lower PL	March 24-26, 2020
		P	urpose of Ever	nt:	Assessment Semi-annual
Boron	mg/L	PZ-7D	0.0274	-	0.24
Boron	mg/L	PZ-14	0.0274	-	0.027 (J)
Boron	mg/L	PZ-15	0.0274	-	0.21
Boron	mg/L	PZ-16	0.0274	-	0.19
Boron	mg/L	PZ-17	0.0274	-	0.33
Boron	mg/L	PZ-18	0.0274	-	0.36
Boron	mg/L	PZ-19	0.0274	-	0.60
Boron	mg/L	PZ-23A	0.0274	-	0.19
Boron	mg/L	PZ-25	0.0274	-	0.21
Boron	mg/L	PZ-33	0.0274	-	0.38
Calcium	mg/L	PZ-7D	107.4	-	122
Calcium	mg/L	PZ-14	107.4	-	105
Calcium	mg/L	PZ-15	107.4	-	103
Calcium	mg/L	PZ-16	107.4	-	89.8
Calcium	mg/L	PZ-17	107.4	-	121
Calcium	mg/L	PZ-18	107.4	-	138
Calcium	mg/L	PZ-19	107.4	-	158
Calcium	mg/L	PZ-23A	107.4	-	157
Calcium	mg/L	PZ-25	107.4	-	97.5
Calcium	mg/L	PZ-33	107.4	-	122
Chloride	mg/L	PZ-7D	4.77	-	4.8
Chloride	mg/L	PZ-14	4.77	-	4.2
Chloride	mg/L	PZ-15	4.77	-	7.0
Chloride	mg/L	PZ-16	4.77	-	7.0
Chloride	mg/L	PZ-17	4.77	-	6.1
Chloride	mg/L	PZ-18	4.77	-	5.7
Chloride	mg/L	PZ-19	4.77	-	5.4
Chloride	mg/L	PZ-23A	4.77	-	6.4
Chloride	mg/L	PZ-25	4.77	-	1.6
Chloride	mg/L	PZ-33	4.77	-	2.9
Fluoride	mg/L	PZ-7D	0.3	-	< 0.050
Fluoride	mg/L	PZ-14	0.3	-	< 0.050
Fluoride	mg/L	PZ-15	0.3	-	0.056 (J)
Fluoride	mg/L	PZ-16	0.3	-	< 0.050
Fluoride	mg/L	PZ-17	0.3	-	< 0.050
Fluoride	mg/L	PZ-18	0.3	-	< 0.050
Fluoride	mg/L	PZ-19	0.3	-	0.077 (J)
Fluoride	mg/L	PZ-23A	0.3	-	0.066 (J)
Fluoride	mg/L	PZ-25A	0.3	-	0.13 (J)
Fluoride	mg/L	PZ-23	0.3	-	< 0.050
рН	s.u.	PZ-33	9.5	7.0	7.1
pH	s.u. s.u.	PZ-14	9.5	7.0	7.0
pH		PZ-14 PZ-15	9.5	7.0	7.1
<u>рн</u> рН	S.U.	PZ-15 PZ-16	9.5 9.5	7.0	7.1 7.1
<u>рн</u> рН	S.U.	PZ-16 PZ-17	9.5 9.5	7.0	6.9
	S.U.	1	9.5 9.5	7.0	7.0
pH	S.U.	PZ-18			6.7
pH	S.U.	PZ-19	9.5	7.0	
pH nH	s.u.	PZ-23A	9.5	7.0	6.8
pH	s.u.	PZ-25	9.5	7.0	7.0
рН	s.u.	PZ-33	9.5	7.0	7.0

Table C-2
Appendix III March 2020 Results Compared with Prediction Limits
Plant Mitchell Ash Ponds A, 1 & 2

Parameter	Units	Well ID	Upper PL	Lower PL	March 24-26, 2020
		P	urpose of Event:		Assessment Semi-annual
Sulfate	mg/L	PZ-7D	6.4	-	57.1
Sulfate	mg/L	PZ-14	6.4	-	11.9
Sulfate	mg/L	PZ-15	6.4	-	83.6
Sulfate	mg/L	PZ-16	6.4	-	43.5
Sulfate	mg/L	PZ-17	6.4	-	92.4
Sulfate	mg/L	PZ-18	6.4	-	91.0
Sulfate	mg/L	PZ-19	6.4	-	84.9
Sulfate	mg/L	PZ-23A	6.4	-	47.0
Sulfate	mg/L	PZ-25	6.4	-	39.1
Sulfate	mg/L	PZ-33	6.4	-	66.6
TDS	mg/L	PZ-7D	317	-	332
TDS	mg/L	PZ-14	317	-	330
TDS	mg/L	PZ-15	317	-	330
TDS	mg/L	PZ-16	317	-	286
TDS	mg/L	PZ-17	317	-	408
TDS	mg/L	PZ-18	317	-	415
TDS	mg/L	PZ-19	317	-	440
TDS	mg/L	PZ-23A	317	-	454
TDS	mg/L	PZ-25	317	-	280
TDS	mg/L	PZ-33	317	-	336

Notes:

- = Not applicable
- < indicates the constituent was not detected above the method detection limit.
- (J) indicates the constituent was detected between the analytical method detection limit and the laboratory reporting. The value followed by (J) is qualified by the laboratory as estimated.

mg/L = milligrams per liter

s.u. - standard units

TDS = Total Dissolved Solids

PL = prediction limit

Shaded and bolded values indicate an exceedance of the statistically derived PL.

The pH value presented was recorded at the time of sample collection in the field. pH is the only parameter where the field result is compared to both the upper and lower PL.

An Alternate Source Demonstration (ASD) has not been prepared for these Appendix III statistical exceedances. Assessment monitoring is currently being implemented.

GROUNDWATER STATS CONSULTING

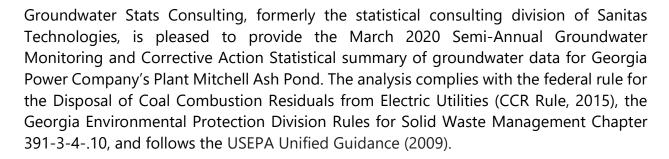
July 27, 2020

Southern Company Services Attn: Mr. Joju Abraham 241 Ralph McGill Blvd NE, Bin 10160 Atlanta, Georgia 30308-3374

Re: Plant Mitchell Ash Pond

March 2020 Statistical Analysis

Dear Mr. Abraham,



Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- o **Upgradient wells:** PZ-1D, PZ-2D, PZ-31, PZ-32
- Downgradient wells: PZ-7D, PZ-14, PZ-15, PZ-16, PZ-17, PZ-18, PZ-19, PZ-23A, PZ-25, PZ-33

Note that well PZ-23 was abandoned and was replaced with well PZ-23A. Since the new well PZ-23A was installed in close proximity to well PZ-23A, the historical data and new data can be combined. Well PZ-23A was first sampled during the March 2020 event.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed Kristina Rayner, Groundwater Statistician and Founder of Groundwater Stats Consulting.

The CCR program consists of the following constituents:

- Appendix III (Detection Monitoring) boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- Appendix IV (Assessment Monitoring) antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs with 100% nondetects follows this letter. Additionally, the following Appendix IV analytes were detected during the August 2019 scan event: antimony, arsenic, barium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, molybdenum, selenium, and thallium. Therefore, statistics were not required for beryllium, cadmium, and mercury since they were not detected.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided with the previous screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

Summary of Statistical Methods – Appendix III Parameters:

Based on the earlier evaluation described above, the following method was selected:

 Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of onehalf the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will

rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Screening – Conducted in March 2019

Outlier and Trend Testing

Time series plots are used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, several outliers were identified and the reports were submitted with the screening. In cases where the most recent value was identified as an outlier, values were not flagged in the database at that time as they may represent a future trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only a few of these values were flagged in the database as all other values are similar to remaining measurements within a given well or neighboring wells or were nondetects.

When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

While trends may be visual, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends, and the reports were submitted with the screening. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses were included with the previous screening and showed one statistically significant decreasing trend for chloride at well PZ-25. This trend was relatively low in magnitude when compared to average concentrations; therefore, no adjustments were made to the data sets.

<u>Appendix III – Determination of Spatial Variation</u>

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified no variation among upgradient well data for boron and fluoride, making these constituents eligible for interwell analyses. Variation was noted for calcium, chloride, pH, sulfate and TDS. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

913.829.1470

Statistical Analysis of Appendix III Parameters - March 2020 Sample Event

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through March 2020 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase is identified and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Several prediction limit exceedances were noted for Appendix III parameters. A summary table of the interwell prediction limits follows this letter.

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. Statistically significant increasing trends were noted for calcium in downgradient wells PZ-18 and PZ-7D; and for sulfate in downgradient wells PZ-14 and PZ-23A. Statistically significant decreasing trends were noted for chloride in downgradient wells PZ-19 and PZ-7D; and for sulfate in downgradient well PZ-33. A summary of the trend test results follows this letter.

Statistical Analysis of Appendix IV Parameters – March 2020 Sample Event

Interwell tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for the Appendix IV constituents discussed above (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for barium and combined radium 226 + 228. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. The background limits were then

used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a) (Figure G).

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

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified level have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

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

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the March 2020 sample event. To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well (Figure H). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. No exceedances were noted for any of the Appendix IV parameters and a summary of the confidence intervals follows this letter.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Mitchell Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew T. Collins

Groundwater Analyst

Kristina L. Rayner

Groundwater Statistician

Kristina Rayner

Page 1

100% Nondetect Well-Constituent Pairs

Date: 4/28/2020 4:16 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Antimony (mg/L)

PZ-16, PZ-23A, PZ-25, PZ-32, PZ-33

Arsenic (mg/L)

PZ-16, PZ-18, PZ-1D, PZ-31, PZ-7D

Beryllium (mg/L)

PZ-14, PZ-15, PZ-16, PZ-17, PZ-18, PZ-19, PZ-23A, PZ-25, PZ-31, PZ-32, PZ-33, PZ-7D

Cadmium (mg/L)

PZ-14, PZ-15, PZ-16, PZ-17, PZ-18, PZ-19, PZ-1D, PZ-25, PZ-2D, PZ-31, PZ-32, PZ-7D

Chromium (mg/L)

PZ-15, PZ-17, PZ-25

Cobalt (mg/L)

PZ-1D, PZ-2D, PZ-7D

Lead (mg/L)

PZ-14, PZ-17, PZ-19, PZ-25, PZ-7D

Lithium (mg/L)

PZ-16, PZ-1D, PZ-31, PZ-32, PZ-33

Mercury (mg/L)

PZ-1D, PZ-31, PZ-32

Molybdenum (mg/L)

PZ-18, PZ-2D, PZ-32, PZ-33, PZ-7D

Selenium (mg/L)

PZ-15, PZ-16, PZ-17, PZ-18, PZ-1D, PZ-25, PZ-2D, PZ-31, PZ-32, PZ-33

Thallium (mg/L)

PZ-1D

Outlier Summary

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/27/2020, 3:14 PM

PZ-33 Barium (mg/L) PZ-1D Calcium (mg/L) PZ-33 PH (SU) PZ-33 TDS (mg/L)

12/8/2016 0.162 (o) 503 (o)

7/11/2017 7.82 (o)

7/11/2018 65.3 (o)

Interwell Prediction Limits Summary Table - Significant Results

Printed 4/28/2020, 4:10 PM Data: Mitchell Ash Pond CCR Plant Mitchell Client: Southern Company Well Sig. Bg N Bg Mean %NDs ND Adj. Constituent Upper Lim. Lower LimDate Observ. Std. Dev. Alpha Method Boron (mg/L) PZ-15 0.0274 3/26/2020 0.21 Yes 44 -4.335 0.3594 4.545 0.0007523 Param Inter 1 of 2 None Boron (mg/L) PZ-16 0.0274 n/a 3/26/2020 0.19 Yes 44 -4.335 0.3594 4.545 None 0.0007523 Param Inter 1 of 2 Boron (mg/L) PZ-17 0.0274 3/25/2020 Yes 44 -4.335 0.3594 4.545 0.0007523 Param Inter 1 of 2 0.33 Yes 44 -4.335 Boron (mg/L) PZ-18 0.0274 3/26/2020 0.36 0.3594 4.545 0.0007523 Param Inter 1 of 2 n/a None 0.0274 3/26/2020 Yes 44 -4.335 0.3594 4.545 0.0007523 Param Inter 1 of 2 Boron (mg/L) PZ-19 n/a 0.6 0.0007523 Boron (mg/L) PZ-23A 0.0274 n/a 3/25/2020 0.19 Yes 44 -4.335 0.3594 4.545 None Param Inter 1 of 2 PZ-25 3/25/2020 Yes 44 -4.335 0.0007523 Param Inter 1 of 2 Boron (mg/L) 0.0274 n/a 0.21 0.3594 4.545 Boron (mg/L) PZ-33 3/26/2020 0.38 Yes 44 -4.335 0.3594 0.0007523 Param Inter 1 of 2 0.0274 n/a 4.545 None PZ-7D 0.0274 3/26/2020 Yes 44 -4.335 4.545 0.0007523 Param Inter 1 of 2 Boron (mg/L) n/a 0.24 0.3594 Calcium (mg/L) 0.0007523 PZ-17 107.4 3/25/2020 121 Yes 43 54.51 25.72 2.326 Param Inter 1 of 2 n/a None Calcium (mg/L) 3/26/2020 Yes 43 54.51 0.0007523 PZ-18 107.4 138 25.72 2.326 Param Inter 1 of 2 3/26/2020 158 Yes 43 54.51 0.0007523 Calcium (mg/L) PZ-19 107.4 n/a 25.72 2.326 None Param Inter 1 of 2 Calcium (mg/L) PZ-23A 107.4 n/a 3/25/2020 157 Yes 43 54.51 25.72 2.326 0.0007523 Param Inter 1 of 2 Calcium (mg/L) PZ-33 107.4 n/a 3/26/2020 122 Yes 43 54.51 25.72 2.326 0.0007523 Param Inter 1 of 2 None 3/26/2020 122 Yes 43 Calcium (mg/L) PZ-7D 107.4 54.51 25.72 2.326 0.0007523 Param Inter 1 of 2 3/26/2020 Chloride (mg/L) PZ-15 Yes 44 1.781 0.0007523 Param Inter 1 of 2 4.77 n/a 0.1964 0 None 3/26/2020 Yes 44 Chloride (mg/L) PZ-16 4.77 n/a 1.781 0.1964 0 0.0007523 Param Inter 1 of 2 Chloride (mg/L) 3/25/2020 6.1 0 0.0007523 PZ-17 4.77 n/a Yes 44 1.781 0.1964 None Param Inter 1 of 2 Chloride (mg/L) PZ-18 3/26/2020 5.7 Yes 44 1.781 0.1964 0 0.0007523 Param Inter 1 of 2 Chloride (mg/L) PZ-19 3/26/2020 5.4 Yes 44 1.781 0 0.0007523 Param Inter 1 of 2 4.77 n/a 0.1964 None Chloride (mg/L) 3/25/2020 6.4 Yes 44 1.781 0 Param Inter 1 of 2 PZ-23A 4.77 n/a 0.1964 None 0.0007523 Chloride (mg/L) PZ-7D 3/26/2020 4.8 Yes 44 1.781 0 0.0007523 Param Inter 1 of 2 4.77 n/a 0.1964 None pH (SU) 3/25/2020 Yes 40 NP Inter (normality) 1 of 2 PZ-17 0 0.002217 pH (SU) PZ-19 9.48 6.96 3/26/2020 6.7 Yes 40 n/a n/a 0 n/a 0.002217 NP Inter (normality) 1 of 2 (UZ) Hq PZ-23A 9.48 6.96 3/25/2020 6.84 Yes 40 0 0.002217 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-14 6.4 3/25/2020 11.9 Yes 44 n/a 0 0.0009571 NP Inter (normality) 1 of 2 n/a n/a n/a 3/26/2020 Yes 44 0 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-15 6.4 83.6 3/26/2020 PZ-16 43.5 Yes 44 n/a 0 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) 6.4 n/a n/a n/a 3/25/2020 Yes 44 Sulfate (mg/L) PZ-17 6.4 n/a 92.4 0 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-18 6.4 n/a 3/26/2020 91 Yes 44 n/a n/a 0 n/a 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-19 6.4 3/26/2020 Yes 44 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-23A 6.4 3/25/2020 47 Yes 44 n/a 0 0.0009571 NP Inter (normality) 1 of 2 n/a n/a n/a 3/25/2020 39.1 Sulfate (mg/L) PZ-25 6.4 n/a Yes 44 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-33 6.4 3/26/2020 66.6 Yes 44 n/a 0 0.0009571 NP Inter (normality) 1 of 2 n/a n/a n/a 3/26/2020 Sulfate (mg/L) PZ-7D 6.4 57.1 Yes 44 0 0.0009571 NP Inter (normality) 1 of 2 3/25/2020 TDS (mg/L) PZ-14 317 n/a 330 Yes 44 174.4 69.49 0 None 0.0007523 Param Inter 1 of 2 TDS (mg/L) PZ-15 317 n/a 3/26/2020 330 Yes 44 174.4 None Param Inter 1 of 2 TDS (ma/L) PZ-17 317 3/25/2020 408 Yes 44 174.4 O 0.0007523 Param Inter 1 of 2 n/a 69.49 None 3/26/2020 TDS (mg/L) 317 n/a Yes 44 174.4 None Param Inter 1 of 2 3/26/2020 174.4 0 0.0007523 TDS (mg/L) PZ-19 317 n/a 440 Yes 44 69.49 None Param Inter 1 of 2 3/25/2020 Yes 44 TDS (mg/L) PZ-23A 317 n/a 174.4 69.49 None 0.0007523 Param Inter 1 of 2 TDS (mg/L) PZ-33 317 n/a 3/26/2020 336 Yes 44 174.4 69.49 0 None 0.0007523 Param Inter 1 of 2 TDS (mg/L) PZ-7D 3/26/2020 332 Yes 44 174.4 0.0007523 Param Inter 1 of 2

Interwell Prediction Limits Summary Table - All Results

Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:10 PM Plant Mitchell Client: Southern Company Well Constituent Upper Lim. Lower LimDate Observ. Sig. Bg NBg Mean Std. Dev. %NDs ND Adj. Alpha Boron (mg/L) PZ-14 0.0274 3/25/2020 0.027 No 44 -4.335 0.3594 4.545 0.0007523 Param Inter 1 of 2 n/a None Boron (mg/L) PZ-15 0.0274 n/a 3/26/2020 0.21 Yes 44 -4.335 0.3594 4.545 None 0.0007523 Param Inter 1 of 2 PZ-16 3/26/2020 Yes 44 -4.335 0.0007523 Param Inter 1 of 2 Boron (mg/L) 0.0274 0.19 0.3594 4.545 Boron (mg/L) PZ-17 0.0274 3/25/2020 0.33 Yes 44 -4.335 0.3594 0.0007523 Param Inter 1 of 2 n/a 4.545 None 3/26/2020 Yes 44 4.545 Param Inter 1 of 2 Boron (mg/L) PZ-18 0.0274 n/a 0.36 -4.335 0.3594 0.0007523 0.0007523 Boron (mg/L) PZ-19 0.0274 n/a 3/26/2020 0.6 Yes 44 -4.335 0.3594 4.545 None Param Inter 1 of 2 3/25/2020 Yes 44 0.0007523 Boron (mg/L) PZ-23A 0.0274 n/a -4.335 0.3594 4.545 Param Inter 1 of 2 PZ-25 3/25/2020 0.21 Yes 44 -4.335 0.0007523 Param Inter 1 of 2 Boron (mg/L) 0.0274 n/a 0.3594 4.545 None 3/26/2020 Yes 44 0.0007523 Param Inter 1 of 2 Boron (mg/L) PZ-33 0.0274 n/a 0.38 -4.335 0.3594 4.545 None 0.0007523 Boron (mg/L) PZ-7D 3/26/2020 0.24 Yes 44 -4.335 0.3594 Param Inter 1 of 2 0.0274 n/a 4.545 None PZ-14 3/25/2020 43 54.51 0.0007523 Param Inter 1 of 2 Calcium (mg/L) 107.4 105 25.72 2.326 103 43 54.51 0.0007523 Calcium (mg/L) PZ-15 107.4 n/a 3/26/2020 No 25.72 2.326 None Param Inter 1 of 2 Calcium (mg/L) PZ-16 107.4 n/a 3/26/2020 89.8 No 43 54.51 25.72 2.326 0.0007523 Param Inter 1 of 2 Calcium (mg/L) PZ-17 107.4 n/a 3/25/2020 121 Yes 43 54.51 25.72 0.0007523 Param Inter 1 of 2 2.326 None Yes 43 Calcium (mg/L) PZ-18 107.4 n/a 3/26/2020 138 54.51 25.72 2.326 0.0007523 Param Inter 1 of 2 Calcium (mg/L) PZ-19 3/26/2020 158 Yes 43 54.51 0.0007523 107.4 n/a 25.72 2.326 None Param Inter 1 of 2 3/25/2020 Yes 43 54.51 Calcium (mg/L) PZ-23A 107.4 n/a 157 25.72 2.326 None 0.0007523 Param Inter 1 of 2 3/25/2020 97.5 No 43 54.51 0.0007523 Calcium (mg/L) PZ-25 107.4 n/a 25.72 2.326 None Param Inter 1 of 2 Calcium (mg/L) PZ-33 107.4 3/26/2020 122 Yes 43 54.51 25.72 2.326 0.0007523 Param Inter 1 of 2 Calcium (mg/L) PZ-7D 3/26/2020 122 Yes 43 54.51 2.326 0.0007523 107.4 n/a 25.72 None Param Inter 1 of 2 Chloride (mg/L) 3/25/2020 No 44 Param Inter 1 of 2 PZ-14 4.77 n/a 4.2 1.781 0.1964 0 None 0.0007523 Chloride (mg/L) PZ-15 3/26/2020 7 Yes 44 0 0.0007523 4.77 n/a 1.781 0.1964 None Param Inter 1 of 2 3/26/2020 Yes 44 Chloride (mg/L) PZ-16 n/a 1.781 0 0.0007523 Param Inter 1 of 2 3/25/2020 6.1 Chloride (mg/L) PZ-17 4.77 n/a Yes 44 1.781 0.1964 0 None 0.0007523 Param Inter 1 of 2 Chloride (mq/L) PZ-18 4.77 n/a 3/26/2020 5.7 Yes 44 1.781 0.1964 0 None 0.0007523 Param Inter 1 of 2 Chloride (mg/L) PZ-19 3/26/2020 5.4 Yes 44 1.781 0 0.0007523 Param Inter 1 of 2 4.77 n/a 0.1964 None 3/25/2020 1.781 0 Param Inter 1 of 2 Chloride (mg/L) PZ-23A 6.4 Yes 44 0.0007523 3/25/2020 1.781 0 Chloride (mg/L) PZ-25 1.6 No 44 0.0007523 Param Inter 1 of 2 4.77 n/a 0.1964 None 3/26/2020 2.9 No 44 Chloride (mg/L) PZ-33 4.77 n/a 1.781 0.1964 0 0.0007523 Param Inter 1 of 2 Chloride (mg/L) PZ-7D 4.77 n/a 3/26/2020 4.8 Yes 44 1.781 0.1964 0 None 0.0007523 Param 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0.0009571 pH (SU) PZ-14 9.48 6.96 3/25/2020 7.02 40 0 0.002217 NP Inter (normality) 1 of 2 NP Inter (normality) 1 of 2 pH (SU) PZ-15 9.48 6.96 3/26/2020 7.08 No 40 n/a n/a 0 n/a 0.002217 pH (SU) PZ-16 9.48 6.96 3/26/2020 7.12 40 0 0.002217 NP Inter (normality) 1 of 2 P7-17 3/25/2020 0.002217 NP Inter (normality) 1 of 2 pH (SU) 9.48 6.96 6.93 Yes 40 n/a n/a 0 n/a 3/26/2020 pH (SU) PZ-18 9.48 6.96 7.01 40 n/a 0 0.002217 NP Inter (normality) 1 of 2 6.7 pH (SU) PZ-19 9.48 6.96 3/26/2020 Yes 40 n/a n/a 0 n/a 0.002217 NP Inter (normality) 1 of 2 pH (SU) PZ-23A 6.96 3/25/2020 Yes 40 n/a 0 n/a 0.002217 NP Inter (normality) 1 of 2 n/a pH (SU) PZ-25 9.48 6.96 3/25/2020 7.01 No 40 n/a n/a 0 n/a 0.002217 NP Inter (normality) 1 of 2 pH (SU) PZ-33 9.48 6.96 3/26/2020 40 0.002217 NP Inter (normality) 1 of 2 PZ-7D 9.48 6.96 3/26/2020 7.12 No 40 0 0.002217 NP Inter (normality) 1 of 2 pH (SU) n/a n/a n/a Sulfate (mg/L) PZ-14 6.4 3/25/2020 n/a 0.0009571 NP Inter (normality) 1 of 2 n/a n/a 3/26/2020 Sulfate (mg/L) PZ-15 6.4 n/a 83.6 Yes 44 n/a n/a 0 n/a 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-16 6.4 n/a 3/26/2020 43.5 Yes 44 n/a n/a 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-17 6.4 n/a 3/25/2020 92.4 Yes 44 n/a n/a 0 n/a 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) PZ-18 n/a 3/26/2020 Yes 44 n/a NP Inter (normality) 1 of 2

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Interwell Prediction Limits Summary Table - All Results

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:10 PM Constituent <u>Well</u> Upper Lim. Lower LimDate Observ. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. Alpha Method Sulfate (mg/L) PZ-19 3/26/2020 84.9 Yes 44 n/a n/a 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) 3/25/2020 47 0.0009571 NP Inter (normality) 1 of 2 PZ-23A 6.4 n/a Yes 44 n/a n/a 0 n/a Sulfate (mg/L) PZ-25 6.4 n/a 3/25/2020 39.1 Yes 44 n/a n/a 0 n/a 0.0009571 NP Inter (normality) 1 of 2 Sulfate (mg/L) 3/26/2020 66.6 Yes 44 n/a 0 0.0009571 NP Inter (normality) 1 of 2 PZ-33 6.4 n/a n/a n/a Sulfate (mg/L) PZ-7D 6.4 3/26/2020 57.1 Yes 44 n/a 0.0009571 NP Inter (normality) 1 of 2 TDS (mg/L) 317 3/25/2020 330 Yes 44 174.4 PZ-14 n/a 69.49 0 None 0.0007523 Param Inter 1 of 2 TDS (mg/L) PZ-15 317 n/a 3/26/2020 330 Yes 44 174.4 0 None 0.0007523 Param Inter 1 of 2 TDS (mg/L) PZ-16 3/26/2020 286 No 44 174.4 0 0.0007523 Param Inter 1 of 2 317 n/a 69.49 None TDS (mg/L) PZ-17 317 3/25/2020 408 Yes 44 174.4 0.0007523 Param Inter 1 of 2 TDS (mg/L) 3/26/2020 415 Yes 44 174.4 PZ-18 317 0.0007523 Param Inter 1 of 2 n/a 69.49 None TDS (mg/L) PZ-19 317 3/26/2020 440 Yes 44 174.4 0.0007523 Param Inter 1 of 2 3/25/2020 454 Yes 44 174.4 0 0.0007523 Param Inter 1 of 2 TDS (mg/L) PZ-23A 317 n/a 69.49 None TDS (mg/L) PZ-25 317 3/25/2020 280 No 44 174.4 69.49 None 0.0007523 Param Inter 1 of 2 3/26/2020 336 Yes 44 174.4 TDS (mg/L) PZ-33 317 n/a 69.49 0 None 0.0007523 Param Inter 1 of 2 TDS (mg/L) PZ-7D 317 3/26/2020 332 Yes 44 174.4 69.49 None 0.0007523 Param Inter 1 of 2

Interwell Parameters Trend Tests - PL Exceedances - Significant Results

	Plant Mitchell	Client: Southern Company	Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:14 PM										
Constituent	<u>Well</u>		Slope	<u>Calc.</u>	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method	
Calcium (mg/L)	PZ-18		6.257	36	34	Yes	11	0	n/a	n/a	0.01	NP	
Calcium (mg/L)	PZ-7D		6.314	39	34	Yes	11	0	n/a	n/a	0.01	NP	
Chloride (mg/L)	PZ-19		-0.3547	-38	-34	Yes	11	0	n/a	n/a	0.01	NP	
Chloride (mg/L)	PZ-7D		-0.5264	-37	-34	Yes	11	0	n/a	n/a	0.01	NP	
Sulfate (mg/L)	PZ-14		1.801	38	34	Yes	11	0	n/a	n/a	0.01	NP	
Sulfate (mg/L)	PZ-23A		5.318	47	34	Yes	11	0	n/a	n/a	0.01	NP	
Sulfate (mg/L)	PZ-33		-9.928	-43	-34	Yes	11	0	n/a	n/a	0.01	NP	

Interwell Parameters Trend Tests - PL Exceedances - All Results

	Plant Mitchell	Client: Southern Company	Data: Mitchel	l Ash Pon	d CCR F	rinted 4	4/28/20	20, 4:14 PM				
Constituent	Well		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	PZ-15		-0.001402	-3	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-16		0.005149	12	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-17		0.009605	16	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-18		0	3	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-19		0	0	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-1D (bg)		-0.0001349	-6	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-23A		0.00215	4	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-25		0	1	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-2D (bg)		-0.001174	-12	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-31 (bg)		-0.001967	-21	-34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-32 (bg)		-0.001365	-10	-34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-33		-0.005599	-17	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-7D		-0.03718	-30	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-17		4.888	28	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-18		6.257	36	34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-19		3.141	11	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-1D (bg)		1.295	17	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-23A		6.65	25	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-2D (bg)		6.396	21	34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-31 (bg)		1.695	22	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-32 (bg)		2.068	21	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-33		0	-1	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-7D		6.314	39	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-15		0	4	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-16		-0.1986	-21	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-17		0.04345	4	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L) Chloride (mg/L)	PZ-18 PZ-19		-0.1033 - 0.3547	-21 - 38	-34	No	11	0 0	n/a	n/a	0.01	NP NP
Chloride (mg/L) Chloride (mg/L)	PZ-19 PZ-1D (bg)		-0.04345	- 36 -9	- 34 -34	Yes No	11 11	0	n/a n/a	n/a n/a	0.01 0.01	NP
Chloride (mg/L)	PZ-1D (bg)		-0.04545	-13	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-25A PZ-2D (bg)		0.1139	2	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-31 (bg)		-0.4562	-34	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-32 (bg)		-0.2327	-24	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-7D		-0.5264	-37	-34	Yes	11	0	n/a	n/a	0.01	NP
pH (SU)	PZ-17		-0.02417	-19	-38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	PZ-19		0.02514	11	38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	PZ-1D (bg)		-0.02483	-6	-34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	PZ-23A		0.0338	15	34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	PZ-2D (bg)		-0.191	-3	-14	No	6	0	n/a	n/a	0.01	NP
pH (SU)	PZ-31 (bg)		0	-1	-34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	PZ-32 (bg)		-0.0137	-15	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-14		1.801	38	34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-15		3.476	33	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-16		-1.555	-21	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-17		0.3042	4	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-18		2.479	8	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-19		-0.6838	-10	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-1D (bg)		0.1534	26	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-23A		5.318	47	34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-25		-3.578	-31	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-2D (bg)		-0.8488	-16	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-31 (bg)		-1.437	-32	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-32 (bg)		0.0953	15	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-33		-9.928	-43	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-7D		-0.5524	-2	-34	No	11	0	n/a	n/a	0.01	NP

Interwell Parameters Trend Tests - PL Exceedances - All Results Page 2

	Plant Mitchell	Client: Southern Company	Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:14 PM									
Constituent	Well		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
TDS (mg/L)	PZ-14		2.48	1	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-15		21.13	30	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-17		-4.78	-6	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-18		-1.7	-4	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-19		-20.73	-23	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-1D (bg)		10.86	23	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-23A		16.26	33	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-2D (bg)		24.24	27	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-31 (bg)		1.184	2	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-32 (bg)		5.911	12	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-33		-6.32	-4	-30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-7D		-9.922	-13	-34	No	11	0	n/a	n/a	0.01	NP

Tolerance Limit Summary Table

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/27/2020, 2:30 PM

Constituent	Well	Upper Lin	n. Lower Lin	n. Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	PZ-14	0.0035	n/a	3/25/2020	<0.003	No	40	n/a	n/a	57.5	n/a	n/a	0.1285	NP Inter(NDs)
Arsenic (mg/L)	PZ-14	0.005	n/a	3/25/2020	<0.005	No	40	n/a	n/a	85	n/a	n/a	0.1285	NP Inter(NDs)
Barium (mg/L)	PZ-14	0.06706	n/a	3/25/2020	0.021	No	40	-4.233	0.7198	2.5	None	In(x)	0.05	Inter
Beryllium (mg/L)	PZ-14	0.003	n/a	9/12/2018	<0.003	No	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Cadmium (mg/L)	PZ-14	0.001	n/a	9/12/2018	<0.001	No	32	n/a	n/a	100	n/a	n/a	0.1937	NP Inter(NDs)
Chromium (mg/L)	PZ-14	0.011	n/a	3/25/2020	0.0013	No	40	n/a	n/a	30	n/a	n/a	0.1285	NP Inter(normality)
Cobalt (mg/L)	PZ-14	0.005	n/a	3/25/2020	<0.005	No	40	n/a	n/a	95	n/a	n/a	0.1285	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	PZ-14	1.906	n/a	3/25/2020	0.694	No	39	0.745	0.2978	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	PZ-14	0.3	n/a	3/25/2020	<0.3	No	44	n/a	n/a	36.36	n/a	n/a	0.1047	NP Inter(normality)
Lead (mg/L)	PZ-14	0.005	n/a	3/25/2020	<0.005	No	40	n/a	n/a	80	n/a	n/a	0.1285	NP Inter(NDs)
Lithium (mg/L)	PZ-14	0.03	n/a	3/25/2020	<0.03	No	40	n/a	n/a	82.5	n/a	n/a	0.1285	NP Inter(NDs)
Mercury (mg/L)	PZ-14	0.0005	n/a	9/12/2018	<0.0005	No	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Molybdenum (mg/L)	PZ-14	0.01	n/a	3/25/2020	<0.01	No	40	n/a	n/a	82.5	n/a	n/a	0.1285	NP Inter(NDs)
Selenium (mg/L)	PZ-14	0.01	n/a	3/25/2020	<0.01	No	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Thallium (mg/L)	PZ-14	0.001	n/a	3/25/2020	<0.001	No	40	n/a	n/a	85	n/a	n/a	0.1285	NP Inter(NDs)

Confidence Intervals - All Results

Plant Mitchell

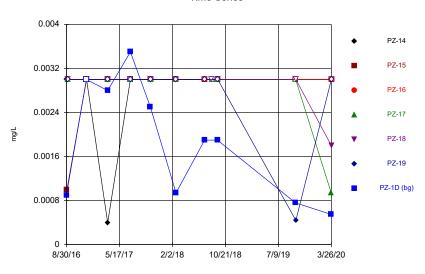
Data: Mitchell Ash Pond CCR Printed 4/29/2020, 2:05 PM Client: Southern Company Well %NDs ND Adj. Transform Alpha Method Constituent Upper Lim. Lower Lim. Compliance Sig. N Mean Std. Dev. Antimony (mg/L) PZ-14 0.003 0.003 0.006 No 10 0.00274 0.0008222 90 No 0.011 NP (NDs) None 0.011 NP (NDs) Antimony (mg/L) PZ-15 0.003 0.003 0.006 No 10 0.0028 0.0006325 90 None No Antimony (mg/L) PZ-17 0.003 0.003 0.006 10 0.002794 0.0006514 90 0.011 NP (NDs) No None No 0.003 0.003 0.00288 0.0003795 90 0.011 NP (NDs) Antimony (mg/L) PZ-18 0.006 No 10 None No 0.006 Antimony (mg/L) PZ-19 0.003 0.003 No 10 0.002744 0.0008095 90 0.011 NP (NDs) None No PZ-7D 0.003 0.00042 0.006 0.011 NP (NDs) Antimony (mg/L) No 10 0.002471 0.001116 80 None No PZ-14 0.005 0.005 0.01 0.004583 0.001319 90 0.011 NP (NDs) Arsenic (mg/L) No 10 None No Arsenic (mg/L) PZ-15 0.005 0.00089 0.01 10 0.003759 0.002002 70 No 0.011 NP (NDs) No None PZ-17 0.005 0.0007 0.01 0.003712 0.002074 0.011 NP (NDs) Arsenic (mg/L) No 10 70 None No PZ-19 0.005 0.005 0.01 0.00457 0.00136 0.011 NP (NDs) Arsenic (ma/L) No 10 90 None No 0.01 0.004536 0.001467 0.011 NP (NDs) Arsenic (mg/L) PZ-23A 0.005 0.005 No 10 90 No 0.005 0.00071 0.01 0.003404 0.002079 0.011 NP (NDs) Arsenic (mg/L) PZ-25 No 10 60 None No 0.004164 0.011 NP (NDs) Arsenic (mg/L) PZ-33 0.005 0.00094 0.01 No 10 0.001763 80 None No Barium (mg/L) PZ-14 0.04126 0.01966 2 No 10 0.03059 0.01372 0 None sart(x) 0.01 Param PZ-15 0.07946 0.04854 2 0.01733 0 Barium (mg/L) No 10 0.064 None No 0.01 Param 2 0.0589 0.03664 0.04809 0.0145 0 Barium (mg/L) PZ-16 No 10 0.01 Param. None In(x) PZ-17 0.08199 0.07307 2 0.07753 0.004999 0 Barium (mg/L) No 10 None No 0.01 Param PZ-18 0.0513 2 0.01588 NP (normality) Barium (mg/L) 0.023 No 10 0.033 0 None No 0.011 Barium (mg/L) PZ-19 0.06138 0.0536 2 No 10 0.05749 0.004365 0 None No 0.01 Param Barium (mg/L) PZ-23A 0.05812 0.0369 2 No 10 0.04751 0.0119 0 0.01 Param None No PZ-25 0.1077 0.09846 2 0.1031 0 Barium (mg/L) No 10 0.005177 None No 0.01 Param PZ-33 0.07956 2 0.07078 Barium (mg/L) 0.062 No 9 0.009094 0 0.01 Param None No PZ-7D 0.01135 0.007668 2 0.00951 0.002065 0 Barium (mg/L) No 10 No 0.01 Param 0.00913 Chromium (mg/L) PZ-14 0.01 0.01 0.1 No 10 0.002751 90 None No 0.011 NP (NDs) Chromium (mg/L) PZ-16 0.01 0.0008 0.1 No 10 0.007254 0.004426 70 None No 0.011 NP (NDs) Chromium (ma/L) PZ-18 0.01 0.01 0.1 No 10 0.009056 0.002985 90 None No 0.011 NP (NDs) Chromium (mg/L) 0.009073 0.002931 0.011 NP (NDs) PZ-19 0.01 0.01 0.1 No 10 90 0.1 0.00443 Chromium (mg/L) PZ-23A 0.002763 0.001202 No 10 0.003955 30 0.01 Param Kaplan-Meier In(x) PZ-33 0.00917 0.011 NP (NDs) Chromium (mg/L) 0.01 0.01 0.1 10 0.002625 90 Kaplan-Meier No PZ-7D 0.01 0.0005 0.011 NP (normality) Chromium (mg/L) 0.1 No 10 0.0056 0.004698 50 None No Cobalt (mg/L) PZ-14 0.005 0.002 0.005 No 10 0.00423 0.001672 80 None No 0.011 NP (NDs) Cobalt (mg/L) PZ-15 0.005 0.0004 0.005 No 10 0.0028 0.00233 50 0.011 NP (normality) None No 0.001423 0.011 NP (NDs) Cobalt (mg/L) PZ-16 0.005 0.005 0.005 No 10 0.00455 90 None No PZ-17 0.002362 0.011 NP (normality) Cobalt (mg/L) 0.005 0.0005 0.005 No 10 0.002279 40 None No 0.00461 0.001233 0.011 NP (NDs) Cobalt (mg/L) PZ-18 0.005 0.005 0.005 10 90 No 0.005 0.0012 0.00421 0.011 NP (NDs) Cobalt (mg/L) PZ-19 0.005 No 10 0.001667 80 None No Cobalt (mg/L) PZ-23A 0.005 0.0008 0.005 No 10 0.00411 0.00188 80 None No 0.011 NP (NDs) Cobalt (mg/L) P7-25 0.0018 0.0008 0.005 No 10 0.001495 0.001284 10 Nο 0.011 NP (normality) None 0.00053 0.002783 0.002172 PZ-33 0.005 0.005 10 40 None No 0.011 NP (normality) 5 0.8774 0.6046 0 0.01 Param Combined Radium 226 + 228 (pCi/L) PZ-14 1.349 0.387 No 10 None sqrt(x) Combined Radium 226 + 228 (pCi/L) PZ-15 1.218 0.5998 No 10 0.9124 0.3901 0 None sqrt(x) 0.01 Param Combined Radium 226 + 228 (pCi/L) PZ-16 0.9929 0.3985 5 No 10 0.6957 0.3332 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) PZ-17 1.341 0.6641 5 No 9 1.003 0.3507 0 No 0.01 Combined Radium 226 + 228 (pCi/L) P7-18 1 525 0.514 5 No 9 1 02 0.5236 O None Nο 0.01 Param Combined Radium 226 + 228 (pCi/L) 5 0.4678 PZ-19 1.601 0.7663 10 1.184 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) 5 PZ-23A 1.391 No 10 0.378 0 Param 0.7162 1.054 None No 0.01 Combined Radium 226 + 228 (pCi/L) 1.358 0.8034 5 No 10 0.311 0 None No 0.01 Combined Radium 226 + 228 (pCi/L) PZ-33 1.194 0.5921 5 No 10 0.8928 0.3371 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) PZ-7D 0.7284 0.1228 0.4338 0.4056 0 None sqrt(x) 0.01 Param Fluoride (ma/L) PZ-14 0.3 0.05 4 No 11 0.1778 0.1197 45.45 0.006 NP (normality) None No 4 0.07779 Fluoride (ma/L) PZ-15 0.197 0.06736 11 0.1322 No 0.01 Fluoride (mg/L) PZ-16 4 0.1694 0.1262 0.006 NP (normality) 0.3 0.04 No. 11 45.45 None Nο Fluoride (mg/L) PZ-17 0.1865 0.06896 No 0.1705 0.09621 18.18 Kaplan-Meier No 0.01 Param 4 Fluoride (mg/L) PZ-18 0.1438 0.06382 No 11 0.1763 0.1064 36.36 Kaplan-Meier sqrt(x) 0.01 Param Fluoride (mg/L) PZ-19 0.188 0.07472 4 11 0.1686 0.1062 18.18 Kaplan-Meier sqrt(x) 0.01 Param

Confidence Intervals - All Results

Data: Mitchell Ash Pond CCR Printed 4/29/2020, 2:05 PM Plant Mitchell Client: Southern Company Constituent Well Upper Lim. Lower Lim. Compliance Sig. N Std. Dev. %NDs ND Adj. Transform Alpha Method Mean Fluoride (mg/L) PZ-23A 0.3 0.05 4 No 11 0.1821 0.1159 36.36 None No 0.006 NP (normality) PZ-25 0.2859 4 0.06818 0 0.01 Param. Fluoride (ma/L) 0.1723 No 11 0.2291 None No Fluoride (mg/L) PZ-33 0.3 0.06 4 No 11 0.1999 0.1087 45.45 None No 0.006 NP (normality) 0.006 NP (NDs) Fluoride (mg/L) PZ-7D 0.3 0.041 4 0.1951 0.1249 No 11 54.55 None No Lead (mg/L) PZ-15 0.005 0.005 0.005 No 10 0.004505 0.001565 90 No 0.011 NP (NDs) None Lead (mg/L) PZ-16 0.005 0.005 0.005 No 10 0.004508 0.001556 0.011 NP (NDs) 90 None No Lead (mg/L) PZ-18 0.005 0.005 0.005 No 10 0.004543 0.001445 90 None No 0.011 NP (NDs) Lead (mg/L) PZ-23A 0.005 0.005 0.005 No 10 0.004515 0.001534 90 None No 0.011 NP (NDs) Lead (mg/L) PZ-33 0.005 0.00009 0.005 No 10 0.004014 0.002079 80 No 0.011 NP (NDs) None PZ-14 0.03 Lithium (mg/L) 0.03 0.03 0.0273 0.008538 0.011 NP (NDs) No 10 90 None No Lithium (mg/L) PZ-15 0.03 0.0012 0.03 10 0.01563 0.01515 50 0.011 NP (normality) No None No 0.00789 Lithium (mg/L) 0.03 0.002 0.03 0.01166 20 0.011 NP (normality) PZ-17 No 10 None No 0.011 NP (normality) Lithium (mg/L) PZ-18 0.03 0.0024 0.03 No 10 0.00811 0.01154 20 None No Lithium (ma/L) PZ-19 0.01532 0.008877 0.03 No 10 0.0121 0.003612 0 None No 0.01 Param Lithium (mg/L) PZ-23A 0.03 0.03 0.03 10 0.02711 0.009139 90 No 0.011 NP (NDs) No None Lithium (mg/L) PZ-25 0.006932 0.004808 0.03 0.00587 0.001191 0 0.01 Param. No 10 No None Lithium (mg/L) PZ-7D 0.0038 0.0023 0.03 No 10 0.00564 0.008575 10 0.011 NP (normality) None No 0.011 NP (NDs) Molybdenum (mg/L) PZ-14 0.01 0.01 0.01 0.00905 0.003004 No 10 90 None No Molybdenum (mg/L) PZ-15 0.01 0.01 0.01 No 10 0.00904 0.003036 90 None No 0.011 NP (NDs) Molybdenum (mg/L) PZ-16 0.01 0.01 0.01 No 10 0.00904 0.003036 90 None No 0.011 NP (NDs) Molybdenum (mg/L) PZ-17 0.01 0.01 0.01 No 10 0.00904 0.003036 90 No 0.011 NP (NDs) None PZ-19 0.0027 0.0021 0.01 0.00307 0.011 NP (normality) Molybdenum (mg/L) No 10 0.002442 10 None No PZ-23A 0.01 0.0011 0.01 10 0.00817 0.00386 80 0.011 NP (NDs) Molybdenum (mg/L) No No 0.0091 0.002846 0.011 NP (NDs) Molybdenum (mg/L) PZ-25 0.01 0.01 0.01 No 10 90 None No Selenium (mg/L) PZ-14 0.01 0.0015 0.05 No 10 0.00827 0.003648 80 None No 0.011 NP (NDs) Selenium (ma/L) PZ-19 0.01 0.0016 0.05 No 10 0.00765 0.003817 70 None No 0.011 NP (NDs) Selenium (mg/L) PZ-23A 0.01 0.0018 0.05 10 0.00762 0.003852 70 No 0.011 NP (NDs) No None PZ-7D 0.00917 0.002625 0.011 NP (NDs) Selenium (mg/L) 0.01 0.01 0.05 No 10 90 None No Thallium (mg/L) PZ-14 0.001 0.001 0.002 No 10 0.000906 0.0002973 90 0.011 NP (NDs) No PZ-15 0.001 0.00016 0.002 0.00083 0.011 NP (NDs) Thallium (mg/L) No 10 0.0003584 80 None No Thallium (mg/L) PZ-16 0.001 0.00017 0.002 10 0.0005003 0.0004322 40 No 0.011 NP (normality) Thallium (mg/L) PZ-17 0.001 0.0002 0.002 No 10 0.000836 0.0003459 80 Nο 0.011 NP (NDs) None Thallium (mg/L) PZ-18 0.001 0.00005 0.002 0.0007161 0.0004572 0.011 NP (NDs) No 10 No PZ-19 0.0003862 0.000591 0.01 Thallium (mg/L) 0.0007958 0.002 No 10 0.0002296 10 Param None No Thallium (mg/L) PZ-23A 0.0002469 0.0001296 0.002 10 0.000439 0.0003909 0.01 30 Kaplan-Meier In(x) Param. 0.001 0.00037 0.000861 0.0002946 80 0.011 NP (NDs) Thallium (mg/L) PZ-25 0.002 No 10 Kaplan-Meier No Thallium (mg/L) PZ-33 0.001 0.0001 0.002 No 10 0.000563 0.0004613 50 No 0.011 NP (normality) Thallium (mg/L) P7-7D 0.001 0.000085 0.002 No 10 0.0005563 0.0004689 50 None Nο 0.011 NP (normality)

FIGURE A.

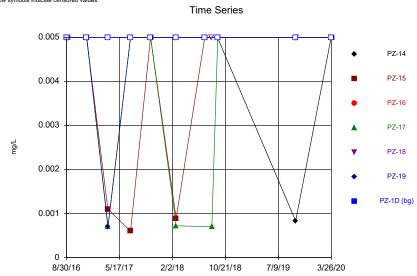




Constituent: Antimony Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

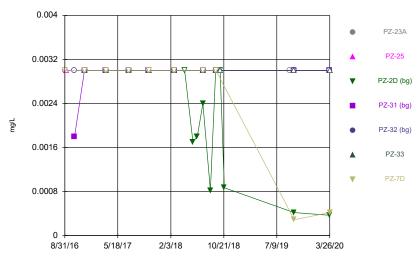
Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Arsenic Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

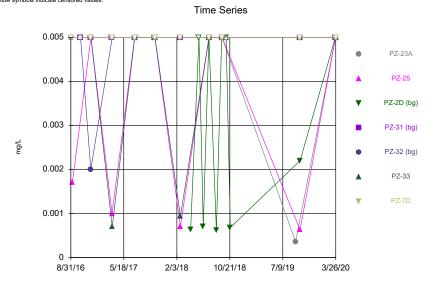
Time Series



Constituent: Antimony Analysis Run 7/27/2020 10:16 AM

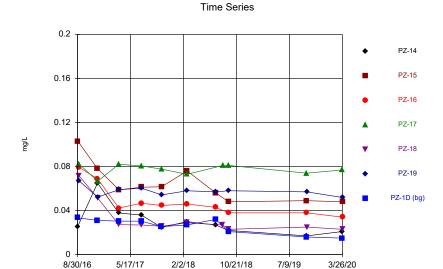
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



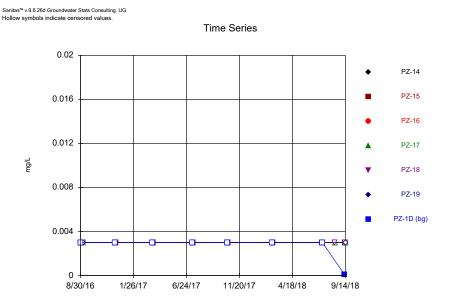
Constituent: Arsenic Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



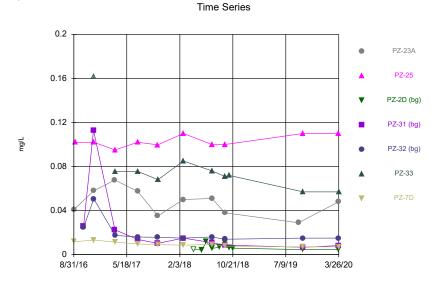
Constituent: Barium Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



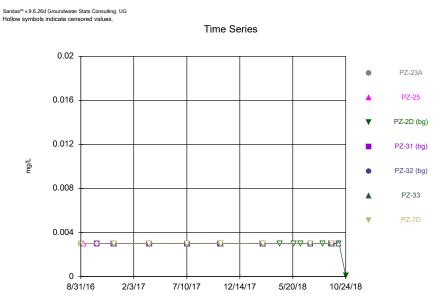
Constituent: Beryllium Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Barium Analysis Run 7/27/2020 10:16 AM

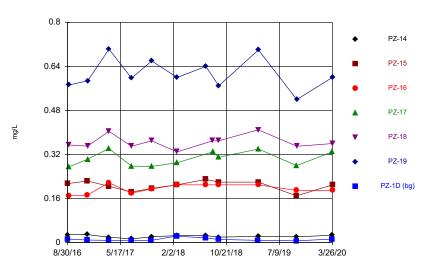
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Beryllium Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

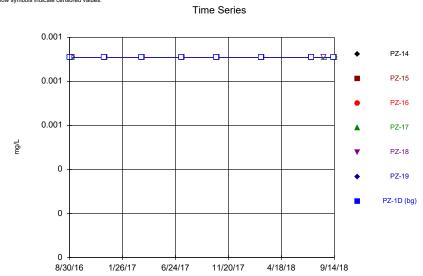




Constituent: Boron Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

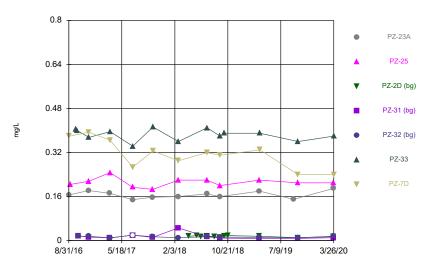
Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Cadmium Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Time Series



Constituent: Boron Analysis Run 7/27/2020 10:16 AM

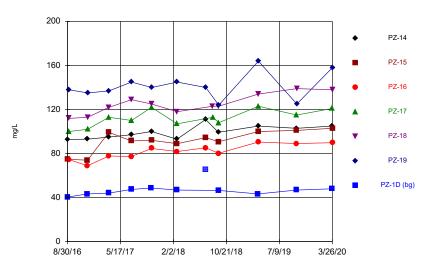
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Time Series 0.0011 PZ-23A AA B A MAA PZ-25 0.00088 PZ-2D (bg) 0.00066 PZ-31 (bg) PZ-32 (bg) 0.00044 PZ-33 PZ-7D 0.00022 8/31/16 2/3/17 7/10/17 12/14/17 5/20/18 10/24/18

Constituent: Cadmium Analysis Run 7/27/2020 10:16 AM

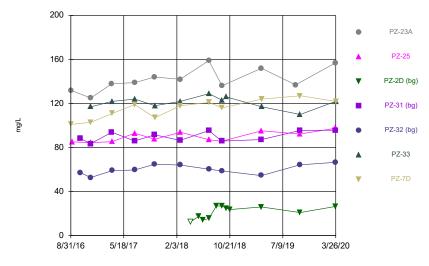
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Calcium Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Time Series

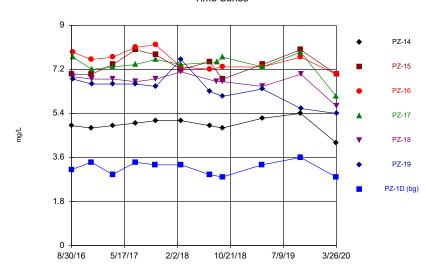


Constituent: Calcium Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG

Time Series

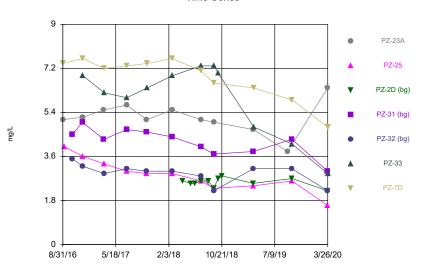


Constituent: Chloride Analysis Run 7/27/2020 10:16 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

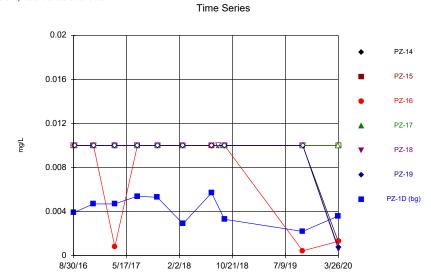
Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG

Time Series



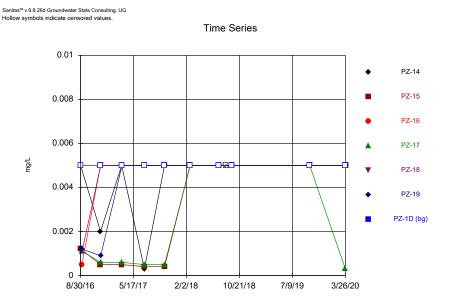
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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



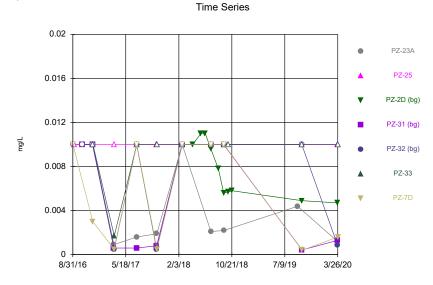
Constituent: Chromium Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



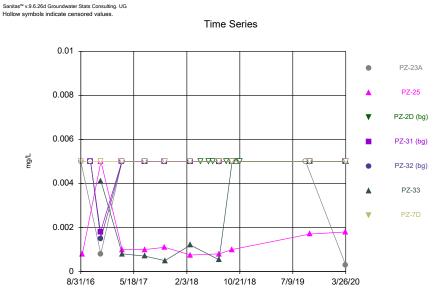
Constituent: Cobalt Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



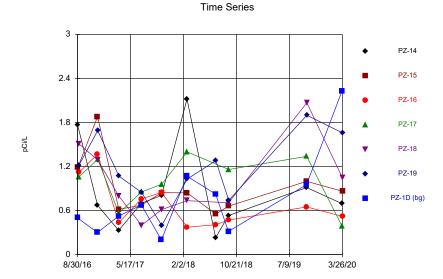
Constituent: Chromium Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Cobalt Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



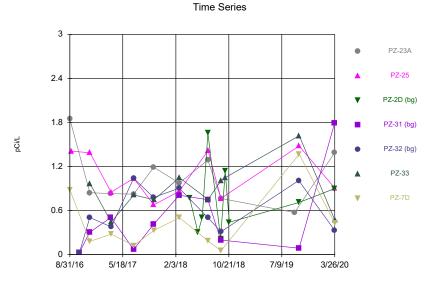
Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values Time Series 0.4 PZ-14 PZ-15 0.32 PZ-16 0.24 PZ-17 PZ-18 0.16 PZ-19 PZ-1D (bg) 0.08 8/30/16 5/17/17 2/2/18 10/21/18 7/9/19 3/26/20

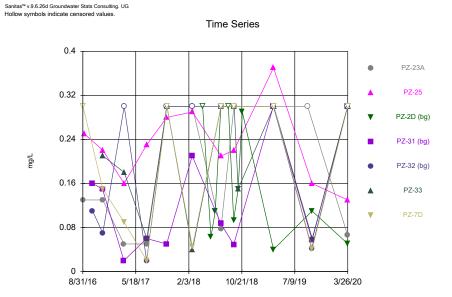
Constituent: Fluoride Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 10:17 AM

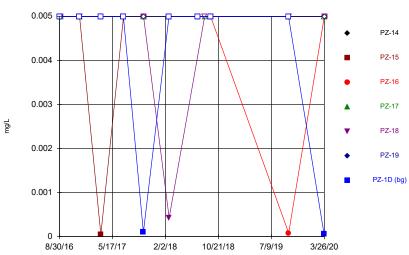
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Fluoride Analysis Run 7/27/2020 10:17 AM

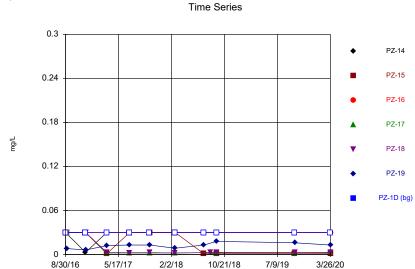
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR





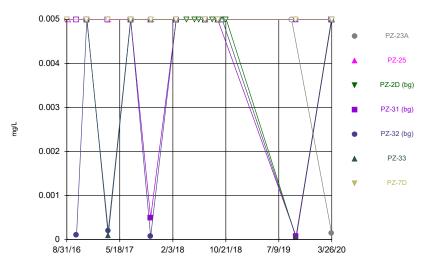
Constituent: Lead Analysis Run 7/27/2020 10:17 AM Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values



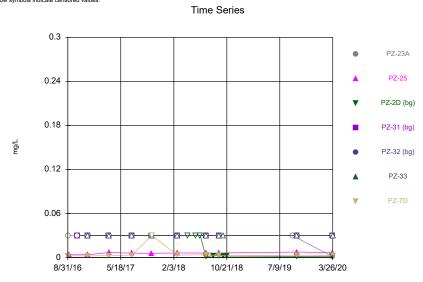
Constituent: Lithium Analysis Run 7/27/2020 10:17 AM Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR





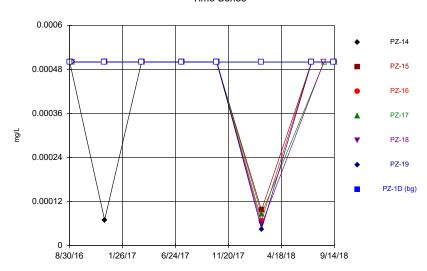
Constituent: Lead Analysis Run 7/27/2020 10:17 AM Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Lithium Analysis Run 7/27/2020 10:17 AM Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

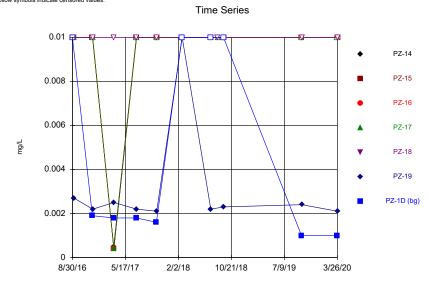




Constituent: Mercury Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

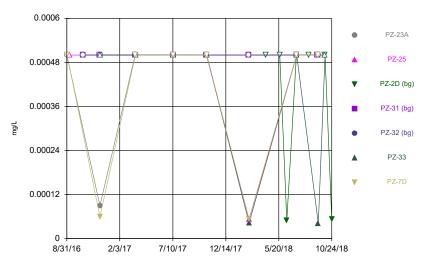
Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Molybdenum Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

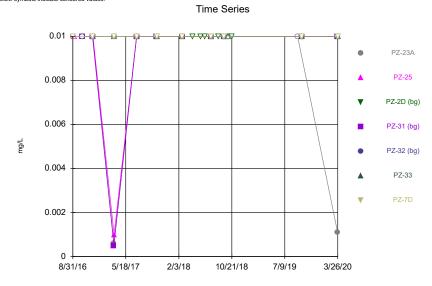
Time Series



Constituent: Mercury Analysis Run 7/27/2020 10:17 AM

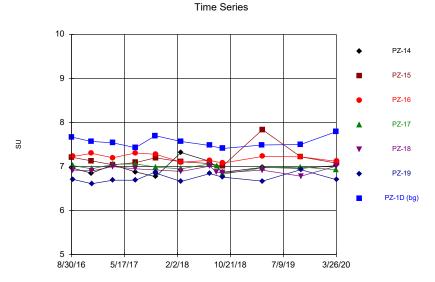
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



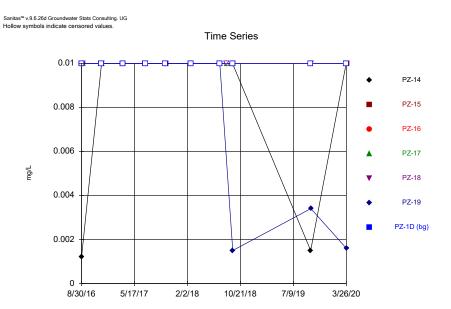
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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



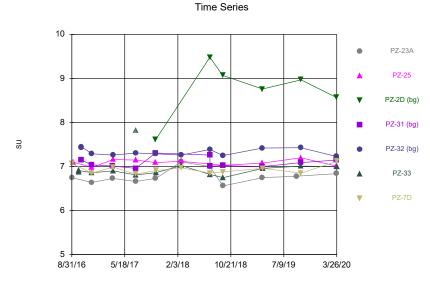
Constituent: pH Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



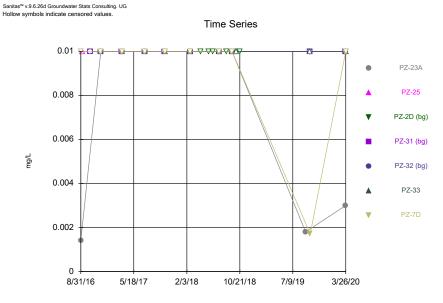
Constituent: Selenium Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



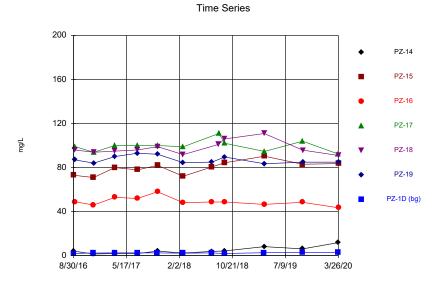
Constituent: pH Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Selenium Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Sulfate Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

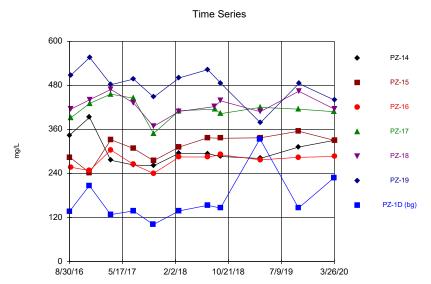
200 PZ-23A PZ-25 160 PZ-2D (bg) 120 PZ-31 (bg) mg/L PZ-32 (bg) 80 PZ-33 PZ-7D 8/31/16 5/18/17 2/3/18 10/21/18 7/9/19 3/26/20

Time Series

Constituent: Sulfate Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

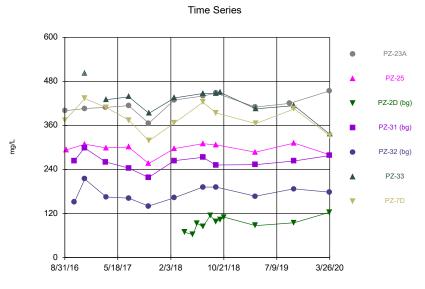
Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG



Constituent: TDS Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG

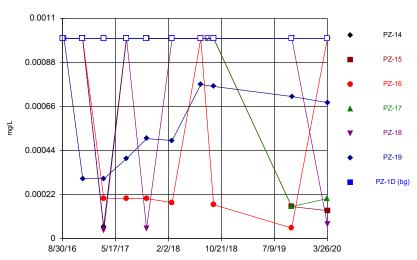


Constituent: TDS Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



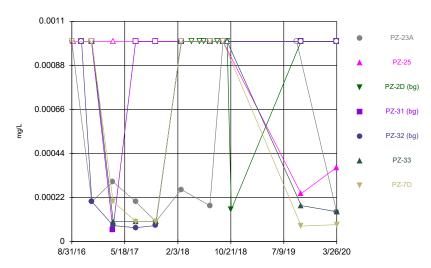


Constituent: Thallium Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.26d Groundwater Stats Consulting. UG

Time Series



Constituent: Thallium Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							0.0009 (J)
8/31/2016	<0.003						
9/1/2016		0.001 (J)					
9/6/2016			<0.003				
9/7/2016				<0.003	<0.003	<0.003	
12/6/2016							<0.003
12/7/2016	<0.003	<0.003	<0.003				
12/8/2016				<0.003	<0.003	<0.003	
3/21/2017	0.0004 (J)						0.0028 (J)
3/22/2017		<0.003	<0.003	<0.003	<0.003		
3/23/2017						<0.003	
7/11/2017	<0.003		<0.003				0.0035
7/12/2017		<0.003		<0.003	<0.003	<0.003	
10/17/2017							0.0025 (J)
10/18/2017	<0.003	<0.003	<0.003	<0.003	<0.003		
10/19/2017						<0.003	
2/20/2018	<0.003						0.00094 (J)
2/21/2018		<0.003	<0.003	<0.003	<0.003	<0.003	
7/11/2018	<0.003						0.0019 (J)
7/12/2018		<0.003	<0.003			<0.003	
8/15/2018					<0.003		
8/16/2018				<0.003			
9/12/2018	<0.003						0.0019 (J)
9/13/2018		<0.003	<0.003		<0.003		
9/14/2018				<0.003		<0.003	
10/1/2019							0.00076 (X)
10/2/2019	<0.003	<0.003	<0.003	<0.003			
10/3/2019					<0.003	0.00044 (X)	
3/24/2020							0.00055 (J)
3/25/2020	<0.003			0.00094 (J)			
3/26/2020		<0.003	<0.003		0.0018 (J)	<0.003	

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.003						
9/1/2016							<0.003
9/8/2016		<0.003					
10/18/2016				0.0018 (J)	<0.003		
12/6/2016				<0.003			
12/7/2016	<0.003				<0.003		<0.003
12/8/2016		<0.003				<0.003	
3/21/2017	<0.003			<0.003			
3/22/2017		<0.003					<0.003
3/23/2017					<0.003	<0.003	
7/11/2017	<0.003	<0.003		<0.003	<0.003		
7/12/2017						<0.003	<0.003
10/17/2017				<0.003	<0.003		
10/18/2017	<0.003	<0.003					
10/19/2017						<0.003	<0.003
2/20/2018	<0.003			<0.003	<0.003		
2/21/2018		<0.003				<0.003	<0.003
4/12/2018			<0.003				
5/23/2018			0.0017 (J)				
6/13/2018			0.0018 (J)				
7/11/2018	<0.003		0.0024 (J)	<0.003	<0.003		
7/12/2018		<0.003				<0.003	<0.003
8/17/2018			0.00082 (J)				
9/12/2018			<0.003	<0.003			
9/13/2018	<0.003	<0.003			<0.003		<0.003
9/14/2018						<0.003	
10/4/2018			<0.003			<0.003	
10/24/2018			0.00087 (J)				
9/10/2019	<0.003						
10/1/2019					<0.003		
10/2/2019		<0.003	0.00042 (X)	<0.003			
10/3/2019						<0.003	0.00029 (X)
3/24/2020			0.00037 (J)				
3/25/2020	<0.003	<0.003		<0.003	<0.003		
3/26/2020						<0.003	0.00042 (J)

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 10:17 AM

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.005
8/31/2016	<0.005						
9/1/2016		<0.005					
9/6/2016			<0.005				
9/7/2016				<0.005	<0.005	<0.005	
12/6/2016							<0.005
12/7/2016	<0.005	<0.005	<0.005				
12/8/2016				<0.005	<0.005	<0.005	
3/21/2017	<0.005						<0.005
3/22/2017		0.0011 (J)	<0.005	0.0007 (J)	<0.005		
3/23/2017						0.0007 (J)	
7/11/2017	<0.005		<0.005				<0.005
7/12/2017		0.0006 (J)		<0.005	<0.005	<0.005	
10/17/2017							<0.005
10/18/2017	<0.005	<0.005	<0.005	<0.005	<0.005		
10/19/2017						<0.005	
2/20/2018	<0.005						<0.005
2/21/2018		0.00089 (J)	<0.005	0.00072 (J)	<0.005	<0.005	
7/11/2018	<0.005						<0.005
7/12/2018		<0.005	<0.005			<0.005	
8/15/2018					<0.005		
8/16/2018				0.0007 (J)			
9/12/2018	<0.005						<0.005
9/13/2018		<0.005	<0.005		<0.005		
9/14/2018				<0.005		<0.005	
10/1/2019							<0.005
10/2/2019	0.00083 (X)	<0.005	<0.005	<0.005			
10/3/2019					<0.005	<0.005	
3/24/2020							<0.005
3/25/2020	<0.005			<0.005			
3/26/2020		<0.005	<0.005		<0.005	<0.005	

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 10:17 AM

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.005						
9/1/2016							<0.005
9/8/2016		0.0017 (J)					
10/18/2016				<0.005	<0.005		
12/6/2016				<0.005			
12/7/2016	<0.005				0.002 (J)		<0.005
12/8/2016		<0.005				<0.005	
3/21/2017	<0.005			<0.005			
3/22/2017		0.001 (J)					<0.005
3/23/2017					<0.005	0.0007 (J)	
7/11/2017	<0.005	<0.005		<0.005	<0.005		
7/12/2017						<0.005	<0.005
10/17/2017				<0.005	<0.005		
10/18/2017	<0.005	<0.005					
10/19/2017						<0.005	<0.005
2/20/2018	<0.005			<0.005	<0.005		
2/21/2018		0.00071 (J)				0.00094 (J)	<0.005
4/12/2018			0.00064 (J)				
5/23/2018			<0.005				
6/13/2018			0.0007 (J)				
7/11/2018	<0.005		<0.005	<0.005	<0.005		
7/12/2018		<0.005				<0.005	<0.005
8/17/2018			0.00062 (J)				
9/12/2018			<0.005	<0.005			
9/13/2018	<0.005	<0.005			<0.005		<0.005
9/14/2018						<0.005	
10/4/2018			<0.005			<0.005	
10/24/2018			0.00068 (J)				
9/10/2019	0.00036 (X)						
10/1/2019					<0.005		
10/2/2019		0.00063 (X)	0.0022 (X)	<0.005			
10/3/2019						<0.005	<0.005
3/24/2020			<0.005				
3/25/2020	<0.005	<0.005		<0.005	<0.005		
3/26/2020						<0.005	<0.005

Constituent: Barium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell	Client: Southern Company	Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							0.0335
8/31/2016	0.0253						
9/1/2016		0.103					
9/6/2016			0.0794				
9/7/2016				0.0823	0.0717	0.067	
12/6/2016							0.0311
12/7/2016	0.065	0.0781	0.0689				
12/8/2016				0.0668	0.0513	0.0522	
3/21/2017	0.0379						0.0305
3/22/2017		0.0589	0.0423	0.0821	0.0273		
3/23/2017						0.0591	
7/11/2017	0.036		0.0467				0.0305
7/12/2017		0.0613		0.0805	0.0269	0.0604	
10/17/2017							0.0255
10/18/2017	0.0247	0.0617	0.0446	0.0776	0.0258		
10/19/2017						0.0542	
2/20/2018	0.03						0.027
2/21/2018		0.076	0.046	0.073	0.029	0.058	
7/11/2018	0.027						0.032
7/12/2018		0.056	0.043			0.057	
8/15/2018					0.027		
8/16/2018				0.081			
9/12/2018	0.022						0.021
9/13/2018		0.048	0.038		0.023		
9/14/2018				0.081		0.058	
10/1/2019							0.016
10/2/2019	0.017	0.049	0.038	0.074			
10/3/2019					0.025	0.057	
3/24/2020							0.015
3/25/2020	0.021			0.077			
3/26/2020		0.048	0.034		0.023	0.052	

Constituent: Barium (mg/L) Analysis Run 7/27/2020 10:17 AM

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	0.0407						
9/1/2016							0.0117
9/8/2016		0.102					
10/18/2016				0.0257	0.0248		
12/6/2016				0.113			
12/7/2016	0.0581				0.0506		0.0133
12/8/2016		0.102				0.162 (o)	
3/21/2017	0.0678			0.0226			
3/22/2017		0.0951					0.0114
3/23/2017					0.0175	0.0753	
7/11/2017	0.0574	0.102		0.0139	0.0161		
7/12/2017						0.0756	0.0097 (J)
10/17/2017				0.0103	0.0158		
10/18/2017	0.0351	0.0997					
10/19/2017						0.0681	0.0091 (J)
2/20/2018	0.05			0.015	0.015		
2/21/2018		0.11				0.085	0.0086 (J)
4/12/2018			<0.01				
5/23/2018			0.0042 (J)				
6/13/2018			0.012				
7/11/2018	0.051		0.0056 (J)	0.011	0.016		
7/12/2018		0.1				0.076	0.0093 (J)
8/17/2018			0.0069 (J)				
9/12/2018			0.011	0.0087 (J)			
9/13/2018	0.038	0.1			0.014		0.0078 (J)
9/14/2018						0.071	
10/4/2018			0.0066 (J)			0.072	
10/24/2018			0.0059 (J)				
9/10/2019	0.029						
10/1/2019					0.015		
10/2/2019		0.11	0.0046 (X)	0.0067 (X)			
10/3/2019						0.057	0.007 (X)
3/24/2020			0.0046 (J)				
3/25/2020	0.048	0.11		0.0082 (J)	0.015		
3/26/2020						0.057	0.0072 (J)

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.003
8/31/2016	<0.003						
9/1/2016		<0.003					
9/6/2016			<0.003				
9/7/2016				<0.003	<0.003	<0.003	
12/6/2016							<0.003
12/7/2016	<0.003	<0.003	<0.003				
12/8/2016				<0.003	<0.003	<0.003	
3/21/2017	<0.003						<0.003
3/22/2017		<0.003	<0.003	<0.003	<0.003		
3/23/2017						<0.003	
7/11/2017	<0.003		<0.003				<0.003
7/12/2017		<0.003		<0.003	<0.003	<0.003	
10/17/2017							<0.003
10/18/2017	<0.003	<0.003	<0.003	<0.003	<0.003		
10/19/2017						<0.003	
2/20/2018	<0.003						<0.003
2/21/2018		<0.003	<0.003	<0.003	<0.003	<0.003	
7/11/2018	<0.003						<0.003
7/12/2018		<0.003	<0.003			<0.003	
8/15/2018					<0.003		
8/16/2018				<0.003			
9/12/2018	<0.003						6.1E-05 (J)
9/13/2018		<0.003	<0.003		<0.003		
9/14/2018				<0.003		<0.003	

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.003						
9/1/2016							<0.003
9/8/2016		<0.003					
10/18/2016				<0.003	<0.003		
12/6/2016				<0.003			
12/7/2016	<0.003				<0.003		<0.003
12/8/2016		<0.003				<0.003	
3/21/2017	<0.003			<0.003			
3/22/2017		<0.003					<0.003
3/23/2017					<0.003	<0.003	
7/11/2017	<0.003	<0.003		< 0.003	< 0.003		
7/12/2017						<0.003	<0.003
10/17/2017				<0.003	<0.003		
10/18/2017	<0.003	<0.003					
10/19/2017						<0.003	<0.003
2/20/2018	<0.003			<0.003	<0.003		
2/21/2018		<0.003				<0.003	<0.003
4/12/2018			<0.003				
5/23/2018			<0.003				
6/13/2018			<0.003				
7/11/2018	<0.003		<0.003	<0.003	<0.003		
7/12/2018		<0.003				<0.003	<0.003
8/17/2018			<0.003				
9/12/2018			<0.003	<0.003			
9/13/2018	<0.003	<0.003			<0.003		<0.003
9/14/2018						<0.003	
10/4/2018			<0.003			<0.003	
10/24/2018			6E-05 (J)				

Constituent: Boron (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							0.0132 (J)
8/31/2016	0.0285 (J)						
9/1/2016		0.215					
9/6/2016			0.17				
9/7/2016				0.276	0.355	0.573	
12/6/2016							0.0096 (J)
12/7/2016	0.0292 (J)	0.224	0.173				
12/8/2016				0.303	0.351	0.588	
3/21/2017	0.0198 (J)						0.0082 (J)
3/22/2017		0.205	0.218	0.342	0.405		
3/23/2017						0.703	
7/11/2017	0.0137 (J)		0.18				0.0067 (J)
7/12/2017		0.184		0.278	0.35	0.598	
10/17/2017							0.0083 (J)
10/18/2017	0.0212 (J)	0.197	0.195	0.277	0.37		
10/19/2017						0.66	
2/20/2018	0.026 (J)						0.024 (J)
2/21/2018		0.21	0.21	0.29	0.33	0.6	
7/11/2018	0.026 (J)						0.017 (J)
7/12/2018		0.23	0.21			0.64	
8/15/2018					0.37		
8/16/2018				0.33			
9/12/2018	0.02 (J)						0.012 (J)
9/13/2018		0.22	0.21		0.37		
9/14/2018				0.31		0.57	
3/26/2019							0.0082
3/27/2019	0.023		0.21		0.41		
3/28/2019		0.22		0.34		0.7	
10/1/2019							0.0064 (X)
10/2/2019	0.021 (X)	0.17	0.19	0.28			
10/3/2019					0.35	0.52	
3/24/2020							0.013 (J)
3/25/2020	0.027 (J)			0.33			
3/26/2020		0.21	0.19		0.36	0.6	

Constituent: Boron (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	0.166						
9/1/2016							0.379
9/8/2016		0.204					
10/5/2016						0.404	
10/10/2016						0.401	
10/18/2016				0.0174 (J)	0.0156 (J)		
12/6/2016				0.0133 (J)			
12/7/2016	0.182				0.0157 (J)		0.394
12/8/2016		0.216				0.375	
3/21/2017	0.172			0.0103 (J)			
3/22/2017		0.247					0.365
3/23/2017					0.0103 (J)	0.396	
7/11/2017	0.149	0.194		<0.04	<0.04		
7/12/2017						0.343	0.267
10/17/2017				0.0116 (J)	0.0142 (J)		
10/18/2017	0.158	0.186					
10/19/2017						0.413	0.326
2/20/2018	0.16			0.046 (J)	0.011 (J)		
2/21/2018		0.22				0.36	0.29
4/12/2018			0.016 (J)				
5/23/2018			0.018 (J)				
6/13/2018			0.014 (J)				
7/11/2018	0.17		0.017 (J)	0.014 (J)	0.014 (J)		
7/12/2018		0.22				0.41	0.32
8/17/2018			0.015 (J)				
9/12/2018	0.10	0.0	0.013 (J)	0.0098 (J)	0.010 (1)		0.24
9/13/2018	0.16	0.2			0.013 (J)	0.00	0.31
9/14/2018			0.016 (1)			0.38	
10/4/2018 10/24/2018			0.016 (J)			0.39	
3/26/2019			0.018 (J)	0.0076			
3/27/2019	0.18	0.22	0.016	0.0070	0.012		
3/28/2019	0.10	0.22	0.010		0.012	0.39	0.33
9/10/2019	0.15					0.59	0.55
10/1/2019	0.13				0.011 (X)		
10/1/2019		0.21	0.011 (X)	0.0084 (X)			
10/3/2019			(* ')			0.36	0.24
3/24/2020			0.015 (J)			-	
3/25/2020	0.19	0.21	` '	0.011 (J)	0.016 (J)		
3/26/2020				` '	` '	0.38	0.24

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.001
8/31/2016	<0.001						
9/1/2016		<0.001					
9/6/2016			<0.001				
9/7/2016				<0.001	<0.001	<0.001	
12/6/2016							<0.001
12/7/2016	<0.001	<0.001	<0.001				
12/8/2016				<0.001	<0.001	<0.001	
3/21/2017	<0.001						<0.001
3/22/2017		<0.001	<0.001	<0.001	<0.001		
3/23/2017						<0.001	
7/11/2017	<0.001		<0.001				<0.001
7/12/2017		<0.001		<0.001	<0.001	<0.001	
10/17/2017							<0.001
10/18/2017	<0.001	<0.001	<0.001	<0.001	<0.001		
10/19/2017						<0.001	
2/20/2018	<0.001						<0.001
2/21/2018		<0.001	<0.001	<0.001	<0.001	<0.001	
7/11/2018	<0.001						<0.001
7/12/2018		<0.001	<0.001			<0.001	
8/15/2018					<0.001		
8/16/2018				<0.001			
9/12/2018	<0.001						<0.001
9/13/2018		<0.001	<0.001		<0.001		
9/14/2018				<0.001		<0.001	

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	0.0002 (J)						
9/1/2016							<0.001
9/8/2016		<0.001					
10/18/2016				<0.001	<0.001		
12/6/2016				<0.001			
12/7/2016	0.0002 (J)				<0.001		<0.001
12/8/2016		<0.001				<0.001	
3/21/2017	<0.001			<0.001			
3/22/2017		<0.001					<0.001
3/23/2017					<0.001	0.0001 (J)	
7/11/2017	<0.001	<0.001		<0.001	<0.001		
7/12/2017						<0.001	<0.001
10/17/2017				<0.001	<0.001		
10/18/2017	<0.001	<0.001					
10/19/2017						<0.001	<0.001
2/20/2018	<0.001			<0.001	<0.001		
2/21/2018		<0.001				<0.001	<0.001
4/12/2018			<0.001				
5/23/2018			<0.001				
6/13/2018			<0.001				
7/11/2018	<0.001		<0.001	<0.001	<0.001		
7/12/2018		<0.001				<0.001	<0.001
8/17/2018			<0.001				
9/12/2018			<0.001	<0.001			
9/13/2018	<0.001	<0.001			<0.001		<0.001
9/14/2018						<0.001	
10/4/2018			<0.001			<0.001	
10/24/2018			<0.001				

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 10:17 AM

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							40.4
8/31/2016	92.9						
9/1/2016		74.8					
9/6/2016			74.6				
9/7/2016				100	112	138	
12/6/2016							43.3
12/7/2016	93.1	74	68.9				
12/8/2016				102	113	135	
3/21/2017	95						44.1
3/22/2017		99.3	77.8	113	122		
3/23/2017						137	
7/11/2017	97.1		77.3				47.4
7/12/2017		91.4		110	129	145	
10/17/2017							48.7
10/18/2017	100	92	84.7	122	125		
10/19/2017						140	
2/20/2018	93.1						46.8
2/21/2018		89	81.8	107	118	145	
7/11/2018	111						65.3 (o)
7/12/2018		94.5	85.2			140	
8/15/2018					123		
8/16/2018				113			
9/12/2018	99.3						46.6
9/13/2018		90.8	80.2		123		
9/14/2018				108		124	
3/26/2019							43.3
3/27/2019	105		90.5		134		
3/28/2019		100		123		164	
10/1/2019							46.8
10/2/2019	103	101	89.1	115			
10/3/2019					139	125	
3/24/2020							48
3/25/2020	105			121			
3/26/2020		103	89.8		138	158	

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 10:17 AM

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	132						
9/1/2016							101
9/8/2016		85.2					
10/18/2016				88.3	57.2		
12/6/2016				83.4			
12/7/2016	125				52.8		103
12/8/2016		84.5				117	
3/21/2017	138			94			
3/22/2017		85.3					111
3/23/2017					59.1	122	
7/11/2017	139	93		86	59.7		
7/12/2017						124	119
10/17/2017				91.6	64.9		
10/18/2017	144	87.6					
10/19/2017						118	107
2/20/2018	142			86.5	64.1		
2/21/2018		93.9				122	118
4/12/2018			<25				
5/23/2018			17.6 (J)				
6/13/2018			14.3				
7/11/2018	159		15.6	95.4	60.4		
7/12/2018		87.1				129	121
8/17/2018			27				
9/12/2018			26.9	86			
9/13/2018	136	85.8			58.7		116
9/14/2018						123	
10/4/2018			25			126	
10/24/2018			23.8				
3/26/2019				87.3			
3/27/2019	152	95.2	26.1		54.6		
3/28/2019						117	124
9/10/2019	137						
10/1/2019					64.3		
10/2/2019		92.3	21	95.5			
10/3/2019						110	127
3/24/2020			26.5				
3/25/2020	157	97.5		95.8	66.6		
3/26/2020						122	122

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							3.1
8/31/2016	4.9						
9/1/2016		7					
9/6/2016			7.9				
9/7/2016				7.7	6.9	6.8	
12/6/2016							3.4
12/7/2016	4.8	7	7.6				
12/8/2016				7.2	6.8	6.6	
3/21/2017	4.9						2.9
3/22/2017		7.4	7.7	7.3	6.8		
3/23/2017						6.6	
7/11/2017	5		8.1				3.4
7/12/2017		8		7.4	6.7	6.6	
10/17/2017							3.3
10/18/2017	5.1	7.8	8.2	7.6	6.8		
10/19/2017						6.5	
2/20/2018	5.1						3.3
2/21/2018		7.2	7.3	7.4	7.1	7.6	
7/11/2018	4.9						2.9
7/12/2018		7.5	7.2			6.3	
8/15/2018					6.7		
8/16/2018				7.5			
9/12/2018	4.8						2.8
9/13/2018		6.8	7.3		6.7		
9/14/2018				7.7		6.1	
3/26/2019							3.3
3/27/2019	5.2		7.3		6.5		
3/28/2019		7.4		7.3		6.4	
10/1/2019							3.6
10/2/2019	5.4	8	7.7	7.9			
10/3/2019					7	5.6	
3/24/2020							2.8
3/25/2020	4.2			6.1			
3/26/2020		7	7		5.7	5.4	

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell	Client: Southern Company	Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	5.1						
9/1/2016							7.4
9/8/2016		4					
10/18/2016				4.5	3.5		
12/6/2016				5			
12/7/2016	5.2				3.2		7.6
12/8/2016		3.6				6.9	
3/21/2017	5.5			4.3			
3/22/2017		3.3					7.2
3/23/2017					2.9	6.2	
7/11/2017	5.7	3		4.7	3.1		
7/12/2017						6	7.3
10/17/2017				4.6	3		
10/18/2017	5.1	2.9					
10/19/2017						6.4	7.4
2/20/2018	5.5			4.4	3		
2/21/2018		2.9				6.9	7.6
4/12/2018			2.6				
5/23/2018			2.5				
6/13/2018			2.5				
7/11/2018	5.1		2.6	4	2.8		
7/12/2018		2.6				7.3	7.1
8/17/2018			2.6				
9/12/2018			2.3	3.7			
9/13/2018	5	2.3			2.2		6.6
9/14/2018						7.3	
10/4/2018			2.7			7	
10/24/2018			2.8				
3/26/2019				3.8			
3/27/2019	4.7	2.4	2.5		3.1		
3/28/2019						4.8	6.4
9/10/2019	3.8						
10/1/2019					3.1		
10/2/2019		2.6	2.7	4.3			
10/3/2019						4.1	5.9
3/24/2020			2.2				
3/25/2020	6.4	1.6		3	2.2		
3/26/2020						2.9	4.8

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							0.0039 (J)
8/31/2016	<0.01						
9/1/2016		<0.01					
9/6/2016			<0.01				
9/7/2016				<0.01	<0.01	<0.01	
12/6/2016							0.0047 (J)
12/7/2016	<0.01	<0.01	<0.01				
12/8/2016				<0.01	<0.01	<0.01	
3/21/2017	<0.01						0.0047 (J)
3/22/2017		<0.01	0.0008 (J)	<0.01	<0.01		
3/23/2017						<0.01	
7/11/2017	<0.01		<0.01				0.0054 (J)
7/12/2017		<0.01		<0.01	<0.01	<0.01	
10/17/2017							0.0053 (J)
10/18/2017	<0.01	<0.01	<0.01	<0.01	<0.01		
10/19/2017						<0.01	
2/20/2018	<0.01						0.0029 (J)
2/21/2018		<0.01	<0.01	<0.01	<0.01	<0.01	
7/11/2018	<0.01						0.0057 (J)
7/12/2018		<0.01	<0.01			<0.01	
8/15/2018					<0.01		
8/16/2018				<0.01			
9/12/2018	<0.01						0.0033 (J)
9/13/2018		<0.01	<0.01		<0.01		
9/14/2018				<0.01		<0.01	
10/1/2019							0.0022 (X)
10/2/2019	<0.01	<0.01	0.00044 (X)	<0.01			
10/3/2019					<0.01	<0.01	
3/24/2020							0.0036 (J)
3/25/2020	0.0013 (J)			<0.01			
3/26/2020		<0.01	0.0013 (J)		0.00056 (J)	0.00073 (J)	

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.01						
9/1/2016							<0.01
9/8/2016		<0.01					
10/18/2016				<0.01	<0.01		
12/6/2016				<0.01			
12/7/2016	<0.01				<0.01		0.003 (J)
12/8/2016		<0.01				<0.01	
3/21/2017	0.0009 (J)			0.0006 (J)			
3/22/2017		<0.01					0.0005 (J)
3/23/2017					0.0005 (J)	0.0017 (J)	
7/11/2017	0.0016 (J)	<0.01		0.0006 (J)	<0.01		
7/12/2017						<0.01	<0.01
10/17/2017				0.0008 (J)	0.0005 (J)		
10/18/2017	0.0019 (J)	<0.01					
10/19/2017						<0.01	0.0005 (J)
2/20/2018	<0.01			<0.01	<0.01		
2/21/2018		<0.01				<0.01	<0.01
4/12/2018			0.01				
5/23/2018			0.011				
6/13/2018			0.011				
7/11/2018	0.0021 (J)		0.0096 (J)	<0.01	<0.01		
7/12/2018		<0.01				<0.01	<0.01
8/17/2018			0.0078 (J)				
9/12/2018			0.0056 (J)	<0.01			
9/13/2018	0.0022 (J)	<0.01			<0.01		<0.01
9/14/2018						<0.01	
10/4/2018			0.0057 (J)			<0.01	
10/24/2018			0.0058 (J)				
9/10/2019	0.0044 (X)						
10/1/2019					<0.01		
10/2/2019		<0.01	0.0049 (X)	0.00043 (X)			
10/3/2019						<0.01	0.0004 (X)
3/24/2020			0.0047 (J)				
3/25/2020	0.0012 (J)	<0.01		0.0013 (J)	0.00086 (J)		
3/26/2020						<0.01	0.0016 (J)

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 10:17 AM

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.005
8/31/2016	<0.005						
9/1/2016		0.0012 (J)					
9/6/2016			0.0005 (J)				
9/7/2016				0.0011 (J)	0.0011 (J)	0.0012 (J)	
12/6/2016							<0.005
12/7/2016	0.002 (J)	0.0005 (J)	<0.005				
12/8/2016				0.0006 (J)	<0.005	0.0009 (J)	
3/21/2017	<0.005						<0.005
3/22/2017		0.0005 (J)	<0.005	0.0006 (J)	<0.005		
3/23/2017						<0.005	
7/11/2017	0.0003 (J)		<0.005				<0.005
7/12/2017		0.0004 (J)		0.0005 (J)	<0.005	<0.005	
10/17/2017							<0.005
10/18/2017	<0.005	0.0004 (J)	<0.005	0.0005 (J)	<0.005		
10/19/2017						<0.005	
2/20/2018	<0.005						<0.005
2/21/2018		<0.005	<0.005	<0.005	<0.005	<0.005	
7/11/2018	<0.005						<0.005
7/12/2018		<0.005	<0.005			<0.005	
8/15/2018					<0.005		
8/16/2018				<0.005			
9/12/2018	<0.005						<0.005
9/13/2018		<0.005	<0.005		<0.005		
9/14/2018				<0.005		<0.005	
10/1/2019							<0.005
10/2/2019	<0.005	<0.005	<0.005	<0.005			
10/3/2019					<0.005	<0.005	
3/24/2020							<0.005
3/25/2020	<0.005			0.00032 (J)			
3/26/2020		<0.005	<0.005		<0.005	<0.005	

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.005						
9/1/2016							<0.005
9/8/2016		0.0008 (J)					
10/18/2016				<0.005	<0.005		
12/6/2016				0.0018 (J)			
12/7/2016	0.0008 (J)				0.0015 (J)		<0.005
12/8/2016		<0.005				0.0041 (J)	
3/21/2017	<0.005			<0.005			
3/22/2017		0.001 (J)					<0.005
3/23/2017					<0.005	0.0008 (J)	
7/11/2017	<0.005	0.001 (J)		<0.005	<0.005		
7/12/2017						0.0007 (J)	<0.005
10/17/2017				<0.005	<0.005		
10/18/2017	<0.005	0.0011 (J)					
10/19/2017						0.0005 (J)	<0.005
2/20/2018	<0.005			<0.005	<0.005		
2/21/2018		0.00075 (J)				0.0012 (J)	<0.005
4/12/2018			<0.005				
5/23/2018			<0.005				
6/13/2018			<0.005				
7/11/2018	<0.005		<0.005	<0.005	<0.005		
7/12/2018		0.0008 (J)				0.00053 (J)	<0.005
8/17/2018			<0.005				
9/12/2018			<0.005	<0.005			
9/13/2018	<0.005	0.001 (J)			<0.005		<0.005
9/14/2018						<0.005	
10/4/2018			<0.005			<0.005	
10/24/2018			<0.005				
9/10/2019	<0.005						
10/1/2019					<0.005		
10/2/2019		0.0017 (X)	<0.005	<0.005			
10/3/2019						<0.005	<0.005
3/24/2020			<0.005				
3/25/2020	0.0003 (J)	0.0018 (J)		<0.005	<0.005		
3/26/2020						<0.005	<0.005

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 10:17 AM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							0.503 (U)
8/31/2016	1.77						
9/1/2016		1.19					
9/6/2016			1.12				
9/7/2016				1.06 (U)	1.51	1.22	
12/6/2016							0.302 (U)
12/7/2016	0.672 (U)	1.88	1.37				
12/8/2016				1.3	1.29	1.69	
3/21/2017	0.33 (U)						0.526 (U)
3/22/2017		0.617 (U)	0.435 (U)	0.566 (U)	0.799 (U)		
3/23/2017						1.07	
7/11/2017	0.701 (U)		0.76 (U)				0.676 (U)
7/12/2017		0.674 (U)		0.856 (U)	0.4 (U)	0.849 (U)	
10/17/2017							0.201 (U)
10/18/2017	0.808 (U)	0.844 (U)	0.847 (U)	0.957	0.613 (U)		
10/19/2017						0.398 (U)	
2/20/2018	2.12						1.07 (U)
2/21/2018		0.842 (U)	0.373 (U)	1.4	0.736 (U)	1.03 (U)	
7/11/2018	0.232 (U)						0.825 (U)
7/12/2018		0.552 (U)	0.408 (U)			1.28 (U)	
9/12/2018	0.532 (U)						0.317 (U)
9/13/2018		0.662 (U)	0.472 (U)		0.708 (U)		
9/14/2018				1.16		0.74 (U)	
10/1/2019							0.953 (U)
10/2/2019	0.915 (U)	1 (U)	0.65 (U)	1.34 (U)			
10/3/2019					2.07	1.9	
3/24/2020							2.23
3/25/2020	0.694 (U)			0.385 (U)			
3/26/2020		0.863 (U)	0.522 (U)		1.05	1.66	

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 10:17 AM Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	1.85						
9/1/2016							0.88 (U)
9/8/2016		1.41					
10/18/2016				0.0311 (U)	0.0333 (U)		
12/6/2016				0.301 (U)			
12/7/2016	0.844 (U)				0.507 (U)		0.179 (U)
12/8/2016		1.39				0.968 (U)	
3/21/2017	0.832 (U)			0.506 (U)			
3/22/2017		0.852 (U)					0.279 (U)
3/23/2017					0.378 (U)	0.444 (U)	
7/11/2017	0.824 (U)	1.04		0.0701 (U)	1.04		
7/12/2017						0.814 (U)	0.125 (U)
10/17/2017				0.412 (U)	0.779 (U)		
10/18/2017	1.19	0.678 (U)					
10/19/2017						0.748 (U)	0.329 (U)
2/20/2018	0.975 (U)			0.81 (U)	0.906 (U)		
2/21/2018		0.863 (U)				1.05 (U)	0.504 (U)
4/12/2018			0.774 (U)				
5/23/2018			0.301 (U)				
6/13/2018			0.508 (U)				
7/11/2018	1.29		1.66	0.749 (U)	0.505 (U)		
7/12/2018		1.42				0.751 (U)	0.188 (U)
9/12/2018			0.217 (U)	0.2 (U)			
9/13/2018	0.765 (U)	0.766 (U)			0.313 (U)		0.0542 (U)
9/14/2018						1.01 (U)	
10/4/2018			1.14			1.05	
10/24/2018			0.441 (U)				
9/10/2019	0.575 (U)						
10/1/2019					1.01 (U)		
10/2/2019		1.48	0.712 (U)	0.0883 (U)			
10/3/2019						1.62 (U)	1.37
3/24/2020			0.898 (U)				
3/25/2020	1.39	0.91 (U)		1.79	0.333 (U)		
3/26/2020						0.473 (U)	0.43 (U)

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							0.06 (J)
8/31/2016	0.13 (J)						
9/1/2016		0.06 (J)					
9/6/2016			0.09 (J)				
9/7/2016				0.03 (J)	0.12 (J)	0.15 (J)	
12/6/2016							0.06 (J)
12/7/2016	0.07 (J)	0.09 (J)	0.09 (J)				
12/8/2016				0.18 (J)	0.18 (J)	0.12 (J)	
3/21/2017	<0.3						0.004 (J)
3/22/2017		0.11 (J)	0.04 (J)	0.09 (J)	0.08 (J)		
3/23/2017						0.14 (J)	
7/11/2017	0.05 (J)		0.05 (J)				0.05 (J)
7/12/2017		0.23 (J)		0.21 (J)	0.17 (J)	0.07 (J)	
10/17/2017							<0.3
10/18/2017	0.11 (J)	0.19 (J)	0.04 (J)	0.24 (J)	0.06 (J)		
10/19/2017						<0.3	
2/20/2018	0.04 (J)						0.098 (J)
2/21/2018		0.093 (J)	<0.3	0.24 (J)	0.086 (J)	0.37	
7/11/2018	<0.3						<0.3
7/12/2018		<0.3	<0.3			0.17 (J)	
8/15/2018					<0.3		
8/16/2018				0.073 (J)			
9/12/2018	<0.3						0.034 (J)
9/13/2018		0.15 (J)	<0.3		<0.3		
9/14/2018				<0.3		<0.3	
3/26/2019							<0.3
3/27/2019	<0.3		<0.3		<0.3		
3/28/2019		0.1		0.15		0.074	
10/1/2019							0.062 (X)
10/2/2019	0.056 (X)	0.075 (X)	0.053 (X)	0.063 (X)			
10/3/2019					0.043 (X)	0.084 (X)	
3/24/2020							<0.3
3/25/2020	<0.3			<0.3			
3/26/2020		0.056 (J)	<0.3		<0.3	0.077 (J)	

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	0.13 (J)						
9/1/2016							<0.3
9/8/2016		0.25 (J)					
10/18/2016				0.16 (J)	0.11 (J)		
12/6/2016				0.15 (J)			
12/7/2016	0.13 (J)				0.07 (J)		0.15 (J)
12/8/2016		0.22 (J)				0.21 (J)	
3/21/2017	0.05 (J)			0.02 (J)			
3/22/2017		0.16 (J)					0.09 (J)
3/23/2017					<0.3	0.18 (J)	
7/11/2017	0.05 (J)	0.23 (J)		0.06 (J)	0.02 (J)		
7/12/2017						0.06 (J)	0.02 (J)
10/17/2017				0.05 (J)	<0.3		
10/18/2017	<0.3	0.28 (J)					
10/19/2017						<0.3	<0.3
2/20/2018	0.3 (J)			0.21 (J)	<0.3		
2/21/2018		0.29 (J)				0.039 (J)	0.045 (J)
4/12/2018			<0.3				
5/23/2018			0.063 (J)				
6/13/2018			0.11 (J)				
7/11/2018	0.077 (J)		<0.3	0.087 (J)	<0.3		
7/12/2018		0.21 (J)				<0.3	<0.3
8/17/2018			<0.3				
9/12/2018			0.093 (J)	0.049 (J)			
9/13/2018	<0.3	0.22 (J)			<0.3		<0.3
9/14/2018						<0.3	
10/4/2018			0.15 (J)			0.15 (J)	
10/24/2018			0.29 (J)				
3/26/2019				<0.3			
3/27/2019	<0.3	0.37	0.04		<0.3		
3/28/2019						<0.3	<0.3
9/10/2019	<0.3						
10/1/2019					0.042 (X)		
10/2/2019		0.16 (X)	0.11 (X)	0.057 (X)			
10/3/2019						0.06 (X)	0.041 (X)
3/24/2020			0.051 (J)				
3/25/2020	0.066 (J)	0.13 (J)		<0.3	<0.3		
3/26/2020						<0.3	<0.3

Constituent: Lead (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.005
8/31/2016	<0.005						
9/1/2016		<0.005					
9/6/2016			<0.005				
9/7/2016				<0.005	<0.005	<0.005	
12/6/2016							<0.005
12/7/2016	<0.005	<0.005	<0.005				
12/8/2016				<0.005	<0.005	<0.005	
3/21/2017	<0.005						<0.005
3/22/2017		5E-05 (J)	<0.005	<0.005	<0.005		
3/23/2017						<0.005	
7/11/2017	<0.005		<0.005				<0.005
7/12/2017		<0.005		<0.005	<0.005	<0.005	
10/17/2017							0.0001 (J)
10/18/2017	<0.005	<0.005	<0.005	<0.005	<0.005		
10/19/2017						<0.005	
2/20/2018	<0.005						<0.005
2/21/2018		<0.005	<0.005	<0.005	0.00043 (J)	<0.005	
7/11/2018	<0.005						<0.005
7/12/2018		<0.005	<0.005			<0.005	
8/15/2018					<0.005		
8/16/2018				<0.005			
9/12/2018	<0.005						<0.005
9/13/2018		<0.005	<0.005		<0.005		
9/14/2018				<0.005		<0.005	
10/1/2019							<0.005
10/2/2019	<0.005	<0.005	8.1E-05 (X)	<0.005			
10/3/2019					<0.005	<0.005	
3/24/2020							6.2E-05 (J)

<0.005

<0.005

<0.005

<0.005

<0.005

3/25/2020

3/26/2020

<0.005

Constituent: Lead (mg/L) Analysis Run 7/27/2020 10:17 AM

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.005						
9/1/2016							<0.005
9/8/2016		<0.005					
10/18/2016				<0.005	0.0001 (J)		
12/6/2016				<0.005			
12/7/2016	<0.005				<0.005		<0.005
12/8/2016		<0.005				<0.005	
3/21/2017	<0.005			<0.005			
3/22/2017		<0.005					<0.005
3/23/2017					0.0002 (J)	9E-05 (J)	
7/11/2017	<0.005	<0.005		<0.005	<0.005		
7/12/2017						<0.005	<0.005
10/17/2017				0.0005 (J)	7E-05 (J)		
10/18/2017	<0.005	<0.005					
10/19/2017						<0.005	<0.005
2/20/2018	<0.005			<0.005	<0.005		
2/21/2018		<0.005				<0.005	<0.005
4/12/2018			<0.005				
5/23/2018			<0.005				
6/13/2018			<0.005				
7/11/2018	<0.005		<0.005	<0.005	<0.005		
7/12/2018		<0.005				<0.005	<0.005
8/17/2018			<0.005				
9/12/2018			<0.005	<0.005			
9/13/2018	<0.005	<0.005			<0.005		<0.005
9/14/2018						<0.005	
10/4/2018			<0.005			<0.005	
10/24/2018			<0.005				
9/10/2019	<0.005						
10/1/2019					<0.005		
10/2/2019		<0.005	4.7E-05 (X)	8.1E-05 (X)			
10/3/2019						4.7E-05 (X)	<0.005
3/24/2020			<0.005				
3/25/2020	0.00015 (J)	<0.005		<0.005	<0.005		
3/26/2020						<0.005	<0.005

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 10:17 AM

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.03
8/31/2016	<0.03						
9/1/2016		<0.03					
9/6/2016			<0.03				
9/7/2016				<0.03	<0.03	0.0082 (J)	
12/6/2016							<0.03
12/7/2016	0.003 (J)	<0.03	<0.03				
12/8/2016				<0.03	<0.03	0.0061 (J)	
3/21/2017	<0.03						<0.03
3/22/2017		0.0011 (J)	<0.03	0.0021 (J)	0.0029 (J)		
3/23/2017						0.0122 (J)	
7/11/2017	<0.03		<0.03				<0.03
7/12/2017		<0.03		0.002 (J)	0.0024 (J)	0.013 (J)	
10/17/2017							<0.03
10/18/2017	<0.03	<0.03	<0.03	0.002 (J)	0.0027 (J)		
10/19/2017						0.013 (J)	
2/20/2018	<0.03						<0.03
2/21/2018		<0.03	<0.03	0.0022 (J)	0.0021 (J)	0.0085 (J)	
7/11/2018	<0.03						<0.03
7/12/2018		0.0012 (J)	<0.03			0.013 (J)	
8/15/2018					0.0027 (J)		
8/16/2018				0.0027 (J)			
9/12/2018	<0.03						<0.03
9/13/2018		0.0013 (J)	<0.03		0.0029 (J)		
9/14/2018				0.0025 (J)		0.018 (J)	
10/1/2019							<0.03
10/2/2019	<0.03	0.0013 (X)	<0.03	0.0024 (X)			
10/3/2019					0.0027 (X)	0.016 (X)	
3/24/2020							<0.03
3/25/2020	<0.03			0.003 (J)			
3/26/2020		0.0014 (J)	<0.03		0.0027 (J)	0.013 (J)	

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.03						
9/1/2016							0.0022 (J)
9/8/2016		0.0038 (J)					
10/18/2016				<0.03	<0.03		
12/6/2016				<0.03			
12/7/2016	<0.03				<0.03		0.0023 (J)
12/8/2016		0.0038 (J)				<0.03	
3/21/2017	<0.03			<0.03			
3/22/2017		0.0068 (J)					0.0025 (J)
3/23/2017					<0.03	<0.03	
7/11/2017	<0.03	0.0059 (J)		<0.03	<0.03		
7/12/2017						<0.03	0.0033 (J)
10/17/2017				<0.03	<0.03		
10/18/2017	<0.03	0.0057 (J)					
10/19/2017						<0.03	<0.03
2/20/2018	<0.03			<0.03	<0.03		
2/21/2018		0.0063 (J)				<0.03	0.0034 (J)
4/12/2018			<0.03				
5/23/2018			<0.03				
6/13/2018			<0.03				
7/11/2018	<0.03		0.0011 (J)	<0.03	<0.03		
7/12/2018		0.0063 (J)				<0.03	0.0038 (J)
8/17/2018			0.0024 (J)				
9/12/2018			0.0025 (J)	<0.03			
9/13/2018	<0.03	0.0061 (J)			<0.03		0.0026 (J)
9/14/2018						<0.03	
10/4/2018			0.0021 (J)			<0.03	
10/24/2018			0.0021 (J)				
9/10/2019	<0.03						
10/1/2019					<0.03		
10/2/2019		0.0074 (X)	0.0016 (X)	<0.03			
10/3/2019						<0.03	0.0032 (X)
3/24/2020			0.0019 (J)				
3/25/2020	0.0011 (J)	0.0066 (J)		<0.03	<0.03		
3/26/2020						<0.03	0.0031 (J)

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.0005
8/31/2016	<0.0005						
9/1/2016		<0.0005					
9/6/2016			<0.0005				
9/7/2016				<0.0005	<0.0005	<0.0005	
12/6/2016							<0.0005
12/7/2016	7E-05 (J)	<0.0005	<0.0005				
12/8/2016				<0.0005	<0.0005	<0.0005	
3/21/2017	<0.0005						<0.0005
3/22/2017		<0.0005	<0.0005	<0.0005	<0.0005		
3/23/2017						<0.0005	
7/11/2017	<0.0005		<0.0005				<0.0005
7/12/2017		<0.0005		<0.0005	<0.0005	<0.0005	
10/17/2017							<0.0005
10/18/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
10/19/2017						<0.0005	
2/20/2018	<0.0005						<0.0005
2/21/2018		9.7E-05 (J)	6.8E-05 (J)	8.6E-05 (J)	5.7E-05 (J)	4.5E-05 (J)	
7/11/2018	<0.0005						<0.0005
7/12/2018		<0.0005	<0.0005			<0.0005	
8/15/2018					<0.0005		
8/16/2018				<0.0005			
9/12/2018	<0.0005						<0.0005
9/13/2018		<0.0005	<0.0005		<0.0005		
9/14/2018				<0.0005		<0.0005	

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.0005						
9/1/2016							<0.0005
9/8/2016		<0.0005					
10/18/2016				<0.0005	<0.0005		
12/6/2016				<0.0005			
12/7/2016	9E-05 (J)				<0.0005		6E-05 (J)
12/8/2016		<0.0005				<0.0005	
3/21/2017	<0.0005			<0.0005			
3/22/2017		<0.0005					<0.0005
3/23/2017					<0.0005	<0.0005	
7/11/2017	<0.0005	<0.0005		<0.0005	<0.0005		
7/12/2017						<0.0005	<0.0005
10/17/2017				<0.0005	<0.0005		
10/18/2017	<0.0005	<0.0005					
10/19/2017						<0.0005	<0.0005
2/20/2018	<0.0005			<0.0005	<0.0005		
2/21/2018		5.3E-05 (J)				4.3E-05 (J)	5.3E-05 (J)
4/12/2018			<0.0005				
5/23/2018			<0.0005				
6/13/2018			4.9E-05 (J)				
7/11/2018	<0.0005		<0.0005	<0.0005	<0.0005		
7/12/2018		<0.0005				<0.0005	<0.0005
8/17/2018			<0.0005				
9/12/2018			<0.0005	<0.0005			
9/13/2018	<0.0005	<0.0005			<0.0005		<0.0005
9/14/2018						4.1E-05 (J)	
10/4/2018			<0.0005			<0.0005	
10/24/2018			5.2E-05 (J)				

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.01
8/31/2016	<0.01						
9/1/2016		<0.01					
9/6/2016			<0.01				
9/7/2016				<0.01	<0.01	0.0027 (J)	
12/6/2016							0.0019 (J)
12/7/2016	<0.01	<0.01	<0.01				
12/8/2016				<0.01	<0.01	0.0022 (J)	
3/21/2017	0.0005 (J)						0.0018 (J)
3/22/2017		0.0004 (J)	0.0004 (J)	0.0004 (J)	<0.01		
3/23/2017						0.0025 (J)	
7/11/2017	<0.01		<0.01				0.0018 (J)
7/12/2017		<0.01		<0.01	<0.01	0.0022 (J)	
10/17/2017							0.0016 (J)
10/18/2017	<0.01	<0.01	<0.01	<0.01	<0.01		
10/19/2017						0.0021 (J)	
2/20/2018	<0.01						<0.01
2/21/2018		<0.01	<0.01	<0.01	<0.01	<0.01	
7/11/2018	<0.01						<0.01
7/12/2018		<0.01	<0.01			0.0022 (J)	
8/15/2018					<0.01		
8/16/2018				<0.01			
9/12/2018	<0.01						<0.01
9/13/2018		<0.01	<0.01		<0.01		
9/14/2018				<0.01		0.0023 (J)	
10/1/2019							0.001 (X)
10/2/2019	<0.01	<0.01	<0.01	<0.01			
10/3/2019					<0.01	0.0024 (X)	
3/24/2020							0.001 (J)
3/25/2020	<0.01			<0.01			
3/26/2020		<0.01	<0.01		<0.01	0.0021 (J)	

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

					. ,		
	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.01						
9/1/2016							<0.01
9/8/2016		<0.01					
10/18/2016				<0.01	<0.01		
12/6/2016				<0.01			
12/7/2016	<0.01				<0.01		<0.01
12/8/2016		<0.01				<0.01	
3/21/2017	0.0006 (J)			0.0005 (J)			
3/22/2017		0.001 (J)					<0.01
3/23/2017					<0.01	<0.01	
7/11/2017	<0.01	<0.01		<0.01	<0.01		
7/12/2017						<0.01	<0.01
10/17/2017				<0.01	<0.01		
10/18/2017	<0.01	<0.01					
10/19/2017						<0.01	<0.01
2/20/2018	<0.01			<0.01	<0.01		
2/21/2018		<0.01				<0.01	<0.01
4/12/2018			<0.01				
5/23/2018			<0.01				
6/13/2018			<0.01				
7/11/2018	<0.01		<0.01	<0.01	<0.01		
7/12/2018		<0.01				<0.01	<0.01
8/17/2018			<0.01				
9/12/2018			<0.01	<0.01			
9/13/2018	<0.01	<0.01			<0.01		<0.01
9/14/2018						<0.01	
10/4/2018			<0.01			<0.01	
10/24/2018			<0.01				
9/10/2019	<0.01						
10/1/2019					<0.01		
10/2/2019		<0.01	<0.01	<0.01			
10/3/2019						<0.01	<0.01
3/24/2020			<0.01				
3/25/2020	0.0011 (J)	<0.01		<0.01	<0.01		
3/26/2020						<0.01	<0.01

Constituent: pH (SU) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR										
PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)				
						7.67				
6.97										
	7.21									
		7.23								
			7.02	6.92	6.71					
						7.57				
6.85	7.13	7.3								
			6.95	6.9	6.61					
7.04						7.54				
	7.04	7.2	7.05	7						
					6.69					
6.88		7.31				7.43				
	7.09		7.06	6.95	6.69					
						7.7				
6.77	7.2	7.28	6.99		6.88					
					6.85					
7.32 (D)						7.57				
	7.11	7.1	6.95	6.89	6.66					
7.12						7.48				
	7.07	7.14	7.06	7.01	6.84					
				6.87						
			7.01							
6.87						7.41				
	7.01	7.08		6.86						
			6.83		6.76					
						7.49				
6.98		7.23		6.92						
	7.84		6.97		6.67					
						7.5				
6.96	7.22	7.22	6.99							
				6.78	6.93					
						7.79				
7.02			6.93							
	6.97 6.85 7.04 6.88 6.77 7.32 (D) 7.12 6.87 6.98	6.97 7.21 6.85 7.13 7.04 7.04 6.88 7.09 6.77 7.2 7.32 (D) 7.11 7.12 7.07 6.87 7.01 6.98 7.84 6.96 7.22	PZ-14 PZ-15 PZ-16 6.97 7.21 7.23 6.85 7.13 7.3 7.04 7.04 7.2 6.88 7.31 7.31 7.09 7.2 7.28 7.32 (D) 7.11 7.1 7.12 7.07 7.14 6.87 7.01 7.08 6.98 7.23 7.84 6.96 7.22 7.22	PZ-14 PZ-15 PZ-16 PZ-17 6.97 7.21 7.23 7.02 6.85 7.13 7.3 6.95 7.04 7.04 7.2 7.05 6.88 7.09 7.06 6.77 7.2 7.28 6.99 7.32 (D) 7.11 7.1 6.95 7.12 7.07 7.14 7.06 6.87 7.01 7.08 6.83 6.98 7.22 7.23 6.97 6.96 7.22 7.22 6.99	PZ-14 PZ-15 PZ-16 PZ-17 PZ-18 6.97 7.21 7.23 7.02 6.92 6.85 7.13 7.3 6.95 6.9 7.04 7.04 7.2 7.05 7 6.88 7.09 7.06 6.95 6.77 7.2 7.28 6.99 6.89 7.12 7.07 7.14 7.06 7.01 6.87 7.01 7.08 6.83 6.86 6.98 7.22 7.23 6.97 6.92 6.96 7.22 7.22 6.99 6.78	PZ-14 PZ-15 PZ-16 PZ-17 PZ-18 PZ-19 6.97 7.21 7.23 7.02 6.92 6.71 6.85 7.13 7.3 6.95 6.9 6.61 7.04 7.2 7.05 7 6.69 6.88 7.31 7.06 6.95 6.69 6.77 7.2 7.28 6.99 6.85 6.85 7.32 (D) 7.11 7.1 6.95 6.89 6.66 7.12 7.07 7.14 7.06 7.01 6.84 6.87 7.01 7.08 6.83 6.76 6.98 7.84 6.97 6.92 6.67 6.96 7.22 7.22 6.99 6.78 6.93	6.97			

7.01

6.7

7.08 7.12

3/26/2020

Constituent: pH (SU) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	6.75						
9/1/2016							7.07
9/8/2016		7.1					
10/4/2016						6.88	
10/5/2016						6.91	
10/17/2016					7.43		
10/18/2016				7.15	7.45		
12/6/2016				7.04			
12/7/2016	6.64				7.29		6.85
12/8/2016		6.98				6.86	
3/21/2017	6.73			7.01			
3/22/2017		7.16					6.99
3/23/2017					7.26	6.9	
7/11/2017	6.66	7.15		6.96	7.31	7.82 (o)	
7/12/2017						6.81	6.83
10/17/2017			7.61	7.31	7.29		
10/18/2017	6.73	7.09					
10/19/2017						6.86	6.91
2/20/2018	7.11				7.26		
2/21/2018		7.12				7.02	6.97
7/11/2018	7		9.48	7.26	7.39		
7/12/2018				7.01		6.82	6.85
9/12/2018			9.07	7.02			
9/13/2018	6.56	7.03			7.25		6.88
9/14/2018						6.75	
3/26/2019				7			
3/27/2019	6.75	7.08	8.76		7.42		
3/28/2019						6.96	6.96
9/10/2019	6.78						
10/1/2019					7.43		
10/2/2019		7.2	8.97	7.09			
10/3/2019						7.01	6.85
3/24/2020			8.57				
3/25/2020	6.84	7.01		7.15	7.23		
3/26/2020						7	7.12

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.01
8/31/2016	0.0012 (J)						
9/1/2016		<0.01					
9/6/2016			<0.01				
9/7/2016				<0.01	<0.01	<0.01	
12/6/2016							<0.01
12/7/2016	<0.01	<0.01	<0.01				
12/8/2016				<0.01	<0.01	<0.01	
3/21/2017	<0.01						<0.01
3/22/2017		<0.01	<0.01	<0.01	<0.01		
3/23/2017						<0.01	
7/11/2017	<0.01		<0.01				<0.01
7/12/2017		<0.01		<0.01	<0.01	<0.01	
10/17/2017							<0.01
10/18/2017	<0.01	<0.01	<0.01	<0.01	<0.01		
10/19/2017						<0.01	
2/20/2018	<0.01						<0.01
2/21/2018		<0.01	<0.01	<0.01	<0.01	<0.01	
7/11/2018	<0.01						<0.01
7/12/2018		<0.01	<0.01			<0.01	
8/15/2018					<0.01		
8/16/2018				<0.01			
9/12/2018	<0.01						<0.01
9/13/2018		<0.01	<0.01		<0.01		
9/14/2018				<0.01		0.0015 (J)	
10/1/2019							<0.01
10/2/2019	0.0015 (X)	<0.01	<0.01	<0.01			
10/3/2019					<0.01	0.0034 (X)	
3/24/2020							<0.01
3/25/2020	<0.01			<0.01			
3/26/2020		<0.01	<0.01		<0.01	0.0016 (J)	

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	0.0014 (J)						
9/1/2016							<0.01
9/8/2016		<0.01					
10/18/2016				<0.01	<0.01		
12/6/2016				<0.01			
12/7/2016	<0.01				<0.01		<0.01
12/8/2016		<0.01				<0.01	
3/21/2017	<0.01			<0.01			
3/22/2017		<0.01					<0.01
3/23/2017					<0.01	<0.01	
7/11/2017	<0.01	<0.01		<0.01	<0.01		
7/12/2017						<0.01	<0.01
10/17/2017				<0.01	<0.01		
10/18/2017	<0.01	<0.01					
10/19/2017						<0.01	<0.01
2/20/2018	<0.01			<0.01	<0.01		
2/21/2018		<0.01				<0.01	<0.01
4/12/2018			<0.01				
5/23/2018			<0.01				
6/13/2018			<0.01				
7/11/2018	<0.01		<0.01	<0.01	<0.01		
7/12/2018		<0.01				<0.01	<0.01
8/17/2018			<0.01				
9/12/2018			<0.01	<0.01			
9/13/2018	<0.01	<0.01			<0.01		<0.01
9/14/2018						<0.01	
10/4/2018			<0.01			<0.01	
10/24/2018			<0.01				
9/10/2019	0.0018 (X)						
10/1/2019					<0.01		
10/2/2019		<0.01	<0.01	<0.01			
10/3/2019						<0.01	0.0017 (X)
3/24/2020			<0.01				
3/25/2020	0.003 (J)	<0.01		<0.01	<0.01		
3/26/2020						<0.01	<0.01

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							2.1
8/31/2016	4.1						
9/1/2016		73					
9/6/2016			49				
9/7/2016				99	96	87	
12/6/2016							2.4
12/7/2016	1.5	71	46				
12/8/2016				94	94	84	
3/21/2017	2						2.5
3/22/2017		80	53	100	95		
3/23/2017						90	
7/11/2017	2		52				2.6
7/12/2017		78		100	96	93	
10/17/2017							2.5
10/18/2017	4.2	82	58	100	99		
10/19/2017						92	
2/20/2018	2.4						2.3
2/21/2018		72.2	48.2	98.8	91.8	84.5	
7/11/2018	3.8						2.5
7/12/2018		80.5	48.8			84.9	
8/15/2018					101		
8/16/2018				111			
9/12/2018	4.3						2
9/13/2018		84.4	48.7		106		
9/14/2018				102		89.5	
3/26/2019							2.7
3/27/2019	8.2		46.5		111		
3/28/2019		90.3		94.7		83.5	
10/1/2019							2.8
10/2/2019	6.2	83	48.5	104			
10/3/2019					95.8	84.9	
3/24/2020							3
3/25/2020	11.9			92.4			
3/26/2020		83.6	43.5		91	84.9	

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	29						
9/1/2016							62
9/8/2016		48					
10/18/2016				2.2	2.3		
12/6/2016				6.1			
12/7/2016	24				1.9		57
12/8/2016		46				100	
3/21/2017	31			5.7			
3/22/2017		53					61
3/23/2017					1.7	100	
7/11/2017	37	51		4.8	1.8		
7/12/2017						97	53
10/17/2017				6.4	1.9		
10/18/2017	34	50					
10/19/2017						97	55
2/20/2018	34.7			5.2	2.1		
2/21/2018		46.8				93.6	52.1
4/12/2018			4.8 (J)				
5/23/2018			4.5				
6/13/2018			5.3				
7/11/2018	35.4		5.4	3.6	2		
7/12/2018		48.3				89.4	53.9
8/17/2018			4.5				
9/12/2018			4.4	2.7			
9/13/2018	37.4	42			2.1		67.5
9/14/2018						88.9	
10/4/2018			5.8			97.8	
10/24/2018			6.2				
3/26/2019				1.6			
3/27/2019	41.9	43.7	3.7		2.4		
3/28/2019						76.7	59.6
9/10/2019	45.1						
10/1/2019					2.2		
10/2/2019		43	4.1	1.6			
10/3/2019						72.1	59.6
3/24/2020			3.1				
3/25/2020	47	39.1		1.5	1.9		
3/26/2020						66.6	57.1

Constituent: TDS (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

					. ,		
	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							136
8/31/2016	344						
9/1/2016		284					
9/6/2016			257				
9/7/2016				392	415	508	
12/6/2016							207
12/7/2016	393	242	248				
12/8/2016				431	441	556	
3/21/2017	276						128
3/22/2017		332	304	456	469		
3/23/2017						482	
7/11/2017	263		265				138
7/12/2017		308		445	432	497	
10/17/2017							101
10/18/2017	261	275	240	349	368		
10/19/2017						448	
2/20/2018	295						138
2/21/2018		312	285	411	409	500	
7/11/2018	294						153
7/12/2018		337	285			523	
8/15/2018					422		
8/16/2018				415			
9/12/2018	286						146
9/13/2018		336	291		438		
9/14/2018				403		486	
3/26/2019							334
3/27/2019	281		277		408		
3/28/2019		337		420		378	
10/1/2019							146
10/2/2019	312	355	284	415	404	105	
10/3/2019					464	485	222
3/24/2020	220			400			228
3/25/2020	330	220	200	408	445	440	
3/26/2020		330	286		415	440	

Constituent: TDS (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	400						
9/1/2016							373
9/8/2016		293					
10/18/2016				264	152		
12/6/2016				299			
12/7/2016	406				214		433
12/8/2016		309				503 (o)	
3/21/2017	409			260			
3/22/2017		299					409
3/23/2017					165	430	
7/11/2017	414	301		244	162		
7/12/2017						438	374
10/17/2017				218	140		
10/18/2017	366	256					
10/19/2017						393	318
2/20/2018	429			264	163		
2/21/2018		297				435	367
4/12/2018			69				
5/23/2018			62				
6/13/2018			93				
7/11/2018	440		84	273	192		
7/12/2018		310				447	423
8/17/2018			115				
9/12/2018			97	252			
9/13/2018	448	307			192		394
9/14/2018						447	
10/4/2018			103			450	
10/24/2018			110				
3/26/2019				253			
3/27/2019	410	287	87		167		
3/28/2019						405	365
9/10/2019	420						
10/1/2019					187		
10/2/2019		312	95	263			
10/3/2019						414	405
3/24/2020			123				
3/25/2020	454	280		278	178		
3/26/2020						336	332

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-14	PZ-15	PZ-16	PZ-17	PZ-18	PZ-19	PZ-1D (bg)
8/30/2016							<0.001
8/31/2016	<0.001						
9/1/2016		<0.001					
9/6/2016			<0.001				
9/7/2016				<0.001	<0.001	<0.001	
12/6/2016							<0.001
12/7/2016	<0.001	<0.001	<0.001				
12/8/2016				<0.001	<0.001	0.0003 (J)	
3/21/2017	6E-05 (J)						<0.001
3/22/2017		<0.001	0.0002 (J)	<0.001	4E-05 (J)		
3/23/2017						0.0003 (J)	
7/11/2017	<0.001		0.0002 (J)				<0.001
7/12/2017		<0.001		<0.001	<0.001	0.0004 (J)	
10/17/2017							<0.001
10/18/2017	<0.001	<0.001	0.0002 (J)	<0.001	5E-05 (J)		
10/19/2017						0.0005 (J)	
2/20/2018	<0.001						<0.001
2/21/2018		<0.001	0.00018 (J)	<0.001	<0.001	0.00049 (J)	
7/11/2018	<0.001						<0.001
7/12/2018		<0.001	<0.001			0.00077 (J)	
8/15/2018					<0.001		
8/16/2018				<0.001			
9/12/2018	<0.001						<0.001
9/13/2018		<0.001	0.00017 (J)		<0.001		
9/14/2018				<0.001		0.00076 (J)	
10/1/2019							<0.001
10/2/2019	<0.001	0.00016 (X)	5.3E-05 (X)	0.00016 (X)			
10/3/2019					<0.001	0.00071 (X)	
3/24/2020							<0.001
3/25/2020	<0.001			0.0002 (J)			
3/26/2020		0.00014 (J)	<0.001		7.1E-05 (J)	0.00068 (J)	

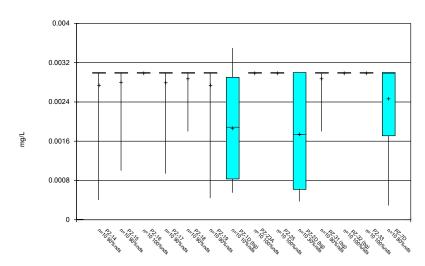
Constituent: Thallium (mg/L) Analysis Run 7/27/2020 10:17 AM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-23A	PZ-25	PZ-2D (bg)	PZ-31 (bg)	PZ-32 (bg)	PZ-33	PZ-7D
8/31/2016	<0.001						
9/1/2016							<0.001
9/8/2016		<0.001					
10/18/2016				<0.001	<0.001		
12/6/2016				<0.001			
12/7/2016	0.0002 (J)				0.0002 (J)		<0.001
12/8/2016		<0.001				<0.001	
3/21/2017	0.0003 (J)			6E-05 (J)			
3/22/2017		<0.001					0.0002 (J)
3/23/2017					8E-05 (J)	0.0001 (J)	
7/11/2017	0.0002 (J)	<0.001		<0.001	7E-05 (J)		
7/12/2017						0.0001 (J)	0.0001 (J)
10/17/2017				<0.001	8E-05 (J)		
10/18/2017	0.0001 (J)	<0.001					
10/19/2017						0.0001 (J)	0.0001 (J)
2/20/2018	0.00026 (J)			<0.001	<0.001		
2/21/2018		<0.001				<0.001	<0.001
4/12/2018			<0.001				
5/23/2018			<0.001				
6/13/2018			<0.001				
7/11/2018	0.00018 (J)		<0.001	<0.001	<0.001		
7/12/2018		<0.001				<0.001	<0.001
8/17/2018			<0.001				
9/12/2018			<0.001	<0.001			
9/13/2018	<0.001	<0.001			<0.001		<0.001
9/14/2018						<0.001	
10/4/2018			<0.001			<0.001	
10/24/2018			0.00016 (J)				
9/10/2019	<0.001						
10/1/2019					<0.001		
10/2/2019		0.00024 (X)	<0.001	<0.001			
10/3/2019						0.00018 (X)	7.8E-05 (X)
3/24/2020			<0.001				
3/25/2020	0.00015 (J)	0.00037 (J)		<0.001	<0.001		
3/26/2020						0.00015 (J)	8.5E-05 (J)

FIGURE B.



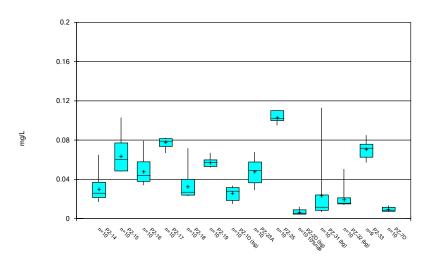


Constituent: Antimony Analysis Run 4/28/2020 4:05 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

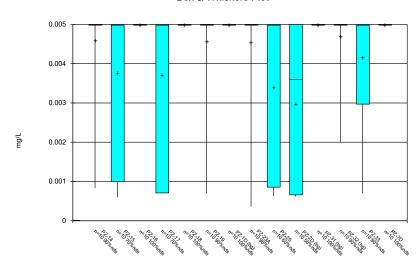
Box & Whiskers Plot



Constituent: Barium Analysis Run 4/28/2020 4:05 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Box & Whiskers Plot

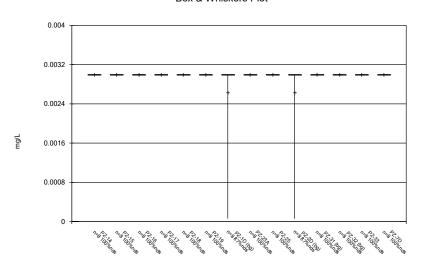


Constituent: Arsenic Analysis Run 4/28/2020 4:05 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

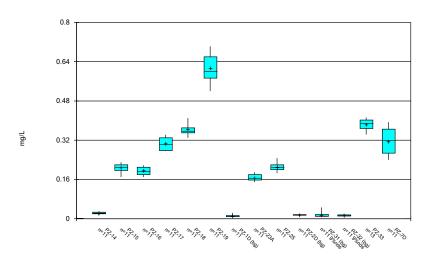
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 4/28/2020 4:05 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

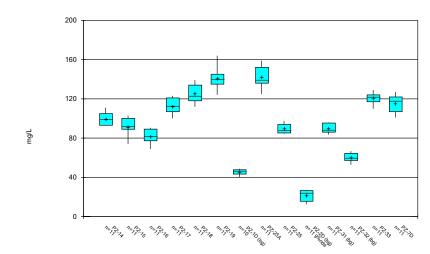
Box & Whiskers Plot



Constituent: Boron Analysis Run 4/28/2020 4:06 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas[™] v.9.6.25 Groundwater Stats Consulting. UG

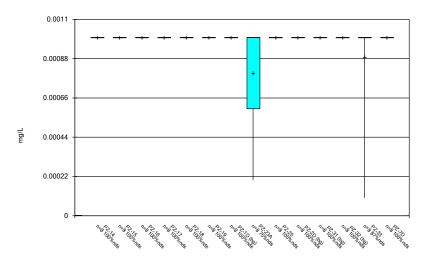
Box & Whiskers Plot



Constituent: Calcium Analysis Run 4/28/2020 4:06 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

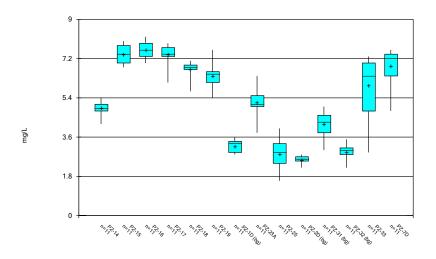
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/28/2020 4:06 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

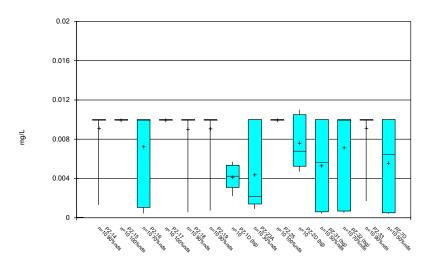
Box & Whiskers Plot



Constituent: Chloride Analysis Run 4/28/2020 4:06 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Box & Whiskers Plot

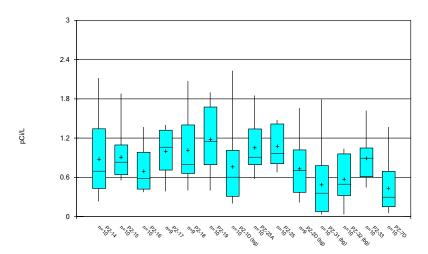


Constituent: Chromium Analysis Run 4/28/2020 4:06 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

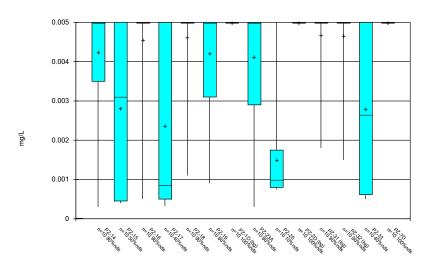
Sanitas[™] v.9.6.25 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/28/2020 4:06 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Box & Whiskers Plot

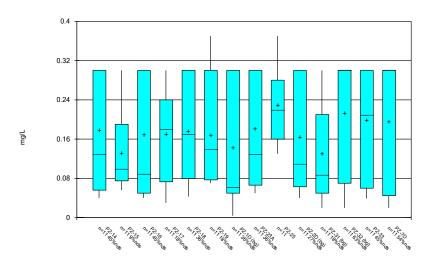


Constituent: Cobalt Analysis Run 4/28/2020 4:06 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

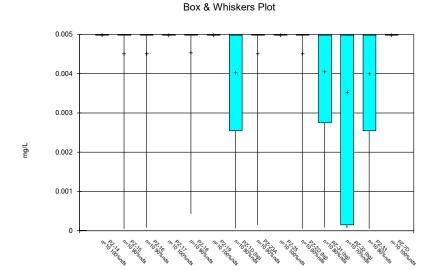
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 4/28/2020 4:06 PM

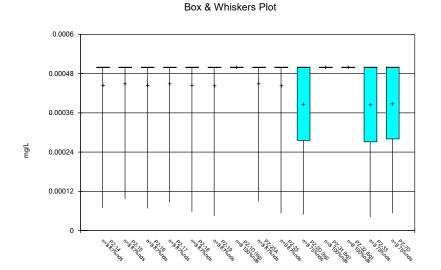
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

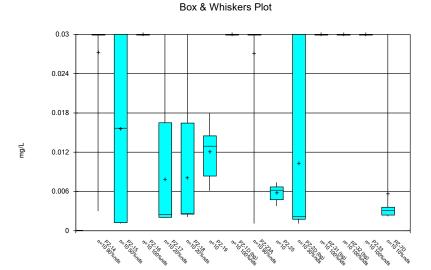


Constituent: Lead Analysis Run 4/28/2020 4:06 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

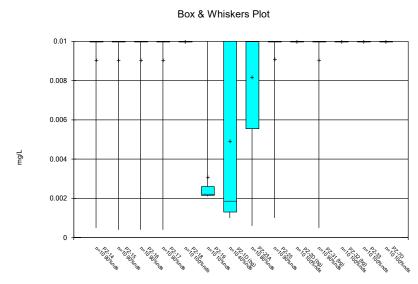


Constituent: Mercury Analysis Run 4/28/2020 4:06 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



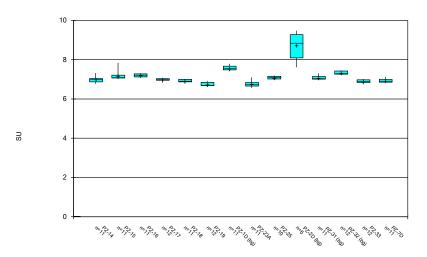
Constituent: Lithium Analysis Run 4/28/2020 4:06 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR





Constituent: Molybdenum Analysis Run 4/28/2020 4:06 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Box & Whiskers Plot

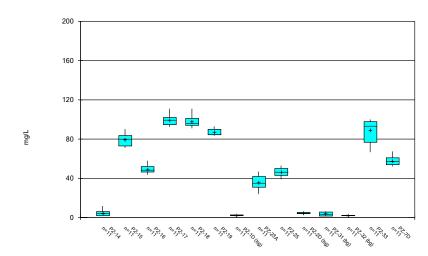


Constituent: pH Analysis Run 4/28/2020 4:06 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas[™] v.9.6.25 Groundwater Stats Consulting. UG

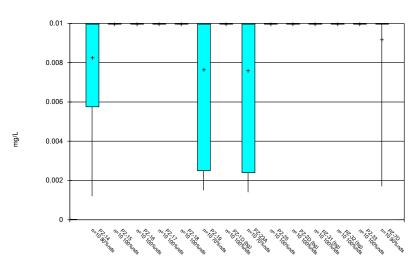
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 4/28/2020 4:06 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

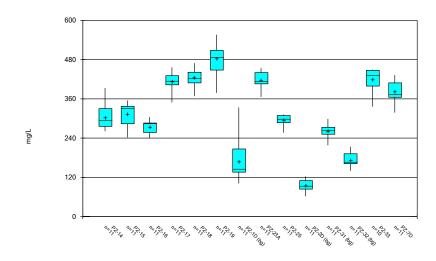
Box & Whiskers Plot



Constituent: Selenium Analysis Run 4/28/2020 4:06 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

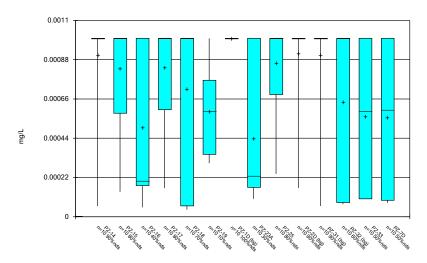
Box & Whiskers Plot



Constituent: TDS Analysis Run 4/28/2020 4:06 PM

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Box & Whiskers Plot



Constituent: Thallium Analysis Run 4/28/2020 4:06 PM
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

FIGURE C.

Outlier Summary

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/27/2020, 3:14 PM

PZ-33 Barium (mg/L) PZ-1D Calcium (mg/L) PZ-33 PH (SU) PZ-33 TDS (mg/L)

12/8/2016 0.162 (o) 503 (o)

7/11/2017 7.82 (o)

7/11/2018 65.3 (o)

FIGURE D.

Interwell Prediction Limits Summary Table - Significant Results Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:10 PM

	Plant	Mitchell C	lient: South	nern Compan	y Data: Mi	tchell Ash I	Pond CCR	Printed 4/2	8/2020, 4:10) PM		
Constituent	Well	Upper Lin	n. Lower Li	m.Date	Observ.	Sig. Bg I	N Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Alpha</u>	Method
Boron (mg/L)	PZ-15	0.0274	n/a	3/26/2020	0.21	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-16	0.0274	n/a	3/26/2020	0.19	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-17	0.0274	n/a	3/25/2020	0.33	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-18	0.0274	n/a	3/26/2020	0.36	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-19	0.0274	n/a	3/26/2020	0.6	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-23A	0.0274	n/a	3/25/2020	0.19	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-25	0.0274	n/a	3/25/2020	0.21	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-33	0.0274	n/a	3/26/2020	0.38	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-7D	0.0274	n/a	3/26/2020	0.24	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-17	107.4	n/a	3/25/2020	121	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-18	107.4	n/a	3/26/2020	138	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-19	107.4	n/a	3/26/2020	158	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-23A	107.4	n/a	3/25/2020	157	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-33	107.4	n/a	3/26/2020	122	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-7D	107.4	n/a	3/26/2020	122	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-15	4.77	n/a	3/26/2020	7	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-16	4.77	n/a	3/26/2020	7	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-17	4.77	n/a	3/25/2020	6.1	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-18	4.77	n/a	3/26/2020	5.7	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-19	4.77	n/a	3/26/2020	5.4	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-23A	4.77	n/a	3/25/2020	6.4	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-7D	4.77	n/a	3/26/2020	4.8	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
pH (SU)	PZ-17	9.48	6.96	3/25/2020	6.93	Yes 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-19	9.48	6.96	3/26/2020	6.7	Yes 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-23A	9.48	6.96	3/25/2020	6.84	Yes 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-14	6.4	n/a	3/25/2020	11.9	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-15	6.4	n/a	3/26/2020	83.6	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-16	6.4	n/a	3/26/2020	43.5	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-17	6.4	n/a	3/25/2020	92.4	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-18	6.4	n/a	3/26/2020	91	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-19	6.4	n/a	3/26/2020	84.9	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-23A	6.4	n/a	3/25/2020	47	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-25	6.4	n/a	3/25/2020	39.1	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-33	6.4	n/a	3/26/2020	66.6	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-7D	6.4	n/a	3/26/2020	57.1	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
TDS (mg/L)	PZ-14	317	n/a	3/25/2020	330	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-15	317	n/a	3/26/2020	330	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-17	317	n/a	3/25/2020	408	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-18	317	n/a	3/26/2020	415	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-19	317	n/a	3/26/2020	440	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-23A	317	n/a	3/25/2020	454	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-33	317	n/a	3/26/2020	336	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-7D	317	n/a	3/26/2020	332	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2

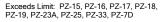
Interwell Prediction Limits Summary Table - All Results Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:10 PM

		Plant Mitchell C	lient: Sout	thern Compan	y Data: M	litchell Ash	Pond CCR	Printed 4/2	8/2020, 4:1	0 PM		
Constituent	Well	Upper Lin	n. Lower L	<u>imDate</u>	Observ.	Sig. Bg	N Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Alpha</u>	Method
Boron (mg/L)	PZ-14	0.0274	n/a	3/25/2020	0.027	No 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-15	0.0274	n/a	3/26/2020	0.21	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-16	0.0274	n/a	3/26/2020	0.19	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-17	0.0274	n/a	3/25/2020	0.33	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-18	0.0274	n/a	3/26/2020	0.36	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-19	0.0274	n/a	3/26/2020	0.6	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-23A	0.0274	n/a	3/25/2020	0.19	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-25	0.0274	n/a	3/25/2020	0.21	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-33	0.0274	n/a	3/26/2020	0.38	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Boron (mg/L)	PZ-7D	0.0274	n/a	3/26/2020	0.24	Yes 44	-4.335	0.3594	4.545	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-14	107.4	n/a	3/25/2020	105	No 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-15	107.4	n/a	3/26/2020	103	No 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-16	107.4	n/a	3/26/2020	89.8	No 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-17	107.4	n/a	3/25/2020	121	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-18	107.4	n/a	3/26/2020	138	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-19	107.4	n/a	3/26/2020	158	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-23A	107.4	n/a	3/25/2020	157	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-25	107.4	n/a	3/25/2020	97.5	No 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-33	107.4	n/a	3/26/2020	122	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Calcium (mg/L)	PZ-7D	107.4	n/a	3/26/2020	122	Yes 43	54.51	25.72	2.326	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-14	4.77	n/a	3/25/2020	4.2	No 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-15	4.77	n/a	3/26/2020	7	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-16	4.77	n/a	3/26/2020	7	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-17	4.77	n/a	3/25/2020	6.1	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-18	4.77	n/a	3/26/2020	5.7	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-19	4.77	n/a	3/26/2020	5.4	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-23A	4.77	n/a	3/25/2020	6.4	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-25	4.77	n/a	3/25/2020	1.6	No 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-33	4.77	n/a	3/26/2020	2.9	No 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Chloride (mg/L)	PZ-7D	4.77	n/a	3/26/2020	4.8	Yes 44	1.781	0.1964	0	None	0.0007523	Param Inter 1 of 2
Fluoride (mg/L)	PZ-14	0.3	n/a	3/25/2020	0.3ND	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)	PZ-15	0.3	n/a	3/26/2020	0.056	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)	PZ-16	0.3	n/a	3/26/2020	0.3ND	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)	PZ-17	0.3	n/a	3/25/2020	0.3ND	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)	PZ-18	0.3	n/a	3/26/2020	0.3ND	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)				3/26/2020								, -,
, ,	PZ-19	0.3	n/a	3/25/2020	0.077	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)	PZ-23A	0.3	n/a		0.066	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)	PZ-25	0.3	n/a	3/25/2020	0.13	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)	PZ-33	0.3	n/a	3/26/2020	0.3ND	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
Fluoride (mg/L)	PZ-7D	0.3	n/a	3/26/2020	0.3ND	No 44	n/a	n/a	36.36	n/a	0.0009571	NP Inter (normality) 1 of 2
pH (SU)	PZ-14	9.48	6.96	3/25/2020	7.02	No 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-15	9.48	6.96	3/26/2020	7.08	No 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-16	9.48	6.96	3/26/2020	7.12	No 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-17	9.48	6.96	3/25/2020	6.93	Yes 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-18	9.48	6.96	3/26/2020	7.01	No 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-19	9.48	6.96	3/26/2020	6.7	Yes 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-23A	9.48	6.96	3/25/2020	6.84	Yes 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-25	9.48	6.96	3/25/2020	7.01	No 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-33	9.48	6.96	3/26/2020		No 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
pH (SU)	PZ-7D	9.48	6.96	3/26/2020	7.12	No 40	n/a	n/a	0	n/a	0.002217	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-14	6.4	n/a	3/25/2020	11.9	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-15	6.4	n/a	3/26/2020	83.6	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-16	6.4	n/a	3/26/2020	43.5	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-17	6.4	n/a	3/25/2020	92.4	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-18	6.4	n/a	3/26/2020	91	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2

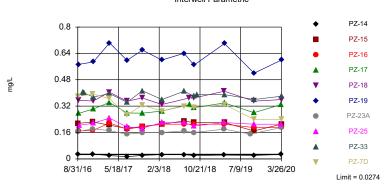
Page 2

Interwell Prediction Limits Summary Table - All Results Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:10 PM

	Plant N	Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR						R Printed 4/28/2020, 4:10 PM				
Constituent	Well	Upper Lim	n. Lower Lir	m.Date	Observ.	Sig. Bg	N Bg Mean	Std. Dev.	%NDs	ND Adj.	<u>Alpha</u>	Method
Sulfate (mg/L)	PZ-19	6.4	n/a	3/26/2020	84.9	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-23A	6.4	n/a	3/25/2020	47	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-25	6.4	n/a	3/25/2020	39.1	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-33	6.4	n/a	3/26/2020	66.6	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
Sulfate (mg/L)	PZ-7D	6.4	n/a	3/26/2020	57.1	Yes 44	n/a	n/a	0	n/a	0.0009571	NP Inter (normality) 1 of 2
TDS (mg/L)	PZ-14	317	n/a	3/25/2020	330	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-15	317	n/a	3/26/2020	330	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-16	317	n/a	3/26/2020	286	No 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-17	317	n/a	3/25/2020	408	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-18	317	n/a	3/26/2020	415	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-19	317	n/a	3/26/2020	440	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-23A	317	n/a	3/25/2020	454	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-25	317	n/a	3/25/2020	280	No 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-33	317	n/a	3/26/2020	336	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2
TDS (mg/L)	PZ-7D	317	n/a	3/26/2020	332	Yes 44	174.4	69.49	0	None	0.0007523	Param Inter 1 of 2



Prediction Limit Interwell Parametric



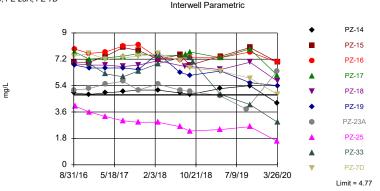
Background Data Summary (based on natural log transformation): Mean=-4.335, Std. Dev.=0.3594, n=44, 4.545% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9559, critical = 0.924. Kappa = 2.053 (c=7, w=10, of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0007523. Comparing 10 points to limit.

Constituent: Boron Analysis Run 4/28/2020 4:08 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Exceeds Limit: PZ-15, PZ-16, PZ-17, PZ-18, PZ-19, PZ-23A, PZ-7D

Prediction Limit



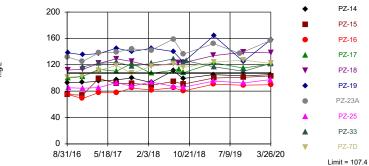
Background Data Summary (based on square root transformation): Mean=1.781, Std. Dev.=0.1964, n=44. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9367, critical = 0.924. Kappa = 2.053 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.007523. Comparing 10 points to limit.

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Exceeds Limit: PZ-17, PZ-18, PZ-19, PZ-23A, PZ-33, PZ-7D

Prediction Limit



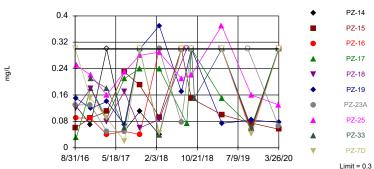


Background Data Summary: Mean=54.51, Std. Dev.=25.72, n=43, 2.326% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9254, critical = 0.923. Kappa = 2.056 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0007523. Comparing 10 points to limit.

Constituent: Calcium Analysis Run 4/28/2020 4:08 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.





Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 36.36% NDs. Annual perconstituent alpha = 0.01897. Individual comparison alpha = 0.0009571 (1 of 2). Comparing 10 points to limit.

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Prediction Limit Exceeds Limits: PZ-17, PZ-19, PZ-23A Interwell Non-parametric PZ-14 10 PZ-15 PZ-16 PZ-17 PZ-18 S PZ-19 PZ-23A PZ-25 2 PZ-33 0 Limit = 9.48 8/31/16 5/18/17 2/3/18 10/21/18 7/9/19

Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 40 background values. Annual perconstituent alpha = 0.04388. Individual comparison alpha = 0.002217 (1 of 2). Comparing 10 points to limit.

Limit = 6.96

Limit = 317

Constituent: pH Analysis Run 4/28/2020 4:08 PM View: Interwell
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

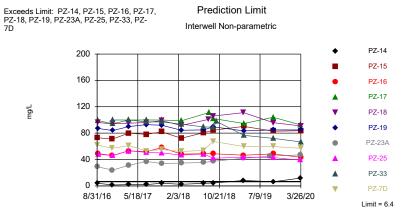
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Prediction Limit Exceeds Limit: PZ-14, PZ-15, PZ-17, PZ-18, PZ-19, PZ-23A, PZ-33, PZ-7D Interwell Parametric PZ-14 600 PZ-15 480 PZ-16 PZ-17 360 PZ-18 PZ-19 240 PZ-23A 120 PZ-25 PZ-33 PZ-7D 8/31/16 5/18/17 2/3/18 10/21/18 7/9/19 3/26/20

Background Data Summary: Mean=174.4, Std. Dev.=69.49, n=44. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9502, critical = 0.924. Kappa = 2.053 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0007523. Comparing 10 points to limit.

Constituent: TDS Analysis Run 4/28/2020 4:08 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. Annual per-constituent alpha = 0.009571 (1 of 2). Comparing 10 points to limit.

Constituent: Sulfate Analysis Run 4/28/2020 4:08 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Constituent: Boron (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-1D (bg)	PZ-14	PZ-23A	PZ-7D	PZ-15	PZ-16	PZ-18	PZ-19	PZ-17
8/30/2016	0.0132 (J)								
8/31/2016		0.0285 (J)	0.166						
9/1/2016				0.379	0.215				
9/6/2016						0.17			
9/7/2016							0.355	0.573	0.276
9/8/2016									
10/5/2016									
10/10/2016									
10/18/2016									
12/6/2016	0.0096 (J)								
12/7/2016		0.0292 (J)	0.182	0.394	0.224	0.173			
12/8/2016							0.351	0.588	0.303
3/21/2017	0.0082 (J)	0.0198 (J)	0.172						
3/22/2017				0.365	0.205	0.218	0.405		0.342
3/23/2017								0.703	
7/11/2017	0.0067 (J)	0.0137 (J)	0.149			0.18			
7/12/2017				0.267	0.184		0.35	0.598	0.278
10/17/2017	0.0083 (J)								
10/18/2017		0.0212 (J)	0.158		0.197	0.195	0.37		0.277
10/19/2017				0.326				0.66	
2/20/2018	0.024 (J)	0.026 (J)	0.16						
2/21/2018				0.29	0.21	0.21	0.33	0.6	0.29
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	0.017 (J)	0.026 (J)	0.17						
7/12/2018				0.32	0.23	0.21		0.64	
8/15/2018							0.37		
8/16/2018									0.33
8/17/2018									
9/12/2018	0.012 (J)	0.02 (J)							
9/13/2018			0.16	0.31	0.22	0.21	0.37		
9/14/2018								0.57	0.31
10/4/2018									
10/24/2018									
3/26/2019	0.0082								
3/27/2019		0.023	0.18			0.21	0.41		
3/28/2019				0.33	0.22			0.7	0.34
9/10/2019			0.15						
10/1/2019	0.0064 (X)								
10/2/2019		0.021 (X)			0.17	0.19			0.28
10/3/2019				0.24			0.35	0.52	
3/24/2020	0.013 (J)								
3/25/2020		0.027 (J)	0.19						0.33
3/26/2020				0.24	0.21	0.19	0.36	0.6	

Constituent: Boron (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-25	PZ-33	PZ-31 (bg)	PZ-32 (bg)	PZ-2D (bg)
8/30/2016					, -,
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016	0.004				
9/8/2016	0.204	0.404			
10/5/2016		0.404			
10/10/2016		0.401			
10/18/2016			0.0174 (J)	0.0156 (J)	
12/6/2016			0.0133 (J)		
12/7/2016				0.0157 (J)	
12/8/2016	0.216	0.375			
3/21/2017			0.0103 (J)		
3/22/2017	0.247				
3/23/2017		0.396		0.0103 (J)	
7/11/2017	0.194		<0.04	<0.04	
7/12/2017	0.101	0.343	0.01	0.01	
10/17/2017		3.3-10	0.0116 (J)	0.0142 (J)	
			0.0110 (3)	0.0142 (3)	
10/18/2017		0.440			
10/19/2017		0.413	0.04245	0.044 ("	
2/20/2018			0.046 (J)	0.011 (J)	
2/21/2018	0.22	0.36			
4/12/2018					0.016 (J)
5/23/2018					0.018 (J)
6/13/2018					0.014 (J)
7/11/2018			0.014 (J)	0.014 (J)	0.017 (J)
7/12/2018	0.22	0.41			
8/15/2018					
8/16/2018					
8/17/2018					0.015 (J)
			0.0098 (J)		
9/12/2018	0.2		0.0096 (1)	0.012 (1)	0.013 (J)
9/13/2018	0.2			0.013 (J)	
9/14/2018		0.38			
10/4/2018		0.39			0.016 (J)
10/24/2018					0.018 (J)
3/26/2019			0.0076		
3/27/2019	0.22			0.012	0.016
3/28/2019		0.39			
9/10/2019					
10/1/2019				0.011 (X)	
10/2/2019	0.21		0.0084 (X)	` '	0.011 (X)
10/3/2019	V.2.1	0.36	0.0004 (7.)		5.5 (//)
3/24/2020		0.00			0.015 (J)
	0.24		0.044 (1)	0.016 (1)	0.013 (3)
3/25/2020	0.21	0.22	0.011 (J)	0.016 (J)	
3/26/2020		0.38			

Constituent: Calcium (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-1D (bg)	PZ-14	PZ-23A	PZ-7D	PZ-15	PZ-16	PZ-19	PZ-17	PZ-18
8/30/2016	40.4								
8/31/2016		92.9	132						
9/1/2016				101	74.8				
9/6/2016						74.6			
9/7/2016							138	100	112
9/8/2016									
10/18/2016									
12/6/2016	43.3								
12/7/2016		93.1	125	103	74	68.9			
12/8/2016							135	102	113
3/21/2017	44.1	95	138						
3/22/2017				111	99.3	77.8		113	122
3/23/2017							137		
7/11/2017	47.4	97.1	139			77.3			
7/12/2017				119	91.4		145	110	129
10/17/2017	48.7								
10/18/2017		100	144		92	84.7		122	125
10/19/2017				107			140		
2/20/2018	46.8	93.1	142						
2/21/2018				118	89	81.8	145	107	118
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	65.3 (o)	111	159						
7/12/2018				121	94.5	85.2	140		
8/15/2018									123
8/16/2018								113	
8/17/2018									
9/12/2018	46.6	99.3							
9/13/2018			136	116	90.8	80.2			123
9/14/2018							124	108	
10/4/2018									
10/24/2018									
3/26/2019	43.3								
3/27/2019		105	152			90.5			134
3/28/2019				124	100		164	123	
9/10/2019			137						
10/1/2019	46.8								
10/2/2019		103			101	89.1		115	
10/3/2019				127			125		139
3/24/2020	48								
3/25/2020		105	157					121	
3/26/2020				122	103	89.8	158		138

Constituent: Calcium (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-25	PZ-32 (bg)	PZ-31 (bg)	PZ-33	PZ-2D (bg)	
8/30/2016						
8/31/2016						
9/1/2016						
9/6/2016						
9/7/2016						
9/8/2016	85.2					
10/18/2016		57.2	88.3			
12/6/2016			83.4			
12/7/2016		52.8				
12/8/2016	84.5			117		
3/21/2017			94			
3/22/2017	85.3					
3/23/2017		59.1		122		
7/11/2017	93	59.7	86			
7/12/2017				124		
10/17/2017		64.9	91.6			
10/18/2017	87.6					
10/19/2017				118		
2/20/2018		64.1	86.5			
2/21/2018	93.9			122		
4/12/2018					<25	
5/23/2018					17.6 (J)	
6/13/2018					14.3	
7/11/2018		60.4	95.4		15.6	
7/12/2018	87.1			129		
8/15/2018						
8/16/2018						
8/17/2018					27	
9/12/2018			86		26.9	
9/13/2018	85.8	58.7				
9/14/2018				123		
10/4/2018				126	25	
10/24/2018					23.8	
3/26/2019			87.3			
3/27/2019	95.2	54.6			26.1	
3/28/2019				117		
9/10/2019						
10/1/2019		64.3				
10/2/2019	92.3		95.5		21	
10/3/2019				110		
3/24/2020					26.5	
3/25/2020	97.5	66.6	95.8			
3/26/2020				122		

Constituent: Chloride (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-1D (bg)	PZ-14	PZ-23A	PZ-7D	PZ-15	PZ-16	PZ-19	PZ-17	PZ-18
8/30/2016	3.1								
8/31/2016		4.9	5.1						
9/1/2016				7.4	7				
9/6/2016						7.9			
9/7/2016							6.8	7.7	6.9
9/8/2016									
10/18/2016									
12/6/2016	3.4								
12/7/2016		4.8	5.2	7.6	7	7.6			
12/8/2016							6.6	7.2	6.8
3/21/2017	2.9	4.9	5.5						
3/22/2017				7.2	7.4	7.7		7.3	6.8
3/23/2017							6.6		
7/11/2017	3.4	5	5.7			8.1			
7/12/2017				7.3	8		6.6	7.4	6.7
10/17/2017	3.3								
10/18/2017		5.1	5.1		7.8	8.2		7.6	6.8
10/19/2017				7.4			6.5		
2/20/2018	3.3	5.1	5.5						
2/21/2018				7.6	7.2	7.3	7.6	7.4	7.1
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	2.9	4.9	5.1						
7/12/2018	2.0		.	7.1	7.5	7.2	6.3		
8/15/2018					7.0	7.2	0.0		6.7
8/16/2018								7.5	···
8/17/2018								7.0	
9/12/2018	2.8	4.8							
9/13/2018	2.0	4.0	5	6.6	6.8	7.3			6.7
9/14/2018			· ·	0.0	0.0	7.0	6.1	7.7	0.7
10/4/2018							0.1	7.7	
10/24/2018									
3/26/2019	3.3								
3/27/2019	0.0	5.2	4.7			7.3			6.5
3/28/2019		0.2	7.7	6.4	7.4	7.0	6.4	7.3	0.0
9/10/2019			3.8	0.4	***		0.4	7.0	
10/1/2019	3.6		3.0						
10/1/2019	5.0	5.4			8	7.7		7.9	
10/2/2019		U.T		5.9	J		5.6	7.5	7
3/24/2020	2.8			J.J			5.0		,
3/25/2020	2.0	4.2	6.4					6.1	
3/26/2020		7.4	0.4	4.8	7	7	5.4	0.1	5.7
512012020				7.0	,	,	5.4		J.,

Constituent: Chloride (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

			. idiii iiii		outlett, Sompariy	
	PZ-25	PZ-32 (bg)	PZ-31 (bg)	PZ-33	PZ-2D (bg)	
8/30/2016						
8/31/2016						
9/1/2016						
9/6/2016						
9/7/2016						
9/8/2016	4					
10/18/2016		3.5	4.5			
12/6/2016			5			
12/7/2016		3.2				
12/8/2016	3.6			6.9		
3/21/2017			4.3			
3/22/2017	3.3					
3/23/2017		2.9		6.2		
7/11/2017	3	3.1	4.7			
7/12/2017				6		
10/17/2017		3	4.6			
10/18/2017	2.9					
10/19/2017				6.4		
2/20/2018		3	4.4			
2/21/2018	2.9			6.9		
4/12/2018					2.6	
5/23/2018					2.5	
6/13/2018					2.5	
7/11/2018		2.8	4		2.6	
7/12/2018	2.6			7.3		
8/15/2018						
8/16/2018						
8/17/2018					2.6	
9/12/2018			3.7		2.3	
9/13/2018	2.3	2.2				
9/14/2018				7.3		
10/4/2018				7	2.7	
10/24/2018					2.8	
3/26/2019			3.8			
3/27/2019	2.4	3.1			2.5	
3/28/2019				4.8		
9/10/2019						
10/1/2019		3.1				
10/2/2019	2.6		4.3		2.7	
10/3/2019				4.1		
3/24/2020					2.2	
3/25/2020	1.6	2.2	3			
3/26/2020				2.9		

Constituent: Fluoride (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-1D (bg)	PZ-14	PZ-23A	PZ-7D	PZ-15	PZ-16	PZ-19	PZ-17	PZ-18
8/30/2016	0.06 (J)								
8/31/2016		0.13 (J)	0.13 (J)						
9/1/2016				<0.3	0.06 (J)				
9/6/2016						0.09 (J)			
9/7/2016							0.15 (J)	0.03 (J)	0.12 (J)
9/8/2016									
10/18/2016									
12/6/2016	0.06 (J)								
12/7/2016		0.07 (J)	0.13 (J)	0.15 (J)	0.09 (J)	0.09 (J)			
12/8/2016							0.12 (J)	0.18 (J)	0.18 (J)
3/21/2017	0.004 (J)	<0.3	0.05 (J)						
3/22/2017				0.09 (J)	0.11 (J)	0.04 (J)		0.09 (J)	0.08 (J)
3/23/2017							0.14 (J)		
7/11/2017	0.05 (J)	0.05 (J)	0.05 (J)			0.05 (J)			
7/12/2017				0.02 (J)	0.23 (J)		0.07 (J)	0.21 (J)	0.17 (J)
10/17/2017	<0.3								
10/18/2017		0.11 (J)	<0.3		0.19 (J)	0.04 (J)		0.24 (J)	0.06 (J)
10/19/2017				<0.3			<0.3		
2/20/2018	0.098 (J)	0.04 (J)	0.3 (J)						
2/21/2018				0.045 (J)	0.093 (J)	<0.3	0.37	0.24 (J)	0.086 (J)
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	<0.3	<0.3	0.077 (J)						
7/12/2018				<0.3	<0.3	<0.3	0.17 (J)		
8/15/2018									<0.3
8/16/2018								0.073 (J)	
8/17/2018									
9/12/2018	0.034 (J)	<0.3							
9/13/2018			<0.3	<0.3	0.15 (J)	<0.3			<0.3
9/14/2018							<0.3	<0.3	
10/4/2018									
10/24/2018									
3/26/2019	<0.3								
3/27/2019		<0.3	<0.3			<0.3			<0.3
3/28/2019				<0.3	0.1		0.074	0.15	
9/10/2019			<0.3						
10/1/2019	0.062 (X)								
10/2/2019		0.056 (X)			0.075 (X)	0.053 (X)		0.063 (X)	
10/3/2019				0.041 (X)			0.084 (X)		0.043 (X)
3/24/2020	<0.3								
3/25/2020		<0.3	0.066 (J)					<0.3	
3/26/2020				<0.3	0.056 (J)	<0.3	0.077 (J)		<0.3

Constituent: Fluoride (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-25	PZ-32 (bg)	PZ-31 (bg)	PZ-33	PZ-2D (bg)	
8/30/2016						
8/31/2016						
9/1/2016						
9/6/2016						
9/7/2016						
9/8/2016	0.25 (J)					
10/18/2016		0.11 (J)	0.16 (J)			
12/6/2016		. ,	0.15 (J)			
12/7/2016		0.07 (J)	.,			
12/8/2016	0.22 (J)	, ,		0.21 (J)		
3/21/2017	` '		0.02 (J)	.,		
3/22/2017	0.16 (J)		\-/			
3/23/2017	- \-/	<0.3		0.18 (J)		
7/11/2017	0.23 (J)	0.02 (J)	0.06 (J)	(-/		
7/12/2017	- (-/	(-)	(-)	0.06 (J)		
10/17/2017		<0.3	0.05 (J)	(0)		
10/18/2017	0.28 (J)	3.3	3.33 (0)			
10/19/2017	(0)			<0.3		
2/20/2018		<0.3	0.21 (J)	0.0		
2/21/2018	0.29 (J)	3.3	5.2. (0)	0.039 (J)		
4/12/2018	0.20 (0)			0.000 (0)	<0.3	
5/23/2018					0.063 (J)	
6/13/2018					0.003 (J) 0.11 (J)	
7/11/2018		<0.3	0.087 (J)		<0.3	
7/11/2018	0.21 (1)	30.0	0.007 (0)	<0.3	·0.0	
8/15/2018	0.21 (J)			~ 0.3		
8/16/2018						
8/17/2018					<0.3	
9/12/2018			0.049 (J)			
	0.00 (1)	-0.2	0.049 (J)		0.093 (J)	
9/13/2018	0.22 (J)	<0.3		-0.2		
9/14/2018				<0.3	0.15 (1)	
10/4/2018				0.15 (J)	0.15 (J)	
10/24/2018			.00		0.29 (J)	
3/26/2019			<0.3			
3/27/2019	0.37	<0.3			0.04	
3/28/2019				<0.3		
9/10/2019						
10/1/2019		0.042 (X)				
10/2/2019	0.16 (X)		0.057 (X)		0.11 (X)	
10/3/2019				0.06 (X)		
3/24/2020					0.051 (J)	
3/25/2020	0.13 (J)	<0.3	<0.3			
3/26/2020				<0.3		

Constituent: pH (SU) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-1D (bg)	PZ-14	PZ-23A	PZ-7D	PZ-15	PZ-16	PZ-19	PZ-17	PZ-18
8/30/2016	7.67								
8/31/2016		6.97	6.75						
9/1/2016				7.07	7.21				
9/6/2016						7.23			
9/7/2016							6.71	7.02	6.92
9/8/2016									
10/4/2016									
10/5/2016									
10/17/2016									
10/18/2016									
12/6/2016	7.57								
12/7/2016		6.85	6.64	6.85	7.13	7.3			
12/8/2016							6.61	6.95	6.9
3/21/2017	7.54	7.04	6.73						
3/22/2017				6.99	7.04	7.2		7.05	7
3/23/2017							6.69		
7/11/2017	7.43	6.88	6.66			7.31			
7/12/2017				6.83	7.09		6.69	7.06	6.95
10/17/2017	7.7								
10/18/2017		6.77	6.73		7.2	7.28	6.88	6.99	
10/19/2017				6.91			6.85		
2/20/2018	7.57	7.32 (D)	7.11						
2/21/2018				6.97	7.11	7.1	6.66	6.95	6.89
7/11/2018	7.48	7.12	7						
7/12/2018				6.85	7.07	7.14	6.84	7.06	7.01
8/15/2018									6.87
8/16/2018								7.01	
9/12/2018	7.41	6.87							
9/13/2018			6.56	6.88	7.01	7.08			6.86
9/14/2018							6.76	6.83	
3/26/2019	7.49								
3/27/2019		6.98	6.75			7.23			6.92
3/28/2019				6.96	7.84		6.67	6.97	
9/10/2019			6.78						
10/1/2019	7.5								
10/2/2019		6.96			7.22	7.22		6.99	
10/3/2019				6.85			6.93		6.78
3/24/2020	7.79								
3/25/2020		7.02	6.84					6.93	
3/26/2020				7.12	7.08	7.12	6.7		7.01

Constituent: pH (SU) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-25	PZ-33	PZ-32 (bg)	PZ-31 (bg)	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	7.1				
10/4/2016		6.88			
10/5/2016		6.91			
10/17/2016			7.43		
10/18/2016			7.45	7.15	
12/6/2016				7.04	
12/7/2016			7.29		
12/8/2016	6.98	6.86			
3/21/2017				7.01	
3/22/2017	7.16				
3/23/2017		6.9	7.26		
7/11/2017	7.15	7.82 (o)	7.31	6.96	
7/12/2017		6.81			
10/17/2017			7.29	7.31	7.61
10/18/2017					
10/19/2017		6.86			
2/20/2018			7.26		
2/21/2018	7.12	7.02			
7/11/2018			7.39	7.26	9.48
7/12/2018		6.82		7.01	
8/15/2018					
8/16/2018					
9/12/2018				7.02	9.07
9/13/2018	7.03		7.25		
9/14/2018		6.75			
3/26/2019				7	
3/27/2019	7.08		7.42		8.76
3/28/2019		6.96			
9/10/2019					
10/1/2019			7.43		
10/2/2019	7.2		-	7.09	8.97
10/3/2019		7.01			
3/24/2020					8.57
3/25/2020	7.01		7.23	7.15	
3/26/2020		7			

Constituent: Sulfate (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-1D (bg)	PZ-14	PZ-23A	PZ-7D	PZ-15	PZ-16	PZ-19	PZ-17	PZ-18
8/30/2016	2.1								
8/31/2016		4.1	29						
9/1/2016				62	73				
9/6/2016						49			
9/7/2016							87	99	96
9/8/2016									
10/18/2016									
12/6/2016	2.4								
12/7/2016		1.5	24	57	71	46			
12/8/2016							84	94	94
3/21/2017	2.5	2	31						
3/22/2017				61	80	53		100	95
3/23/2017							90		
7/11/2017	2.6	2	37			52			
7/12/2017				53	78		93	100	96
10/17/2017	2.5								
10/18/2017		4.2	34		82	58		100	99
10/19/2017				55			92		
2/20/2018	2.3	2.4	34.7						
2/21/2018				52.1	72.2	48.2	84.5	98.8	91.8
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	2.5	3.8	35.4						
7/12/2018	2.0	0.0	55.1	53.9	80.5	48.8	84.9		
8/15/2018				00.0	00.0	10.0	00		101
8/16/2018								111	
8/17/2018									
9/12/2018	2	4.3							
9/13/2018	_	4.0	37.4	67.5	84.4	48.7			106
9/14/2018			07.4	07.0	04.4	40.7	89.5	102	100
10/4/2018							00.0	102	
10/24/2018									
3/26/2019	2.7								
3/27/2019	2.7	8.2	41.9			46.5			111
3/28/2019		0.2	41.5	59.6	90.3	40.0	83.5	94.7	
9/10/2019			45.1	00.0	56.6		00.0	04.7	
10/1/2019	2.8		70.1						
10/1/2019	2.0	6.2			83	48.5		104	
10/2/2019		U.Z		59.6	55	-10.0	84.9	104	95.8
3/24/2020	3			55.0			J 1 .J		
3/25/2020	5	11.9	47					92.4	
3/26/2020		11.5	7/	57.1	83.6	43.5	84.9	J2. T	91
5/20/2020				57.1	55.0	70.0	J 1 .J		VI

Constituent: Sulfate (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-25	PZ-32 (bg)	PZ-31 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	48				
10/18/2016		2.3	2.2		
12/6/2016			6.1		
12/7/2016		1.9	0		
12/8/2016	46	1.0		100	
3/21/2017	40		5.7	100	
3/22/2017	53		5.7		
3/23/2017	55	1.7		100	
	51		1.8	100	
7/11/2017	51	1.8	4.8	97	
7/12/2017		1.0	0.4	97	
10/17/2017	50	1.9	6.4		
10/18/2017	50			07	
10/19/2017				97	
2/20/2018		2.1	5.2		
2/21/2018	46.8			93.6	
4/12/2018					4.8 (J)
5/23/2018					4.5
6/13/2018					5.3
7/11/2018		2	3.6		5.4
7/12/2018	48.3			89.4	
8/15/2018					
8/16/2018					
8/17/2018					4.5
9/12/2018			2.7		4.4
9/13/2018	42	2.1			
9/14/2018				88.9	
10/4/2018				97.8	5.8
10/24/2018					6.2
3/26/2019			1.6		
3/27/2019	43.7	2.4			3.7
3/28/2019	-			76.7	-
9/10/2019					
10/1/2019		2.2			
10/2/2019	43		1.6		4.1
10/2/2019	70		1.0	72.1	7.1
				14.1	3.1
3/24/2020	20.1	1.0	1.5		J. I
3/25/2020	39.1	1.9	1.5	66.6	
3/26/2020				66.6	

Constituent: TDS (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-1D (bg)	PZ-14	PZ-23A	PZ-7D	PZ-15	PZ-16	PZ-19	PZ-17	PZ-18
8/30/2016	136								
8/31/2016		344	400						
9/1/2016				373	284				
9/6/2016						257			
9/7/2016							508	392	415
9/8/2016									
10/18/2016									
12/6/2016	207								
12/7/2016		393	406	433	242	248			
12/8/2016							556	431	441
3/21/2017	128	276	409						
3/22/2017				409	332	304		456	469
3/23/2017							482		
7/11/2017	138	263	414			265			
7/12/2017				374	308		497	445	432
10/17/2017	101								
10/18/2017		261	366		275	240		349	368
10/19/2017				318			448		
2/20/2018	138	295	429						
2/21/2018				367	312	285	500	411	409
4/12/2018									
5/23/2018									
6/13/2018									
7/11/2018	153	294	440						
7/12/2018				423	337	285	523		
8/15/2018									422
8/16/2018								415	
8/17/2018									
9/12/2018	146	286							
9/13/2018			448	394	336	291			438
9/14/2018							486	403	
10/4/2018									
10/24/2018									
3/26/2019	334								
3/27/2019		281	410			277			408
3/28/2019				365	337		378	420	
9/10/2019			420						
10/1/2019	146								
10/2/2019		312			355	284		415	
10/3/2019				405			485		464
3/24/2020	228								
3/25/2020		330	454					408	
3/26/2020				332	330	286	440		415

Constituent: TDS (mg/L) Analysis Run 4/28/2020 4:10 PM View: Interwell Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

	PZ-25	PZ-32 (bg)	PZ-31 (bg)	PZ-33	PZ-2D (bg)
8/30/2016					
8/31/2016					
9/1/2016					
9/6/2016					
9/7/2016					
9/8/2016	293				
10/18/2016		152	264		
12/6/2016			299		
12/7/2016		214			
12/8/2016	309			503 (o)	
3/21/2017			260		
3/22/2017	299				
3/23/2017		165		430	
7/11/2017	301	162	244		
7/12/2017				438	
10/17/2017		140	218		
10/18/2017	256				
10/19/2017				393	
2/20/2018		163	264		
2/21/2018	297			435	
4/12/2018					69
5/23/2018					62
6/13/2018					93
7/11/2018		192	273		84
7/12/2018	310			447	
8/15/2018					
8/16/2018					
8/17/2018					115
9/12/2018			252		97
9/13/2018	307	192			
9/14/2018				447	
10/4/2018				450	103
10/24/2018					110
3/26/2019			253		
3/27/2019	287	167			87
3/28/2019				405	
9/10/2019					
10/1/2019		187			
10/2/2019	312		263		95
10/3/2019				414	
3/24/2020					123
3/25/2020	280	178	278		
3/26/2020				336	

FIGURE E.

Interwell Parameters Trend Tests - PL Exceedances - Significant Results

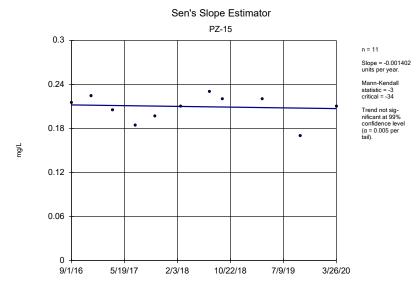
	Plant Mitchell	Client: Southern Company	Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:14 PM									
Constituent	<u>Well</u>		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Calcium (mg/L)	PZ-18		6.257	36	34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-7D		6.314	39	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-19		-0.3547	-38	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-7D		-0.5264	-37	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-14		1.801	38	34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-23A		5.318	47	34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-33		-9.928	-43	-34	Yes	11	0	n/a	n/a	0.01	NP

Interwell Parameters Trend Tests - PL Exceedances - All Results

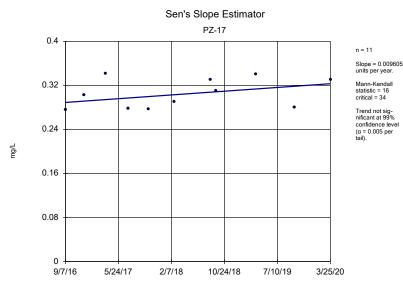
	Plant Mitchell	Client: Southern Company	y Data: Mitchell Ash Pond CCR		d CCR P	Printed 4/28/2020, 4:14 PM						
Constituent	Well		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	PZ-15		-0.001402	-3	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-16		0.005149	12	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-17		0.009605	16	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-18		0	3	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-19		0	0	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-1D (bg)		-0.0001349	-6	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-23A		0.00215	4	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-25		0	1	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-2D (bg)		-0.001174	-12	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-31 (bg)		-0.001967	-21	-34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-32 (bg)		-0.001365	-10	-34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-33		-0.005599	-17	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	PZ-7D		-0.03718	-30	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-17		4.888	28	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-18		6.257	36	34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-19		3.141	11	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-1D (bg)		1.295	17	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-23A		6.65	25	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-2D (bg)		6.396	21	34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-31 (bg)		1.695	22	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-32 (bg)		2.068	21	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-33		0	-1	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	PZ-7D		6.314	39	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-15		0	4	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-16		-0.1986	-21	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-17		0.04345	4	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-18		-0.1033	-21	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-19		-0.3547	-38	-34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-1D (bg)		-0.04345	-9	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-23A		-0.1159	-13	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-2D (bg)		0	2	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-31 (bg)		-0.4562	-34	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-32 (bg)		-0.2327	-24	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	PZ-7D		-0.5264	-37	-34	Yes	11	0	n/a	n/a	0.01	NP
pH (SU)	PZ-17		-0.02417	-19	-38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	PZ-19		0.02514	11	38	No	12	0	n/a	n/a	0.01	NP
pH (SU)	PZ-1D (bg)		-0.02483	-6	-34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	PZ-23A		0.0338	15	34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	PZ-2D (bg)		-0.191	-3	-14	No	6	0	n/a	n/a	0.01	NP
pH (SU)	PZ-31 (bg)		0	-1	-34	No	11	0	n/a	n/a	0.01	NP
pH (SU)	PZ-32 (bg)		-0.0137	-15	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-14		1.801	38	34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-15		3.476	33	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-16		-1.555	-21	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-17		0.3042	4	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-18		2.479	8	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-19		-0.6838	-10	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-1D (bg)		0.1534	26	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-23A		5.318	47	34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-25		-3.578	-31	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-2D (bg)		-0.8488	-16	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-31 (bg)		-1.437	-32	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-32 (bg)		0.0953	15	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-33		-9.928	-43	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	PZ-7D		-0.5524	-2	-34	No	11	0	n/a	n/a	0.01	NP

Interwell Parameters Trend Tests - PL Exceedances - All Results Page 2

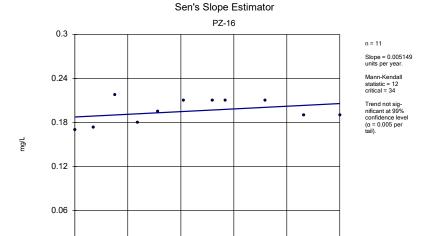
	Plant Mitchell	Client: Southern Company	Data: Mitchell Ash Pond CCR Printed 4/28/2020, 4:14 PM									
Constituent	Well		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
TDS (mg/L)	PZ-14		2.48	1	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-15		21.13	30	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-17		-4.78	-6	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-18		-1.7	-4	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-19		-20.73	-23	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-1D (bg)		10.86	23	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-23A		16.26	33	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-2D (bg)		24.24	27	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-31 (bg)		1.184	2	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-32 (bg)		5.911	12	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-33		-6.32	-4	-30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	PZ-7D		-9.922	-13	-34	No	11	0	n/a	n/a	0.01	NP



Constituent: Boron Analysis Run 4/28/2020 4:11 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Boron Analysis Run 4/28/2020 4:11 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Boron Analysis Run 4/28/2020 4:11 PM View: Trend Tests Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

2/6/18

10/24/18

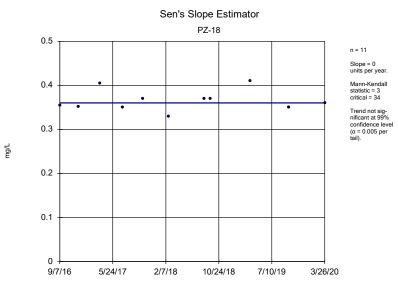
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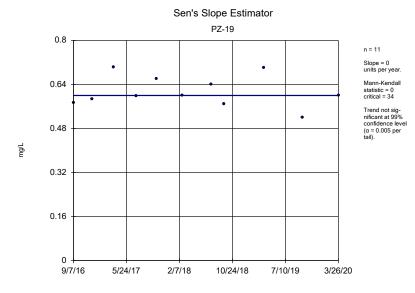
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9/6/16

5/23/17

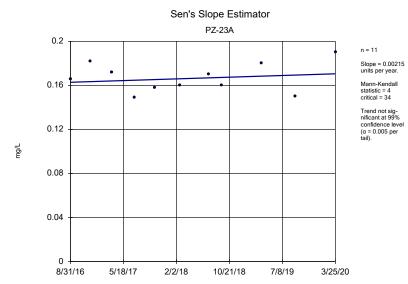


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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



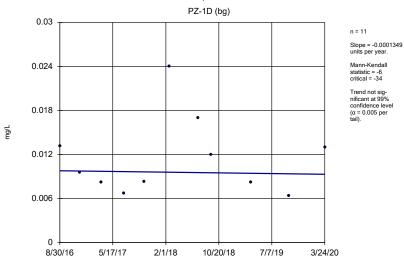
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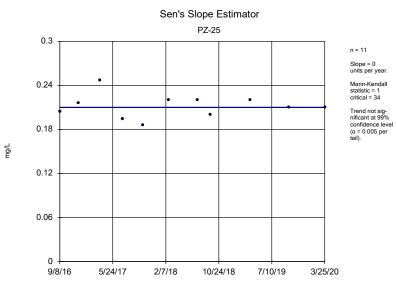
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Sen's Slope Estimator

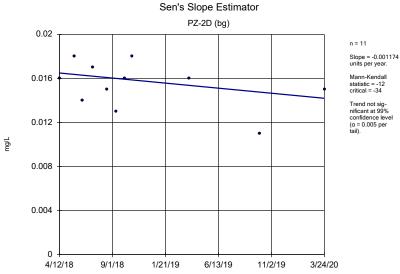


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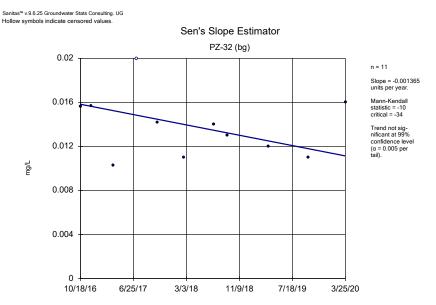
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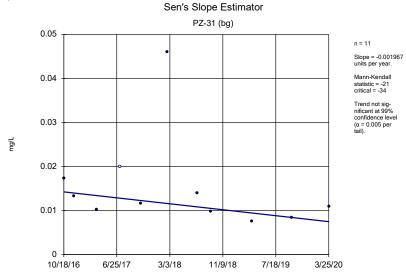
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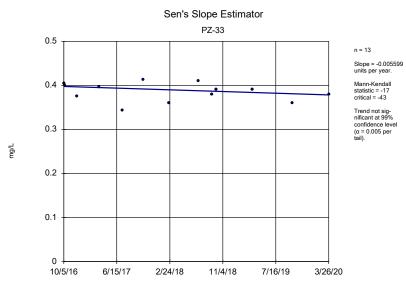


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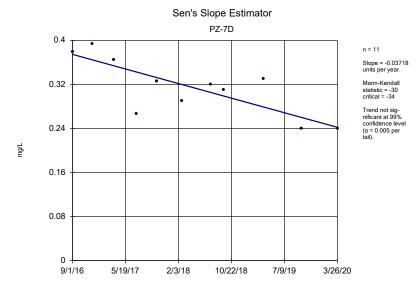


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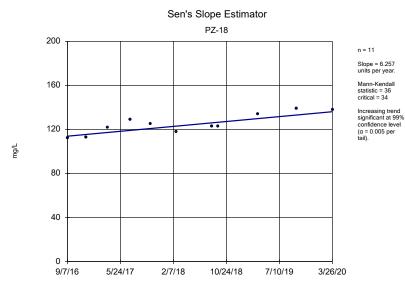




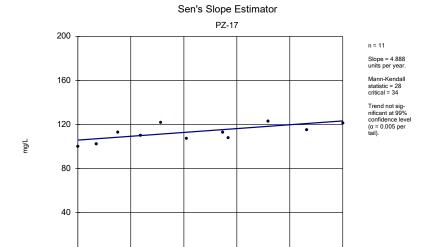
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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Boron Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Calcium Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: Calcium Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

10/24/18

7/10/19

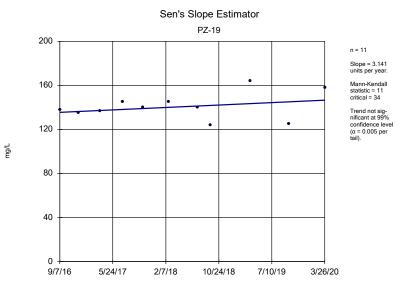
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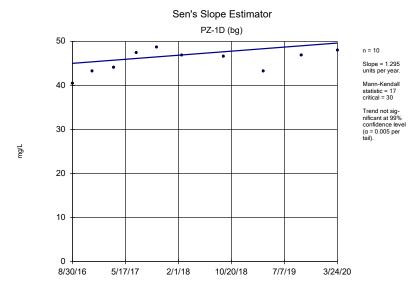
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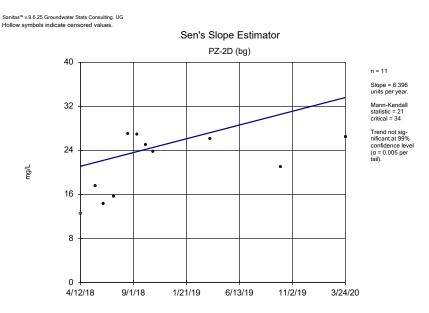
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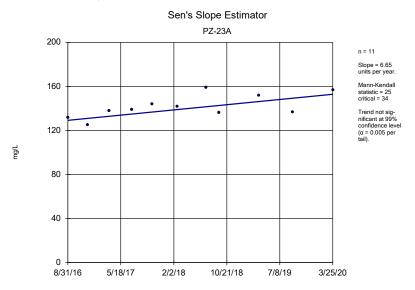
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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



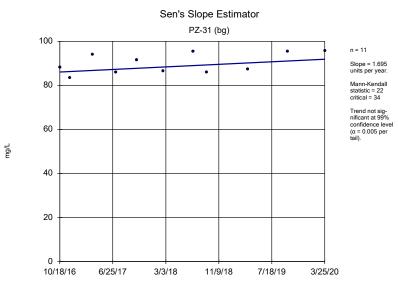
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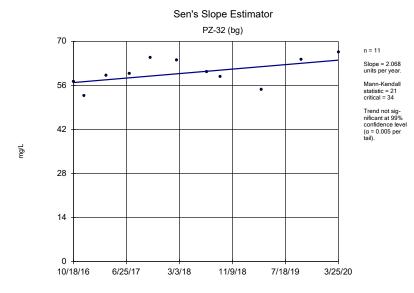
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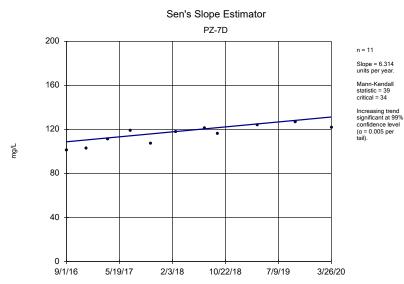


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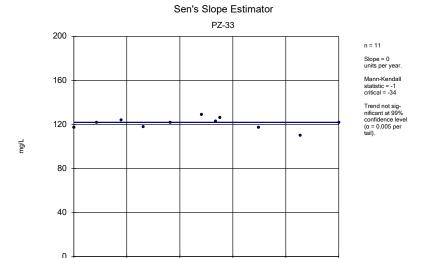


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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR





Constituent: Calcium Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

11/30/18

7/29/19

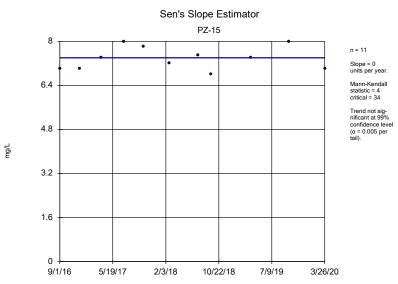
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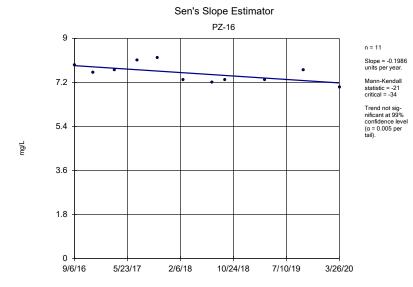
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12/8/16

8/5/17

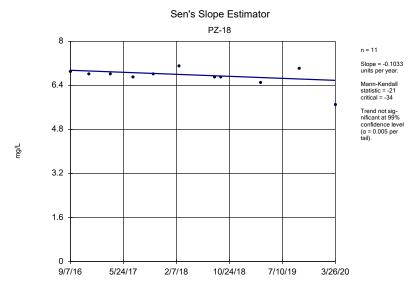


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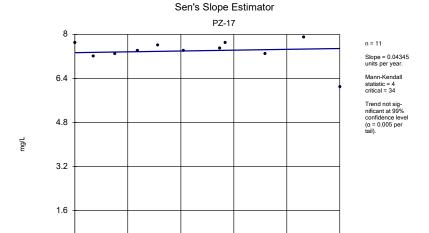


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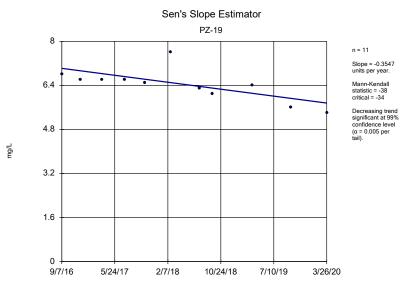
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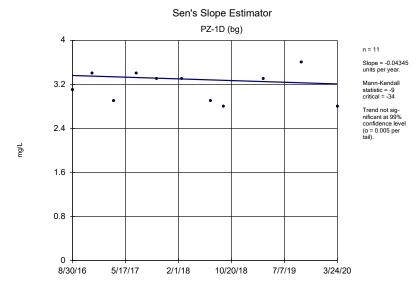
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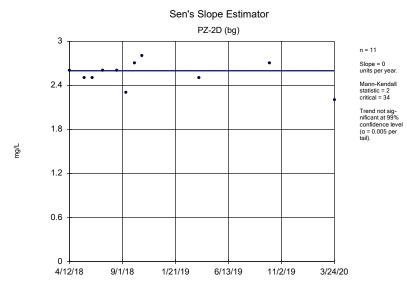


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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

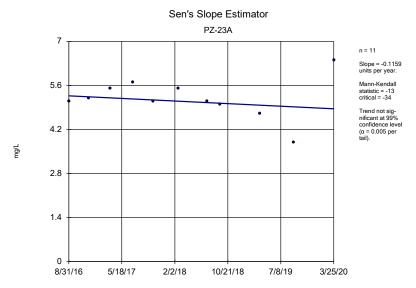


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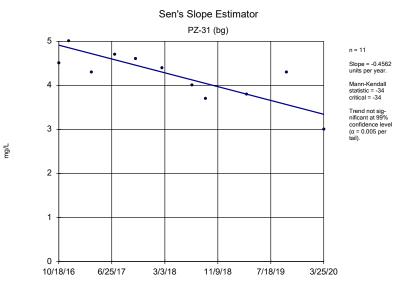




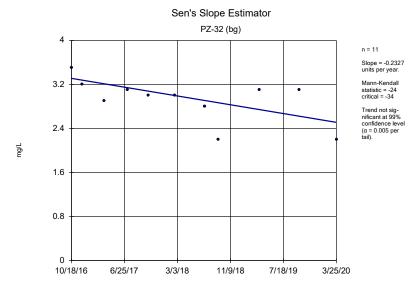
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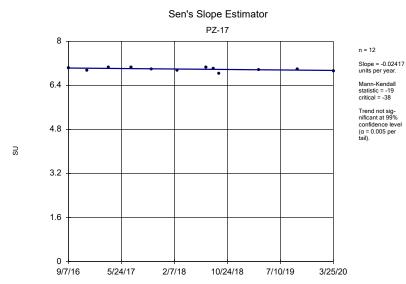


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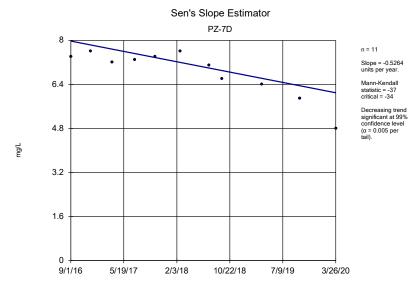


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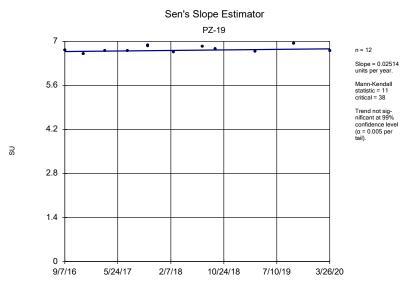




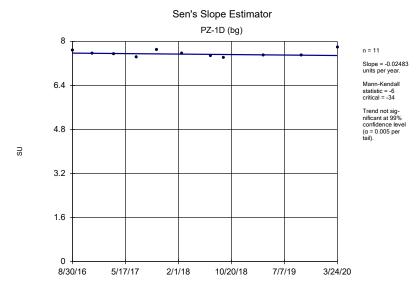
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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

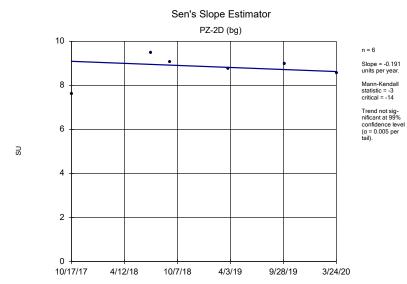


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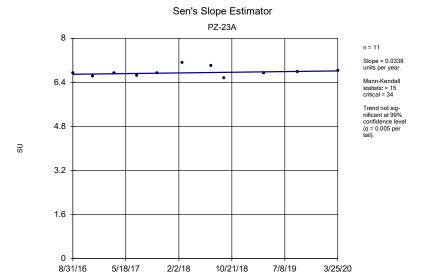


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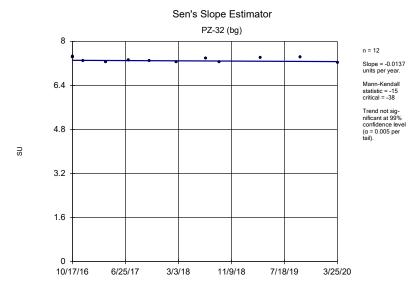
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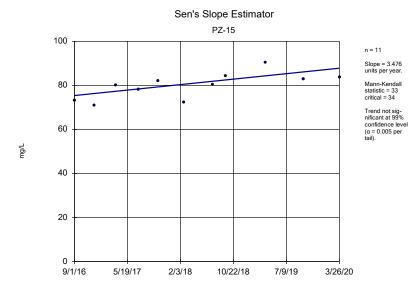
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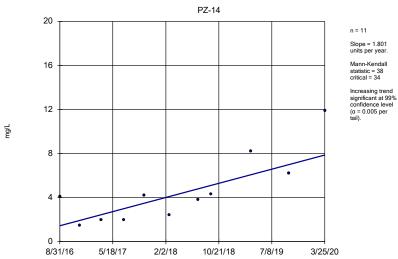


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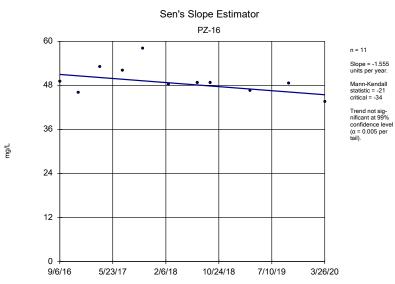


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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

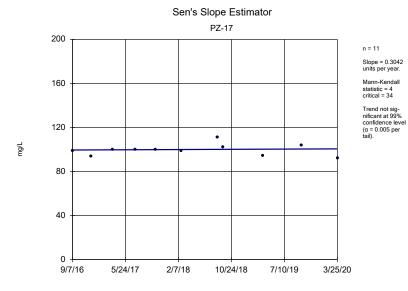
Sen's Slope Estimator



Constituent: Sulfate Analysis Run 4/28/2020 4:12 PM View: Trend Tests Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

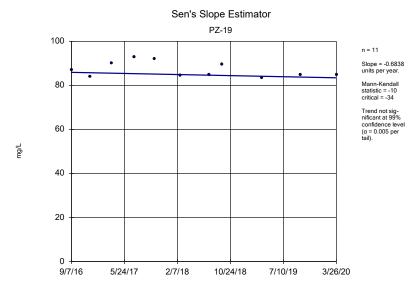


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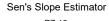


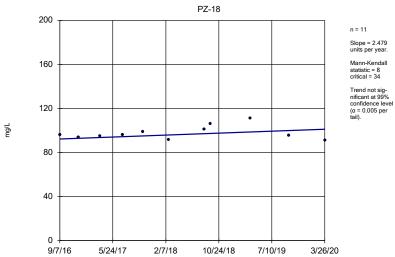
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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

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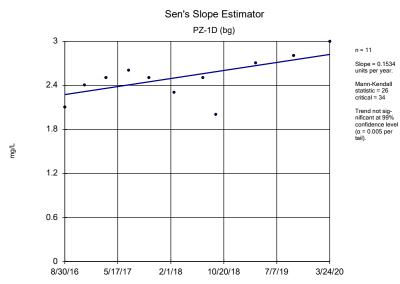
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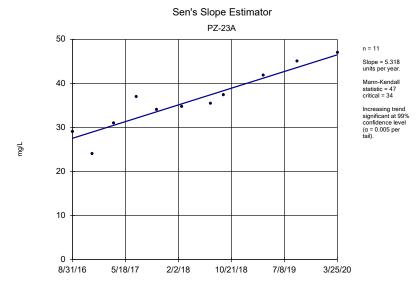


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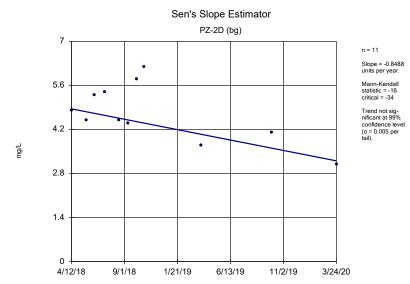
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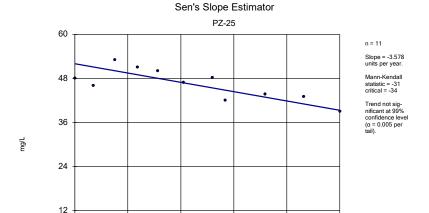
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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



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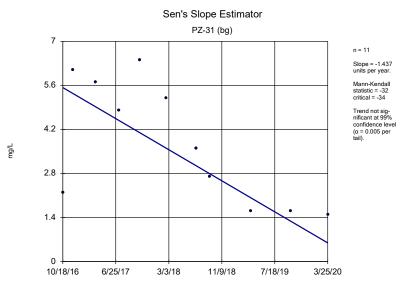
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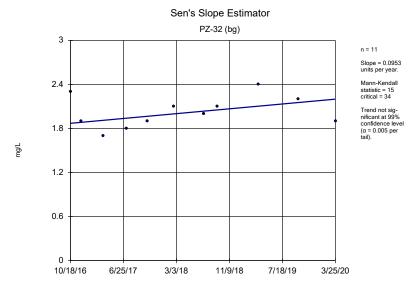
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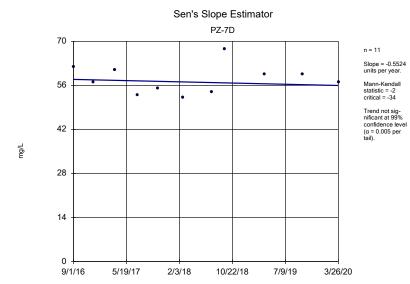
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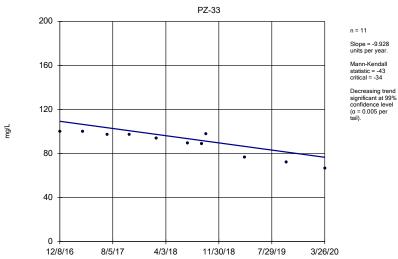


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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

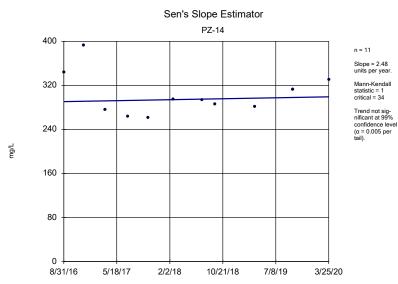


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Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

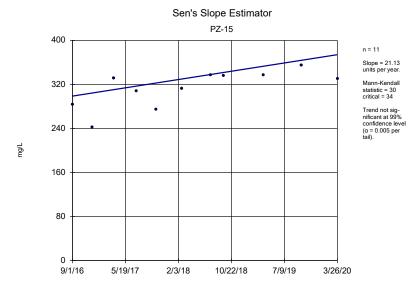
Sen's Slope Estimator



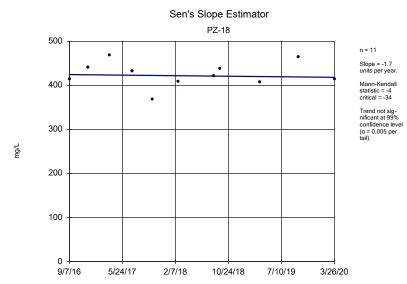
Constituent: Sulfate Analysis Run 4/28/2020 4:12 PM View: Trend Tests Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



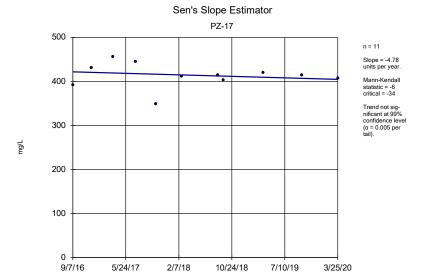
Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



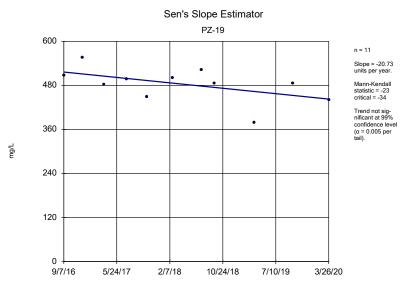
Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



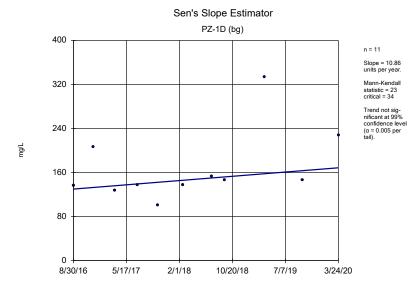
Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



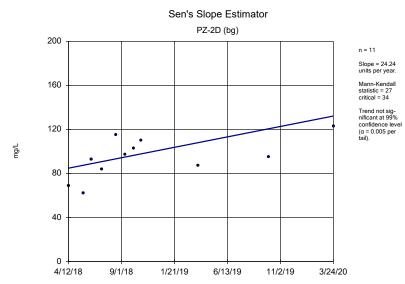
Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



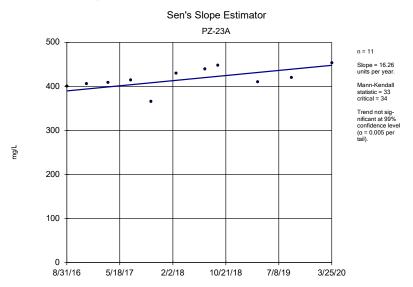
Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



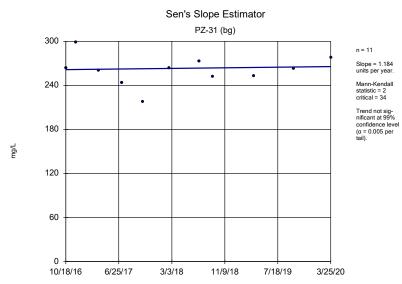
Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



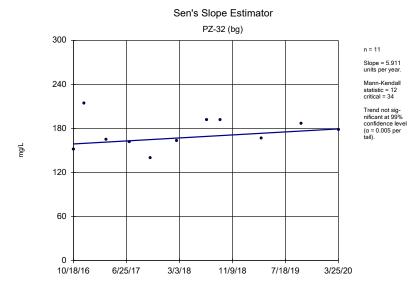
Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

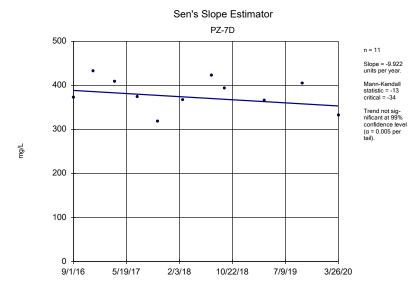


Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

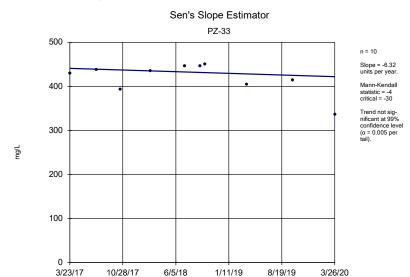


Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

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Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



Constituent: TDS Analysis Run 4/28/2020 4:12 PM View: Trend Tests
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

FIGURE F.

Tolerance Limit Summary Table

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/27/2020, 2:30 PM

Constituent	Well	Upper Lin	n. Lower Lin	n. Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	PZ-14	0.0035	n/a	3/25/2020	<0.003	No	40	n/a	n/a	57.5	n/a	n/a	0.1285	NP Inter(NDs)
Arsenic (mg/L)	PZ-14	0.005	n/a	3/25/2020	<0.005	No	40	n/a	n/a	85	n/a	n/a	0.1285	NP Inter(NDs)
Barium (mg/L)	PZ-14	0.06706	n/a	3/25/2020	0.021	No	40	-4.233	0.7198	2.5	None	In(x)	0.05	Inter
Beryllium (mg/L)	PZ-14	0.003	n/a	9/12/2018	<0.003	No	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Cadmium (mg/L)	PZ-14	0.001	n/a	9/12/2018	<0.001	No	32	n/a	n/a	100	n/a	n/a	0.1937	NP Inter(NDs)
Chromium (mg/L)	PZ-14	0.011	n/a	3/25/2020	0.0013	No	40	n/a	n/a	30	n/a	n/a	0.1285	NP Inter(normality)
Cobalt (mg/L)	PZ-14	0.005	n/a	3/25/2020	<0.005	No	40	n/a	n/a	95	n/a	n/a	0.1285	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	PZ-14	1.906	n/a	3/25/2020	0.694	No	39	0.745	0.2978	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	PZ-14	0.3	n/a	3/25/2020	<0.3	No	44	n/a	n/a	36.36	n/a	n/a	0.1047	NP Inter(normality)
Lead (mg/L)	PZ-14	0.005	n/a	3/25/2020	<0.005	No	40	n/a	n/a	80	n/a	n/a	0.1285	NP Inter(NDs)
Lithium (mg/L)	PZ-14	0.03	n/a	3/25/2020	<0.03	No	40	n/a	n/a	82.5	n/a	n/a	0.1285	NP Inter(NDs)
Mercury (mg/L)	PZ-14	0.0005	n/a	9/12/2018	<0.0005	No	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Molybdenum (mg/L)	PZ-14	0.01	n/a	3/25/2020	<0.01	No	40	n/a	n/a	82.5	n/a	n/a	0.1285	NP Inter(NDs)
Selenium (mg/L)	PZ-14	0.01	n/a	3/25/2020	<0.01	No	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Thallium (mg/L)	PZ-14	0.001	n/a	3/25/2020	<0.001	No	40	n/a	n/a	85	n/a	n/a	0.1285	NP Inter(NDs)

FIGURE G.

PLANT MITCHELL ASH POND GWPS TABLE			
Constituent Name	MCL	Background Limit	GWPS
Antimony, Total (mg/L)	0.006	0.0035	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.06706	2
Beryllium, Total (mg/L)	0.004	0.003	0.004
Cadmium, Total (mg/L)	0.005	0.001	0.005
Chromium, Total (mg/L)	0.1	0.011	0.1
Cobalt, Total (mg/L)		0.005	0.005
Combined Radium, Total (pCi/L)	5	1.906	5
Fluoride, Total (mg/L)	4	0.3	4
Lead, Total (mg/L)		0.005	0.005
Lithium, Total (mg/L)		0.03	0.03
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)		0.01	0.01
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

^{*}Highlighted cells indicated Background is higher than MCLs.

^{*}MCL = Maximum Contaminant Level

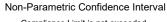
FIGURE H.

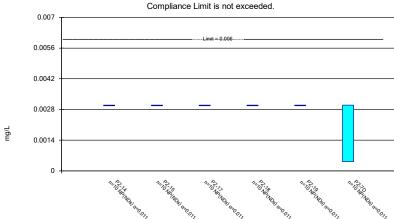
Confidence Intervals - All Results

Client: Southern Company Data: Mitchell Ash Pond CCR Printed 4/29/2020, 2:05 PM Constituent <u>Well</u> Lower Lim. Compliance Sig. N Std. Dev. %NDs ND Adj. Transform Alpha Method PZ-14 0.003 0.003 0.006 0.00274 0.0008222 90 0.011 NP (NDs) Antimony (mg/L) No 10 None No 0.011 NP (NDs) Antimony (mg/L) PZ-15 0.003 0.003 0.006 No 10 0.0028 0.0006325 90 None No PZ-17 0.003 0.011 NP (NDs) Antimony (ma/L) 0.003 0.006 No 10 0.002794 0.0006514 90 No None Antimony (mg/L) PZ-18 0.003 0.003 0.006 No 10 0.00288 0.0003795 90 None No 0.011 NP (NDs) Antimony (mg/L) PZ-19 0.003 0.003 0.006 10 0.002744 0.0008095 90 0.011 NP (NDs) No None No 0.002471 Antimony (mg/L) PZ-7D 0.003 0.00042 0.006 10 0.001116 80 No 0.011 NP (NDs) No None PZ-14 0.011 NP (NDs) Arsenic (mg/L) 0.005 0.005 0.01 No 10 0.004583 0.001319 90 None No Arsenic (mg/L) PZ-15 0.005 0.00089 0.01 No 10 0.003759 0.002002 70 None No 0.011 NP (NDs) Arsenic (mg/L) PZ-17 0.005 0.0007 0.01 Nο 10 0.003712 0.002074 70 None Nο 0.011 NP (NDs) Arsenic (mg/L) PZ-19 0.005 0.005 0.01 10 0.00457 0.00136 90 None No 0.011 NP (NDs) PZ-23A 0.011 NP (NDs) Arsenic (mg/L) 0.005 0.005 0.01 Nο 10 0.004536 0.001467 90 None Nο PZ-25 0.00071 0.01 0.003404 0.002079 0.011 NP (NDs) Arsenic (mg/L) 0.005 10 60 No 0.011 NP (NDs) PZ-33 0.005 0.00094 0.01 No 10 0.004164 0.001763 Arsenic (mg/L) 80 None No Barium (mg/L) PZ-14 0.04126 0.01966 2 10 0.03059 0.01372 0 None sart(x) 0.01 2 Barium (mg/L) P7-15 0.07946 0.04854 Nο 10 0.064 0.01733 0 None Nο 0.01 Param Barium (mg/L) 0.0589 0.03664 2 No 10 0.0145 0 0.01 None In(x) 2 Barium (mg/L) P7-17 0.08199 0.07307 No 10 0.07753 0.004999 0 None No 0.01 Param Barium (mg/L) PZ-18 0.0513 0.023 2 No 10 0.033 0.01588 0 None No 0.011 NP (normality) Barium (mg/L) PZ-19 0.06138 0.0536 2 No 10 0.05749 0.004365 0 None Nο 0.01 Param. Barium (mg/L) PZ-23A 0.05812 0.0369 2 No 10 0.04751 0.0119 0 None Nο 0.01 Param. Barium (mg/L) PZ-25 0.1077 0.09846 2 No 10 0.1031 0.005177 0 None Nο 0.01 Param. PZ-33 0.07956 2 Barium (mg/L) 0.062 No 9 0.07078 0.009094 0 No 0.01 Param. None Barium (mg/L) PZ-7D 0.01135 0.007668 2 No 10 0.00951 0.002065 0 No 0.01 None Param 0.011 NP (NDs) Chromium (mg/L) PZ-14 0.01 0.01 0.1 No 10 0.00913 0.002751 90 None No Chromium (mg/L) PZ-16 0.01 0.0008 0.1 No 0.007254 0.004426 70 None No 0.011 NP (NDs) Chromium (ma/L) PZ-18 0.01 0.01 0.1 Nο 10 0.009056 0.002985 90 None Nο 0.011 NP (NDs) Chromium (mg/L) PZ-19 0.01 0.01 0.1 No 10 0.009073 0.002931 90 0.011 NP (NDs) No PZ-23A 0.002763 0.001202 0.1 0.00443 0.003955 0.01 Chromium (ma/L) No 10 30 Param. Kaplan-Meier In(x) Chromium (mg/L) PZ-33 0.01 10 0.00917 0.002625 0.011 NP (NDs) 0.01 0.1 90 Kaplan-Meier No PZ-7D Chromium (ma/L) 0.01 0.0005 0.1 No 10 0.0056 0.004698 50 None No 0.011 NP (normality) Cobalt (mg/L) PZ-14 0.005 0.002 0.005 10 0.00423 0.001672 80 0.011 NP (NDs) P7-15 0.005 0.00233 0.011 NP (normality) Cobalt (mg/L) 0.0004 0.005 No. 10 0.0028 50 None Nο Cobalt (mg/L) PZ-16 0.005 0.005 0.005 No 10 0.00455 0.001423 90 None No 0.011 NP (NDs) PZ-17 0.002362 0.011 NP (normality) Cobalt (mg/L) 0.005 0.0005 0.005 No 10 0.002279 40 None Nο Cobalt (mg/L) PZ-18 0.005 0.005 No 10 0.00461 0.001233 90 None No 0.011 NP (NDs) Cobalt (mg/L) PZ-19 0.005 0.0012 0.005 No 10 0.00421 0.001667 80 None Nο 0.011 NP (NDs) Cobalt (mg/L) PZ-23A 0.005 8000.0 0.005 No 10 0.00411 0.00188 80 None No 0.011 NP (NDs) Cobalt (mg/L) PZ-25 0.0018 8000.0 0.005 No 10 0.001495 0.001284 10 None Nο 0.011 NP (normality) 0.011 NP (normality) Cobalt (mg/L) PZ-33 0.005 0.00053 0.005 No 10 0.002783 0.002172 40 No None Combined Radium 226 + 228 (pCi/L) PZ-14 1.349 0.387 5 No 0.8774 0.6046 0 None 0.01 Param. 10 sqrt(x) Combined Radium 226 + 228 (pCi/L) PZ-15 1.218 0.5998 5 0.9124 0.3901 0 0.01 No 10 None sqrt(x) Param. Combined Radium 226 + 228 (pCi/L) PZ-16 0.9929 0.3985 5 No 10 0.6957 0.3332 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) PZ-17 1.341 0.6641 5 No 9 1.003 0.3507 0 0.01 Param. None No Combined Radium 226 + 228 (pCi/L) PZ-18 1.525 0.514 5 No 9 1.02 0.5236 0 No 0.01 Param None Combined Radium 226 + 228 (pCi/L) PZ-19 1.601 5 0.4678 0 0.7663 No 10 1.184 No 0.01 Param. None Combined Radium 226 + 228 (pCi/L) PZ-23A 1.391 5 10 0.378 0 0.01 0.7162 No 1.054 No Combined Radium 226 + 228 (pCi/L) PZ-25 1.358 0.8034 5 No 1.081 0.311 0 0.01 Param. 10 None No Combined Radium 226 + 228 (pCi/L) PZ-33 0.5921 5 0.3371 0 No 0.01 Param. 1.194 No 10 0.8928 None Combined Radium 226 + 228 (pCi/L) PZ-7D 0.7284 0.1228 5 Nο 10 0.4338 0.4056 0 None 0.01 Param. sart(x) 4 NP (normality) Fluoride (mg/L) PZ-14 0.3 0.05 No 0.1778 0.1197 45.45 None No 0.006 4 PZ-15 0.06736 0.1322 0.07779 Fluoride (mg/L) 0.197 Nο 11 9.091 None Nο 0.01 Param. Fluoride (mg/L) PZ-16 0.3 0.04 No 0.1694 0.1262 45.45 None No 0.006 NP (normality) 4 Fluoride (mg/L) PZ-17 0.1865 0.06896 Nο 11 0.1705 0.09621 18.18 Kaplan-Meier No 0.01 Param. 0.06382 4 Fluoride (mg/L) PZ-18 0.1438 0.1763 0.1064 Kaplan-Meier sqrt(x) 0.01 P7-19 0.188 0.07472 4 0.1686 0 1062 18 18 Kaplan-Meier 0.01 Param Fluoride (ma/L) No. 11 sart(x)

Confidence Intervals - All Results

Client: Southern Company Data: Mitchell Ash Pond CCR Constituent <u>Well</u> Upper Lim. Lower Lim. Compliance Sig. N Std. Dev. %NDs ND Adj. Transform Alpha Method Fluoride (mg/L) PZ-23A 0.3 0.05 No 11 0.1821 0.1159 36.36 None No 0.006 NP (normality) Fluoride (mg/L) PZ-25 0.2859 0.1723 4 No 11 0.2291 0.06818 0 None No 0.01 Param. PZ-33 0.3 0.06 4 0.1999 0.1087 0.006 NP (normality) Fluoride (ma/L) No 11 45.45 None No Fluoride (mg/L) PZ-7D 0.3 0.041 4 No 11 0.1951 0.1249 None No 0.006 NP (NDs) Lead (mg/L) PZ-15 0.005 0.005 0.005 No 10 0.004505 0.001565 90 None No 0.011 NP (NDs) Lead (mg/L) PZ-16 0.005 0.005 0.005 No 10 0.004508 0.001556 90 None No 0.011 NP (NDs) PZ-18 0.005 0.005 0.004543 0.001445 0.011 NP (NDs) Lead (mg/L) 0.005 No 10 90 None No Lead (mg/L) PZ-23A 0.005 0.005 0.005 No 10 0.004515 0.001534 90 None No 0.011 NP (NDs) 0.004014 0.011 NP (NDs) Lead (mg/L) PZ-33 0.005 0.00009 0.005 No 10 0.002079 80 None Nο Lithium (mg/L) PZ-14 0.03 0.03 0.03 No 10 0.0273 0.008538 90 None No 0.011 NP (NDs) 0.0012 Lithium (mg/L) PZ-15 0.03 0.03 0.01563 0.01515 0.011 NP (normality) No 10 50 None Nο Lithium (mg/L) PZ-17 0.03 0.002 0.03 10 0.00789 0.01166 20 0.011 NP (normality) No 0.00811 0.011 NP (normality) Lithium (mg/L) PZ-18 0.03 0.0024 0.03 No 10 0.01154 20 None No Lithium (mg/L) PZ-19 0.01532 0.008877 0.03 No 10 0.0121 0.003612 0 None No Param. P7-23A Lithium (ma/L) 0.03 0.03 0.03 No. 10 0.02711 0.009139 90 None Nο 0.011 NP (NDs) Lithium (mg/L) 0.006932 0.004808 0.03 No 10 0.00587 0.001191 0 No 0.01 Param. None 0.0038 Lithium (mg/L) PZ-7D 0.0023 0.03 No 10 0.00564 0.008575 10 None No 0.011 NP (normality) 0.011 NP (NDs) Molybdenum (mg/L) PZ-14 0.01 0.01 0.01 No 10 0.00905 0.003004 90 None No 0.011 NP (NDs) Molybdenum (mg/L) PZ-15 0.01 0.01 0.01 No 10 0.00904 0.003036 90 None No Molybdenum (mg/L) PZ-16 0.01 0.01 0.01 No 10 0.00904 0.003036 90 None No 0.011 NP (NDs) Molybdenum (mg/L) PZ-17 0.01 0.01 0.01 No 10 0.00904 0.003036 90 None No 0.011 NP (NDs) PZ-19 0.0027 0.0021 0.01 0.00307 0.011 NP (normality) Molybdenum (mg/L) No 10 0.002442 10 None No Molybdenum (mg/L) PZ-23A 0.01 0.0011 0.01 No 10 0.00817 0.00386 80 None No 0.011 NP (NDs) Molybdenum (mg/L) PZ-25 0.01 0.0091 0.002846 90 0.011 NP (NDs) 0.01 0.01 No 10 None No Selenium (mg/L) PZ-14 0.01 0.0015 0.05 No 10 0.00827 0.003648 80 None No 0.011 NP (NDs) Selenium (mg/L) PZ-19 0.01 0.0016 0.05 No 10 0.00765 0.003817 70 None Nο 0.011 NP (NDs) Selenium (mg/L) PZ-23A 0.01 0.0018 0.05 No 10 0.00762 0.003852 70 No 0.011 NP (NDs) Selenium (mg/L) 0.011 NP (NDs) PZ-7D 0.01 0.01 0.05 0.00917 0.002625 90 No 10 None No Thallium (mg/L) PZ-14 0.001 0.001 0.002 No 10 0.000906 0.0002973 90 No 0.011 NP (NDs) PZ-15 0.001 0.011 NP (NDs) Thallium (mg/L) 0.00016 0.002 No 10 0.00083 0.0003584 80 None No Thallium (mg/L) PZ-16 0.001 0.00017 0.002 10 0.0005003 0.0004322 40 No 0.011 NP (normality) P7-17 0.001 0.0002 0.002 0.000836 0.0003459 0.011 NP (NDs) Thallium (mg/L) No. 10 80 None Nο Thallium (mg/L) PZ-18 0.001 0.00005 0.002 No 10 0.0007161 0.0004572 70 None No 0.011 NP (NDs) PZ-19 0.0007958 0.0003862 0.002 0.000591 0.0002296 0.01 Param. Thallium (mg/L) No 10 10 None No 0.0001296 Thallium (mg/L) PZ-23A 0.0002469 0.002 No 10 0.000439 0.0003909 30 Kaplan-Meier In(x) 0.01 Param. Thallium (mg/L) PZ-25 0.001 0.00037 0.002 No 10 0.000861 0.0002946 80 Kaplan-Meier No 0.011 NP (NDs) Thallium (mg/L) PZ-33 0.001 0.0001 0.002 No 10 0.000563 0.0004613 50 None No 0.011 NP (normality) Thallium (mg/L) PZ-7D 0.001 0.000085 0.002 No 10 0.0005563 0.0004689 50 None No 0.011 NP (normality)



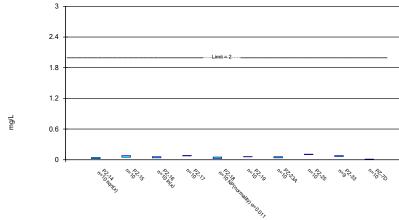


Constituent: Antimony Analysis Run 4/29/2020 2:05 PM View: Appendix IV
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

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Parametric and Non-Parametric (NP) Confidence Interval

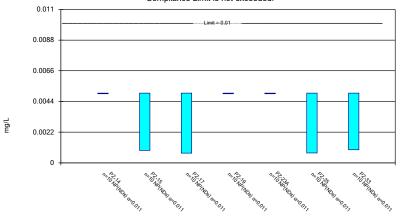
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 4/29/2020 2:05 PM View: Appendix IV Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

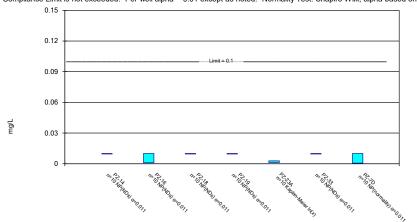


Constituent: Arsenic Analysis Run 4/29/2020 2:05 PM View: Appendix IV Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

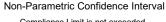
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

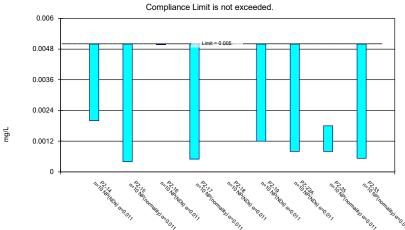
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 4/29/2020 2:05 PM View: Appendix IV
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR



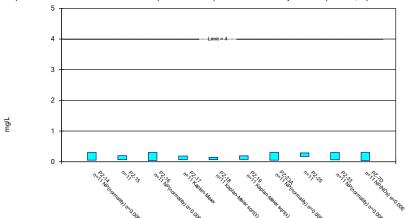


Constituent: Cobalt Analysis Run 4/29/2020 2:05 PM View: Appendix IV Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

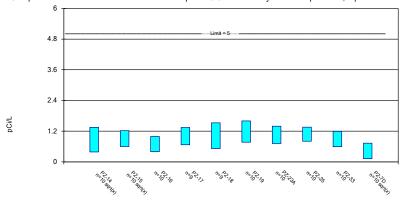
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 4/29/2020 2:05 PM View: Appendix IV
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/29/2020 2:05 PM View: Appendix IV

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

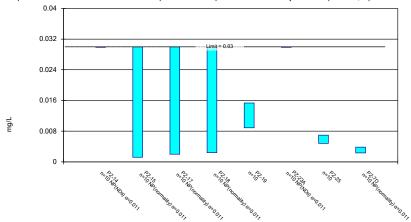
Non-Parametric Confidence Interval

0.004
0.0012
0.0012
0.0012
0.0012
0.0012
0.0012

Constituent: Lead Analysis Run 4/29/2020 2:05 PM View: Appendix IV
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Parametric and Non-Parametric (NP) Confidence Interval

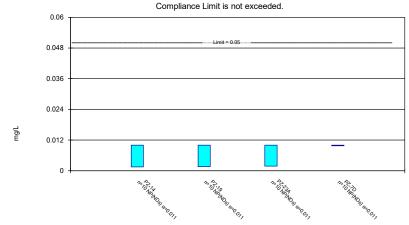
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 4/29/2020 2:05 PM View: Appendix IV
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

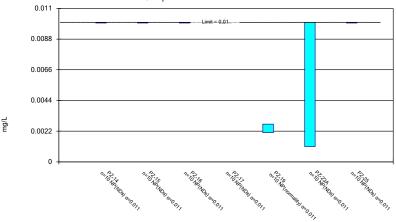
Non-Parametric Confidence Interval



Constituent: Selenium Analysis Run 4/29/2020 2:05 PM View: Appendix IV
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



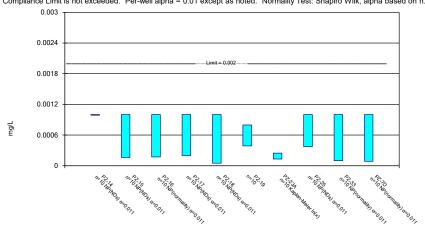
Constituent: Molybdenum Analysis Run 4/29/2020 2:05 PM View: Appendix IV

Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 4/29/2020 2:05 PM View: Appendix IV
Plant Mitchell Client: Southern Company Data: Mitchell Ash Pond CCR